

# Confidential Release

Case Number: 96-899-TP-ALT

Date of Confidential Document:

February 23, 1998

Today's Date: MAY 10 2011

Page Count 200

Part 10

MCI Exhibits  
1-48

This is to certify that the images appearing are an accurate and complete reproduction of a case file document delivered in the regular course of business  
Technician SM Date Processed MAY-10 2011

C:\123R24\LCATR081\COSTMETH

## LOOP COST ANALYSIS TOOL

Bellcore (R)

TABLE - COST METH  
SHEET 1 of 2COST METHODS ASSIGNMENT TABLE  
DISTRIBUTION SEGMENTCOMPANY: CINCINNATI BELL TEL  
STATE: OHIO

SWITCHED SERVICES

LCAT Rel: 1.0.4  
Issued: 07/31/95  
STUDY YR: 1995  
TEST CASE: 1  
LAST UPDATE: 10-Dec-95  
TIME: 13:11

| PLANT ITEM              | LCAT CODE | WHEN BANDWIDTH DELIVERY IS |             |                     |            |             |                     |            |             |                     |
|-------------------------|-----------|----------------------------|-------------|---------------------|------------|-------------|---------------------|------------|-------------|---------------------|
|                         |           | NARBAND                    |             | WIDEBAND            |            | BROADBAND   |                     |            |             |                     |
|                         |           | CATEGORY                   |             | CATEGORY            |            | CATEGORY    |                     |            |             |                     |
|                         |           | PLANT CODE                 | SENS. INDEX | RESOURCE ASSIGNMENT | PLANT CODE | SENS. INDEX | RESOURCE ASSIGNMENT | PLANT CODE | SENS. INDEX | RESOURCE ASSIGNMENT |
| LAND                    | LAND      | 20C                        | F           | SHARED              | F          | SHARED      | F                   | SHARED     |             |                     |
| BUILDING                | BLDG      | 10C                        | F           | SHARED              | F          | SHARED      | F                   | SHARED     |             |                     |
| BLDG ENTRANCE CABLE     | BEC       | 12C                        | V           | DIRECT              | V          | DIRECT      | V                   | DIRECT     |             |                     |
| INTRABLDG CABLE         | IBC       | 52C                        | V           | DIRECT              | V          | DIRECT      | V                   | DIRECT     |             |                     |
| AERIAL CABLE (COPPER) ① | ACU       | 22C                        | V           | DIRECT              | V          | DIRECT      | V                   | DIRECT     |             |                     |
| BURIED CABLE (COPPER) ① | BCU       | 45C                        | V           | DIRECT              | V          | DIRECT      | V                   | DIRECT     |             |                     |
| UNDERGROUND (CU) CA. ①  | UCU       | 5C                         | V           | DIRECT              | V          | DIRECT      | V                   | DIRECT     |             |                     |
| CO EQPT - LOW CAP TERM  | DLCT      | 257C                       | F           | DIRECT              | V          | DIRECT      | V                   | DIRECT     |             |                     |
| CO EQPT - LOW CAP CHAN  | DLCC      | 257C                       | V           | DIRECT              | V          | DIRECT      | V                   | DIRECT     |             |                     |
| CO EQPT - HI CAP TERM   | MUXT      | 857C                       | F           | DIRECT              | F          | DIRECT      | F                   | DIRECT     |             |                     |
| CO EQPT - HI CAP CHAN   | MUXC      | 857C                       | F           | DIRECT              | F          | DIRECT      | V                   | DIRECT     |             |                     |
| CO EQPT - ANALOG SW     | ACOE      | 77C                        | V           | DIRECT              | V          | DIRECT      | V                   | DIRECT     |             |                     |
| CO EQPT - DIGITAL SW    | DCOE      | 377C                       | V           | DIRECT              | V          | DIRECT      | V                   | DIRECT     |             |                     |
| AERIAL CABLE (FIBER)    | AFO       | 822C                       | F           | DIRECT              | F          | DIRECT      | F                   | DIRECT     |             |                     |
| BURIED CABLE (FIBER)    | BFO       | 845C                       | F           | DIRECT              | F          | DIRECT      | F                   | DIRECT     |             |                     |
| UNDERGROUND (FO) CA.    | UFO       | 85C                        | F           | DIRECT              | F          | DIRECT      | F                   | DIRECT     |             |                     |
| CONNECTORS              | CONN      | 57C                        | V           | DIRECT              | V          | DIRECT      | V                   | DIRECT     |             |                     |
| MISC. COM EQP & PWR     | MCEP      | 57C                        | V           | SHARED              | V          | SHARED      | V                   | SHARED     |             |                     |
| POLE LINE               | POLE      | 1C                         | F           | DIRECT              | F          | DIRECT      | F                   | DIRECT     |             |                     |
| CONDUIT                 | COND      | 4C                         | F           | DIRECT              | F          | DIRECT      | F                   | DIRECT     |             |                     |

## FOOTNOTES

- ① THESE ASSIGNMENTS APPLY TO DEDICATED COPPER - PAIRS (NON-MULTIPLXED) FEEDER & DISTRIBUTION  
 BY DEFINITION: ITEMS LABELED F(ixed) OR SHARED ARE EXCLUDED IN A MARGINAL COST STUDY  
 ITEMS LABELED F(ixed) ARE EXCLUDED FROM ADDITIONS IN INCREMENTAL STUDIES  
 ALL ITEMS ARE INCLUDED IN A PROSPECTIVE, REPLACEMENT OR NEW INSTALLATION

CONFIDENTIAL  
 PRIOR TO RELEASE TO THE PUBLIC  
 PROVIDED TO PECO

C:\123R24\LCATR081 COSTMETH  
TABLE - COST\_METH  
Sheet 1 of 2

HELP SCREEN**Belcore** (R)

LCAT Rel : 1.0.4

Issued : 07/31/95

| <u>Field / Group Title</u> | <u>Valid Inputs</u>    | <u>This field or grouping defines -</u>                                                                                                                                                                                                                                                                                             |
|----------------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SERVICES                   | (none)                 | The system matrix for DISTRIBUTION cost methodology for -<br>The User selected Service Category - SWITCHED or PRIVATE LINE.                                                                                                                                                                                                         |
| LCAT CODE                  | (none)                 | The system key code for this cost component                                                                                                                                                                                                                                                                                         |
| PLANT CODE                 | Any 5 (max) char. code | The User cross-reference code for the cost component or component group. Examples are "field" codes, sub-accounts.                                                                                                                                                                                                                  |
| DELIVERY                   | (none)                 | The Service Delivery Bandwidth Capacity for each group of methodology categories. The system defines 3 -<br>Narrowband - denotes voice grade and sub-voice grade band width.<br>Wideband - denotes bandwidths of the first level of digital hierarchy.<br>Broadband - denotes bandwidths of the higher levels of digital hierarchy. |
| CATEGORY                   | (none)                 | The group of Methodology Categories                                                                                                                                                                                                                                                                                                 |
| SENSITIVITY INDEX          | F, V                   | The Volatility Index to Distance or Demand Sensitivity -<br>F for Fixed Value, Low sensitivity to Distance or Demand.<br>V for Variable Usage, Cost Sensitive to Distance or Demand.<br>S for Sunk Investment which only has an Annual Component.                                                                                   |
| RESOURCE ASSIGNMENT        | SHARED, DIRECT         | The Assigned Category of Circuit Function -<br>DIRECT for Dedicated or Circuit Specific Investment.<br>SHARED - for Multi-Circuit or Non-Specific Investment.                                                                                                                                                                       |

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*  
\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION \*\*\*\*\*

PRESS <ENTER> TO RETURN TO THE MAIN MENU

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATR081\COSTMETH

**LOOP COST ANALYSIS TOOL****Bellcore** (R)TABLE - COST METH  
SHEET 2 of 2COST METHODS ASSIGNMENT TABLE  
FEEDER SEGMENTCOMPANY: CINCINNATI BELL TEL.  
STATE: OHIOSWITCHED SERVICES

LCAT Rel: 1.0.4

Issued: 07/31/95

STUDY YR: 1996

TEST CASE: 1

LAST UPDATE: 10-Dec-96

TIME: 13:11

| PLANT ITEM              | WHEN BANDWIDTH DELIVERY IS |                |                        |               |                |                        |               |                |                        |
|-------------------------|----------------------------|----------------|------------------------|---------------|----------------|------------------------|---------------|----------------|------------------------|
|                         | NARROWBAND                 |                |                        | WIDEBAND      |                | BROADBAND              |               |                |                        |
|                         | PLANT<br>CODE              | SENS.<br>INDEX | RESOURCE<br>ASSIGNMENT | PLANT<br>CODE | SENS.<br>INDEX | RESOURCE<br>ASSIGNMENT | PLANT<br>CODE | SENS.<br>INDEX | RESOURCE<br>ASSIGNMENT |
| LAND                    | 20C                        | F              | SHARED                 | F             | SHARED         | F                      | SHARED        |                |                        |
| BUILDING                | 10C                        | F              | SHARED                 | F             | SHARED         | F                      | SHARED        |                |                        |
| BLDG ENTRANCE CABLE     |                            |                |                        |               |                |                        |               |                |                        |
| INTRABLDG CABLE         |                            |                |                        |               |                |                        |               |                |                        |
| AERIAL CABLE (COPPER) ① | 22C                        | V              | DIRECT                 | V             | DIRECT         | V                      | DIRECT        |                |                        |
| BURIED CABLE (COPPER) ① | 45C                        | V              | DIRECT                 | V             | DIRECT         | V                      | DIRECT        |                |                        |
| UNDERGROUND (CU) CA. ①  | 5C                         | V              | DIRECT                 | V             | DIRECT         | V                      | DIRECT        |                |                        |
| CO EQPT - LOW CAP TERM  | 257C                       | F              | DIRECT                 | V             | DIRECT         | V                      | DIRECT        |                |                        |
| CO EQPT - LOW CAP CHAN  | 257C                       | V              | DIRECT                 | V             | DIRECT         | V                      | DIRECT        |                |                        |
| CO EQPT - HI CAP TERM   | 857C                       | F              | DIRECT                 | F             | DIRECT         | F                      | DIRECT        |                |                        |
| CO EQPT - HI CAP CHAN   | 857C                       | F              | DIRECT                 | F             | DIRECT         | V                      | DIRECT        |                |                        |
| CO EQPT - ANALOG SW     | 77C                        | V              | DIRECT                 | V             | DIRECT         | V                      | DIRECT        |                |                        |
| CO EQPT - DIGITAL SW    | 377C                       | V              | DIRECT                 | V             | DIRECT         | V                      | DIRECT        |                |                        |
| AERIAL CABLE (FIBER)    | 822C                       | F              | DIRECT                 | F             | DIRECT         | F                      | DIRECT        |                |                        |
| BURIED CABLE (FIBER)    | 845C                       | F              | DIRECT                 | F             | DIRECT         | F                      | DIRECT        |                |                        |
| UNDERGROUND (FO) CA.    | 85C                        | F              | DIRECT                 | F             | DIRECT         | F                      | DIRECT        |                |                        |
| CONNECTORS              | 57C                        | V              | DIRECT                 | V             | DIRECT         | V                      | DIRECT        |                |                        |
| MISC. COM EQP & PWR     | 57C                        | V              | SHARED                 | V             | SHARED         | V                      | SHARED        |                |                        |
| POLE LINE               | 1C                         | F              | DIRECT                 | F             | DIRECT         | F                      | DIRECT        |                |                        |
| CONDUIT                 | 4C                         | F              | DIRECT                 | F             | DIRECT         | F                      | DIRECT        |                |                        |

FOOTNOTES

① THESE ASSIGNMENTS APPLY TO MULTIPLEXED COPPER FEEDER PAIRS ONLY

BY DEFINITION: ITEMS LABELED F(ixed) OR SHARED ARE EXCLUDED IN A MARGINAL COST STUDY

ITEMS LABELED F(ixed) ARE EXCLUDED FROM ADDITIONS IN INCREMENTAL STUDIES

ALL ITEMS ARE INCLUDED IN A PROSPECTIVE REPLACEMENT OR NEW INSTALLATION

## FOOTNOTES

① THESE ASSIGNMENTS APPLY TO MULTIPLEXED COPPER FEEDER PAIRS ONLY  
 BY DEFINITION: ITEMS LABELED F(ixed) OR SHARED ARE EXCLUDED IN A MARGINAL COST STUDY  
 ITEMS LABELED F(ixed) ARE EXCLUDED FROM ADDITIONS IN INCREMENTAL STUDIES  
 ALL ITEMS ARE INCLUDED IN A PROSPECTIVE, REPLACEMENT OR NEW INSTALLATION.

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATR081\COSTMETH  
TABLE - COST\_METH  
Sheet 2 of 2

HELP SCREEN

**Bellcore** (R)  
LCAT Rel : 1.0.4  
Issued : 07/31/95

| <u>Field / Group Title</u> | <u>Valid Inputs</u> | <u>This field or grouping defines -</u>                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SERVICES                   | (none)              | The system matrix for FEEDER cost methodology for -<br>The User selected Service Category - SWITCHED or PRIVATE LINE.                                                                                                                                                                                                               |
| LCAT CODE                  | (none)              | The system key code for this cost component                                                                                                                                                                                                                                                                                         |
| PLANT CODE                 | (none)              | The User nominated cross-reference code for the cost component or component group from the previous screen.                                                                                                                                                                                                                         |
| DELIVERY                   | (none)              | The Service Delivery Bandwidth Capacity for each group of methodology categories. The system defines 3 -<br>Narrowband - denotes voice grade and sub-voice grade band width.<br>Wideband - denotes bandwidths of the first level of digital hierarchy.<br>Broadband - denotes bandwidths of the higher levels of digital hierarchy. |
| CATEGORY                   | (none)              | The group of Methodology Categories                                                                                                                                                                                                                                                                                                 |
| SENSITIVITY INDEX          | F, V                | The Volatility Index to Distance or Demand Sensitivity -<br>F for Fixed Value, Low sensitivity to Distance or Demand.<br>V for Variable Usage, Cost Sensitive to Distance or Demand.<br>S for Sunk Investment which only has an Annual Component.                                                                                   |
| RESOURCE ASSIGNMENT        | SHARED, DIRECT      | The Assigned Category of Circuit Function -<br>DIRECT for Dedicated or Circuit Specific Investment.<br>SHARED - for Multi-Circuit or Non-Specific Investment.                                                                                                                                                                       |

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*  
\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION \*\*\*\*\*

PRESS <ENTER> TO RETURN TO THE MAIN MENU

CONFIDENTIAL  
PRIOR TO RELEASE BE GIVEN  
PROVIDED TO PUBLIC

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR081\CRITERIA                            |  | LOOP COST ANALYSIS TOOL                                                          |  | Bellcore <sup>®</sup>                       |  |
|--------------------------------------------------------|--|----------------------------------------------------------------------------------|--|---------------------------------------------|--|
| INPUT - STUDY SETUP                                    |  | GENERAL STUDY REQUIREMENTS                                                       |  | TODAY IS: 27-Jan-97                         |  |
| LCAT Rel.: 1.0.4                                       |  |                                                                                  |  | LAST UPDATE:                                |  |
| Issue Date: 3/31/95                                    |  |                                                                                  |  | 10-Dec-96 01:19 PM                          |  |
| STUDY NAME                                             |  | 1996 BAND 3 (OHIO-UNBUNDLED) BUSINESS LINE STUDY 18001 FEET - INFINITY INTRASTAT |  |                                             |  |
| COMMENTS                                               |  |                                                                                  |  |                                             |  |
| SERVICE CLASS                                          |  | BAND 3 - BUSINESS LINE                                                           |  | STUDY BASIS                                 |  |
|                                                        |  |                                                                                  |  | <input checked="" type="checkbox"/> NETWORK |  |
|                                                        |  |                                                                                  |  | <input type="checkbox"/> INDIVIDUAL         |  |
| COMPANY                                                |  | CINCINNATI BELL TEL.                                                             |  | INVESTMENT YEAR                             |  |
|                                                        |  |                                                                                  |  | 1996                                        |  |
| STATE / PROVINCE                                       |  | OHIO                                                                             |  | LOOP CHAR. STUDY YEAR                       |  |
|                                                        |  |                                                                                  |  | 1996                                        |  |
| CITY / AREA                                            |  | CINCINNATI                                                                       |  | STUDY YEAR                                  |  |
|                                                        |  |                                                                                  |  | 1996                                        |  |
| DENSITY CELL MIX                                       |  | 0 100 0 0                                                                        |  | TEST CASE                                   |  |
|                                                        |  | VH HI MED LO                                                                     |  | N                                           |  |
| DIGITAL LOOP CARRIER FACILITIES INCLUDED IN THE STUDY: |  |                                                                                  |  |                                             |  |
| Type Percent Mix:                                      |  |                                                                                  |  |                                             |  |
|                                                        |  | 100 FIBER IN THE LOOP                                                            |  |                                             |  |
|                                                        |  | 0 COPPER DIG LOOP CXR                                                            |  |                                             |  |

CONFIDENTIAL  
NOTICE MUST BE RELEASED TO PUBLIC  
PRIOR TO RELEASE TO PUCO  
PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

CA123R24\LCAT081\CRITERIA  
INPUT - STUDY SETUP  
Sheet 1 of 2

HELP SCREEN**Belcore** (R)

LCAT Rel. 1.0.4  
ISSUED: 3/31/95

**THIS DISPLAY** This display's data and the data on the subsequent display are a record of this study's criteria and the system's parameters and is the TITLE PAGE of this study. Printouts should accompany the input, worksheets, and results.

**STUDY NAME** Enter in Free Form up to 35 Characters for a Study Title. This data will be inserted in the title box of the title display of each run module.

**COMMENTS** Enter in Free Form (as in a Word Processor) FOUR lines (Word Wrap is active) of Commentary that will help Explain the study criteria and rationale. The space will allow approximately 72 proportionately spaced characters per line, 288 total. To begin just start typing in the data after <Enter>ing the previous item. The character guide will appear after the first character is entered. Data can be edited in the normal WP manner, using the <BS>, <Del>, <Up>, <Dn>, etc... keys. PRESS THE <Enter> KEY TO STOP INPUTTING DATA.

**STUDY BASIS** Select with an "X" either an average NETWORK study or an INDIVIDUAL CASE study.

**FACILITY TYPE** Select by entering the percent of technology mix, the Facility types in the loop network that support the service/s/ under study or enter an "X" to denote inclusion.

**CELL DENSITY** Select by entering the percent of cell density mix, based upon the scope of the jurisdiction and the definitions of the cell layers: C1, C2, C3, C4: which represent the VERY HIGH, HIGH, MEDIUM, LOW qualifiers, such as, METRO, URBAN, SUBURBAN, and RURAL.

\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR INFORMATION \*\*\*\*\*  
\*\*\*\*\* CONCERNING ANY OTHER DATA INPUT ITEMS ON THIS DISPLAY \*\*\*\*\*  
PRESS <Enter> KEY TO RETURN TO THE MAIN MENU

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR081\CRITERIA                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>LOOP COST ANALYSIS TOOL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Bellcore <sup>®</sup>                                                                                              |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------|-----|--|--------|-----|--------|----------|-----------|---------|--------|---|---------|-----|---------|---|---------|------------|-------------|--|-------|-----------|---------|---|-------|------|-----------|----------|--------|---|-----|------------|
| <b>INPUT - STUDY SETUP</b><br>SHEET 2 / 2<br><br>COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>GENERAL STUDY REQUIREMENTS</b><br><b>STUDY QUESTIONS</b><br>FOR<br>INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 3 - BUSINESS LINE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | LCAT Rel. 1.0.4<br>ISSUED: 3/31/95<br>STUDY YEAR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 10-Dec-95<br>TIME: 01:13 PM |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| <b>SELECTED QUESTIONS</b>                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| <b>CONCERNING - SERVICE SPEC.</b>                                                                                               | 1. Is this Study for a NEW Installation or an ADDITION ? .....<br>2. Is this Study for a SWITCHED or PRIVATE LINE Service ? .....<br>3. Is this Study for Narrow, Wide, or Broadband Services .....<br>4. Is this Study for 2 Wire or 4 Wire Transmission ? .....                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| <b>OFFICE CHAR.</b>                                                                                                             | 5. What Percent of the C.O. Switch Installations are DIGITAL Switches? .....<br>6. What Percent of Loop Carrier Installations are INTEGRATED DLC's? .....<br>7. What Percent of Loop Carrier Cross-connects are Electronic DCS's? .....<br>8. Deploy Digital Loop Carrier (loop pair gain) exclusively at ? .....                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| <b>RESULTS SPEC.</b>                                                                                                            | 9. Do you want FLAT RATE or DISTANCE SENSITIVE parameters ? .....<br>9a. If Distance Sensitive, what band increment do you want ? .....<br>10. How many Cost Bands in this study ? .....<br>11. Should this Study result in Investment, Cost, or All values ? .....<br>12. Is this study for Total Incremental or Marginal Costs ? .....<br>13. How many circuits (loops) in this Study ? .....<br>14. The study classification is .....(e.g.; RATES PLAN, TEST DATA, NEW SERVICE)<br>Required for the "Footer" of each Report page. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
|                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>VALID RESPONSE</b><br><table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">SET</td> <td></td> </tr> <tr> <td style="text-align: center;">N or A</td> <td style="text-align: center;">NEW</td> </tr> <tr> <td style="text-align: center;">S or P</td> <td style="text-align: center;">SWITCHED</td> </tr> <tr> <td style="text-align: center;">N, W or B</td> <td style="text-align: center;">NARBAND</td> </tr> <tr> <td style="text-align: center;">2 or 4</td> <td style="text-align: center;">2</td> </tr> </table><br><table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">0 → 100</td> <td style="text-align: center;">100</td> </tr> <tr> <td style="text-align: center;">0 → 100</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: center;">0 → 100</td> <td style="text-align: center;">18000 Feet</td> </tr> <tr> <td style="text-align: center;">e.g., 12000</td> <td></td> </tr> </table><br><table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">For D</td> <td style="text-align: center;">FLAT RATE</td> </tr> <tr> <td style="text-align: center;">1,2,3,4</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: center;">0 → 5</td> <td style="text-align: center;">COST</td> </tr> <tr> <td style="text-align: center;">I.C. or M</td> <td style="text-align: center;">TOT INCR</td> </tr> <tr> <td style="text-align: center;">P or M</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">999</td> <td style="text-align: center;">RATES PLAN</td> </tr> </table> |  |                                                                                                                    | SET |  | N or A | NEW | S or P | SWITCHED | N, W or B | NARBAND | 2 or 4 | 2 | 0 → 100 | 100 | 0 → 100 | 0 | 0 → 100 | 18000 Feet | e.g., 12000 |  | For D | FLAT RATE | 1,2,3,4 | 0 | 0 → 5 | COST | I.C. or M | TOT INCR | P or M | 1 | 999 | RATES PLAN |
| SET                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| N or A                                                                                                                          | NEW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| S or P                                                                                                                          | SWITCHED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| N, W or B                                                                                                                       | NARBAND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| 2 or 4                                                                                                                          | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| 0 → 100                                                                                                                         | 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| 0 → 100                                                                                                                         | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| 0 → 100                                                                                                                         | 18000 Feet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| e.g., 12000                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| For D                                                                                                                           | FLAT RATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| 1,2,3,4                                                                                                                         | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| 0 → 5                                                                                                                           | COST                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| I.C. or M                                                                                                                       | TOT INCR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| P or M                                                                                                                          | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |
| 999                                                                                                                             | RATES PLAN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                    |     |  |        |     |        |          |           |         |        |   |         |     |         |   |         |            |             |  |       |           |         |   |       |      |           |          |        |   |     |            |

CONFIDENTIAL  
 NOTICE MUST BE OBTAINED FROM BELL  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUBLIC

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**



C:\23R24\LCATRO81\CRITERIA

## HELP SCREEN

Bellcore<sup>®</sup>

INPUT - STUDY SETUP

LCAT Rel. 1.0.4  
ISSUED: 3/31/95

1. Specify **N** for New Installations or **A** for Addition to existing installations are being studied.
2. Specify **S** for the Switched Services or **P** for the Private Line (Special) Service category.
3. Specify **N** for Narrowband (DS0), **W** for Wideband (DS1), or **B** for Broadband Services category.
4. Specify as **2** for 2-wire or **4** for 4-wire, the circuit transmission paths used by the service/s/ being studied. .
5. Specify Digital Switch Mix as a Percentage of Installations over Analog in the Jurisdiction.
6. & 7. Specify Integrated DLC Mix as a Percentage of the DLC equipment requirements.  
Using **6.** for Switched Services or Using **7.** for Special (Private Line) Services.
8. Enter in feet, the loop length beyond which only Digital Loop Carrier Technology will be considered
9. Specify **F** for Flat Rate Loop or **D** for Distance Sensitive Bands, for the Cost Structure of the study
- 9A. Enter **1, 2, 3,** or **4** to specify either 1/4, 1/2, 3/4, or 1 mile, respectively, band increments in a Distance Sensitive Study
10. Specify the quantity of Cost Bands of Loop Lengths will be studied, for upto a maximum of 5 bands.  
Enter **0** for Network Averaged (non-Banded) Input or Individual Circuit Flat Rate Cost Studies.
11. Specify **I** for Investment Only results or **C** for resultant Annual and Monthly Recurring Costs or **A** for All values.
12. Specify **T** for Total Incremental or **M** for Marginal (Direct Incremental) Average Weighted Costs Study.
13. Enter the quantity of loop circuits that will be the demand basis of this cost study.  
Nominally, entering 1 provides a "UNIT" cost and any other value a "TOTAL" cost.

PRESS &lt; Enter &gt; KEY TO RETURN TO THE MAIN MENU

CONFIDENTIAL  
 NOT TO BE DISCLOSED TO PUBLIC  
 PRIOR TO REVIEW BY PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

|                                    |                                                       |                                      |
|------------------------------------|-------------------------------------------------------|--------------------------------------|
| C:\123R24\LCATR081\DESIGN          | <b>LOOP COST ANALYSIS TOOL</b>                        | <b>Belcore</b>                       |
| INPUT - LOOP DESIGN<br>Sheet 1 / 1 | CIRCUIT DESIGN REQUIREMENTS<br>CHARACTERISTICS<br>FOR | LCAT Rel: 1.0.4<br>Issued: 07/31/95~ |
| COMPANY: CINCINNATI BELL TEL.      | INVESTMENT YEAR: 1996                                 | STUDY YR: 1996                       |
| CITY / AREA: CINCINNATI            | LOOP STUDY YEAR: 1996                                 | TEST CASE: 1                         |
| STATE / PROV: OHIO                 | SERVICE CLASS: BAND 3 - BUSINESS LINE                 | LAST UPDATE: 10-Dec-96               |
|                                    |                                                       | TIME: 13:15                          |

**CIRCUIT DESIGN****Study Parameters**

Study Basis: NETWORK STUDY

Service Level: NARBAND

Loop Topology: STAR

**CIRCUIT LAYOUT REQUIREMENTS -  
FOR FIBER HUBS & FEEDER EXTENSIONS**

(FIBER HUB TO REMOTE TERMINAL LINK)

**FACILITY INTERFACE SITES:**

Proportion of Fiber Circuits

WITHOUT Fiber Hubs

0.0000

**FACILITY TECHNOLOGIES:**

Of the Hubbed Circuits -

Proportion of links on Fiber Tech.

0.0000

Proportion of links on CDLC / MAR 0.0000

**FOR SERVICE ACCESS NETWORK**

(REMOTE TERMINAL TO CUSTOMER LINK)

**FACILITY INTERFACE SITES:**

Proportion of Remote terminals

colocated at Customer Premises

0.0000

**CIRCUIT DESIGN REQUIREMENTS -  
SELECTION & DISTRIBUTION:**Note**FOR FIBER DLC DESIGNS:**

Weighting of Design #1

0.0000

Weighting of Design #2

0.0000

Weighting of Design #3

1.0000

Weighting of Design #4

NA 0.0000

Weighting of Design #5

NA 0.0000

Weighting of Design #6

NA 0.0000

1.0000 ChkSum

**FOR COPPER DLC DESIGNS:**

Weighting of Design #1

1.0000

Weighting of Design #2

NA 0.0000

1.0000 ChkSum

NA DENOTES THAT THE CIRCUIT DESIGN  
PROBABLY DOES NOT APPLY TO THIS  
SET OF STUDY PARAMETERS.

**CONFIDENTIAL**  
NOT FOR DISCLOSURE  
PRIOR TO PROVISION

C:\123R24\LCATR081\DESIGN

HELP SCREEN

Bellcore

INPUT - LOOP\_DESIGN

LCAT Rel :1.0.4

Sheet 1 of 1

Issued :07/31/95

**DIGITAL LOOP  
CARRIER  
DESIGNS**

Each Loop's circuit layout is broken down into potentially the FEEDER, the DISTRIBUTION, and the DROP segment. The FEEDER segment can have THREE Spans, the PRIMARY and EXTENSION are realtime, but, the SUBFEEDER is a "filler" for spans or distances under PAIR GAIN Deployment and will be employed using engineering rules and network characteristics. The potential Fiber Optic DLC and Copper DLC circuit layouts have been categorized into several generic designs for purposes of narrowing down the complexity of the network contribution. The *DESIGN's* represent unique combinations of layers (COLLOCATION) and the transport media. There is a chart of these *DESIGN's* included in the DATA CATALOG and the METHODOLOGY sections of the User Guide.

**COLLOCATIONS** To be defined as the combining of Loop functions at the same location, excluding the need for translation of the transport function (eliminating the OSP and termination equipment). Note that the sum of the probabilities do not have to equal total universe, therefore, the proportions are a function of the total serving universe (total loop network).

**FIBER HUBS & FEEDER EXTENSIONS** These values represent the proportion of each technology used in the layouts which DO NOT have collocated FIBER HUB and REMOTE TERMINAL functions.

**WARNING** → This function must be in place for "RING" topologies as 100% FIBER, therefore, the *DESIGN* choices are limited for RING to *DESIGN's* 1 and 5. All other *DESIGN* are to be avoided.

**SERVICE SPECIFIC** To avoid circuit layout conflict with certain service levels, the input choices will be limited for BROADBAND service levels to those which currently support DSL Conn at both ends. Currently, that is, *DESIGN* 4, 5, & 6.

\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR INFORMATION \*\*\*\*\*  
\*\*\*\*\* CONCERNING ANY OTHER DATA INPUT ITEMS ON THIS DISPLAY \*\*\*\*\*

PRESS < Enter > KEY TO RETURN TO THE MAIN MENU

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR081\FACILITY                                                                                               |  | <b>LOOP COST ANALYSIS TOOL</b>                 |  | Bellcore                            |  |
|---------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------|--|-------------------------------------|--|
| TABLE - SPAN_INV<br>SHEET 1 / 4                                                                                           |  | LOOP FACILITY INPUT<br>FIBER CABLE DATA<br>FOR |  | LCAT Rel: 1.0.4<br>Issued: 07/31/95 |  |
| COMPANY: CINCINNATI BELL TEL.                                                                                             |  | INVESTMENT YEAR: 1996                          |  | STUDY YR: 1996                      |  |
| CITY / AREA: CINCINNATI                                                                                                   |  | LOOP STUDY YEAR: 1996                          |  | TEST CASE: 1                        |  |
| STATE / PROV: OHIO                                                                                                        |  | SERVICE CLASS: BAND 3 - BUSINESS LINE          |  | LAST UPDATE: 10-Dec-96              |  |
|                                                                                                                           |  |                                                |  | TIME: 13:17                         |  |
| <b>FIBER CABLE INVESTMENT AND CHARACTERISTICS</b>                                                                         |  |                                                |  |                                     |  |
| <b>CABLE TYPE MIX (DISTRIBUTION TO CODE):</b><br>Proportion of FIBER cable installations that are ....                    |  | <b>FOR FEEDER SEGMENTS</b>                     |  | <b>FOR DISTRIBUTION SEGMENTS</b>    |  |
|                                                                                                                           |  |                                                |  |                                     |  |
|                                                                                                                           |  | AERIAL                                         |  | 0.8100                              |  |
|                                                                                                                           |  | BURIED                                         |  | 0.0000                              |  |
|                                                                                                                           |  | UNDGRD                                         |  | 0.1900                              |  |
|                                                                                                                           |  |                                                |  | 0.0000 factors                      |  |
|                                                                                                                           |  |                                                |  | 0.0000 factors                      |  |
|                                                                                                                           |  |                                                |  | 0.0000 factors                      |  |
| <b>INVESTMENT PER CABLE PAIR FOOT BY CABLE TYPE:</b>                                                                      |  |                                                |  |                                     |  |
| Update Cable Sheath Prices on the FULL SET Input SHEET ? (Y/N) <input type="checkbox"/> N [Required with INDIVIDUAL Mode] |  |                                                |  |                                     |  |
| If not, Update Unit Averages as Follows :                                                                                 |  |                                                |  |                                     |  |
| <b>PRIMARY SEGMENT</b>                                                                                                    |  |                                                |  |                                     |  |
| Average Unit Investment for FIBER cable, Installed as ....                                                                |  | AERIAL                                         |  | \$ 0.1930                           |  |
|                                                                                                                           |  | BURIED                                         |  | \$ 0.0000                           |  |
|                                                                                                                           |  | UNDGRD                                         |  | \$ 0.2229                           |  |
|                                                                                                                           |  |                                                |  | (Fiber Hub to Remote Terminal)      |  |
|                                                                                                                           |  |                                                |  | per fiber pair Foot                 |  |
|                                                                                                                           |  |                                                |  | per fiber pair Foot                 |  |
|                                                                                                                           |  |                                                |  | per fiber pair Foot                 |  |
| <b>FEEDER - EXTENSION SEGMENT AND DISTRIBUTION SEGMENT</b>                                                                |  |                                                |  |                                     |  |
| Average Unit Investment for FIBER cable, Installed as ....                                                                |  | AERIAL                                         |  | \$ 0.1930                           |  |
|                                                                                                                           |  | BURIED                                         |  | \$ 0.0000                           |  |
|                                                                                                                           |  | UNDGRD                                         |  | \$ 0.2229                           |  |
|                                                                                                                           |  |                                                |  | (Fiber Hub to Remote Terminal)      |  |
|                                                                                                                           |  |                                                |  | (Remote Terminal to Service Point)  |  |
|                                                                                                                           |  |                                                |  | per fiber pair Foot                 |  |
|                                                                                                                           |  |                                                |  | per fiber pair Foot                 |  |
|                                                                                                                           |  |                                                |  | per fiber pair Foot                 |  |

NOT TO BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUBLIC

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR081\FACILITY                                                    |             | <b>LOOP COST ANALYSIS TOOL</b>                                                          |                                                                   |        |             | Bellcore                                                                |
|--------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------|--------|-------------|-------------------------------------------------------------------------|
| TABLE - SPAN_INV<br>SHEET 1A / 4                                               |             | LOOP FACILITY INPUT<br>FIBER CABLE DATA - BY CABLE SHEATH DETAIL<br>FOR                 |                                                                   |        |             | LCAT Rev: 1.0.4<br>Issued: 07/31/95                                     |
| COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO |             | INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 3 - BUSINESS LINE |                                                                   |        |             | STUDY YR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 10-Dec-96<br>TIME: 13:17 |
| <b>FIBER OPTIC CABLE INVESTMENT REFERENCE TABLE</b>                            |             |                                                                                         |                                                                   |        |             |                                                                         |
| Cable Sheath Sizes                                                             |             | CAPACITY                                                                                | Unit Investment per Cable Pair Foot, by Cable Type, by Cable Size |        |             |                                                                         |
|                                                                                |             | INDEX                                                                                   | AERIAL                                                            | BURIED | UNDERGROUND |                                                                         |
| 4                                                                              | Fiber Cable | 2 pr                                                                                    | \$                                                                | \$     | \$          | \$                                                                      |
| 6                                                                              | Fiber Cable | 3 pr                                                                                    | \$                                                                | \$     | \$          | \$                                                                      |
| 12                                                                             | Fiber Cable | 6 pr                                                                                    | \$                                                                | \$     | \$          | \$                                                                      |
| 18                                                                             | Fiber Cable | 9 pr                                                                                    | \$                                                                | \$     | \$          | \$                                                                      |
| 24                                                                             | Fiber Cable | 12 pr                                                                                   | \$                                                                | \$     | \$          | \$                                                                      |
| 36                                                                             | Fiber Cable | 18 pr                                                                                   | \$                                                                | \$     | \$          | \$                                                                      |
| 48                                                                             | Fiber Cable | 24 pr                                                                                   | \$                                                                | \$     | \$          | \$                                                                      |
| 60                                                                             | Fiber Cable | 30 pr                                                                                   | \$                                                                | \$     | \$          | \$                                                                      |
| 72                                                                             | Fiber Cable | 36 pr                                                                                   | \$                                                                | \$     | \$          | \$                                                                      |
| 84                                                                             | Fiber Cable | 42 pr                                                                                   | \$                                                                | \$     | \$          | \$                                                                      |
| 96                                                                             | Fiber Cable | 48 pr                                                                                   | \$                                                                | \$     | \$          | \$                                                                      |
| 144                                                                            | Fiber Cable | 72 pr                                                                                   | \$                                                                | \$     | \$          | \$                                                                      |
| 192                                                                            | Fiber Cable | 96 pr                                                                                   | \$                                                                | \$     | \$          | \$                                                                      |
| 216                                                                            | Fiber Cable | 108 pr                                                                                  | \$                                                                | \$     | \$          | \$                                                                      |

CONFIDENTIAL

NOTICE: INFORMATION PROVIDED TO PUBLIC

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATR081\FACILITY  
TABLE - SPAN\_INV  
SHEET 1 / 4

HELP SCREEN

**Bellcore** (TM)

LCAT Rel : 1.0.4  
Issued : 07/31/95

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*

\*\*\*\*\*PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION\*\*\*\*\*

PRESS 'ENTER' TO RETURN TO THE MAIN MENU

**CONFIDENTIAL**  
NOTICE: MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

| LOOP COST ANALYSIS TOOL                                                                                                                                                                                                             |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       | Bellcore (P)                                                                                                   |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------|--------|--------------|---------------------------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------|-----------|--------|-----------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|--------|--------|-----------|-----------|--------|-----------|-----------|---------|-----------|-----------|--------|--------|-----------|-----------|--------|-----------|-----------|---------|-----------|-----------|--------|
| C:\123R24\LCATRC81\FACILITY<br>TABLE - SPAN_INV<br>SHEET 2 / 4<br><br>COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO                                                                                |              | LOOP FACILITY INPUT<br>COPPER CABLE DATA<br>FOR<br>INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 3 - BUSINESS LINE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                       | LCAT Rel: 1.0.4<br>Issued: 07/31/95<br>STUDY YR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 10-Dec-96<br>TIME: 13:17 |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| COPPER CABLE CHARACTERISTICS AND INVESTMENTS                                                                                                                                                                                        |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| <b>Cable Gauge Mix :</b> <u>GAUGE</u>                                                                                                                                                                                               |              | <b>FEEDER</b><br><b>SEGMENT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>DISTRIBUTION</b><br><b>SEGMENT</b> | <b>Unit Investment per Cable Pair Foot</b><br><b>By Cable Type, By Cable Gauge :</b>                           |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| The Proportion of<br>Copper Cable that is ....                                                                                                                                                                                      |              | <table border="1" style="width: 100%;"> <tr><td>26 GA.</td><td>0.1500</td></tr> <tr><td>24 GA.</td><td>0.8500</td></tr> <tr><td>22 GA.</td><td>0.0000</td></tr> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 26 GA.                                | 0.1500                                                                                                         | 24 GA. | 0.8500       | 22 GA.                          | 0.0000                                | <table border="1" style="width: 100%;"> <tr><td>0.1500</td><td>0.1500</td></tr> <tr><td>0.8500</td><td>0.8500</td></tr> <tr><td>0.0000</td><td>0.0000</td></tr> </table> | 0.1500 | 0.1500    | 0.8500    | 0.8500 | 0.0000    | 0.0000    | Update Cable Sheath Prices      [Required with INDIVIDUAL Mode]<br>on the FULL SET Input SHEET ? (Y/N) <input type="text" value="N"/><br>If not, Update |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| 26 GA.                                                                                                                                                                                                                              | 0.1500       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| 24 GA.                                                                                                                                                                                                                              | 0.8500       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| 22 GA.                                                                                                                                                                                                                              | 0.0000       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| 0.1500                                                                                                                                                                                                                              | 0.1500       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| 0.8500                                                                                                                                                                                                                              | 0.8500       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| 0.0000                                                                                                                                                                                                                              | 0.0000       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| <b>Cable Type Mix, By Gauge :</b>                                                                                                                                                                                                   |              | <table border="1" style="width: 100%;"> <thead> <tr> <th></th> <th><u>GAUGE</u></th> <th><u>FEEDER</u><br/><u>SEGMENT</u></th> <th><u>DISTRIBUTION</u><br/><u>SEGMENT</u></th> </tr> </thead> <tbody> <tr> <td rowspan="3">The Proportion of<br/>Copper Cable that is ....</td> <td rowspan="3">26 GA.</td> <td>AERIAL</td> <td>0.8100</td> <td>0.5800</td> </tr> <tr> <td>BURIED</td> <td>0.0400</td> <td>0.4200</td> </tr> <tr> <td>UNDGRND</td> <td>0.1500</td> <td>0.0000</td> </tr> <tr> <td rowspan="3">24 GA.</td> <td>AERIAL</td> <td>0.8100</td> <td>0.5800</td> </tr> <tr> <td>BURIED</td> <td>0.0400</td> <td>0.4200</td> </tr> <tr> <td>UNDGRND</td> <td>0.1500</td> <td>0.0000</td> </tr> <tr> <td rowspan="3">22 GA.</td> <td>AERIAL</td> <td>0.0000</td> <td>0.0000</td> </tr> <tr> <td>BURIED</td> <td>0.0000</td> <td>0.0000</td> </tr> <tr> <td>UNDGRND</td> <td>0.0000</td> <td>0.0000</td> </tr> </tbody> </table> |                                       |                                                                                                                |        | <u>GAUGE</u> | <u>FEEDER</u><br><u>SEGMENT</u> | <u>DISTRIBUTION</u><br><u>SEGMENT</u> | The Proportion of<br>Copper Cable that is ....                                                                                                                           | 26 GA. | AERIAL    | 0.8100    | 0.5800 | BURIED    | 0.0400    | 0.4200                                                                                                                                                  | UNDGRND   | 0.1500    | 0.0000 | 24 GA. | AERIAL    | 0.8100    | 0.5800 | BURIED    | 0.0400    | 0.4200  | UNDGRND   | 0.1500    | 0.0000 | 22 GA. | AERIAL    | 0.0000    | 0.0000 | BURIED    | 0.0000    | 0.0000  | UNDGRND   | 0.0000    | 0.0000 |
|                                                                                                                                                                                                                                     | <u>GAUGE</u> | <u>FEEDER</u><br><u>SEGMENT</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <u>DISTRIBUTION</u><br><u>SEGMENT</u> |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| The Proportion of<br>Copper Cable that is ....                                                                                                                                                                                      | 26 GA.       | AERIAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.8100                                | 0.5800                                                                                                         |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
|                                                                                                                                                                                                                                     |              | BURIED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.0400                                | 0.4200                                                                                                         |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
|                                                                                                                                                                                                                                     |              | UNDGRND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0.1500                                | 0.0000                                                                                                         |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| 24 GA.                                                                                                                                                                                                                              | AERIAL       | 0.8100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.5800                                |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
|                                                                                                                                                                                                                                     | BURIED       | 0.0400                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.4200                                |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
|                                                                                                                                                                                                                                     | UNDGRND      | 0.1500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.0000                                |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| 22 GA.                                                                                                                                                                                                                              | AERIAL       | 0.0000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.0000                                |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
|                                                                                                                                                                                                                                     | BURIED       | 0.0000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.0000                                |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
|                                                                                                                                                                                                                                     | UNDGRND      | 0.0000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.0000                                |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| Average Unit<br>Investment for<br>Copper Cable<br>Installed as ....                                                                                                                                                                 |              | <table border="1" style="width: 100%;"> <thead> <tr> <th></th> <th><u>GAUGE</u></th> <th><u>FEEDER</u><br/><u>SEGMENT</u></th> <th><u>DISTRIBUTION</u><br/><u>SEGMENT</u></th> </tr> </thead> <tbody> <tr> <td rowspan="3">26 GA.</td> <td>AERIAL</td> <td>\$ 0.0113</td> <td>\$ 0.0418</td> </tr> <tr> <td>BURIED</td> <td>\$ 0.0189</td> <td>\$ 0.0588</td> </tr> <tr> <td>UNDGRND</td> <td>\$ 0.0120</td> <td>\$ 0.0000</td> </tr> <tr> <td rowspan="3">24 GA.</td> <td>AERIAL</td> <td>\$ 0.0113</td> <td>\$ 0.0418</td> </tr> <tr> <td>BURIED</td> <td>\$ 0.0189</td> <td>\$ 0.0588</td> </tr> <tr> <td>UNDGRND</td> <td>\$ 0.0120</td> <td>\$ 0.0000</td> </tr> <tr> <td rowspan="3">22 GA.</td> <td>AERIAL</td> <td>\$ 0.0000</td> <td>\$ 0.0000</td> </tr> <tr> <td>BURIED</td> <td>\$ 0.0000</td> <td>\$ 0.0000</td> </tr> <tr> <td>UNDGRND</td> <td>\$ 0.0000</td> <td>\$ 0.0000</td> </tr> </tbody> </table>                |                                       |                                                                                                                |        | <u>GAUGE</u> | <u>FEEDER</u><br><u>SEGMENT</u> | <u>DISTRIBUTION</u><br><u>SEGMENT</u> | 26 GA.                                                                                                                                                                   | AERIAL | \$ 0.0113 | \$ 0.0418 | BURIED | \$ 0.0189 | \$ 0.0588 | UNDGRND                                                                                                                                                 | \$ 0.0120 | \$ 0.0000 | 24 GA. | AERIAL | \$ 0.0113 | \$ 0.0418 | BURIED | \$ 0.0189 | \$ 0.0588 | UNDGRND | \$ 0.0120 | \$ 0.0000 | 22 GA. | AERIAL | \$ 0.0000 | \$ 0.0000 | BURIED | \$ 0.0000 | \$ 0.0000 | UNDGRND | \$ 0.0000 | \$ 0.0000 |        |
|                                                                                                                                                                                                                                     | <u>GAUGE</u> | <u>FEEDER</u><br><u>SEGMENT</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <u>DISTRIBUTION</u><br><u>SEGMENT</u> |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| 26 GA.                                                                                                                                                                                                                              | AERIAL       | \$ 0.0113                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | \$ 0.0418                             |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
|                                                                                                                                                                                                                                     | BURIED       | \$ 0.0189                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | \$ 0.0588                             |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
|                                                                                                                                                                                                                                     | UNDGRND      | \$ 0.0120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | \$ 0.0000                             |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| 24 GA.                                                                                                                                                                                                                              | AERIAL       | \$ 0.0113                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | \$ 0.0418                             |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
|                                                                                                                                                                                                                                     | BURIED       | \$ 0.0189                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | \$ 0.0588                             |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
|                                                                                                                                                                                                                                     | UNDGRND      | \$ 0.0120                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | \$ 0.0000                             |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| 22 GA.                                                                                                                                                                                                                              | AERIAL       | \$ 0.0000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | \$ 0.0000                             |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
|                                                                                                                                                                                                                                     | BURIED       | \$ 0.0000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | \$ 0.0000                             |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
|                                                                                                                                                                                                                                     | UNDGRND      | \$ 0.0000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | \$ 0.0000                             |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |
| NOTE : If the DROP WIRE resource Investment is average values, it may be backed out through input of the Drop Wire Unit Investment (Sheet 5) and the flagging of the Adjustment either there or on the ADJUST input file worksheet. |              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                       |                                                                                                                |        |              |                                 |                                       |                                                                                                                                                                          |        |           |           |        |           |           |                                                                                                                                                         |           |           |        |        |           |           |        |           |           |         |           |           |        |        |           |           |        |           |           |         |           |           |        |

|                                  |  |                                                                          |  |                                       |  |
|----------------------------------|--|--------------------------------------------------------------------------|--|---------------------------------------|--|
| C:\123R24\LCATRO81\FACILITY      |  | <b>LOOP COST ANALYSIS TOOL</b>                                           |  | Belcore                               |  |
| TABLE - SPAN INV<br>SHEET 2A / 4 |  | LOOP FACILITY INPUT<br>COPPER CABLE DATA - BY CABLE SHEATH DETAIL<br>FOR |  | LCAT R61: 10.3<br>Issued: 07/31/95    |  |
| COMPANY: CINCINNATI BELL TEL     |  | INVESTMENT YEAR: 1996                                                    |  | STUDY YR: 1996                        |  |
| CITY / AREA: CINCINNATI          |  | LOOP STUDY YEAR: 1996                                                    |  | TEST CASE: 1                          |  |
| STATE/PROV: OHIO                 |  | SERVICE CLASS: BAND 3 - BUSINESS LINE                                    |  | LAST UPDATE: 10-Dec-96<br>TIME: 13:17 |  |

**COPPER CABLE INVESTMENT REFERENCE TABLE**

Unit Investment Per Cable Pair Foot. By Cable Gauge, By Cable Type, By Cable Size

| Cable Sheath Sizes | Capacity | Gauge: =><br>INDEX | 25 GA. |        |        | 24 GA. |        |        | 22 GA. |        |        |
|--------------------|----------|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                    |          |                    | AERIAL | BURIED | UNDGRD | AERIAL | BURIED | UNDGRD | AERIAL | BURIED | UNDGRD |
| 40 Copper Cable    | 20 pr    | \$                 |        |        |        |        |        |        |        |        |        |
| 50 Copper Cable    | 25 pr    | \$                 |        |        |        |        |        |        |        |        |        |
| 80 Copper Cable    | 40 pr    | \$                 |        |        |        |        |        |        |        |        |        |
| 100 Copper Cable   | 50 pr    | \$                 |        |        |        |        |        |        |        |        |        |
| 140 Copper Cable   | 70 pr    | \$                 |        |        |        |        |        |        |        |        |        |
| 200 Copper Cable   | 100 pr   | \$                 |        |        |        |        |        |        |        |        |        |
| 400 Copper Cable   | 200 pr   | \$                 |        |        |        |        |        |        |        |        |        |
| 600 Copper Cable   | 300 pr   | \$                 |        |        |        |        |        |        |        |        |        |
| 800 Copper Cable   | 400 pr   | \$                 |        |        |        |        |        |        |        |        |        |
| 1200 Copper Cable  | 600 pr   | \$                 |        |        |        |        |        |        |        |        |        |
| 1800 Copper Cable  | 900 pr   | \$                 |        |        |        |        |        |        |        |        |        |
| 2400 Copper Cable  | 1200 pr  | \$                 |        |        |        |        |        |        |        |        |        |
| 3000 Copper Cable  | 1500 pr  | \$                 |        |        |        |        |        |        |        |        |        |
| 3600 Copper Cable  | 1800 pr  | \$                 |        |        |        |        |        |        |        |        |        |
| 4200 Copper Cable  | 2100 pr  | \$                 |        |        |        |        |        |        |        |        |        |
| 4800 Copper Cable  | 2400 pr  | \$                 |        |        |        |        |        |        |        |        |        |
| 5400 Copper Cable  | 2700 pr  | \$                 |        |        |        |        |        |        |        |        |        |
| 6000 Copper Cable  | 3000 pr  | \$                 |        |        |        |        |        |        |        |        |        |
| 7200 Copper Cable  | 3600 pr  | \$                 |        |        |        |        |        |        |        |        |        |
| 8400 Copper Cable  | 4200 pr  | \$                 |        |        |        |        |        |        |        |        |        |

CONFIDENTIAL  
NOTICE  
PRIOR TO RELEASE  
10/1/96

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.



CA123R24\LCATR081\FACILITY  
TABLE - SPAN\_INV  
SHEET 2 / 4

HELP SCREEN

**Bellcore**  
LCAT Rel: 1.0.4  
Issued: 07/31/95

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS -REFERENCE TO THEIR DATA CATALOG NAMES\*\*\*\*\*

\*\*\*\*\*PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION\*\*\*\*\*

PRESS 'ENTER' TO RETURN TO THE MAIN MENU

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

LCAT

INPUT SCREEN

Page -1-

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

LCAT

INPUT SCREEN

Page -2-

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

| C:\123R24\LCATRO81\FACILITY.WK1 |                           |                                                    |                                   | LOOP COST ANALYSIS TOOL        |                                                     | Bellcore (M)           |             |
|---------------------------------|---------------------------|----------------------------------------------------|-----------------------------------|--------------------------------|-----------------------------------------------------|------------------------|-------------|
| SPAN INV - WORKSHEET            |                           | COPPER CABLE DISTRIBUTIONS MELDING                 |                                   | WORKSHEET A                    |                                                     | LCAT Ver: 1.0.2        |             |
| Sheet 1 / 3                     |                           | FOR                                                |                                   | FACILITY TYPE: COPPER CABLE    |                                                     | Issue Date: 07/31/95   |             |
| COMPANY: CINCINNATI BELL TEL    |                           | DESIGN TYPE: DISTRIBUTION SEGMENT                  |                                   | STUDY YR: 1996                 |                                                     | TEST CASE: 1996        |             |
| CITY / AREA: CINCINNATI         |                           | SERVICE CLASS: BAND 3 - BUSINESS LINE              |                                   | DATE: 1                        |                                                     | LAST UPDATE: 10-Dec-96 |             |
| STATE/PROV: OHIO                |                           |                                                    |                                   | TIME: 13:17                    |                                                     |                        |             |
| DATA DESC.                      |                           | (DISTRIBUTION TO CODE)<br>CABLE TYPE MIX (p...dst) | PER FOOT INVESTMENT (ph...ds)     | CABLE GAUGE MIX (copper...dst) | ADJUSTED CABLE TYPE                                 | ADJUSTED PFI           |             |
| CHARACTERISTICS FOR :           |                           |                                                    |                                   |                                |                                                     |                        |             |
| AERIAL @ 26 GA.                 | [A]                       | 0.580000                                           | \$ 0.041800                       | 0.1500                         | [D=A*C]                                             | 0.087000               | [E=B*C]     |
| BURIED @ 26 GA.                 |                           | 0.420000                                           | \$ 0.068800                       | 0.1500                         |                                                     | 0.063000               | \$ 0.010320 |
| UNDGRND @ 26 GA.                |                           | 0.000000                                           | \$ 0.000000                       | 0.1500                         |                                                     | 0.000000               | \$ 0.000000 |
| AERIAL @ 24 GA.                 |                           | 0.580000                                           | \$ 0.041800                       | 0.8500                         |                                                     | 0.493000               | \$ 0.035530 |
| BURIED @ 24 GA.                 |                           | 0.420000                                           | \$ 0.068800                       | 0.8500                         |                                                     | 0.357000               | \$ 0.058480 |
| UNDGRND @ 24 GA.                |                           | 0.000000                                           | \$ 0.000000                       | 0.8500                         |                                                     | 0.000000               | \$ 0.000000 |
| AERIAL @ 22 GA.                 |                           | 0.000000                                           | \$ 0.000000                       | 0.0000                         |                                                     | 0.000000               | \$ 0.000000 |
| BURIED @ 22 GA.                 |                           | 0.000000                                           | \$ 0.000000                       | 0.0000                         |                                                     | 0.000000               | \$ 0.000000 |
| UNDGRND @ 22 GA.                |                           | 0.000000                                           | \$ 0.000000                       | 0.0000                         |                                                     | 0.000000               | \$ 0.000000 |
| Check =                         |                           | 1.00                                               |                                   | TABLE 6                        |                                                     |                        |             |
| TABLE 2                         |                           | TABLE 4                                            |                                   | TABLE 6                        |                                                     |                        |             |
| DATA DESC.                      | CABLE TYPE MIX RANGE NAME | MELDED GAUGES                                      | PAIR / FOOT INVESTMENT RANGE NAME | MELDED GAUGES                  | PAIR / FOOT INVESTMENT RENORMALIZED AERIAL / BURIED | MELDED GAUGES          |             |
| CHARACTERISTICS FOR :           |                           | [F=sum(D*Type)]                                    | [G=sum(E*Type)]                   |                                | [H=sum(F*Type)]                                     |                        |             |
| AERIAL                          |                           | 0.580000                                           | \$ 0.041800                       | \$ 0.580000                    |                                                     | \$ 0.580000            |             |
| BURIED                          |                           | 0.420000                                           | \$ 0.068800                       | \$ 0.420000                    |                                                     | \$ 0.420000            |             |
| UNDERGRND                       |                           | 0.000000                                           | \$ 0.000000                       | \$ 0.000000                    |                                                     | \$ 0.000000            |             |
| Check =                         |                           | 1.000000                                           |                                   | Check =                        |                                                     | 1.000000               |             |
| FOOTNOTES                       |                           |                                                    |                                   |                                |                                                     |                        |             |

**CONFIDENTIAL**  
NOTICE MUST BE RELEASED TO PUBLIC  
PRIOR TO RELEASE TO PUCO  
PROVIDED TO PUCO

LCAT

INPUT SCREEN

Page -4

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

| C:\123R24\LCATR081\FACILITY.WK1                                              |                                                          | LOOP COST ANALYSIS TOOL                                                                                                                                            |                                                                         |                        |                 | Bellcore <sup>®</sup>                                                                                                            |  |
|------------------------------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|------------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------|--|
| SPAN INV - WORKSHEET<br>Sheet 2 / 3                                          |                                                          | COPPER CABLE DISTRIBUTIONS WELDING<br>WORKSHEET A<br>FOR<br>FACILITY TYPE: COPPER CABLE<br>DESIGN TYPE: SUBFEEDER SEGMENT<br>SERVICE CLASS: BAND 3 - BUSINESS LINE |                                                                         |                        |                 | LCAT Rev: 1.0.4<br>Issue Date: 07/31/95<br>STUDY YR: 1996<br>TEST CASE: 1996<br>DATE: 1<br>LAST UPDATE: 10-Dec-96<br>TIME: 13:17 |  |
| COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE/PROV: OHIO |                                                          |                                                                                                                                                                    |                                                                         |                        |                 |                                                                                                                                  |  |
|                                                                              |                                                          | MELDED CABLE INVESTMENT PER PAIR FOOT                                                                                                                              |                                                                         |                        |                 |                                                                                                                                  |  |
| DATA<br>DESC.                                                                | (DISTRIBUTION<br>TO CODE)<br>CABLE TYPE MIX<br>(p...fdr) | PER FOOT<br>INVESTMENT<br>(pri...fdr)                                                                                                                              | CABLE<br>GAUGE MIX<br>(copper...fdr)                                    | ADJUSTED<br>CABLE TYPE | ADJUSTED<br>PFI |                                                                                                                                  |  |
| CHARACTERISTICS FOR:                                                         | [A]                                                      | [B]                                                                                                                                                                | [C]                                                                     | [D=A*C]                | [E=B*C]         |                                                                                                                                  |  |
| AERIAL @ 26 GA.                                                              | 0.810000                                                 | \$ 0.011300                                                                                                                                                        | 0.1500                                                                  | 0.121500               | \$ 0.001695     |                                                                                                                                  |  |
| BURIED @ 26 GA.                                                              | 0.040000                                                 | \$ 0.018900                                                                                                                                                        | 0.1500                                                                  | 0.006000               | \$ 0.002835     |                                                                                                                                  |  |
| UNDGRND @ 26 GA.                                                             | 0.150000                                                 | \$ 0.012000                                                                                                                                                        | 0.1500                                                                  | 0.022500               | \$ 0.001800     |                                                                                                                                  |  |
| AERIAL @ 24 GA.                                                              | 0.810000                                                 | \$ 0.011300                                                                                                                                                        | 0.8500                                                                  | 0.688500               | \$ 0.009605     |                                                                                                                                  |  |
| BURIED @ 24 GA.                                                              | 0.040000                                                 | \$ 0.018900                                                                                                                                                        | 0.8500                                                                  | 0.034000               | \$ 0.016065     |                                                                                                                                  |  |
| UNDGRND @ 24 GA.                                                             | 0.150000                                                 | \$ 0.012000                                                                                                                                                        | 0.8500                                                                  | 0.127500               | \$ 0.010200     |                                                                                                                                  |  |
| AERIAL @ 22 GA.                                                              | 0.000000                                                 | \$ 0.000000                                                                                                                                                        | 0.0000                                                                  | 0.000000               | \$ 0.000000     |                                                                                                                                  |  |
| BURIED @ 22 GA.                                                              | 0.000000                                                 | \$ 0.000000                                                                                                                                                        | 0.0000                                                                  | 0.000000               | \$ 0.000000     |                                                                                                                                  |  |
| UNDGRND @ 22 GA.                                                             | 0.000000                                                 | \$ 0.000000                                                                                                                                                        | 0.0000                                                                  | 0.000000               | \$ 0.000000     |                                                                                                                                  |  |
| Check = 1.00                                                                 |                                                          | Check = 1.00                                                                                                                                                       |                                                                         | Check = 1.00           |                 |                                                                                                                                  |  |
| TABLE 2                                                                      |                                                          | TABLE 4                                                                                                                                                            |                                                                         | TABLE 6                |                 |                                                                                                                                  |  |
| DATA<br>DESC.                                                                | CABLE TYPE MIX<br>RANGE NAME MELDED<br>GAUGES            | PAIR / FOOT INVESTMENT<br>RANGE NAME MELDED<br>GAUGES                                                                                                              | PAIR / FOOT INVESTMENT<br>RENORMALIZED MELDED<br>AERIAL / BURIED GAUGES |                        |                 |                                                                                                                                  |  |
| CHARACTERISTICS FOR:                                                         | [F=sum(D*Type)]                                          | [G=sum(E*Type)]                                                                                                                                                    | [H=sum(F*Type)]                                                         |                        |                 |                                                                                                                                  |  |
| AERIAL                                                                       | 0.810000                                                 | \$ 0.011300                                                                                                                                                        | \$ 0.002041                                                             |                        |                 |                                                                                                                                  |  |
| BURIED                                                                       | 0.040000                                                 | \$ 0.018900                                                                                                                                                        | \$ 0.047059                                                             |                        |                 |                                                                                                                                  |  |
| UNDERGRND                                                                    | 0.150000                                                 | \$ 0.012000                                                                                                                                                        | \$ 0.000000                                                             |                        |                 |                                                                                                                                  |  |
| Check = 1.000000                                                             |                                                          | Check = 1.000000                                                                                                                                                   |                                                                         |                        |                 |                                                                                                                                  |  |
| FOOTNOTES                                                                    |                                                          |                                                                                                                                                                    |                                                                         |                        |                 |                                                                                                                                  |  |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUBLIC

| CA123R24\LCAT\03\FACILITY                                                                                                                                                                                                                                                                                                                                                                                             |                                                                       | <b>LOOP COST ANALYSIS TOOL</b>                                                                                                                          |  | Belcore (P)                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------|
| TABLE - SPAN_IN<br>SHEET 3/4<br><br>COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE/PROV: OHIO                                                                                                                                                                                                                                                                                                      |                                                                       | LOOP FACILITY INPUT<br>COPPER PAIR GAIN CABLE DATA<br>FCR<br>INVESTMENT YEAR : 1996<br>LOOP STUDY YEAR : 1996<br>SERVICE CLASS : BAND 3 - BUSINESS LINE |  | LCAT Rel: 1.0.4<br>Issued: 07/31/95<br>STUDY YR : 1996<br>TEST CASE : 1<br>LAST UPDATE : 10-Dec-96<br>TIME : 13:17 |
| <b>COPPER CABLE CHARACTERISTICS FOR CDLC SYSTEMS</b>                                                                                                                                                                                                                                                                                                                                                                  |                                                                       |                                                                                                                                                         |  |                                                                                                                    |
| <b>FOR DLC SYSTEMS ON COPPER LOOPS</b>                                                                                                                                                                                                                                                                                                                                                                                |                                                                       |                                                                                                                                                         |  |                                                                                                                    |
| Cable Gauge :                                                                                                                                                                                                                                                                                                                                                                                                         | Please Enter the NUMBER for 22 GA., 24 GA., or 26 GA. :               |                                                                                                                                                         |  | 24                                                                                                                 |
| Pair Gain Factor :                                                                                                                                                                                                                                                                                                                                                                                                    | (When Investment Utilities or Band Width Mix are NOT Used)            |                                                                                                                                                         |  |                                                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                       | The Average Number Of Voice Grade Circuit Equivalents Per System :    |                                                                                                                                                         |  | 96                                                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                       | The Average Number Of Transmission Pairs Plus Protection Per System : |                                                                                                                                                         |  | 10                                                                                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                       | The Average Number Of Support (Power, Alarm, Etc) Pairs Per System :  |                                                                                                                                                         |  | 2                                                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                       | Ratio Of Required Pairs To Derived Pairs ( Pair Gain Factor ) :       |                                                                                                                                                         |  | 0.1250                                                                                                             |
| <b>NOTE:</b><br>① The value represents the extent to which copper pairs are gauged. For example, A 96 Channel System uses 4 Transmit Pairs, 4 Receive Pairs, 2 Protection Pairs and 2 Support Pairs (Test and Order Wire). Then the Derived Pairs would be the Sum of the Pairs divided by the Working Channels Or $(10 + 2) / 96 = 0.125$ . When applied to segment length it becomes the Effective Length per Pair. |                                                                       |                                                                                                                                                         |  |                                                                                                                    |

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

C:\123R24\LCATR081\FACILITY  
TABLE - SPAN\_INV  
SHEET 3 / 4

HELP SCREEN**Belcore**<sup>®</sup>

LCAT Rel: 07/31/95  
Issued: 07/31/95

|          |                                                                                                                                                                      |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| pggauge  | In CSA rules, a single gauge is preferred for CDLC                                                                                                                   |
| vgcheqv  | Each CDLC has a voice grade equivalent, usually referred to as a ____ Channel System. Domestic systems are basic 96 Channel, whereas, International are 120 Channel  |
| xmsnpr   | CDLC uses a Transmit/Receive Pair for each direction (unidirectional), therefore, the basic structure is four sets of two pairs plus one protection set ( 10 pairs ) |
| suptpr   | CDLC is customarily supported by a power pair and an alarm pair ( 2 pair)                                                                                            |
| pgfactor | Where : pgfactor = ( # of xmsnpr + # of suptpr ) / vgcheqv                                                                                                           |

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*

\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION \*\*\*\*\*

PRESS "ENTER" TO RETURN TO THE MAIN MENU

**CONFIDENTIAL**  
NOT TO BE GIVEN  
TO THE PUBLIC  
PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.



| C:\123R24\LCATR081\FACILITY.WK1                                                       |                       | LOOP COST ANALYSIS TOOL                                          |                                      | Bellcore <sup>®</sup>                               |  |
|---------------------------------------------------------------------------------------|-----------------------|------------------------------------------------------------------|--------------------------------------|-----------------------------------------------------|--|
| SPAN INV - WORKSHEET<br>Sheet 3 / 3                                                   |                       | COPPER CABLE DISTRIBUTIONS WELDING<br>WORKSHEET B                |                                      | LCAT Ver: 1.0.4<br>Issue Date: 07/31/95             |  |
| COMPANY: CINCINNATI BELL TEL.                                                         |                       | FOR<br>FACILITY TYPE: COPPER CABLE for DLC                       |                                      | STUDY YR: 1998                                      |  |
| CITY / AREA: OHIO                                                                     |                       | DESIGN TYPE: FEEDER SEGMENT                                      |                                      | TEST CASE: 1998                                     |  |
| STATE/PROV: CINCINNATI                                                                |                       | SERVICE CLASS: BAND 3 - BUSINESS LINE                            |                                      | DATE: 1                                             |  |
|                                                                                       |                       |                                                                  |                                      | LAST UPDATE: 10-Dec-98                              |  |
|                                                                                       |                       |                                                                  |                                      | TIME: 13:17                                         |  |
| INVESTMENT DEVELOPMENT FOR:                                                           |                       | MELDED CABLE INVESTMENT PER PAIR FOOT<br>LINE REPEATER EQUIPMENT |                                      |                                                     |  |
| DESCRIPTION                                                                           | REPEATER<br>SPACING   | UNIT<br>REPEATER<br>INVESTMENT                                   | REPEATER<br>INVEST.<br>PER FOOT      |                                                     |  |
|                                                                                       | (A)                   | (B)                                                              | (C=B/A)                              |                                                     |  |
| LINE REPEATER AT 26 GA.                                                               | 3500                  | \$ 0                                                             | \$ 0.000000                          |                                                     |  |
| LINE REPEATER AT 24 GA.                                                               | 4500                  | \$ 0                                                             | \$ 0.000000                          |                                                     |  |
| LINE REPEATER AT 22 GA.                                                               | 5500                  | \$ 0                                                             | \$ 0.000000                          |                                                     |  |
| TABLE 4 DEVELOPMENT FOR:                                                              |                       | COPPER CABLE UNIT INVESTMENT                                     |                                      | FOR DLC Gauge : 24.00                               |  |
| ADJUSTED<br>PAIR / FOOT INVESTMENT                                                    | BY CODE<br>BY GAUGE   | REPEATER<br>BY GAUGE                                             | WORKING CHANNEL<br>INVESTMENT / FOOT | - TABLE 4 -<br>WORKING CHANNEL<br>INVESTMENT / FOOT |  |
| DESCRIPTION                                                                           | 2 * (P/FF)logg<br>(D) | (RPTR gaG)<br>(E=C)                                              | (ADLCFFlogg)<br>(F=D+E)              | (ADLCFFlogg)                                        |  |
| AERIAL @ 26 GA.                                                                       | \$ 0.022600           | \$ 0.000000                                                      | \$ 0.022600                          | \$ 0.022600                                         |  |
| BURIED @ 26 GA.                                                                       | \$ 0.037800           | \$ 0.000000                                                      | \$ 0.037800                          | \$ 0.037800                                         |  |
| UNDGRND @ 26 GA.                                                                      | \$ 0.024000           | \$ 0.000000                                                      | \$ 0.024000                          | \$ 0.024000                                         |  |
| AERIAL @ 24 GA.                                                                       | \$ 0.022600           | \$ 0.000000                                                      | \$ 0.022600                          | \$ 0.022600                                         |  |
| BURIED @ 24 GA.                                                                       | \$ 0.037800           | \$ 0.000000                                                      | \$ 0.037800                          | \$ 0.037800                                         |  |
| UNDGRND @ 24 GA.                                                                      | \$ 0.024000           | \$ 0.000000                                                      | \$ 0.024000                          | \$ 0.024000                                         |  |
| AERIAL @ 22 GA.                                                                       | \$ 0.000000           | \$ 0.000000                                                      | \$ 0.000000                          | \$ 0.000000                                         |  |
| BURIED @ 22 GA.                                                                       | \$ 0.000000           | \$ 0.000000                                                      | \$ 0.000000                          | \$ 0.000000                                         |  |
| UNDGRND @ 22 GA.                                                                      | \$ 0.000000           | \$ 0.000000                                                      | \$ 0.000000                          | \$ 0.000000                                         |  |
| NOTES :                                                                               |                       |                                                                  |                                      |                                                     |  |
| ① The Facility Table Investments are for each Cable Pair Foot, DLC Systems are 4 wire |                       |                                                                  |                                      |                                                     |  |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR081\FACILITY                                               |                                                                                                                                                                                                                                                                                                    | <b>LOOP COST ANALYSIS TOOL</b>                   |                                                                                                                                                                                                                                                                                                         | Bellcore <sup>®</sup>  |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|----------------------------------------------------------|------------------------|---------|
| TABLE - SPAN_INV                                                          |                                                                                                                                                                                                                                                                                                    | LOOP FACILITY INPUT                              |                                                                                                                                                                                                                                                                                                         | LCAT Rel: 1.0.4        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| SHEET 4 / 4                                                               |                                                                                                                                                                                                                                                                                                    | SERVICE ACCESS SEGMENT                           |                                                                                                                                                                                                                                                                                                         | Issued: 07/31/95       |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| COM: COMPANY: CINCINNATI BELL TEL.                                        |                                                                                                                                                                                                                                                                                                    | FOR                                              |                                                                                                                                                                                                                                                                                                         | STUDY YR: 1996         |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| CITY / AREA: CINCINNATI                                                   |                                                                                                                                                                                                                                                                                                    | INVESTMENT YEAR: 1996                            |                                                                                                                                                                                                                                                                                                         | TEST CASE: 1           |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| STATE / PROV: OHIO                                                        |                                                                                                                                                                                                                                                                                                    | LOOP STUDY YEAR: 1996                            |                                                                                                                                                                                                                                                                                                         | LAST UPDATE: 10-Dec-96 |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
|                                                                           |                                                                                                                                                                                                                                                                                                    | SERVICE CLASS: BAND 3 - BUSINESS LINE            |                                                                                                                                                                                                                                                                                                         | TIME: 13:17            |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| <b>SERVICE ACCESS CHARACTERISTICS AND INVESTMENTS</b>                     |                                                                                                                                                                                                                                                                                                    |                                                  |                                                                                                                                                                                                                                                                                                         |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| <b>AVERAGE UNIT MIX :</b>                                                 |                                                                                                                                                                                                                                                                                                    | <b>AVERAGE UNIT INVESTMENT :</b>                 |                                                                                                                                                                                                                                                                                                         |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| The Average Number of Terminals in the Service Access Segment of a Loop - |                                                                                                                                                                                                                                                                                                    |                                                  |                                                                                                                                                                                                                                                                                                         |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| Proportion of Loops that use.....                                         | <table border="1" style="display: inline-table; vertical-align: top;"> <tr><td>Aerial</td><td>0.00</td></tr> <tr><td>Buried</td><td>0.00</td></tr> </table>                                                                                                                                        | Aerial                                           | 0.00                                                                                                                                                                                                                                                                                                    | Buried                 | 0.00              | Per Unit Installation..... | <table border="1" style="display: inline-table; vertical-align: top;"> <tr><td>Aerial Termination</td><td>0</td></tr> <tr><td>Buried Termination</td><td>0</td></tr> </table> |                        | Aerial Termination  | 0                                                        | Buried Termination     | 0       |
| Aerial                                                                    | 0.00                                                                                                                                                                                                                                                                                               |                                                  |                                                                                                                                                                                                                                                                                                         |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| Buried                                                                    | 0.00                                                                                                                                                                                                                                                                                               |                                                  |                                                                                                                                                                                                                                                                                                         |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| Aerial Termination                                                        | 0                                                                                                                                                                                                                                                                                                  |                                                  |                                                                                                                                                                                                                                                                                                         |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| Buried Termination                                                        | 0                                                                                                                                                                                                                                                                                                  |                                                  |                                                                                                                                                                                                                                                                                                         |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| The Average Drop Wire & Building Entrance Cable Installation -            |                                                                                                                                                                                                                                                                                                    |                                                  |                                                                                                                                                                                                                                                                                                         |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| Proportion of Loops that use..                                            | <table border="1" style="display: inline-table; vertical-align: top;"> <tr><td>Aerial Wire Drops</td><td>0.0000</td></tr> <tr><td>Buried Wire Drops</td><td>0.0000</td></tr> <tr><td>Bldg Entrance Cable</td><td>1.0000</td></tr> <tr><td>Aerial Coax Wire Drops</td><td>0.0000</td></tr> </table> | Aerial Wire Drops                                | 0.0000                                                                                                                                                                                                                                                                                                  | Buried Wire Drops      | 0.0000            | Bldg Entrance Cable        | 1.0000                                                                                                                                                                        | Aerial Coax Wire Drops | 0.0000              | Adjust Cable Pair Foot Invest. for DW Investment ? (Y/N) | N                      |         |
| Aerial Wire Drops                                                         | 0.0000                                                                                                                                                                                                                                                                                             |                                                  |                                                                                                                                                                                                                                                                                                         |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| Buried Wire Drops                                                         | 0.0000                                                                                                                                                                                                                                                                                             |                                                  |                                                                                                                                                                                                                                                                                                         |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| Bldg Entrance Cable                                                       | 1.0000                                                                                                                                                                                                                                                                                             |                                                  |                                                                                                                                                                                                                                                                                                         |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| Aerial Coax Wire Drops                                                    | 0.0000                                                                                                                                                                                                                                                                                             |                                                  |                                                                                                                                                                                                                                                                                                         |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
|                                                                           |                                                                                                                                                                                                                                                                                                    | Per Unit Installation.....                       | <table border="1" style="display: inline-table; vertical-align: top;"> <tr><td>Aerial Wire Drops</td><td>\$ 0.00</td></tr> <tr><td>Buried Wire Drops</td><td>\$ 0.00</td></tr> <tr><td>Bldg Entrance Cable</td><td>\$ 75.00</td></tr> <tr><td>Aerial Coax Wire Drops</td><td>\$ 0.00</td></tr> </table> |                        | Aerial Wire Drops | \$ 0.00                    | Buried Wire Drops                                                                                                                                                             | \$ 0.00                | Bldg Entrance Cable | \$ 75.00                                                 | Aerial Coax Wire Drops | \$ 0.00 |
| Aerial Wire Drops                                                         | \$ 0.00                                                                                                                                                                                                                                                                                            |                                                  |                                                                                                                                                                                                                                                                                                         |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| Buried Wire Drops                                                         | \$ 0.00                                                                                                                                                                                                                                                                                            |                                                  |                                                                                                                                                                                                                                                                                                         |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| Bldg Entrance Cable                                                       | \$ 75.00                                                                                                                                                                                                                                                                                           |                                                  |                                                                                                                                                                                                                                                                                                         |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| Aerial Coax Wire Drops                                                    | \$ 0.00                                                                                                                                                                                                                                                                                            |                                                  |                                                                                                                                                                                                                                                                                                         |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| The Average Intrabuilding Cable Installation -                            |                                                                                                                                                                                                                                                                                                    |                                                  |                                                                                                                                                                                                                                                                                                         |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |
| Proportion of Installations with Intrabuilding Cable                      | 0.0000                                                                                                                                                                                                                                                                                             | Per Instn for a Intrabuilding Network Cable Pair | \$ 0.00                                                                                                                                                                                                                                                                                                 |                        |                   |                            |                                                                                                                                                                               |                        |                     |                                                          |                        |         |

CONFIDENTIAL  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

\\LCATR081\FACILITY  
SPAN\_INV  
/4

HELP SCREEN

**Bellcore** (R)  
LCAT Rel: 1.0.4  
Issued: 07/31/95

terma These terminals may include the Serving Area Interface Cross Box, Drop Wire Block, and/or the Network  
termb interface Block summary per circuit pair installation investment.

adropinv These facility investments may also include Drop Wire Block and/or Network Interface summary per circuit  
bdropinv pair installation investment.

bec  
coaxinv

ibc This facility investment should include ALL the internal cross-connects and terminations for this type of  
installation as a circuit pair installation investment.

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*

\*\*\*\*\*PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION\*\*\*\*\*

PRESS 'ENTER' TO RETURN TO THE MAIN MENU

CONFIDENTIAL  
NOTICE: NO COPY TO BE GIVEN  
TO ANYONE OUTSIDE OF PUCO  
PROVIDED TO PUCO

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

| C:\123R24\LCATR081\FACTORS     |  | LOOP COST ANALYSIS TOOL                                          |                   | Belcore                              |
|--------------------------------|--|------------------------------------------------------------------|-------------------|--------------------------------------|
| TABLE - FACTORS<br>SHEET 1 / 1 |  | INVESTMENT RELATED FACTOR TABLES<br>FOR<br>ANNUALIZATION FACTORS |                   | LCAT Rel : 1.0.4<br>Issued : 3/31/95 |
| COMPANY : CINCINNATI BELL TEL. |  | INVESTMENT YEAR : 1996                                           | STUDY YEAR : 1996 | STUDY YR : 1996                      |
| CITY / AREA : CINCINNATI       |  | TEST CASE : 1                                                    |                   | LAST UPDATE : 20-Jan-97              |
| STATE / PROV : OHIO            |  | SERVICE CLASS : BAND 3 - BUSINESS LINE                           |                   | TIME : 12:52                         |

  

| plant list             | PRICE<br>INDEX | ANNUAL<br>COST |
|------------------------|----------------|----------------|
| LAND                   | 1.0000         | 0.2232         |
| BUILDING               | 1.0000         | 0.2847         |
| BLDG ENTRANCE CABLE    | 1.0000         | 0.3832         |
| INTRABLDG CABLE        | 1.0000         | 0.3832         |
| AERIAL CABLE (COPPER)  | 1.0000         | 0.3943         |
| BURIED CABLE (COPPER)  | 1.0000         | 0.3377         |
| UNDERGROUND (CU) CA.   | 1.0000         | 0.3573         |
| CO EQPT - LOW CAP TERM | 1.0000         | 0.3791         |
| CO EQPT - LOW CAP CHAN | 1.0000         | 0.3791         |
| CO EQPT - HI CAP TERM  | 1.0000         | 0.3791         |
| CO EQPT - HI CAP CHAN  | 1.0000         | 0.3791         |
| CO EQPT - ANALOG SW    | 1.0000         | 0.0000         |
| CO EQPT - DIGITAL SW   | 1.0000         | 0.3368         |
| AERIAL CABLE (FIBER)   | 1.0000         | 0.2893         |
| BURIED CABLE (FIBER)   | 1.0000         | 0.2634         |
| UNDERGROUND (FO) CA.   | 1.0000         | 0.2599         |
| CONNECTORS             | 1.0000         | 0.3791         |
| MISC. COM EQP & PWR    | 1.0000         | 0.3791         |
| POLE LINE              | 1.0000         | 0.3717         |
| CONDUIT                | 1.0000         | 0.2431         |

CONFIDENTIAL  
NOTICE: THIS INFORMATION IS NOT TO BE DISCLOSED TO THE PUBLIC  
PROVIDED TO PUBLIC

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR081\INVEST                                                  |  | LOOP COST ANALYSIS TOOL                                      |                |                 |                        | Bellcore <sup>®</sup>               |  |
|----------------------------------------------------------------------------|--|--------------------------------------------------------------|----------------|-----------------|------------------------|-------------------------------------|--|
| TABLE - EQUIP_INV<br>Sheet 1 of 1                                          |  | DATA REFERENCE TABLE<br>EQUIPMENT & OTHER INVESTMENTS<br>FOR |                |                 |                        | LCAT Rel: 1.0.4<br>Issued: 07/31/95 |  |
| COMPANY: CINCINNATI BELL TEL                                               |  | INVESTMENT YEAR: 1996                                        |                |                 |                        | STUDY YR: 1996                      |  |
| CITY / AREA: CINCINNATI                                                    |  | SERVICE LEVEL: NARBAND                                       |                |                 |                        | TEST CASE: 1                        |  |
| STATE / PROV: OHIO                                                         |  | SERVICE CLASS: BAND 3 - BUSINESS LINE                        |                |                 |                        | LAST UPDATE: 09-Jan-97<br>15:46     |  |
| <b>EQUIPMENT INVESTMENT</b> (including Engineer, Furnish, & Install Costs) |  |                                                              |                |                 |                        |                                     |  |
|                                                                            |  | <b>CENTRAL OFFICE</b>                                        |                |                 | <b>REMOTE LOCATION</b> |                                     |  |
|                                                                            |  | <b>LINE</b>                                                  | <b>CHANNEL</b> | <b>TERMINAL</b> | <b>CHANNEL</b>         | <b>TERMINAL</b>                     |  |
| <b>AIR DRYERS INVESTMENT:</b>                                              |  |                                                              |                |                 |                        |                                     |  |
| For an AERIAL Installed Cable Pair                                         |  |                                                              |                | \$ 0.00         |                        |                                     |  |
| For a BURIED Installed Cable Pair                                          |  |                                                              |                | \$ 0.00         |                        |                                     |  |
| For an UNDERGROUND Installed Cable Pair                                    |  |                                                              |                | \$ 0.00         |                        |                                     |  |
| <b>CENTRAL OFFICE TERMINATION INVESTMENT :</b>                             |  |                                                              |                |                 |                        |                                     |  |
| For each cable pair associated with twisted pair copper cable              |  |                                                              |                | \$ 0.00         |                        |                                     |  |
| For each per cable pair associated with digital loop carrier technology    |  |                                                              |                | \$ 0.00         |                        |                                     |  |
| <b>COPPER LOOP CARRIER UNIT CIRCUIT INVESTMENT by SERVICE LEVEL :</b>      |  |                                                              |                |                 |                        |                                     |  |
| For each line repeater for one copper digroup (not svc lev)                |  | \$ 0.00                                                      |                |                 |                        |                                     |  |
| For an Office Repeater Bay for a T1 Line                                   |  | \$ 0.00                                                      |                |                 |                        |                                     |  |
| For a Universal DLC Equipment Arrangement                                  |  | \$ 0.00                                                      | \$ 87.51       | \$ 12.14        | \$ 85.28               | \$ 51.57                            |  |
| For an Integrated DLC Equipment Arrangement                                |  | \$ 0.00                                                      | \$ 0.00        | \$ 0.00         | \$ 85.28               | \$ 51.57                            |  |
| <b>FIBER OPTIC MULTIPLEXERS UNIT CIRCUIT INVESTMENT by SERVICE LEVEL :</b> |  |                                                              |                |                 |                        |                                     |  |
| 1. For a Hub with nonFiber Extensions or nonHub Arrangement                |  | \$ 19.62                                                     |                | \$ 2.35         | \$ 18.49               | \$ 2.35                             |  |
| 2. For a Hub with Fiber Extensions or a Fiber Ended Arrangement            |  | \$ 0.00                                                      |                | \$ 0.00         | \$ 0.00                | \$ 0.00                             |  |
| 3. For a Fiber HUB and Fiber Remote Terminal Arrangement                   |  |                                                              |                |                 | \$ 0.00                | \$ 0.00                             |  |
| 4. For Fiber Ring Hub Arrangements (Extensions)                            |  |                                                              |                |                 | \$ 0.00                | \$ 0.00                             |  |
| <b>CEV HOUSING per CIRCUIT by SERVICE LEVEL :</b>                          |  |                                                              |                |                 |                        |                                     |  |
| For CEV's used as fiber hubs for FO Multiplexer equipment                  |  |                                                              |                |                 |                        | \$ 0.00                             |  |
| For CEV's used as remote terminals for CDLC equipment                      |  |                                                              |                |                 |                        | \$ 0.00                             |  |

[Unit investment denotes average weighted unit E.F.I investment at DS0, DS1, and DS3 service equipment]

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATR081\INVEST.WK1

TABLE - EQUIP\_INV

## HELP INFORMATION

Bellcore<sup>TM</sup>

LCAT Rel: 1.0.4

Issued: 07/31/95

LCAT Commands      Description

This Command will allow the User -

EDIT                      To Enter Values with DIRECT Input on a cell by cell basis.  
 CLEAR                    To Erase the Display's Current Data Values, then Perform DIRECT Input.

Line Items              Description

This Equipment Item Represents -

Ofc Rept Bay            A Wideband Special Service Circuits Requirement, included in other DLC COE LINE.  
 Integrated DLC        The DLC Class for Source Bandwidth from Digital Line Cards or DSX Term for DS1.  
 Universal DLC        The DLC Class for Source Bandwidth from Analog Subs Line Cards or Voice Grade Term.

See Circuit Designs:

|                  |                                                                          |           |
|------------------|--------------------------------------------------------------------------|-----------|
| COE Field Item 1 | FITL/CDLC Hub Extension or FITL non-Hubbing Arrangements, CO End Equip.  | 2,3,4 & 6 |
| REM Field Item 1 | FITL/CDLC Hub Extension or FITL non-Hubbing Arrangements, REM End Equip. | 2,3,4 & 6 |
| COE Field Item 2 | FITL Hubbed Arrangements, CO to HUB Span Equip, CO End.                  | 1 & 5     |
| REM Field Item 2 | FITL Hubbed Arrangements, CO to HUB Span Equip, Remote Site.             | 1 & 5     |
| REM Field Item 3 | FITL Hubbed Arrangements, HUB to RT Span Equip, Remote Sites.            | 1 & 5     |
| REM Field Item 4 | FITL Hubbed Arrangements, RING Span Equip, HUB Sites.                    | 1,2,5 & 6 |

NOTE: THE DATA VALUES FOR THESE ITEMS SHOULD ALWAYS REPRESENT  
 THE CIRCUIT EQUIVALENTS FOR THE BANDWIDTH DELIVERY OF THE STUDIED SERVICE.

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*

\*\*\*\*\*PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION\*\*\*\*\*

PRESS &lt;ENTER&gt; KEY TO RETURN TO THE MAIN MENU

CONFIDENTIAL  
 PRICE NOT BE GIVEN  
 TO PUBLIC  
 PROVIDED TO POCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR081\LOADING                                                                                             |        | <b>LOOP COST ANALYSIS TOOL</b>                                                                                                                                                     |  | Bellcore <sup>®</sup>                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------|
| <b>TABLE - ADDNL_INV</b><br>Sheet 1 of 2<br><br>COMPANY: CINCINNATI BELL TEL<br>CITY / AREA: CINCINNATI<br>STATE: OHIO |        | <b>INVESTMENT RELATED FACTOR TABLES</b><br><b>ADJUSTMENT AND LOADING FACTORS</b><br>FOR<br>INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 3 - BUSINESS LINE |  | LCAT Rel: 1.0.4<br>Issued: 3/31/95<br>STUDY YR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 10-Dec-96<br>TIME: 13:22 |
| <b>PLANT UTILIZATION FACTORS:</b>                                                                                      |        |                                                                                                                                                                                    |  |                                                                                                               |
| Land                                                                                                                   | 1.0000 | ALL Non-Traffic Sensitive Equipment                                                                                                                                                |  | 1.0000                                                                                                        |
| Building                                                                                                               | 1.0000 | ALL Digital Loop Carrier Equip., or                                                                                                                                                |  | 0.7000                                                                                                        |
| <b>ALL Copper Cables, or</b>                                                                                           |        | CO DLC Channel Unit                                                                                                                                                                |  | 0.7000                                                                                                        |
| Copper Feeder Cable                                                                                                    | 0.6000 | REM DLC Channel Unit                                                                                                                                                               |  | 0.7000                                                                                                        |
| Copper Distribution Cable                                                                                              | 0.3500 | CO DLC Multiplex System                                                                                                                                                            |  | 0.7000                                                                                                        |
| Copper Entrance Cable                                                                                                  | 1.0000 | REM DLC Multiplex System                                                                                                                                                           |  | 0.7000                                                                                                        |
| Copper Building Cable                                                                                                  | 0.3500 | CO Digital Signal Crossconnect Bay                                                                                                                                                 |  | 0.7000                                                                                                        |
| Copper Building Terminal                                                                                               | 0.3500 | REM Digital Signal Crossconnect Bay                                                                                                                                                |  | 0.7000                                                                                                        |
| <b>ALL Fiber Cables, or</b>                                                                                            |        | ALL Fiber Optic Multiplex Equip., or                                                                                                                                               |  | 1.0000                                                                                                        |
| Fiber Feeder Cable                                                                                                     | 0.3300 | CO Fiber Optic Channel Unit                                                                                                                                                        |  | 1.0000                                                                                                        |
| Fiber Distribution Cable                                                                                               | 0.3300 | REM Fiber Optic Channel Unit                                                                                                                                                       |  | 1.0000                                                                                                        |
| Fiber Entrance Cable                                                                                                   | 0.3300 | CO Fiber Optic Multiplex System                                                                                                                                                    |  | 1.0000                                                                                                        |
| Fiber Building Cable                                                                                                   | 0.3300 | REM Fiber Optic Multiplex System                                                                                                                                                   |  | 1.0000                                                                                                        |
| Fiber Building Terminal                                                                                                | 0.3300 | CO Lightguide Terminating Equipment                                                                                                                                                |  | 1.0000                                                                                                        |
|                                                                                                                        |        | REM Lightguide Terminating Equipment                                                                                                                                               |  | 1.0000                                                                                                        |
| Poles                                                                                                                  | 1.0000 | Remote Housing: CE Hut                                                                                                                                                             |  | 1.0000                                                                                                        |
| Conduit                                                                                                                | 1.0000 | Comm. Svc. Cab.                                                                                                                                                                    |  | 1.0000                                                                                                        |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

TABLE - ADDNL\_INV  
Sheet 1 of 2

HELP SCREEN**Belcore** (R)

LCAT Rel : 1.0.4  
Issued : 3/31/95

## NOTE :

- ① THIS VALUE REPRESENTS GLOBAL (CATEGORY 1) INPUT FOR THESE ITEMS.  
AN ENTRY SETS CATEGORY 2 VALUES TO THE CATEGORY 1 VALUE BY THE SYSTEM.
- ② THE VALUES IN THIS TABLE REPRESENT DETAIL FACTORS (CATEGORY 2 VALUES).  
THESE ITEMS ARE APPLIED IN THE COST EQUATIONS FOR THE COMPONENT THEY IDENTIFY.  
ENTRIES NEGATE CATEGORY 1 VALUES BY THE SYSTEM.
- ③ THE DESIGNATION "CO" DENOTES CENTRAL OFFICE LOCATED.  
THE DESIGNATION "REM" DENOTES REMOTE SITE LOCATED.

\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR INFORMATION \*\*\*\*\*  
\*\*\*\*\* CONCERNING ANY OTHER DATA INPUT ITEMS ON THIS DISPLAY \*\*\*\*\*

PRESS < Enter > KEY TO RETURN TO THE MAIN MENU

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.



| C:\123R24\LCATR081\LOADING                                                                                                                                                                                                                                                                                                                                                                                                                            |        | <b>LOOP COST ANALYSIS TOOL</b>                                                                                                                                                                                                                                                                                                                     |        | Bellcore <sup>®</sup>                                                                                         |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------------------------------------------------------------------------------------------------------------|--------------------------------------|--------|--------|---------------------------------------|--------|--------|-------------------------------------|--------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|----------------|--------|--------|----------------------|--------|--------|-----------------|--------|--------|
| TABLE = ADDNL_INV<br>Sheet 2 of 2<br><br>COMPANY: CINCINNATI BELL TEL<br>CITY / AREA: CINCINNATI<br>STATE: OHIO                                                                                                                                                                                                                                                                                                                                       |        | INVESTMENT RELATED FACTOR TABLES<br>ADJUSTMENT AND LOADING FACTORS<br>FOR<br>INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 3 - BUSINESS LINE                                                                                                                                                                               |        | LCAT Ver: 1.0.4<br>Issued: 3/31/95<br>STUDY YR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 10-Dec-96<br>TIME: 13:22 |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| SEGMENT .....<br>DISTRIBUTION   FEEDER<br>② use DEFAULT                                                                                                                                                                                                                                                                                                                                                                                               |        | <b>DROP WIRE (DW) INVESTMENT ADJUSTMENT:</b><br>The Cable PFI is being Adjusted for DW ? NO<br>Aerial Cable<br>Buried Cable<br>Underground Cable<br>use DEFAULT ① ②<br>for: CENT. OFC. REMOTE SITE                                                                                                                                                 |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| <b>POLE LOADINGS:</b><br><table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Copper Cable Pole Investment Factor</td> <td>0.2530</td> <td>0.2530</td> </tr> <tr> <td>Copper Cable Pole Unit Investment</td> <td></td> <td></td> </tr> <tr> <td>Fiber Cable Pole Investment Factor</td> <td>0.1965</td> <td>0.1965</td> </tr> <tr> <td>Fiber Cable Pole Unit Investment</td> <td></td> <td></td> </tr> </table>                |        | Copper Cable Pole Investment Factor                                                                                                                                                                                                                                                                                                                | 0.2530 | 0.2530                                                                                                        | Copper Cable Pole Unit Investment    |        |        | Fiber Cable Pole Investment Factor    | 0.1965 | 0.1965 | Fiber Cable Pole Unit Investment    |        |        | <b>LAND LOADING FACTORS:</b><br><table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Other or ALL ①</td> <td>0.0056</td> <td>0.0056</td> </tr> <tr> <td>Digital Loop Carrier</td> <td>0.0056</td> <td>0.0056</td> </tr> <tr> <td>Fiber Optic Mux</td> <td>0.0056</td> <td>0.0056</td> </tr> </table>     |  |  | Other or ALL ① | 0.0056 | 0.0056 | Digital Loop Carrier | 0.0056 | 0.0056 | Fiber Optic Mux | 0.0056 | 0.0056 |
| Copper Cable Pole Investment Factor                                                                                                                                                                                                                                                                                                                                                                                                                   | 0.2530 | 0.2530                                                                                                                                                                                                                                                                                                                                             |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| Copper Cable Pole Unit Investment                                                                                                                                                                                                                                                                                                                                                                                                                     |        |                                                                                                                                                                                                                                                                                                                                                    |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| Fiber Cable Pole Investment Factor                                                                                                                                                                                                                                                                                                                                                                                                                    | 0.1965 | 0.1965                                                                                                                                                                                                                                                                                                                                             |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| Fiber Cable Pole Unit Investment                                                                                                                                                                                                                                                                                                                                                                                                                      |        |                                                                                                                                                                                                                                                                                                                                                    |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| Other or ALL ①                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.0056 | 0.0056                                                                                                                                                                                                                                                                                                                                             |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| Digital Loop Carrier                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0.0056 | 0.0056                                                                                                                                                                                                                                                                                                                                             |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| Fiber Optic Mux                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0.0056 | 0.0056                                                                                                                                                                                                                                                                                                                                             |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| <b>CONDUIT LOADINGS:</b><br><table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Copper Cable Conduit Investment Factor</td> <td>0.5165</td> <td>0.5165</td> </tr> <tr> <td>Copper Cable Conduit Unit Investment</td> <td></td> <td></td> </tr> <tr> <td>Fiber Cable Conduit Investment Factor</td> <td>0.5232</td> <td>0.5232</td> </tr> <tr> <td>Fiber Cable Conduit Unit Investment</td> <td></td> <td></td> </tr> </table> |        | Copper Cable Conduit Investment Factor                                                                                                                                                                                                                                                                                                             | 0.5165 | 0.5165                                                                                                        | Copper Cable Conduit Unit Investment |        |        | Fiber Cable Conduit Investment Factor | 0.5232 | 0.5232 | Fiber Cable Conduit Unit Investment |        |        | <b>BUILDING LOADING FACTORS:</b><br><table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Other or ALL ①</td> <td>0.1316</td> <td>0.1316</td> </tr> <tr> <td>Digital Loop Carrier</td> <td>0.1316</td> <td>0.1316</td> </tr> <tr> <td>Fiber Optic Mux</td> <td>0.1316</td> <td>0.1316</td> </tr> </table> |  |  | Other or ALL ① | 0.1316 | 0.1316 | Digital Loop Carrier | 0.1316 | 0.1316 | Fiber Optic Mux | 0.1316 | 0.1316 |
| Copper Cable Conduit Investment Factor                                                                                                                                                                                                                                                                                                                                                                                                                | 0.5165 | 0.5165                                                                                                                                                                                                                                                                                                                                             |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| Copper Cable Conduit Unit Investment                                                                                                                                                                                                                                                                                                                                                                                                                  |        |                                                                                                                                                                                                                                                                                                                                                    |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| Fiber Cable Conduit Investment Factor                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.5232 | 0.5232                                                                                                                                                                                                                                                                                                                                             |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| Fiber Cable Conduit Unit Investment                                                                                                                                                                                                                                                                                                                                                                                                                   |        |                                                                                                                                                                                                                                                                                                                                                    |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| Other or ALL ①                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.1316 | 0.1316                                                                                                                                                                                                                                                                                                                                             |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| Digital Loop Carrier                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0.1316 | 0.1316                                                                                                                                                                                                                                                                                                                                             |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| Fiber Optic Mux                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0.1316 | 0.1316                                                                                                                                                                                                                                                                                                                                             |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        | <b>MISC. EQUIPMENT &amp; POWER LOADING FACTORS:</b><br><table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Other or ALL ①</td> <td>0.1127</td> <td>0.1127</td> </tr> <tr> <td>Digital Loop Carrier</td> <td>0.1127</td> <td>0.1127</td> </tr> <tr> <td>Fiber Optic Mux</td> <td>0.1127</td> <td>0.1127</td> </tr> </table> |        |                                                                                                               | Other or ALL ①                       | 0.1127 | 0.1127 | Digital Loop Carrier                  | 0.1127 | 0.1127 | Fiber Optic Mux                     | 0.1127 | 0.1127 |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| Other or ALL ①                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0.1127 | 0.1127                                                                                                                                                                                                                                                                                                                                             |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| Digital Loop Carrier                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0.1127 | 0.1127                                                                                                                                                                                                                                                                                                                                             |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |
| Fiber Optic Mux                                                                                                                                                                                                                                                                                                                                                                                                                                       | 0.1127 | 0.1127                                                                                                                                                                                                                                                                                                                                             |        |                                                                                                               |                                      |        |        |                                       |        |        |                                     |        |        |                                                                                                                                                                                                                                                                                                                                 |  |  |                |        |        |                      |        |        |                 |        |        |

NOT FOR RELEASE  
PRIOR TO RELEASE  
PROVIDED TO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

## TABLE - ADDNL\_INV

Sheet 2 of 2

## HELP SCREEN

Bellcore<sup>(R)</sup>

LCAT Rel : 1.0.4

Issued : 3/31/85

|                                        |       |      |      |                                                                                 |
|----------------------------------------|-------|------|------|---------------------------------------------------------------------------------|
| Copper Cable Pole Investment Factor    | cpiff | _dst | _fdr | Based on aerial copper cable investment relationship to pole                    |
| Copper Cable Pole Unit Investment      | cpifi | _dst | _fdr | Per unit length of aerial copper cable effective pair feet placed.              |
| Fiber Cable Pole Investment Factor     | fpiff | _dst | _fdr | Based on aerial fiber cable investment relationship to pole                     |
| Fiber Cable Pole Unit Investment       | fpifi | _dst | _fdr | Per unit length of aerial fiber cable effective pair feet placed.               |
| Copper Cable Conduit Investment Factor | cucff | _dst | _fdr | Based on underground copper cable investment relationship to conduit investment |
| Copper Cable Conduit Unit Investment   | cucfi | _dst | _fdr | Per unit length of underground copper cable effective pair feet placed.         |
| Fiber Cable Conduit Investment Factor  | fuclf | _dst | _fdr | Based on underground fiber cable investment relationship to conduit investment  |
| Fiber Cable Conduit Unit Investment    | fucfi | _dst | _fdr | Per unit length of underground fiber cable effective pair feet placed.          |

## NOTES

- ① THIS VALUE REPRESENTS GLOBAL (CATEGORY 1) INPUT FOR THESE ITEMS. AN ENTRY SETS CATEGORY 2 VALUES TO THE CATEGORY 1 VALUE BY THE SYSTEM.

- ② THE VALUES IN THIS TABLE REPRESENT DETAIL FACTORS (CATEGORY 2 VALUES). THESE ITEMS ARE APPLIED IN THE COST EQUATIONS FOR THE COMPONENTS THEY IDENTIFY. ENTRIES NEGATE CATEGORY 1 VALUES BY THE SYSTEM.

\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR INFORMATION \*\*\*\*\*  
 \*\*\*\*\* CONCERNING ANY OTHER DATA INPUT ITEMS ON THIS DISPLAY \*\*\*\*\*

PRESS < Enter > KEY TO RETURN TO THE MAIN MENU

CONFIDENTIAL  
 NO INFORMATION BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO RUCCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR081\SPAN                                                             |                                                                              | <b>LOOP COST ANALYSIS TOOL</b>                                                          |  | Bellcore                                                                |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------|
| INPUT - PLANT_CHAR.<br>Sheet 1 / 5                                                  |                                                                              | LOOP FACILITY INPUT<br>LOOP LENGTH CRITERIA AND NETWORK CHARACTERISTICS                 |  | LCAT Rel: 1.0.4<br>Issued: 07/31/95                                     |
| COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO      |                                                                              | INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 3 - BUSINESS LINE |  | STUDY YR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 10-Dec-96<br>TIME: 13:25 |
| <b>FLAT RATE BASIS DATA WITHOUT COST BANDS<br/>FOR A NETWORK CIRCUIT CASE STUDY</b> |                                                                              |                                                                                         |  |                                                                         |
| <b>LOOP TOPOLOGY</b>                                                                |                                                                              | <b>ACTION SEGMENT</b>                                                                   |  |                                                                         |
| Loop FEEDER Network Configuration is (S)tar Or (R)ing                               |                                                                              | PRIMARY STAR                                                                            |  |                                                                         |
| Average Number Of Hubs In Each Ring                                                 |                                                                              | PRIMARY NA                                                                              |  |                                                                         |
| Loop DISTRIBUTION Network Configuration is (S)tar or (B)us                          |                                                                              | DISTRIBUTION STAR                                                                       |  |                                                                         |
| <b>SPAN LENGTHS</b>                                                                 |                                                                              |                                                                                         |  |                                                                         |
| ①                                                                                   | Average Distance From the Central Office to the Service Access Point         | TOTAL LOOP 27360.0                                                                      |  |                                                                         |
| ②                                                                                   | Average Distance From the Serving Area Interface to the Service Access Point | DISTRIBUTION 3479.0                                                                     |  |                                                                         |
| ③                                                                                   | Average Distance From the Remote Terminal to the Serving Area interface      | SUB-PRIMARY 300.0                                                                       |  |                                                                         |
| ④                                                                                   | Average Distance From the Central Office to the Fiber Hub or S.A.I.          | PRIMARY 23581.0                                                                         |  |                                                                         |
| ⑤                                                                                   | Average Distance From the Fiber Hub to the Remote Terminal                   | PRIMARY-EXTENSION                                                                       |  |                                                                         |
| <b>LOOP LENGTH AT EACH COST BAND</b>                                                |                                                                              | <b>DISTRIBUTION OF COST BANDS IN THE NETWORK</b>                                        |  |                                                                         |
| BAND 1                                                                              |                                                                              | BAND 1                                                                                  |  |                                                                         |
| BAND 2                                                                              |                                                                              | BAND 2                                                                                  |  |                                                                         |
| BAND 3                                                                              |                                                                              | BAND 3                                                                                  |  |                                                                         |
| BAND 4                                                                              |                                                                              | BAND 4                                                                                  |  |                                                                         |
| BAND 5                                                                              |                                                                              | BAND 5                                                                                  |  |                                                                         |
| LAST 27360.0                                                                        |                                                                              | LAST 1.0000                                                                             |  |                                                                         |

**CONFIDENTIAL**  
NOT TO BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

| C:\123R24\LCATR081 SPAN                                                                                                                                                                                    |  | LOOP COST ANALYSIS TOOL                          |  | Bellcore <sup>®</sup>  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------|--|------------------------|--|
| INPUT - PLANT_CHAR                                                                                                                                                                                         |  | LOOP FACILITY INPUT                              |  | LCAT Rel: 1.0.4        |  |
| Sheet 1 / 1                                                                                                                                                                                                |  | LOOP LENGTH CRITERIA AND NETWORK CHARACTERISTICS |  | Issued: 07/31/95       |  |
| COMPANY: CINCINNATI BELL TEL.                                                                                                                                                                              |  | FOR                                              |  | STUDY YR: 1996         |  |
| CITY / AREA: CINCINNATI                                                                                                                                                                                    |  | INVESTMENT YEAR: 1996                            |  | TEST CASE: 1           |  |
| STATE / PROV. CHIO                                                                                                                                                                                         |  | LOOP STUDY YEAR: 1996                            |  | LAST UPDATE: 10-Dec-96 |  |
|                                                                                                                                                                                                            |  | SERVICE CLASS: BAND 3 - BUSINESS LINE            |  | TIME: 13:25            |  |
| <p align="center"><u>FLAT RATE BASIS DATA WITHOUT COST BANDS</u><br/><u>FOR A NETWORK CIRCUIT CASE STUDY</u></p>                                                                                           |  |                                                  |  |                        |  |
| <p align="center"><u>LOOP LENGTH</u><br/>①<br/>27360 FEET</p>                                                                                                                                              |  |                                                  |  |                        |  |
| <p align="center">DROP      DISTRIBUTION      FEEDER<br/>②      ④</p>                                                                                                                                      |  |                                                  |  |                        |  |
| <p align="center">3479 FEET      300.0 FEET      23581 FEET</p>                                                                                                                                            |  |                                                  |  |                        |  |
| <p align="center">SUB-PRIMARY      FIBER DISTRIBUTION      EXTENSION      PRIMARY</p>                                                                                                                      |  |                                                  |  |                        |  |
| <p align="center">③      ⑤      ⑥      ⑦</p>                                                                                                                                                               |  |                                                  |  |                        |  |
| <p align="center">NETWORK INTERFACE      SERVICE ACCESS POINT      SERVING AREA INTERFACE      REMOTE TERMINAL (LOOP MULTIPLEX INTERFACE)      REMOTE NODE (LOOP TRANSFER)      FIBER HUB      PRIMARY</p> |  |                                                  |  |                        |  |
| <p align="center">ON1</p>                                                                                                                                                                                  |  |                                                  |  |                        |  |

NOTICE: ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO RUCO END OFFICE

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR051\SPAN                                                                                                                                                                                                                                                                                                                                                           |  | LOOP COST ANALYSIS TOOL            |  | Bellcore <sup>TM</sup>                |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------|--|---------------------------------------|--|
| INPUT - PLANT_CHAR.<br>Sheet 1 of 2                                                                                                                                                                                                                                                                                                                                               |  | LOOP FACILITY INPUT<br>HELP SCREEN |  | LCAT Rel : 1.0.4<br>Issued : 07/31/95 |  |
| <b>AVERAGE NETWORK STUDY -</b>                                                                                                                                                                                                                                                                                                                                                    |  |                                    |  |                                       |  |
| This mode of LCAT is used where the cost study may be broad in scope and lack sufficient detail data to use the Loop OSP cost calculators on Sheets 2, 3, and 4. Instead, it relies on table data from the FACILITY file, representing jurisdictional average value mixes or proportions. Input for these values is placed on Sheet 1.                                            |  |                                    |  |                                       |  |
| <b>INDIVIDUAL CIRCUIT STUDY -</b>                                                                                                                                                                                                                                                                                                                                                 |  |                                    |  |                                       |  |
| This mode of LCAT is used to cost study circuit specifics on an Individual Circuit Basis for Request For Proposals, Special Constructions, and CENTREX-like Services. Data input is usually actual per the circuit configuration's span by span requirements as detailed by Product Management. This mode will require the use of the Loop OSP calculators on Sheets 2, 3, and 4. |  |                                    |  |                                       |  |
| <b>DATA SAMPLE NETWORK STUDY -</b>                                                                                                                                                                                                                                                                                                                                                |  |                                    |  |                                       |  |
| This mode of LCAT functions well with the Loop OSP cost calculators on Sheets 2, 3, and 4. The data samples are inputted on the sheets cumulatively and cost calculated directly. Then the weightings formulae are applied to create an average weighted Loop cost per pair foot.                                                                                                 |  |                                    |  |                                       |  |
| <b>BANDWIDTH AVERAGING -</b>                                                                                                                                                                                                                                                                                                                                                      |  |                                    |  |                                       |  |
| This feature of LCAT permits study level weighting of fiber multiplexer bandwidth transport. The range of multiplexers goes from 1.5 Mbps through 1.7 Gbps and designating the mix of usage develops a more precise unit investment to the feeder calculations.                                                                                                                   |  |                                    |  |                                       |  |
| ***** THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES *****<br>***** PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION *****                                                                                                                                                                                                                       |  |                                    |  |                                       |  |
| PRESS 'ENTER' TO RETURN TO THE MAIN MENU                                                                                                                                                                                                                                                                                                                                          |  |                                    |  |                                       |  |

NOT FOR RELEASE TO PUBLIC  
PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

CM123R24\LCATR081\SPAN

## LOOP COST ANALYSIS TOOL

Bellcore<sup>®</sup>INPUT - PLANT\_CHAR.  
Sheet 2 of 2

## HELP SCREEN

LCAT Rel: 11.014  
Issued: 07/31/95

## COST DETAILS

When the Loop Study is specified as DISTANCE SENSITIVE, the data required is inputted as part of STUDY SETUP input and the ROUTE TO AIR RATIO [ B ] on WORKSHEET F and the resultant Rate Band delimiters are copied into the RATE BANDS field on SCREEN 1 by the System. The SPAN LENGTHS data is input by the User.

When the Loop Study is specified as FLAT RATE, then ALL the data required is input on SCREEN 1 in the COST BANDS field and/or SPAN LENGTHS field by the User.

## LOOP TOPOLOGY

When the Loop Topology ( circuit layout format ) for the Feeder Layer is specified as STAR, the Primary Feeder ( C.O. to HUB ) is variable and the Feeder Extension ( HUB to R.T. ) is held as an average length link. When the Loop Topology is specified as RING, the Primary Feeder is held as an average length link and the Feeder Extension is variable. This input Sheet is adjusted to each possibility. The SPAN LENGTHS input cells are rearranged to support the Topology specified and only request the necessary data that is required.

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*  
\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION \*\*\*\*\*

PRESS 'ENTER' TO RETURN TO THE MAIN MENU

CONFIDENTIAL  
NOT TO BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
EXCLUDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR081\SPAN               |             | <b>LOOP COST ANALYSIS TOOL</b>                              |                                     |                                |                                             | Bellcore (R)                   |                                     |     |
|---------------------------------------|-------------|-------------------------------------------------------------|-------------------------------------|--------------------------------|---------------------------------------------|--------------------------------|-------------------------------------|-----|
| INPUT - PLANT CHAR.                   |             | LOOP FACILITY INPUT                                         |                                     |                                |                                             | LCAT Rel: 1.0.4                |                                     |     |
| Sheet 2a / 5                          |             | FIBER OPTIC CABLE SPAN CHARACTERISTICS FOR THE FEEDER LAYER |                                     |                                |                                             | Issued: 07/31/95               |                                     |     |
| COMPANY: 0                            |             | FOR                                                         |                                     |                                |                                             | STUDY YR: 1996                 |                                     |     |
| CITY / AREA: 0                        |             | INVESTMENT YEAR: 1996                                       |                                     |                                |                                             | TEST CASE: 1                   |                                     |     |
| STATE / PROV: 0                       |             | LOOP STUDY YEAR: 1996                                       |                                     |                                |                                             | LAST UPDATE: 10-Dec-96         |                                     |     |
|                                       |             | SERVICE CLASS: BAND 3 - BUSINESS LINE                       |                                     |                                |                                             | TIME: 13:25                    |                                     |     |
| <b>NETWORK CIRCUIT LAYOUT STUDIES</b> |             |                                                             |                                     | <b>WORKSHEET A</b>             |                                             |                                |                                     |     |
|                                       |             | AERIAL FIBER                                                |                                     | BURIED FIBER                   |                                             | UNDERGROUND FIBER              |                                     |     |
|                                       |             | CUMULATIVE<br>FEEDER<br>LENGTH                              | EFFECTIVE<br>LENGTH BY<br>PAIR FOOT | CUMULATIVE<br>FEEDER<br>LENGTH | EFFECTIVE<br>LENGTH BY<br>PAIR FOOT         | CUMULATIVE<br>FEEDER<br>LENGTH | EFFECTIVE<br>LENGTH BY<br>PAIR FOOT |     |
| CAPACITY<br>[C]                       |             | idx                                                         | [D <sub>A</sub> ]                   | [E <sub>A</sub> ]              | [D <sub>B</sub> ]                           | [E <sub>B</sub> ]              | [D <sub>U</sub> ]                   |     |
|                                       |             |                                                             |                                     |                                |                                             |                                | [E=D/C]                             |     |
| 4                                     | FIBER CABLE | 2 pr                                                        |                                     | 0.0                            |                                             | 0.0                            |                                     | 0.0 |
| 6                                     | FIBER CABLE | 3 pr                                                        |                                     | 0.0                            |                                             | 0.0                            |                                     | 0.0 |
| 12                                    | FIBER CABLE | 6 pr                                                        |                                     | 0.0                            |                                             | 0.0                            |                                     | 0.0 |
| 18                                    | FIBER CABLE | 9 pr                                                        |                                     | 0.0                            |                                             | 0.0                            |                                     | 0.0 |
| 24                                    | FIBER CABLE | 12 pr                                                       |                                     | 0.0                            |                                             | 0.0                            |                                     | 0.0 |
| 36                                    | FIBER CABLE | 18 pr                                                       |                                     | 0.0                            |                                             | 0.0                            |                                     | 0.0 |
| 48                                    | FIBER CABLE | 24 pr                                                       |                                     | 0.0                            |                                             | 0.0                            |                                     | 0.0 |
| 60                                    | FIBER CABLE | 30 pr                                                       |                                     | 0.0                            |                                             | 0.0                            |                                     | 0.0 |
| 72                                    | FIBER CABLE | 36 pr                                                       |                                     | 0.0                            |                                             | 0.0                            |                                     | 0.0 |
| 84                                    | FIBER CABLE | 42 pr                                                       |                                     | 0.0                            |                                             | 0.0                            |                                     | 0.0 |
| 96                                    | FIBER CABLE | 48 pr                                                       |                                     | 0.0                            |                                             | 0.0                            |                                     | 0.0 |
| 144                                   | FIBER CABLE | 72 pr                                                       |                                     | 0.0                            |                                             | 0.0                            |                                     | 0.0 |
| 192                                   | FIBER CABLE | 96 pr                                                       |                                     | 0.0                            |                                             | 0.0                            |                                     | 0.0 |
| 216                                   | FIBER CABLE | 108 pr                                                      |                                     | 0.0                            |                                             | 0.0                            |                                     | 0.0 |
| CUMULATIVE LENGTHS OF FEEDER:         |             |                                                             |                                     |                                | EFFECTIVE CABLE LENGTHS BY CABLE PAIR FOOT: |                                |                                     |     |
| AERIAL FIBER SUBTOTAL                 |             |                                                             | 0                                   |                                | AERIAL FIBER SUBTOTAL                       |                                |                                     | 0.0 |
| BURIED FIBER SUBTOTAL                 |             |                                                             | 0                                   |                                | BURIED FIBER SUBTOTAL                       |                                |                                     | 0.0 |
| UNDGRD FIBER SUBTOTAL                 |             |                                                             | 0                                   |                                | UNDGRD FIBER SUBTOTAL                       |                                |                                     | 0.0 |
| FIBER SUBTOTAL                        |             |                                                             | 0                                   |                                | FIBER SUBTOTAL                              |                                |                                     | 0.0 |

NOTICE: THIS INFORMATION IS GIVEN TO THE PUBLIC  
UNDER A RELEASED TO THE PUBLIC

| C:\123R24\LCATR081\SPAN                   |  | LOOP COST ANALYSIS TOOL                                                       |  | Bellcore (R)                          |  |
|-------------------------------------------|--|-------------------------------------------------------------------------------|--|---------------------------------------|--|
| PLANT CHAR - WORKSHEET 23<br>Sheet 2b / 5 |  | LOOP FACILITY INPUT<br>FIBER OPTIC CABLE SPAN INVESTMENT FOR THE FEEDER LAYER |  | LCAT Rel : 1.0.4<br>Issued : 07/31/95 |  |
| COMPANY: CINCINNATI BELL TEL.             |  | INVESTMENT YEAR: 1996                                                         |  | STUDY YR: 1996                        |  |
| CITY/AREA: CINCINNATI                     |  | LOOP STUDY YEAR: 1996                                                         |  | TEST CASE: 1                          |  |
| STATE: OHIO                               |  | SERVICE CLASS: BAND 3 - BUSINESS LINE                                         |  | LAST UPDATE: 10-Dec-96                |  |
| NETWORK CIRCUIT LAYOUT STUDIES            |  | WORKSHEET B                                                                   |  | TIME: 13:25                           |  |

EFFECTIVE CHANNEL LENGTH BY CABLE PAIR FOOT [A] =  $\frac{[E] \text{WKSH A}}{[F] \text{WKSH C}}$   
 CUMULATIVE INVESTMENT BY CABLE CHANNEL FOOT [B] =  $[A] * [C] * \text{UNIT INV FACILITY WKSH B}$

| CAPACITY            |        |     | AERIAL FIBER |         | BURIED FIBER |         | UNDERGROUND FIBER |         |
|---------------------|--------|-----|--------------|---------|--------------|---------|-------------------|---------|
| For these sizes ... | [C]    | idx | [A]          | [B]     | [A]          | [B]     | [A]               | [B]     |
| 4 FIBER CABLE       | 2 pr   |     | 0.000        | \$ 0.00 | 0.000        | \$ 0.00 | 0.000             | \$ 0.00 |
| 6 FIBER CABLE       | 3 pr   |     | 0.000        | \$ 0.00 | 0.000        | \$ 0.00 | 0.000             | \$ 0.00 |
| 12 FIBER CABLE      | 6 pr   |     | 0.000        | \$ 0.00 | 0.000        | \$ 0.00 | 0.000             | \$ 0.00 |
| 18 FIBER CABLE      | 9 pr   |     | 0.000        | \$ 0.00 | 0.000        | \$ 0.00 | 0.000             | \$ 0.00 |
| 24 FIBER CABLE      | 12 pr  |     | 0.000        | \$ 0.00 | 0.000        | \$ 0.00 | 0.000             | \$ 0.00 |
| 36 FIBER CABLE      | 18 pr  |     | 0.000        | \$ 0.00 | 0.000        | \$ 0.00 | 0.000             | \$ 0.00 |
| 48 FIBER CABLE      | 24 pr  |     | 0.000        | \$ 0.00 | 0.000        | \$ 0.00 | 0.000             | \$ 0.00 |
| 60 FIBER CABLE      | 30 pr  |     | 0.000        | \$ 0.00 | 0.000        | \$ 0.00 | 0.000             | \$ 0.00 |
| 72 FIBER CABLE      | 36 pr  |     | 0.000        | \$ 0.00 | 0.000        | \$ 0.00 | 0.000             | \$ 0.00 |
| 84 FIBER CABLE      | 42 pr  |     | 0.000        | \$ 0.00 | 0.000        | \$ 0.00 | 0.000             | \$ 0.00 |
| 96 FIBER CABLE      | 48 pr  |     | 0.000        | \$ 0.00 | 0.000        | \$ 0.00 | 0.000             | \$ 0.00 |
| 144 FIBER CABLE     | 72 pr  |     | 0.000        | \$ 0.00 | 0.000        | \$ 0.00 | 0.000             | \$ 0.00 |
| 192 FIBER CABLE     | 96 pr  |     | 0.000        | \$ 0.00 | 0.000        | \$ 0.00 | 0.000             | \$ 0.00 |
| 216 FIBER CABLE     | 108 pr |     | 0.000        | \$ 0.00 | 0.000        | \$ 0.00 | 0.000             | \$ 0.00 |
| SUBTOTAL            |        |     | \$ 0.00      |         | \$ 0.00      |         | \$ 0.00           |         |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.





CA123R24\LCATR081\SPAN

PLANT CHAR - WORKSHEET 3B  
Sheet 3b / 5COMPANY: CINCINNATI BELL TEL.  
CITY / AREA: CINCINNATI

STATE: OHIO

## LOOP COST ANALYSIS TOOL

Bellcore

LOOP FACILITY INPUT  
COPPER CABLE SPAN INVESTMENT FOR THE FEEDER LAYER  
FORINVESTMENT YEAR: 1996  
LOOP STUDY YEAR: 1996LCAT Rel: 1.0.4  
Issued: 07/31/95STUDY YR: 1996  
TEST CASE: 1  
LAST UPDATE: 10-Dec-96  
TIME: 13:25

SERVICE CLASS: BAND 3 - BUSINESS

## NETWORK CIRCUIT LAYOUT STUDIES

## WORKSHEET B

## CUMMULATIVE INVESTMENTS BY CABLE PAIR FOOT

| CABLE SHEATH SIZES    | CAPACITY<br>idx |    | 26 GA. |        |        | 24 GA. |        |        | 22 GA. |        |        |            |
|-----------------------|-----------------|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|------------|
|                       |                 |    | AERIAL | BURIED | UNDGRD | AERIAL | BURIED | UNDGRD | AERIAL | BURIED | UNDGRD |            |
| 40 COPPER CABLE       | 20 pr           | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |            |
| 50 COPPER CABLE       | 25 pr           | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |            |
| 80 COPPER CABLE       | 40 pr           | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |            |
| 100 COPPER CABLE      | 50 pr           | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |            |
| 140 COPPER CABLE      | 70 pr           | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |            |
| 200 COPPER CABLE      | 100 pr          | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |            |
| 400 COPPER CABLE      | 200 pr          | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |            |
| 600 COPPER CABLE      | 300 pr          | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |            |
| 800 COPPER CABLE      | 400 pr          | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |            |
| 1200 COPPER CABLE     | 600 pr          | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |            |
| 1800 COPPER CABLE     | 900 pr          | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |            |
| 2400 COPPER CABLE     | 1200 pr         | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |            |
| 3000 COPPER CABLE     | 1500 pr         | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |            |
| 3600 COPPER CABLE     | 1800 pr         | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |            |
| 4200 COPPER CABLE     | 2100 pr         | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | \$ 0.00    |
| 4800 COPPER CABLE     | 2400 pr         | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | for direct |
| 5400 COPPER CABLE     | 2700 pr         | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | \$ 0.00    |
| 6000 COPPER CABLE     | 3000 pr         | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | for direct |
| 7200 COPPER CABLE     | 3600 pr         | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | \$ 0.00    |
| 8400 COPPER CABLE     | 4200 pr         | \$ | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | for direct |
| AERIAL CABLE SUBTOTAL |                 |    | 0.00   |        |        | 0.00   |        |        | 0.00   |        |        |            |
| BURIED CABLE SUBTOTAL |                 |    |        | 0.00   |        |        | 0.00   |        |        | 0.00   |        |            |
| UNDGRD CABLE SUBTOTAL |                 |    |        |        | 0.00   |        |        | 0.00   |        |        | 0.00   |            |

NOTICE MUST BE  
PROVIDED TO PUBLIC  
PROVIDED TO PUBLIC

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR081\SPAN                                                        |         | LOOP COST ANALYSIS TOOL                                                                    |     |                         | Bellcore                                                                    |                         |     |                         |     |          |
|--------------------------------------------------------------------------------|---------|--------------------------------------------------------------------------------------------|-----|-------------------------|-----------------------------------------------------------------------------|-------------------------|-----|-------------------------|-----|----------|
| INPUT - PLANT_CHAR.<br>Sheet 4a : 5                                            |         | LOOP FACILITY INPUT<br>COPPER CABLE SPAN CHARACTERISTICS FOR THE DISTRIBUTION LAYER<br>FOR |     |                         | LCAT Rel : 1.0.4<br>Issued : 07/31/95                                       |                         |     |                         |     |          |
| COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO |         | INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 3 - BUSINESS         |     |                         | STUDY YR : 1996<br>TEST CASE : 1<br>LAST UPDATE : 10-Dec-96<br>TIME : 13:25 |                         |     |                         |     |          |
| NETWORK CIRCUIT LAYOUT STUDIES                                                 |         |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| WORKSHEET A                                                                    |         |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| CUMULATIVE LENGTHS BY CABLE PAIR FOOT                                          |         |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| CABLE SHEATH SIZES                                                             |         | CAPACITY<br>10X                                                                            |     | 26 GA.                  |                                                                             | 24 GA.                  |     | 22 GA.                  |     |          |
|                                                                                |         |                                                                                            |     | AERIAL - BURIED - UNDER |                                                                             | AERIAL - BURIED - UNDER |     | AERIAL - BURIED - UNDER |     |          |
| 40 COPPER CABLE                                                                | 20 pr   |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| 50 COPPER CABLE                                                                | 25 pr   |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| 80 COPPER CABLE                                                                | 40 pr   |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| 100 COPPER CABLE                                                               | 50 pr   |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| 140 COPPER CABLE                                                               | 70 pr   |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| 200 COPPER CABLE                                                               | 100 pr  |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| 400 COPPER CABLE                                                               | 200 pr  |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| 600 COPPER CABLE                                                               | 300 pr  |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| 800 COPPER CABLE                                                               | 400 pr  |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| 1200 COPPER CABLE                                                              | 600 pr  |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| 1800 COPPER CABLE                                                              | 900 pr  |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| 2400 COPPER CABLE                                                              | 1200 pr |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| 3000 COPPER CABLE                                                              | 1500 pr |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| 3600 COPPER CABLE                                                              | 1800 pr |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| 4200 COPPER CABLE                                                              | 2100 pr |                                                                                            |     |                         |                                                                             |                         |     |                         |     |          |
| 4800 COPPER CABLE                                                              | 2400 pr |                                                                                            |     |                         |                                                                             |                         |     |                         |     | 0.0      |
| 5400 COPPER CABLE                                                              | 2700 pr |                                                                                            |     |                         |                                                                             |                         |     |                         |     | dstacprf |
| 6000 COPPER CABLE                                                              | 3000 pr |                                                                                            |     |                         |                                                                             |                         |     |                         |     | 0.0      |
| 7200 COPPER CABLE                                                              | 3600 pr |                                                                                            |     |                         |                                                                             |                         |     |                         |     | dstbcprf |
| 8400 COPPER CABLE                                                              | 4200 pr |                                                                                            |     |                         |                                                                             |                         |     |                         |     | 0.0      |
| SUB TOTALS                                                                     |         | 0.0                                                                                        | 0.0 | 0.0                     | 0.0                                                                         | 0.0                     | 0.0 | 0.0                     | 0.0 | dstucprf |
| TOTALS                                                                         |         |                                                                                            |     | 0.0                     |                                                                             | 0.0                     |     | 0.0                     | 0.0 | 0.0      |

**CONFIDENTIAL**  
NOTICE MUST BE  
PLACED TO ALL INFORMATION  
PROVIDED TO FCCO

| C:\123R24\LCATR081 SPAN                                  |                 | LOOP COST ANALYSIS TOOL                                                               |        |        |        |        |        |        |        |        |        | Bellcore                              |          |
|----------------------------------------------------------|-----------------|---------------------------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------------------------------|----------|
| PLANT CHAR - WORKSHEET 4B<br>Sheet 4b / 5                |                 | LOOP FACILITY INPUT<br>COPPER CABLE SPAN INVESTMENT FOR THE DISTRIBUTION LAYER<br>FOR |        |        |        |        |        |        |        |        |        | LCAT Rel : 1.0.4<br>Issued : 07/31/95 |          |
| COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI |                 | INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996                                        |        |        |        |        |        |        |        |        |        | STUDY YR : 1996<br>TEST CASE : 1      |          |
| STATE: OHIO                                              |                 | SERVICE CLASS: BAND 3 - BUSINESS                                                      |        |        |        |        |        |        |        |        |        | LAST UPDATE: 10-Dec-96<br>TIME: 13:25 |          |
| NETWORK CIRCUIT LAYOUT STUDIES                           |                 |                                                                                       |        |        |        |        |        |        |        |        |        | WORKSHEET B                           |          |
| CUMMULATIVE INVESTMENTS BY CABLE PAIR FOOT               |                 |                                                                                       |        |        |        |        |        |        |        |        |        |                                       |          |
| CABLE SHEATH SIZES                                       | CAPACITY<br>idx |                                                                                       | 26 GA. |        |        | 24 GA. |        |        | 22 GA. |        |        |                                       |          |
|                                                          |                 |                                                                                       | AERIAL | BURIED | UNDGRD | AERIAL | BURIED | UNDGRD | AERIAL | BURIED | UNDGRD |                                       |          |
| 40 COPPER CABLE                                          | 20 pr           | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |                                       |          |
| 50 COPPER CABLE                                          | 25 pr           | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |                                       |          |
| 80 COPPER CABLE                                          | 40 pr           | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |                                       |          |
| 100 COPPER CABLE                                         | 50 pr           | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |                                       |          |
| 140 COPPER CABLE                                         | 70 pr           | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |                                       |          |
| 200 COPPER CABLE                                         | 100 pr          | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |                                       |          |
| 400 COPPER CABLE                                         | 200 pr          | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |                                       |          |
| 600 COPPER CABLE                                         | 300 pr          | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |                                       |          |
| 800 COPPER CABLE                                         | 400 pr          | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |                                       |          |
| 1200 COPPER CABLE                                        | 600 pr          | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |                                       |          |
| 1800 COPPER CABLE                                        | 900 pr          | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |                                       |          |
| 2400 COPPER CABLE                                        | 1200 pr         | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |                                       |          |
| 3000 COPPER CABLE                                        | 1500 pr         | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |                                       |          |
| 3600 COPPER CABLE                                        | 1800 pr         | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |                                       |          |
| 4200 COPPER CABLE                                        | 2100 pr         | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 9.00                                  | \$ 0.00  |
| 4800 COPPER CABLE                                        | 2400 pr         | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | dstactfi |
| 5400 COPPER CABLE                                        | 2700 pr         | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | \$ 0.00  |
| 6000 COPPER CABLE                                        | 3000 pr         | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | dstactfi |
| 7200 COPPER CABLE                                        | 3600 pr         | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | \$ 0.00  |
| 8400 COPPER CABLE                                        | 4200 pr         | \$                                                                                    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | dstactfi |
| AERIAL CABLE SUBTOTAL                                    |                 |                                                                                       | 0.00   |        |        | 0.00   |        |        | 0.00   |        |        | 0.00                                  |          |
| BURIED CABLE SUBTOTAL                                    |                 |                                                                                       |        | 0.00   |        |        |        |        |        | 0.00   |        |                                       |          |
| UNDGRD CABLE SUBTOTAL                                    |                 |                                                                                       |        |        | 0.00   |        |        |        |        |        | 0.00   |                                       |          |

CONFIDENTIAL  
NOTICE TO RESEARCHERS  
PRIOR TO RELEASE  
PROVIDED TO BELL

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| LOOP COST ANALYSIS TOOL                                                                                                                                                                                                                                                                                                                                                         |         |          |                                                     |          |        |        |        |                        |            | Bellcore <sup>TM</sup> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------|-----------------------------------------------------|----------|--------|--------|--------|------------------------|------------|------------------------|--|
| C:\123R24\LCATR081\SPAN                                                                                                                                                                                                                                                                                                                                                         |         |          | LOOP FACILITY INPUT                                 |          |        |        |        | LCAT Rel: 1.0.4        |            |                        |  |
| INPUT - PLANT_CHAR.<br>Sheet 5 / 5                                                                                                                                                                                                                                                                                                                                              |         |          | DIGITAL LOOP CARRIER CABLE PAIR EQUIVALENTS AND MIX |          |        |        |        | Issued: 07/31/95       |            |                        |  |
| COMPANY: CINCINNATI BELL TEL.                                                                                                                                                                                                                                                                                                                                                   |         |          | FOR                                                 |          |        |        |        | STUDY YR: 1996         |            |                        |  |
| CITY / AREA: CINCINNATI                                                                                                                                                                                                                                                                                                                                                         |         |          | INVESTMENT YEAR: 1996                               |          |        |        |        | TEST CASE: 1           |            |                        |  |
| STATE / PROV: OHIO                                                                                                                                                                                                                                                                                                                                                              |         |          | LOOP STUDY YEAR: 1996                               |          |        |        |        | LAST UPDATE: 10-Dec-95 |            |                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                 |         |          | SERVICE CLASS: BAND 3 - BUSINESS LINE               |          |        |        |        | TIME: 13:25            |            |                        |  |
| FIBER BANDWIDTH                                                                                                                                                                                                                                                                                                                                                                 |         |          |                                                     |          |        |        |        |                        |            |                        |  |
| TRANSMISSION FLOW IS: <input checked="" type="checkbox"/> UNIDIRECTIONAL <input type="checkbox"/> BIDIRECTIONAL                                                                                                                                                                                                                                                                 |         |          |                                                     |          |        |        |        |                        |            |                        |  |
| LEVEL OF SERVICE: NARBAND                                                                                                                                                                                                                                                                                                                                                       |         |          |                                                     |          |        |        |        |                        |            |                        |  |
| BITRATE INDEX                                                                                                                                                                                                                                                                                                                                                                   | 1       | 2        | 3                                                   | 4        | 5      | 6      | 7      | SERVICE                | PROTECTION | WEIGHTED               |  |
| FIBER BANDWIDTH                                                                                                                                                                                                                                                                                                                                                                 | 45 Mbps | 190 Mbps | 155 Mbps                                            | 180 Mbps | 0      | 0      | 0      | LEVEL                  |            | EQUIVALENT             |  |
| MUX DS3 MULTIPLIER                                                                                                                                                                                                                                                                                                                                                              | 1       | 2        | 3                                                   | 4        | 0      | 0      | 0      | MULTIPLE               | n: 1       | CHANNELS               |  |
| VOICE GRADE CHANNELS                                                                                                                                                                                                                                                                                                                                                            | 672     | 1344     | 2016                                                | 2688     | 0      | 0      | 0      | [SLM]                  | [E]        | PER FO PAIR            |  |
|                                                                                                                                                                                                                                                                                                                                                                                 |         |          |                                                     |          |        |        |        |                        |            | [F]                    |  |
| FEEDER - PRIMARY                                                                                                                                                                                                                                                                                                                                                                | 0.0000  | 0.1370   | 0.7810                                              | 0.0820   | 0.0000 | 0.0000 | 0.0000 | 2                      | 1          | 1979.04                |  |
| FEEDER - EXTENSION                                                                                                                                                                                                                                                                                                                                                              | 0.0000  | 0.1370   | 0.7810                                              | 0.0820   | 0.0000 | 0.0000 | 0.0000 | 2                      | 1          | 1979.04                |  |
| <div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; width: 100%; height: 20px; margin-bottom: 5px;"></div> |         |          |                                                     |          |        |        |        |                        |            |                        |  |
| <b>FOOTNOTES</b><br>1 Where Service Level Multiple EQUALS {1 for NARBAND, 25 for WIDEBAND, 672 for BRDBAND} TIMES {2 for Unidirectional and 1 for Bidirectional}.<br>2 Where Wtd Eqv Chan per FO Pr [F] EQUALS {The Avg Wtd VGE for BR1 -> 7} DIVIDED BY {The [SLM]} TIMES {1 PLUS 1 OVER ROOT [E]}                                                                             |         |          |                                                     |          |        |        |        |                        |            |                        |  |

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

PLANT CHAR. - WORKSHEET DS  
Sheet 1 / 1COMPANY: CINCINNATI BELL TEL  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIOLCAT Rel: 1.0.4  
Issued: 07/31/95STUDY YR: 1996  
TEST CASE: 1  
LAST UPDATE: 10-Dec-95  
TIME: 13:25

## WORKSHEET DS

| DIGITAL SIGNAL TABLE (dlsig.tbl) |       |           |          |         |         |                     |
|----------------------------------|-------|-----------|----------|---------|---------|---------------------|
| SELECT                           | MODE  | HIERARCHY | BNWDWDT  | DS1MULT | DS3MULT | VGE MEDIA           |
| 0                                |       |           |          |         |         |                     |
| 1                                |       | DS1       | 1.5 Mbps | 1       | 0.04    | 24 BIDIR 2WCU CA    |
| 2                                | MODE3 | DS1       | 1.5 Mbps | 1       | 0.04    | 24 UNDIR 4WCU CA    |
| 3                                |       | VT1       | 1.5 Mbps | 1       | 0.04    | 24 UNDIR FIBER      |
| 4                                |       | VT2       | 2 Mbps   | 1       | 0       | 24 UNDIR FIBER      |
| 5                                |       | E1        | 2 Mbps   | 1       | 0.06    | 30 BIDIR 2WCU CA    |
| 6                                | MODE1 | DS1C      | 3.2 Mbps | NA      |         | 48 BIDIR 2WCU CA    |
| 7                                | MODE2 | DS1C      | 3.2 Mbps | 2       | 0.07    | 48 BIDIR 2WCU CA    |
| 8                                |       | VT3       | 3.2 Mbps | 2       | 0.07    | 56 UNDIR FIBER      |
| 9                                |       |           | 4 Mbps   | 2       | 0       | 80                  |
| 10                               |       | DS2       | 6.3 Mbps | 4       | 0.14    | 72 BIDIR 2WCU CA    |
| 11                               | MODE4 | DS2       | 6.3 Mbps | NA      | 0       | 72 BIDIR 2WCU CA    |
| 12                               |       | VT6       | 6.3 Mbps | 4       | 0.14    | 84 UNDIR FIBER      |
| 13                               |       | E2        | 8 Mbps   | 4       | 0.25    | 120 BIDIR 2WCU CA   |
| 14                               |       | E3        | 34 Mbps  | 16      |         | 480                 |
| 15                               | X     | DS3       | 45 Mbps  | 28      | 1       | 672 BIDIR 2WCU CA   |
| 16                               |       | OC1       | 50 Mbps  | 28      | 1       | 672 UNDIR FIBER     |
| 17                               | X     |           | 90 Mbps  |         | 2       | 1344 UNDIR FIBER    |
| 18                               |       |           | 90 Mbps  |         | 2       | 1344 BIDIR MW RADIO |
| 19                               |       | DS4       | 135 Mbps |         | 3       | 2016 UNDIR FIBER    |
| 20                               |       |           | 135 Mbps |         | 3       | 2016 BIDIR MW RADIO |
| 21                               |       | DS4NA     | 139 Mbps |         | 3       | 2016 UNDIR FIBER    |
| 22                               |       | E4        | 140 Mbps |         | 3       | 1920 UNDIR FIBER    |
| 23                               |       | 14M       | 139 Mbps |         | 6       | 4032 BIDIR COAX     |
| 24                               |       | PT40      | 139 Mbps |         | 6       | 4032 BIDIR COAX     |
| 25                               | X     | OC3       | 155 Mbps |         | 3       | 2016 UNDIR FIBER    |
| 26                               | X     |           | 180 Mbps |         | 4       | 2688 UNDIR FIBER    |
| 27                               |       |           | 417 Mbps |         | 9       | 6048 UNDIR FIBER    |
| 28                               |       | OC9       | 486 Mbps |         | 9       | 6048 UNDIR FIBER    |
| 29                               |       | OC12      | 560 Mbps |         | 12      | 7680 UNDIR FIBER    |
| 30                               |       |           | 565 Mbps |         | 12      | 8064 UNDIR FIBER    |
| 31                               |       |           | 1.2 Gbps |         | 24      | 16128 UNDIR FIBER   |
| 32                               |       |           | 1.7 Gbps |         | 36      | 24192 UNDIR FIBER   |
| 33                               |       | OC24      | 1.8 Gbps |         | 24      | 24192 UNDIR FIBER   |
| 34                               |       |           | 2.5 Gbps |         | 24      | 34560 UNDIR FIBER   |
| 35                               |       |           |          |         |         |                     |
| 36                               |       |           |          |         |         |                     |
| 0 1 2 3 4                        |       |           |          |         |         |                     |
| OFFSET                           |       |           |          |         |         |                     |

CONFIDENTIAL  
NOT FOR RELEASE  
PROVIDED TO FUCO

PLANT CHAR. - WORKSHEET F  
Sheet 1 of 1

## LOOP LENGTH DEVELOPMENT WORKSHEET

LCAT Rel: 1.0.4

Issued: 07/31/95

STUDY YR.: 1996

TEST CASE: 1

LAST UPDATE: 10-Dec-96

TIME: 13:25

COMPANY: CINCINNATI BELL TEL.  
CTY/AREA: CINCINNATI  
STATE: OHIO

INVESTMENT YEAR: 1996  
LOOP STUDY YEAR: 1996  
SERVICE CLASS: BAND 3 - BUSINESS I  
WORKSHEET F

| [A]<br>BAND<br>NUMBER<br>[C] | DISTANCE INCREMENTS:<br>[B]<br>NUMBER OF BANDS:<br>TOTAL<br>WORKING<br>FEET<br>[D=input] | 0 / 4 MILE BETWEEN BANDS<br>0 TO BE CARRIED INTO THE STUDY<br>TOTAL<br>WORKING<br>FEET<br>[E=(B*D)] | [R]<br>K<br>TOTAL<br>AIR<br>FEET<br>[F=A*C*K] | ROUTE TO AIR RATIO:<br>UNIT MILE / FEET CONSTANT:<br>LOOP<br>LENGTH<br>@ MIDPOINT<br>[G (see note)] | 1.539947<br>1320<br>WORKING<br>FEET<br>@ MIDPOINT<br>[H=G*R] | ratio |
|------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-------|
| 1                            |                                                                                          | 0                                                                                                   |                                               | 0                                                                                                   | 0                                                            |       |
| 2                            |                                                                                          | 0                                                                                                   |                                               | 0                                                                                                   | 0                                                            |       |
| 3                            |                                                                                          | 0                                                                                                   |                                               | 0                                                                                                   | 0                                                            |       |
| 4                            |                                                                                          | 0                                                                                                   |                                               | 0                                                                                                   | 0                                                            |       |
| 5                            |                                                                                          | 0                                                                                                   |                                               | 0                                                                                                   | 0                                                            |       |

ERROR MESSAGE 0

NOTE - SPAN MIDPOINT [G] equals the  $\text{SQRT}((F_{\text{CURR}}^2/2) + (F_{\text{PREV}}^2/2))$

CONFIDENTIAL  
NOT FOR RELEASE TO PUBLIC  
EXCLUDED TO PUCQ

124\LCATR081\SPAN

## LOOP COST ANALYSIS TOOL

Bellcore (R)

PLANT CHAR. - WORKSHEET SA  
 Sheet 1 / 1  
 COMPANY: CINCINNATI BELL TEL.  
 CITY / AREA: CINCINNATI  
 STATE / PROV: OHIO

LCAT Ver: 1.0.4  
 Issued: 07/31/95  
 STUDY YR: 1996  
 TEST CASE: 1  
 LAST UPDATE: 10-Dec-96  
 TIME: 13:25

WORKSHEET SA

Sub Feeder Allocation Table

OFFSET

| 0                           | 1     | 2      | 3      | 4     | 5                          | 6     | 7     | 8     | 9     | 10           |  |  |  |  |
|-----------------------------|-------|--------|--------|-------|----------------------------|-------|-------|-------|-------|--------------|--|--|--|--|
| Sub Feeder Allocation Table |       |        |        |       | segment alloc              |       |       |       |       |              |  |  |  |  |
| cur_lplgth = 27360          |       |        |        |       | COLOCATED RT AND CP, where |       |       |       |       |              |  |  |  |  |
| dcldepl = 18000             |       |        |        |       | NO COLOCATED               |       |       |       |       | dstopo = BUS |  |  |  |  |
| [B] distspa = 3479          |       |        |        |       | dstopo = STAF              |       |       |       |       | dstopo = BUS |  |  |  |  |
| nom_rangecur                |       |        |        |       | disubfeed                  |       |       |       |       | prfeeder     |  |  |  |  |
| nom                         |       |        |        |       | disubfeed                  |       |       |       |       | prfeeder     |  |  |  |  |
| [C]                         |       |        |        |       | [D=C-I]                    |       |       |       |       | [E]          |  |  |  |  |
| [F=D-E]                     |       |        |        |       | [G]                        |       |       |       |       | [H=D-G]      |  |  |  |  |
| [I]                         |       |        |        |       | [J=C-I]                    |       |       |       |       | [K]          |  |  |  |  |
| [L=C-K]                     |       |        |        |       | [M=A-C]                    |       |       |       |       |              |  |  |  |  |
| 500                         | 0     | 0      | 0      | 0     | 0                          | 0     | 0     | 0     | 0     | 27360        |  |  |  |  |
| 1000                        | 0     | 0      | 0      | 0     | 0                          | 0     | 0     | 0     | 0     | 26860        |  |  |  |  |
| 2000                        | 0     | 0      | 0      | 0     | 0                          | 0     | 0     | 0     | 0     | 26360        |  |  |  |  |
| 3000                        | 0     | 0      | 0      | 0     | 0                          | 0     | 0     | 0     | 0     | 25360        |  |  |  |  |
| 4000                        | 521   | 521    | 0      | 521   | 0                          | 4000  | 0     | 4000  | 0     | 24360        |  |  |  |  |
| 5000                        | 1521  | 1521   | 0      | 1521  | 0                          | 5000  | 0     | 5000  | 0     | 23360        |  |  |  |  |
| 6000                        | 2521  | 2521   | 0      | 2521  | 0                          | 6000  | 0     | 6000  | 0     | 22360        |  |  |  |  |
| 7000                        | 3521  | 3521   | 0      | 3521  | 0                          | 7000  | 0     | 7000  | 0     | 21360        |  |  |  |  |
| 8000                        | 4521  | 4521   | 0      | 4521  | 0                          | 8000  | 0     | 8000  | 0     | 20360        |  |  |  |  |
| 9000                        | 5521  | 5521   | 0      | 5521  | 0                          | 9000  | 0     | 9000  | 0     | 19360        |  |  |  |  |
| 10000                       | 6521  | 6521   | 0      | 6521  | 0                          | 10000 | 0     | 10000 | 0     | 18360        |  |  |  |  |
| 11000                       | 7521  | 7521   | 0      | 7521  | 0                          | 11000 | 0     | 11000 | 0     | 17360        |  |  |  |  |
| 12000                       | 8521  | 8521   | 0      | 8521  | 0                          | 12000 | 0     | 12000 | 0     | 16360        |  |  |  |  |
| 13000                       | 9521  | 9521   | 0      | 9521  | 0                          | 13000 | 0     | 13000 | 0     | 15360        |  |  |  |  |
| 14000                       | 10521 | 10521  | 0      | 10521 | 0                          | 14000 | 0     | 14000 | 0     | 14360        |  |  |  |  |
| 15000                       | 11521 | 11521  | 0      | 11521 | 0                          | 15000 | 0     | 15000 | 0     | 13360        |  |  |  |  |
| 16000                       | 12521 | 12521  | 0      | 12521 | 0                          | 16000 | 0     | 16000 | 0     | 12360        |  |  |  |  |
| 17000                       | 13521 | 13521  | 0      | 13521 | 0                          | 17000 | 0     | 17000 | 0     | 11360        |  |  |  |  |
| 18000                       | 14521 | 7260.5 | 7260.5 | 0     | 14521                      | 9000  | 9000  | 0     | 18000 | 10360        |  |  |  |  |
| 19000                       | 15521 | 7760.5 | 7760.5 | 0     | 15521                      | 9500  | 9500  | 0     | 19000 | 9360         |  |  |  |  |
| 20000                       | 16521 | 8260.5 | 8260.5 | 0     | 16521                      | 10000 | 10000 | 0     | 20000 | 8360         |  |  |  |  |
| 80000                       | 76521 | 14521  | 62000  | 1000  | 75521                      | 14521 | 65479 | 1000  | 79000 | 7360         |  |  |  |  |
|                             |       |        |        |       |                            |       |       |       |       | -52640       |  |  |  |  |

## RULES

ASSUMPTION - Table LOOKUP will select from the lower NOM RANGE of a CUR LPLGTH intermediate value  
 If CUR\_LPLGTH is

- = < DISTSPAN, then CUR\_SEGLGTH<sup>dst</sup> Equals CUR\_LPLGTH - NOM\_RANGE difference
- > DISTSPAN and < DLCDEPL, then CUR\_SEGLGTH<sup>star</sup> Equals CUR\_LPLGTH - NOM\_RANGE difference
- = > DLCDEPL, then CUR\_SEGLGTH<sup>prtr</sup> Equals CUR\_LPLGTH - NOM\_RANGE difference

## CUR\_SEGLGTH - Calculation Assumptions

The DISTSPAN can not exceed the DLCDEPL value input on CRITERIA  
 Therefore, set the DLCDEPL at the DISTSPAN to get an ALL FIBER Network.

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.



OHIO ONLY  
3 Geographic Areas

07/26/96  
Revised

|               |                 | Residence            |                      |                 | Business             |                      |                 |
|---------------|-----------------|----------------------|----------------------|-----------------|----------------------|----------------------|-----------------|
|               |                 | Average<br>F1 Length | Average<br>F2 Length | Average<br>Loop | Average<br>F1 Length | Average<br>F2 Length | Average<br>Loop |
|               |                 | A                    | B                    | C               | D                    | E                    | F               |
| <b>Band 1</b> |                 |                      |                      |                 |                      |                      |                 |
| 1             | 0-12,000        | 6,081                | 1,103                | 7,184           | 5,765                | 638                  | 6,403           |
| 2             | # Of Entries    | 107                  |                      |                 | 255                  |                      |                 |
| 3             | 12,001-INFINITY | 14,881               | 2,346                | 17,226          | 13,630               | 2,048                | 15,677          |
| 4             | # Of Entries    | 53                   |                      |                 | 38                   |                      |                 |
| 5             | Ratio           |                      |                      |                 |                      |                      |                 |
| 6             | 0-12,000        | 0.5744               |                      |                 | 0.7433               |                      |                 |
| 7             | 12,001-INFINITY | 0.4256               |                      |                 | 0.2567               |                      |                 |
|               |                 | 1.0000               |                      |                 | 1.0000               |                      |                 |
| <b>Band 2</b> |                 |                      |                      |                 |                      |                      |                 |
| 8             | 0-14,000        | 6,697                | 1,836                | 8,534           | 5,698                | 1,013                | 6,711           |
| 9             | # Of Entries    | 69                   |                      |                 | 90                   |                      |                 |
| 10            | 14,001-INFINITY | 19,582               | 2,699                | 22,282          | 21,785               | 1,989                | 23,774          |
| 11            | # Of Entries    | 70                   |                      |                 | 74                   |                      |                 |
| 12            | Ratio           | 0.4964               |                      |                 | 0.5488               |                      |                 |
| 13            | 0-14,000        | 0.5036               |                      |                 | 0.4512               |                      |                 |
| 14            | 14,001-INFINITY | 1.0000               |                      |                 | 1.0000               |                      |                 |
| <b>Band 3</b> |                 |                      |                      |                 |                      |                      |                 |
| 15            | 0-18,000        | 4,845                | 1,981                | 6,825           | 4,512                | 1,095                | 5,608           |
| 16            | # Of Entries    | 46                   |                      |                 | 41                   |                      |                 |
| 17            | 18,001-INFINITY | 23,301               | 4,826                | 28,127          | 23,881               | 3,479                | 27,360          |
| 18            | # Of Entries    | 56                   |                      |                 | 50                   |                      |                 |
| 19            | Ratio           | 0.4510               |                      |                 | 0.5775               |                      |                 |
| 20            | 0-18,000        | 0.5490               |                      |                 | 0.4225               |                      |                 |
| 21            | 18,001-INFINITY | 1.0000               |                      |                 | 1.0000               |                      |                 |

CONFIDENTIAL  
NOTICE: THIS INFORMATION IS BE GIVEN  
PRIOR TO BE MADE TO PUBLIC  
PROVIDED TO PUCO

**OHIO ONLY  
REVISED JAN 1997 VERSION  
BAND 1  
BUSINESS PBX**

MCI Depo.  
EX. NO 12  
CDR 11-26-97

# INDEX

## BAND 1

### Business PBX

|                |                     |       |
|----------------|---------------------|-------|
| Copper Study - | Results.....        | Tab 1 |
|                | Outputs.....        | Tab 2 |
|                | Inputs.....         | Tab 3 |
|                | Miscellaneous ..... | Tab 4 |

|                              |                     |       |
|------------------------------|---------------------|-------|
| Digital Loop Carrier Study - | Results .....       | Tab 5 |
|                              | Outputs.....        | Tab 6 |
|                              | Inputs.....         | Tab 7 |
|                              | Miscellaneous ..... | Tab 8 |

| A<br>B<br>C<br>D<br>E<br>F<br>G | LOOP COST ANALYSIS TOOL                                    |      |         |         |         |         |         |          |          |  | Bellcore <sup>®</sup> |  |
|---------------------------------|------------------------------------------------------------|------|---------|---------|---------|---------|---------|----------|----------|--|-----------------------|--|
|                                 | PROSPECTIVE INVESTMENT WORKSHEET SUMMARY                   |      |         |         |         |         |         |          |          |  | LCAT Rel: 1.0.4       |  |
| 0                               | C: 123R24\LCATR027\RESULTS1                                |      |         |         |         |         |         |          |          |  | Issued: 7/31/95       |  |
| 1                               | OUTPUT - WORKSHEET D                                       |      |         |         |         |         |         |          |          |  | STUDY YR: 1996        |  |
| 2                               | SHEET 1 of 10                                              |      |         |         |         |         |         |          |          |  | TEST CASE: 1          |  |
| 3                               | COMPANY: CINCINNATI BELL TEL                               |      |         |         |         |         |         |          |          |  | RUN DATE: 25-Jan-97   |  |
| 4                               | CITY / AREA: CINCINNATI                                    |      |         |         |         |         |         |          |          |  | TIME: 07:44           |  |
| 5                               | STATE / PROV: OHIO                                         |      |         |         |         |         |         |          |          |  |                       |  |
| 6                               | JOB IDENT: CINCINNATI                                      |      |         |         |         |         |         |          |          |  |                       |  |
| 7                               | CIRCUIT DESIGN: 1 CDLC                                     |      |         |         |         |         |         |          |          |  |                       |  |
| 8                               | LOOP SPAN DIVISION: ALL LOOP SPANS                         |      |         |         |         |         |         |          |          |  |                       |  |
| 9                               | SERVICE CLASS: BAND 1 - BUSINESS PBX                       |      |         |         |         |         |         |          |          |  |                       |  |
| 10                              | TOTAL LOOP LENGTH: 6403 FEET                               |      |         |         |         |         |         |          |          |  |                       |  |
| 11                              | Circuit Design Mix: 1.0000                                 |      |         |         |         |         |         |          |          |  |                       |  |
| 12                              | UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY |      |         |         |         |         |         |          |          |  |                       |  |
| 13                              | PLANT NAME                                                 |      |         |         |         |         |         |          |          |  |                       |  |
| 14                              | SEG. NAME                                                  |      |         |         |         |         |         |          |          |  |                       |  |
| 15                              | EQPT                                                       |      |         |         |         |         |         |          |          |  |                       |  |
| 16                              | CODE                                                       |      |         |         |         |         |         |          |          |  |                       |  |
| 17                              | PLANT                                                      |      |         |         |         |         |         |          |          |  |                       |  |
| 18                              | ITEM DESCRIPTION                                           |      |         |         |         |         |         |          |          |  |                       |  |
| 19                              | SHARED RESOURCES                                           |      |         |         |         |         |         |          |          |  |                       |  |
| 20                              | LAND                                                       | 20C  | \$ 0.00 |         | \$ 0.01 | \$ 0.00 |         | \$ 0.01  | \$ 0.01  |  |                       |  |
| 21                              | BUILDING                                                   | 10C  | \$ 0.00 |         | \$ 0.28 | \$ 0.00 |         | \$ 0.28  | \$ 0.28  |  |                       |  |
| 22                              | BLDG ENTRANCE CABLE                                        | 12C  | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 23                              | INTRABLDG CABLE                                            | 52C  | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 24                              | AERIAL CABLE (COPPER)                                      | 22C  | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 25                              | BURIED CABLE (COPPER)                                      | 45C  | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 26                              | UNDERGROUND (CU) CA.                                       | 5C   | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 27                              | CO EQPT - LOW CAP TERM                                     | 257C | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 28                              | CO EQPT - LOW CAP CHAN                                     | 257C | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 29                              | CO EQPT - HI CAP TERM                                      | 857C | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 30                              | CO EQPT - HI CAP CHAN                                      | 857C | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 31                              | CO EQPT - ANALOG SW                                        | 77C  | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 32                              | CO EQPT - DIGITAL SW                                       | 377C | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 33                              | AERIAL CABLE (FIBER)                                       | 822C | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 34                              | BURIED CABLE (FIBER)                                       | 845C | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 35                              | UNDERGROUND (FO) CA.                                       | 85C  | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 36                              | CONNECTORS                                                 | 57C  | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 37                              | MISC. COM EQP & PWR                                        | 57C  | \$ 0.00 |         | \$ 0.29 | \$ 0.00 |         | \$ 0.29  | \$ 0.29  |  |                       |  |
| 38                              | POLE LINE                                                  | 1C   | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 39                              | CONDUIT                                                    | 4C   | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 40                              | DIRECT RESOURCES                                           |      |         |         |         |         |         |          |          |  |                       |  |
| 41                              | LAND                                                       | 20C  | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 42                              | BUILDING                                                   | 10C  | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 43                              | BLDG ENTRANCE CABLE                                        | 12C  | \$ 0.00 |         | \$ 0.00 | \$ 0.00 | \$ 2.45 | \$ 2.45  | \$ 2.45  |  |                       |  |
| 44                              | INTRABLDG CABLE                                            | 52C  | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 45                              | AERIAL CABLE (COPPER)                                      | 22C  | \$ 0.00 |         | \$ 0.47 | \$ 1.43 |         | \$ 1.90  | \$ 1.90  |  |                       |  |
| 46                              | BURIED CABLE (COPPER)                                      | 45C  | \$ 0.00 |         | \$ 0.00 | \$ 0.55 |         | \$ 0.55  | \$ 0.55  |  |                       |  |
| 47                              | UNDERGROUND (CU) CA.                                       | 5C   | \$ 0.00 |         | \$ 2.81 | \$ 0.79 |         | \$ 3.60  | \$ 3.60  |  |                       |  |
| 48                              | CO EQPT - LOW CAP TERM                                     | 257C | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 49                              | CO EQPT - LOW CAP CHAN                                     | 257C | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 50                              | CO EQPT - HI CAP TERM                                      | 857C | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 51                              | CO EQPT - HI CAP CHAN                                      | 857C | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 52                              | CO EQPT - ANALOG SW                                        | 77C  | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 53                              | CO EQPT - DIGITAL SW                                       | 377C | \$ 0.00 |         | \$ 2.28 | \$ 0.00 |         | \$ 2.28  | \$ 2.28  |  |                       |  |
| 54                              | AERIAL CABLE (FIBER)                                       | 822C | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 55                              | BURIED CABLE (FIBER)                                       | 845C | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 56                              | UNDERGROUND (FO) CA.                                       | 85C  | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 57                              | CONNECTORS                                                 | 57C  | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |         | \$ 0.00  | \$ 0.00  |  |                       |  |
| 58                              | MISC. COM EQP & PWR                                        | 57C  | \$ 0.00 |         | \$ 0.06 | \$ 0.00 |         | \$ 0.06  | \$ 0.06  |  |                       |  |
| 59                              | POLE LINE                                                  | 1C   | \$ 0.00 |         | \$ 0.11 | \$ 0.34 |         | \$ 0.45  | \$ 0.45  |  |                       |  |
| 60                              | CONDUIT                                                    | 4C   | \$ 0.00 |         | \$ 1.00 | \$ 0.28 |         | \$ 1.28  | \$ 1.28  |  |                       |  |
| 61                              | SPAN SUMMARY                                               |      |         |         |         |         |         |          |          |  |                       |  |
| 62                              |                                                            |      | \$ 0.00 | \$ 0.00 | \$ 7.25 | \$ 3.39 | \$ 2.45 | \$ 13.09 | \$ 13.09 |  |                       |  |
| 63                              | CIRCUIT DESIGN SUMMARY                                     |      |         |         |         |         |         |          |          |  |                       |  |
| 64                              |                                                            |      |         |         |         |         |         | \$ 13.09 |          |  |                       |  |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

A  
B  
C  
D  
E  
F  
GC:\123R24\LCATR027\RESULTS1  
OUTPUT - WORKSHEET D  
SHEET 2 of 10**LOOP COST ANALYSIS TOOL**  
PROSPECTIVE INVESTMENT WORKSHEET SUMMARYBellcore<sup>®</sup>LCAT Rel: 1.0.4  
Issued: 7/31/95  
STUDY YR: 1996  
TEST CASE: 1  
DATE: 28-Jan-97  
TIME: 07:44COMPANY: CINCINNATI BELL TEL  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIO  
JOB IDENT: CINCINNATICIRCUIT DESIGN: 2 CDLC  
LOOP SPAN DIVISION: ALL LOOP SPANS  
SERVICE CLASS: BAND 1 - BUSINESS PBX  
TOTAL LOOP LENGTH: 6403 FEET

| Circuit Design Mix : 0.0000 |              | UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY |        |      |                                   | TOTAL<br>LOOP | WEIGHTED<br>TOTAL<br>LOOP |
|-----------------------------|--------------|------------------------------------------------------------|--------|------|-----------------------------------|---------------|---------------------------|
| PLANT NAME                  | SEG. NAME    | PRIMARY                                                    | FEEDER | SUB- | DISTRIBUTION NETWORK<br>INTERFACE |               |                           |
| PLANT                       | EQPT<br>CODE |                                                            |        |      |                                   |               |                           |
| ITEM DESCRIPTION            |              |                                                            |        |      |                                   |               |                           |
| <b>SHARED RESOURCES</b>     |              |                                                            |        |      |                                   |               |                           |
| LAND                        | 20C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| BUILDING                    | 10C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| BLDG ENTRANCE CABLE         | 12C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| INTRABLDG CABLE             | 52C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| AERIAL CABLE (COPPER)       | 22C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| BURIED CABLE (COPPER)       | 45C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| UNDERGROUND (CU) CA.        | 5C           |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| CO EQPT - LOW CAP TERM      | 257C         |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| CO EQPT - LOW CAP CHAN      | 257C         |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| CO EQPT - HI CAP TERM       | 857C         |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| CO EQPT - HI CAP CHAN       | 857C         |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| CO EQPT - ANALOG SW         | 77C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| CO EQPT - DIGITAL SW        | 377C         |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| AERIAL CABLE (FIBER)        | 822C         |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| BURIED CABLE (FIBER)        | 845C         |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| UNDERGROUND (FO) CA.        | 85C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| CONNECTORS                  | 57C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| MISC. COM EQP & PWR         | 57C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| POLE LINE                   | 1C           |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| CONDUIT                     | 4C           |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| <b>DIRECT RESOURCES</b>     |              |                                                            |        |      |                                   |               |                           |
| LAND                        | 20C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| BUILDING                    | 10C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| BLDG ENTRANCE CABLE         | 12C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| INTRABLDG CABLE             | 52C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| AERIAL CABLE (COPPER)       | 22C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| BURIED CABLE (COPPER)       | 45C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| UNDERGROUND (CU) CA.        | 5C           |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| CO EQPT - P GAIN TERM       | 257C         |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| CO EQPT - P GAIN CHAN       | 257C         |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| CO EQPT - FO MUX TERM       | 857C         |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| CO EQPT - FO MUX CHAN       | 857C         |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| CO EQPT - ANALOG SW         | 77C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| CO EQPT - DIGITAL SW        | 377C         |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| AERIAL CABLE (FIBER)        | 822C         |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| BURIED CABLE (FIBER)        | 845C         |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| UNDERGROUND (FO) CA.        | 85C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| CONNECTORS                  | 57C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| MISC. COM EQP & PWR         | 57C          |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| POLE LINE                   | 1C           |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| CONDUIT                     | 4C           |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| SPAN SUMMARY                |              |                                                            |        |      |                                   | \$ 0          | \$ 0                      |
| CIRCUIT DESIGN SUMMARY      |              |                                                            |        |      |                                   | \$ 0          | \$ 0                      |

CONFIDENTIAL  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

|                                                                                                        |      |         |                                                                                                                                            |           |                      |           |         |                                                                      |         |
|--------------------------------------------------------------------------------------------------------|------|---------|--------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------------|-----------|---------|----------------------------------------------------------------------|---------|
| C:\123R24\LCATR027 RESULTS1<br>OUTPUT - WORKSHEET D<br>SHEET 3 of 10                                   |      |         | LOOP COST ANALYSIS TOOL<br>PROSPECTIVE INVESTMENT WORKSHEET SUMMARY                                                                        |           |                      |           |         | Belcore (R)<br>LCAT Rel: 1.0.4<br>Issued: 7/31/95                    |         |
| COMPANY: CINCINNATI BELL TEL<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO<br>JOB IDENT: CINCINNATI |      |         | CIRCUIT DESIGN: MELEDED CDLC<br>LOOP SPAN DIVISION: ALL LOOP SPANS<br>SERVICE CLASS: BAND 1 - BUSINESS PBX<br>TOTAL LOOP LENGTH: 6403 FEET |           |                      |           |         | STUDY YR: 1996<br>TEST CASE: 1<br>RUN DATE: 28-Jan-97<br>TIME: 07:44 |         |
| Technology Type Mix: 0.0000                                                                            |      |         | UNIT WEIGHTED MONTHLY RECURRING COSTS BY ACCOUNT FOR A BAND STUDY                                                                          |           |                      |           |         | TECHNOLOGY                                                           |         |
| PLANT NAME                                                                                             |      |         | FEEDER                                                                                                                                     |           | DISTRIBUTION NETWORK |           | TOTAL   | WEIGHTED                                                             |         |
| SEG. NAME                                                                                              |      |         | PRIMARY                                                                                                                                    | EXTENSION | SUB-                 | INTERFACE | LOOP    | TOTAL LOOP                                                           |         |
| EQPT                                                                                                   |      |         |                                                                                                                                            |           |                      |           |         |                                                                      |         |
| PLANT CODE                                                                                             |      |         |                                                                                                                                            |           |                      |           |         |                                                                      |         |
| ITEM DESCRIPTION                                                                                       |      |         |                                                                                                                                            |           |                      |           |         |                                                                      |         |
| SHARED RESOURCES                                                                                       |      |         |                                                                                                                                            |           |                      |           |         |                                                                      |         |
| LAND                                                                                                   | 20C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.01   | \$ 0.00              | \$ 0.00   | \$ 0.01 | \$ 0.0000                                                            |         |
| BUILDING                                                                                               | 10C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.28   | \$ 0.00              | \$ 0.00   | \$ 0.28 | \$ 0.0000                                                            |         |
| BLDG ENTRANCE CABLE                                                                                    | 12C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| INTRABLDG CABLE                                                                                        | 52C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| AERIAL CABLE (COPPER)                                                                                  | 22C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| BURIED CABLE (COPPER)                                                                                  | 45C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| UNDERGROUND (CU) CA.                                                                                   | 5C   | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| CO EQPT - LOW CAP TERM                                                                                 | 257C | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| CO EQPT - LOW CAP CHAN                                                                                 | 257C | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| CO EQPT - HI CAP TERM                                                                                  | 857C | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| CO EQPT - HI CAP CHAN                                                                                  | 857C | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| CO EQPT - ANALOG SW                                                                                    | 77C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| CO EQPT - DIGITAL SW                                                                                   | 377C | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| AERIAL CABLE (FIBER)                                                                                   | 822C | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| BURIED CABLE (FIBER)                                                                                   | 845C | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| UNDERGROUND (FO) CA.                                                                                   | 85C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| CONNECTORS                                                                                             | 57C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| MISC. COM EQP & PWR                                                                                    | 57C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.29   | \$ 0.00              | \$ 0.00   | \$ 0.29 | \$ 0.0000                                                            |         |
| POLE LINE                                                                                              | 1C   | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| CONDUIT                                                                                                | 4C   | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| DIRECT RESOURCES                                                                                       |      |         |                                                                                                                                            |           |                      |           |         |                                                                      |         |
| LAND                                                                                                   | 20C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| BUILDING                                                                                               | 10C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| BLDG ENTRANCE CABLE                                                                                    | 12C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 2.45   | \$ 2.45 | \$ 0.0000                                                            |         |
| INTRABLDG CABLE                                                                                        | 52C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| AERIAL CABLE (COPPER)                                                                                  | 22C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.47   | \$ 1.43              | \$ 0.00   | \$ 1.90 | \$ 0.0000                                                            |         |
| BURIED CABLE (COPPER)                                                                                  | 45C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.55              | \$ 0.00   | \$ 0.55 | \$ 0.0000                                                            |         |
| UNDERGROUND (CU) CA.                                                                                   | 5C   | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 2.81   | \$ 0.79              | \$ 0.00   | \$ 3.60 | \$ 0.0000                                                            |         |
| CO EQPT - P GAIN TERM                                                                                  | 257C | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| CO EQPT - P GAIN CHAN                                                                                  | 257C | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| CO EQPT - FO MUX TERM                                                                                  | 857C | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| CO EQPT - FO MUX CHAN                                                                                  | 857C | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| CO EQPT - ANALOG SW                                                                                    | 77C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| CO EQPT - DIGITAL SW                                                                                   | 377C | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| AERIAL CABLE (FIBER)                                                                                   | 822C | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| BURIED CABLE (FIBER)                                                                                   | 845C | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| UNDERGROUND (FO) CA.                                                                                   | 85C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| CONNECTORS                                                                                             | 57C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| MISC. COM EQP & PWR                                                                                    | 57C  | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.0000                                                            |         |
| POLE LINE                                                                                              | 1C   | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 0.11   | \$ 0.34              | \$ 0.00   | \$ 0.45 | \$ 0.0000                                                            |         |
| CONDUIT                                                                                                | 4C   | \$ 0.00 | \$ 0.00                                                                                                                                    | \$ 1.00   | \$ 0.28              | \$ 0.00   | \$ 1.28 | \$ 0.0000                                                            |         |
| SPAN SUMMARY                                                                                           |      |         | \$ 0.00                                                                                                                                    | \$ 0.00   | \$ 7.25              | \$ 3.39   | \$ 2.45 | \$ 13.09                                                             | \$ 0.00 |
| TECHNOLOGY DESIGN SUMMARY                                                                              |      |         |                                                                                                                                            |           |                      |           |         | \$ 13.09                                                             |         |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| CA123R24\LCATR027\RESULTS1<br>OUTPUT - WORKSHEET D<br>SHEET 4 of 10                                    |      | LOOP COST ANALYSIS TOOL<br>PROSPECTIVE INVESTMENT WORKSHEET SUMMARY                                                                   |     |                                                                      |     |       | Belcore <sup>®</sup><br>LCAT Rel: 1.0.4<br>Issued: 7/31/95 |  |
|--------------------------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------------------------------------------------------|-----|----------------------------------------------------------------------|-----|-------|------------------------------------------------------------|--|
| COMPANY: CINCINNATI BELL TEL<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO<br>JOB IDENT: CINCINNATI |      | CIRCUIT DESIGN: 1 FOMUX<br>LOOP SPAN DIVISION: ALL LOOP SPANS<br>SERVICE CLASS: BAND 1 - BUSINESS PBX<br>TOTAL LOOP LENGTH: 6403 FEET |     | STUDY YR: 1996<br>TEST CASE: 1<br>RUN DATE: 28-Jan-97<br>TIME: 07:44 |     |       |                                                            |  |
| Circuit Design Mix: 0.00001                                                                            |      | UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY                                                                            |     |                                                                      |     |       |                                                            |  |
| PLANT NAME                                                                                             |      | FEEDER                                                                                                                                |     | DISTRIBUTION NETWORK                                                 |     | TOTAL |                                                            |  |
| SEG. NAME                                                                                              |      | PRIMARY                                                                                                                               |     | EXTENSION                                                            |     | SUB-  |                                                            |  |
| EQPT                                                                                                   |      |                                                                                                                                       |     |                                                                      |     |       |                                                            |  |
| PLANT CODE                                                                                             |      |                                                                                                                                       |     |                                                                      |     |       |                                                            |  |
| ITEM DESCRIPTION                                                                                       |      |                                                                                                                                       |     |                                                                      |     |       |                                                            |  |
| <b>SHARED RESOURCES</b>                                                                                |      |                                                                                                                                       |     |                                                                      |     |       |                                                            |  |
| LAND                                                                                                   | 20C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| BUILDING                                                                                               | 10C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| BLDG ENTRANCE CABLE                                                                                    | 12C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| INTRABLDG CABLE                                                                                        | 52C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| AERIAL CABLE (COPPER)                                                                                  | 22C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| BURIED CABLE (COPPER)                                                                                  | 45C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| UNDERGROUND (CU) CA.                                                                                   | 5C   |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| CO EQPT - LOW CAP TERM                                                                                 | 257C |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| CO EQPT - LOW CAP CHAN                                                                                 | 257C |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| CO EQPT - HI CAP TERM                                                                                  | 857C |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| CO EQPT - HI CAP CHAN                                                                                  | 857C |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| CO EQPT - ANALOG SW                                                                                    | 77C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| CO EQPT - DIGITAL SW                                                                                   | 377C |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| AERIAL CABLE (FIBER)                                                                                   | 822C |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| BURIED CABLE (FIBER)                                                                                   | 845C |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| UNDERGROUND (FO) CA.                                                                                   | 85C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| CONNECTORS                                                                                             | 57C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| MISC. COM EQP & PWR                                                                                    | 57C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| POLE LINE                                                                                              | 1C   |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| CONDUIT                                                                                                | 4C   |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| <b>DIRECT RESOURCES</b>                                                                                |      |                                                                                                                                       |     |                                                                      |     |       |                                                            |  |
| LAND                                                                                                   | 20C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| BUILDING                                                                                               | 10C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| BLDG ENTRANCE CABLE                                                                                    | 12C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| INTRABLDG CABLE                                                                                        | 52C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| AERIAL CABLE (COPPER)                                                                                  | 22C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| BURIED CABLE (COPPER)                                                                                  | 45C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| UNDERGROUND (CU) CA.                                                                                   | 5C   |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| CO EQPT - LOW CAP TERM                                                                                 | 257C |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| CO EQPT - LOW CAP CHAN                                                                                 | 257C |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| CO EQPT - HI CAP TERM                                                                                  | 857C |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| CO EQPT - HI CAP CHAN                                                                                  | 857C |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| CO EQPT - ANALOG SW                                                                                    | 77C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| CO EQPT - DIGITAL SW                                                                                   | 377C |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| AERIAL CABLE (FIBER)                                                                                   | 822C |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| BURIED CABLE (FIBER)                                                                                   | 845C |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| UNDERGROUND (FO) CA.                                                                                   | 85C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| CONNECTORS                                                                                             | 57C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| MISC. COM EQP & PWR                                                                                    | 57C  |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| POLE LINE                                                                                              | 1C   |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| CONDUIT                                                                                                | 4C   |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |
| SPAN SUMMARY                                                                                           |      | \$0                                                                                                                                   | \$0 | \$0                                                                  | \$0 | \$0   | \$0                                                        |  |
|                                                                                                        |      |                                                                                                                                       |     |                                                                      |     | \$0   | \$0                                                        |  |

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

| A<br>B<br>C<br>D<br>E<br>F<br>G | LOOP COST ANALYSIS TOOL                                    |  |  |  |  |  |  |  |  |  | Belcore®                           |  |
|---------------------------------|------------------------------------------------------------|--|--|--|--|--|--|--|--|--|------------------------------------|--|
|                                 | PROSPECTIVE INVESTMENT WORKSHEET SUMMARY                   |  |  |  |  |  |  |  |  |  | LCAT Rel: 1.0.4<br>Issued: 7/31/95 |  |
| 0                               | CA\123R24\LCATR027\RESULTS1                                |  |  |  |  |  |  |  |  |  | STUDY YR: 1996                     |  |
| 1                               | OUTPUT - WORKSHEET D                                       |  |  |  |  |  |  |  |  |  | TEST CASE: 1                       |  |
| 2                               | SHEET 5 of 10                                              |  |  |  |  |  |  |  |  |  | RUN DATE: 28-Jan-97                |  |
| 3                               | COMPANY: CINCINNATI BELL TEL                               |  |  |  |  |  |  |  |  |  | TIME: 07:44                        |  |
| 4                               | CITY / AREA: CINCINNATI                                    |  |  |  |  |  |  |  |  |  |                                    |  |
| 5                               | STATE / PROV: OHIO                                         |  |  |  |  |  |  |  |  |  |                                    |  |
| 6                               | JOB IDENT: CINCINNATI                                      |  |  |  |  |  |  |  |  |  |                                    |  |
| 7                               | CIRCUIT DESIGN: 2 FOMUX                                    |  |  |  |  |  |  |  |  |  |                                    |  |
| 8                               | LOOP SPAN DIVISION: ALL LOOP SPANS                         |  |  |  |  |  |  |  |  |  |                                    |  |
| 9                               | SERVICE CLASS: BAND 1 - BUSINESS PBX                       |  |  |  |  |  |  |  |  |  |                                    |  |
| 10                              | TOTAL LOOP LENGTH: 6403 FEET                               |  |  |  |  |  |  |  |  |  |                                    |  |
| 11                              | Circuit Design Mix: 0.0000                                 |  |  |  |  |  |  |  |  |  |                                    |  |
| 12                              | UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY |  |  |  |  |  |  |  |  |  |                                    |  |
| 13                              | PLANT NAME                                                 |  |  |  |  |  |  |  |  |  |                                    |  |
| 14                              | SEG. NAME                                                  |  |  |  |  |  |  |  |  |  |                                    |  |
| 15                              | EQPT                                                       |  |  |  |  |  |  |  |  |  |                                    |  |
| 16                              | CODE                                                       |  |  |  |  |  |  |  |  |  |                                    |  |
| 17                              | PLANT                                                      |  |  |  |  |  |  |  |  |  |                                    |  |
| 18                              | ITEM DESCRIPTION                                           |  |  |  |  |  |  |  |  |  |                                    |  |
| 19                              | SHARED RESOURCES                                           |  |  |  |  |  |  |  |  |  |                                    |  |
| 20                              | LAND                                                       |  |  |  |  |  |  |  |  |  |                                    |  |
| 21                              | BUILDING                                                   |  |  |  |  |  |  |  |  |  |                                    |  |
| 22                              | BLDG ENTRANCE CABLE                                        |  |  |  |  |  |  |  |  |  |                                    |  |
| 23                              | INTRABLDG CABLE                                            |  |  |  |  |  |  |  |  |  |                                    |  |
| 24                              | AERIAL CABLE (COPPER)                                      |  |  |  |  |  |  |  |  |  |                                    |  |
| 25                              | BURIED CABLE (COPPER)                                      |  |  |  |  |  |  |  |  |  |                                    |  |
| 26                              | UNDERGROUND (CU) CA.                                       |  |  |  |  |  |  |  |  |  |                                    |  |
| 27                              | CO EQPT - LOW CAP TERM                                     |  |  |  |  |  |  |  |  |  |                                    |  |
| 28                              | CO EQPT - LOW CAP CHAN                                     |  |  |  |  |  |  |  |  |  |                                    |  |
| 29                              | CO EQPT - HI CAP TERM                                      |  |  |  |  |  |  |  |  |  |                                    |  |
| 30                              | CO EQPT - HI CAP CHAN                                      |  |  |  |  |  |  |  |  |  |                                    |  |
| 31                              | CO EQPT - ANALOG SW                                        |  |  |  |  |  |  |  |  |  |                                    |  |
| 32                              | CO EQPT - DIGITAL SW                                       |  |  |  |  |  |  |  |  |  |                                    |  |
| 33                              | AERIAL CABLE (FIBER)                                       |  |  |  |  |  |  |  |  |  |                                    |  |
| 34                              | BURIED CABLE (FIBER)                                       |  |  |  |  |  |  |  |  |  |                                    |  |
| 35                              | UNDERGROUND (FO) CA.                                       |  |  |  |  |  |  |  |  |  |                                    |  |
| 36                              | CONNECTORS                                                 |  |  |  |  |  |  |  |  |  |                                    |  |
| 37                              | MISC. COM EQP & PWR                                        |  |  |  |  |  |  |  |  |  |                                    |  |
| 38                              | POLE LINE                                                  |  |  |  |  |  |  |  |  |  |                                    |  |
| 39                              | CONDUIT                                                    |  |  |  |  |  |  |  |  |  |                                    |  |
| 40                              | DIRECT RESOURCES                                           |  |  |  |  |  |  |  |  |  |                                    |  |
| 41                              | LAND                                                       |  |  |  |  |  |  |  |  |  |                                    |  |
| 42                              | BUILDING                                                   |  |  |  |  |  |  |  |  |  |                                    |  |
| 43                              | BLDG ENTRANCE CABLE                                        |  |  |  |  |  |  |  |  |  |                                    |  |
| 44                              | INTRABLDG CABLE                                            |  |  |  |  |  |  |  |  |  |                                    |  |
| 45                              | AERIAL CABLE (COPPER)                                      |  |  |  |  |  |  |  |  |  |                                    |  |
| 46                              | BURIED CABLE (COPPER)                                      |  |  |  |  |  |  |  |  |  |                                    |  |
| 47                              | UNDERGROUND (CU) CA.                                       |  |  |  |  |  |  |  |  |  |                                    |  |
| 48                              | CO EQPT - LOW CAP TERM                                     |  |  |  |  |  |  |  |  |  |                                    |  |
| 49                              | CO EQPT - LOW CAP CHAN                                     |  |  |  |  |  |  |  |  |  |                                    |  |
| 50                              | CO EQPT - HI CAP TERM                                      |  |  |  |  |  |  |  |  |  |                                    |  |
| 51                              | CO EQPT - HI CAP CHAN                                      |  |  |  |  |  |  |  |  |  |                                    |  |
| 52                              | CO EQPT - ANALOG SW                                        |  |  |  |  |  |  |  |  |  |                                    |  |
| 53                              | CO EQPT - DIGITAL SW                                       |  |  |  |  |  |  |  |  |  |                                    |  |
| 54                              | AERIAL CABLE (FIBER)                                       |  |  |  |  |  |  |  |  |  |                                    |  |
| 55                              | BURIED CABLE (FIBER)                                       |  |  |  |  |  |  |  |  |  |                                    |  |
| 56                              | UNDERGROUND (FO) CA.                                       |  |  |  |  |  |  |  |  |  |                                    |  |
| 57                              | CONNECTORS                                                 |  |  |  |  |  |  |  |  |  |                                    |  |
| 58                              | MISC. COM EQP & PWR                                        |  |  |  |  |  |  |  |  |  |                                    |  |
| 59                              | POLE LINE                                                  |  |  |  |  |  |  |  |  |  |                                    |  |
| 60                              | CONDUIT                                                    |  |  |  |  |  |  |  |  |  |                                    |  |
| 61                              | SPAN SUMMARY                                               |  |  |  |  |  |  |  |  |  |                                    |  |
| 62                              |                                                            |  |  |  |  |  |  |  |  |  |                                    |  |
| 63                              |                                                            |  |  |  |  |  |  |  |  |  |                                    |  |
| 64                              |                                                            |  |  |  |  |  |  |  |  |  |                                    |  |
| 65                              |                                                            |  |  |  |  |  |  |  |  |  |                                    |  |

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO



A  
B  
C  
D  
E  
F  
GCA123R24 LCATR027 RESULTS1  
OUTPUT - WORKSHEET D  
SHEET 6 of 10**LOOP COST ANALYSIS TOOL**  
PROSPECTIVE INVESTMENT WORKSHEET SUMMARYBelcore<sup>®</sup>COMPANY: CINCINNATI BELL TEL  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIO  
JOB IDENT: CINCINNATICIRCUIT DESIGN: 3 FOMUX  
LOOP SPAN DIVISION: ALL LOOP SPANS  
SERVICE CLASS: BAND 1 - BUSINESS PBX  
TOTAL LOOP LENGTH: 6403 FEETLCAT Rel: 1.0.4  
Issued: 7/31/95  
STUDY YR: 1996  
TEST CASE: 1  
RUN DATE: 28-Jan-97  
TIME: 07:44

Circuit Design Mix: [1.0000] UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

WEIGHTED

| PLANT NAME | FEEDER  |           |         | DISTRIBUTION NETWORK |         | TOTAL   | TOTAL |
|------------|---------|-----------|---------|----------------------|---------|---------|-------|
| SEG. NAME  | PRIMARY | EXTENSION | SUB-    | INTERFACE            | LOOP    | LOOP    |       |
| EQPT       |         |           |         |                      |         |         |       |
| CODE       |         |           |         |                      |         |         |       |
| 20C        | \$ 0.00 |           | \$ 0.01 | \$ 0.00              | \$ 0.01 | \$ 0.01 |       |
| 10C        | \$ 0.00 |           | \$ 0.28 | \$ 0.00              | \$ 0.28 | \$ 0.28 |       |
| 12C        | \$ 0.00 |           | \$ 0.00 | \$ 0.00              | \$ 0.00 | \$ 0.00 |       |
| 52C        | \$ 0.00 |           | \$ 0.00 | \$ 0.00              | \$ 0.00 | \$ 0.00 |       |
| 22C        | \$ 0.00 |           | \$ 0.00 | \$ 0.00              | \$ 0.00 | \$ 0.00 |       |
| 45C        | \$ 0.00 |           | \$ 0.00 | \$ 0.00              | \$ 0.00 | \$ 0.00 |       |
| 5C         | \$ 0.00 |           | \$ 0.00 | \$ 0.00              | \$ 0.00 | \$ 0.00 |       |
| 257C       | \$ 0.00 |           | \$ 0.00 | \$ 0.00              | \$ 0.00 | \$ 0.00 |       |
| 257C       | \$ 0.00 |           | \$ 0.00 | \$ 0.00              | \$ 0.00 | \$ 0.00 |       |
| 857C       | \$ 0.00 |           | \$ 0.00 | \$ 0.00              | \$ 0.00 | \$ 0.00 |       |
| 857C       | \$ 0.00 |           | \$ 0.00 | \$ 0.00              | \$ 0.00 | \$ 0.00 |       |
| 77C        | \$ 0.00 |           | \$ 0.00 | \$ 0.00              | \$ 0.00 | \$ 0.00 |       |
| 377C       | \$ 0.00 |           | \$ 0.00 | \$ 0.00              | \$ 0.00 | \$ 0.00 |       |
| 822C       | \$ 0.00 |           | \$ 0.00 | \$ 0.00              | \$ 0.00 | \$ 0.00 |       |
| 845C       | \$ 0.00 |           | \$ 0.00 | \$ 0.00              | \$ 0.00 | \$ 0.00 |       |
| 85C        | \$ 0.00 |           | \$ 0.00 | \$ 0.00              | \$ 0.00 | \$ 0.00 |       |
| 57C        | \$ 0.00 |           | \$ 0.00 | \$ 0.00              | \$ 0.00 | \$ 0.00 |       |
| 57C        | \$ 0.00 |           | \$ 0.29 | \$ 0.00              | \$ 0.29 | \$ 0.29 |       |
| 1C         | \$ 0.00 |           | \$ 0.00 | \$ 0.00              | \$ 0.00 | \$ 0.00 |       |
| 4C         | \$ 0.00 |           | \$ 0.00 | \$ 0.00              | \$ 0.00 | \$ 0.00 |       |

**DIRECT RESOURCES**

|                        |      |         |         |         |         |         |
|------------------------|------|---------|---------|---------|---------|---------|
| LAND                   | 20C  | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| BUILDING               | 10C  | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| BLDG ENTRANCE CABLE    | 12C  | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 2.45 | \$ 2.45 |
| INTRABLDG CABLE        | 52C  | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| AERIAL CABLE (COPPER)  | 22C  | \$ 0.00 | \$ 0.47 | \$ 1.43 | \$ 1.90 | \$ 1.90 |
| BURIED CABLE (COPPER)  | 45C  | \$ 0.00 | \$ 0.00 | \$ 0.55 | \$ 0.55 | \$ 0.55 |
| UNDERGROUND (CU) CA.   | 5C   | \$ 0.00 | \$ 2.81 | \$ 0.79 | \$ 3.60 | \$ 3.60 |
| CO EQPT - LOW CAP TERM | 257C | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| CO EQPT - LOW CAP CHAN | 257C | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| CO EQPT - HI CAP TERM  | 857C | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| CO EQPT - HI CAP CHAN  | 857C | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| CO EQPT - ANALOG SW    | 77C  | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| CO EQPT - DIGITAL SW   | 377C | \$ 0.00 | \$ 2.28 | \$ 0.00 | \$ 2.28 | \$ 2.28 |
| AERIAL CABLE (FIBER)   | 822C | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| BURIED CABLE (FIBER)   | 845C | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| UNDERGROUND (FO) CA.   | 85C  | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| CONNECTORS             | 57C  | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| MISC. COM EQP & PWR    | 57C  | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 | \$ 0.00 |
| POLE LINE              | 1C   | \$ 0.00 | \$ 0.45 | \$ 0.00 | \$ 0.45 | \$ 0.45 |
| CONDUIT                | 4C   | \$ 0.00 | \$ 1.00 | \$ 0.28 | \$ 1.28 | \$ 1.28 |

**SPAN SUMMARY**

|         |         |         |         |         |          |          |
|---------|---------|---------|---------|---------|----------|----------|
| \$ 0.00 | \$ 0.00 | \$ 7.25 | \$ 3.39 | \$ 2.45 | \$ 13.09 | \$ 13.09 |
|         |         |         |         |         | \$ 13.09 |          |

**CONFIDENTIAL**  
 NOT TO BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUBLIC

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| A<br>B<br>C<br>D<br>E<br>F<br>G |  | CA123R24/LCATR027 RESULTS1<br>OUTPUT - WORKSHEET D<br>SHEET 7 of 10                   |         | LOOP COST ANALYSIS TOOL<br>PROSPECTIVE INVESTMENT WORKSHEET SUMMARY |       |                     |      | Bellcore <sup>®</sup><br>LCAT Rel: 1.0.4<br>Issued: 7/31/95 |      |
|---------------------------------|--|---------------------------------------------------------------------------------------|---------|---------------------------------------------------------------------|-------|---------------------|------|-------------------------------------------------------------|------|
|                                 |  | COMPANY: CINCINNATI BELL TEL                                                          |         | CIRCUIT DESIGN: 4 FOMUX                                             |       | STUDY YR: 1996      |      |                                                             |      |
|                                 |  | CITY / AREA: CINCINNATI                                                               |         | LOOP SPAN DIVISION: ALL LOOP SPANS                                  |       | TEST CASE: 1        |      |                                                             |      |
|                                 |  | STATE / PROV: OHIO                                                                    |         | SERVICE CLASS: BAND 1 - BUSINESS PBX                                |       | RUN DATE: 28-Jan-97 |      |                                                             |      |
|                                 |  | JOB IDENT: CINCINNATI                                                                 |         | TOTAL LOOP LENGTH: 6403 FEET                                        |       | TIME: 07:44         |      |                                                             |      |
| 0                               |  | Circuit Design Mix: 0.0000 UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY |         |                                                                     |       |                     |      |                                                             |      |
| 1                               |  | PLANT NAME                                                                            | FEEDER  | DISTRIBUTION NETWORK                                                | TOTAL | WEIGHTED            |      |                                                             |      |
| 2                               |  | SEG. NAME                                                                             | PRIMARY | EXTENSION                                                           | SUB-  | INTERFACE           | LOOP | TOTAL                                                       | LOOP |
| 3                               |  | EQPT                                                                                  |         |                                                                     |       |                     |      |                                                             |      |
| 4                               |  | PLANT                                                                                 | CODE    |                                                                     |       |                     |      |                                                             |      |
| 5                               |  | ITEM DESCRIPTION                                                                      |         |                                                                     |       |                     |      |                                                             |      |
| 6                               |  | <u>SHARED RESOURCES</u>                                                               |         |                                                                     |       |                     |      |                                                             |      |
| 7                               |  | LAND                                                                                  | 20C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 8                               |  | BUILDING                                                                              | 10C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 9                               |  | BLDG ENTRANCE CABLE                                                                   | 12C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 10                              |  | INTRABLDG CABLE                                                                       | 52C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 11                              |  | AERIAL CABLE (COPPER)                                                                 | 22C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 12                              |  | BURIED CABLE (COPPER)                                                                 | 45C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 13                              |  | UNDERGROUND (CU) CA.                                                                  | 5C      |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 14                              |  | CO EQPT - LOW CAP TERM                                                                | 257C    |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 15                              |  | CO EQPT - LOW CAP CHAN                                                                | 257C    |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 16                              |  | CO EQPT - HI CAP TERM                                                                 | 857C    |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 17                              |  | CO EQPT - HI CAP CHAN                                                                 | 857C    |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 18                              |  | CO EQPT - ANALOG SW                                                                   | 77C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 19                              |  | CO EQPT - DIGITAL SW                                                                  | 377C    |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 20                              |  | AERIAL CABLE (FIBER)                                                                  | 822C    |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 21                              |  | BURIED CABLE (FIBER)                                                                  | 845C    |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 22                              |  | UNDERGROUND (FO) CA.                                                                  | 85C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 23                              |  | CONNECTORS                                                                            | 57C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 24                              |  | MISC. COM EQP & PWR                                                                   | 57C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 25                              |  | POLE LINE                                                                             | 1C      |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 26                              |  | CONDUIT                                                                               | 4C      |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 27                              |  |                                                                                       |         |                                                                     |       |                     |      |                                                             |      |
| 28                              |  | <u>DIRECT RESOURCES</u>                                                               |         |                                                                     |       |                     |      |                                                             |      |
| 29                              |  | LAND                                                                                  | 20C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 30                              |  | BUILDING                                                                              | 10C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 31                              |  | BLDG ENTRANCE CABLE                                                                   | 12C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 32                              |  | INTRABLDG CABLE                                                                       | 52C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 33                              |  | AERIAL CABLE (COPPER)                                                                 | 22C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 34                              |  | BURIED CABLE (COPPER)                                                                 | 45C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 35                              |  | UNDERGROUND (CU) CA.                                                                  | 5C      |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 36                              |  | CO EQPT - LOW CAP TERM                                                                | 257C    |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 37                              |  | CO EQPT - LOW CAP CHAN                                                                | 257C    |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 38                              |  | CO EQPT - HI CAP TERM                                                                 | 857C    |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 39                              |  | CO EQPT - HI CAP CHAN                                                                 | 857C    |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 40                              |  | CO EQPT - ANALOG SW                                                                   | 77C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 41                              |  | CO EQPT - DIGITAL SW                                                                  | 377C    |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 42                              |  | AERIAL CABLE (FIBER)                                                                  | 822C    |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 43                              |  | BURIED CABLE (FIBER)                                                                  | 845C    |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 44                              |  | UNDERGROUND (FO) CA.                                                                  | 85C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 45                              |  | CONNECTORS                                                                            | 57C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 46                              |  | MISC. COM EQP & PWR                                                                   | 57C     |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 47                              |  | POLE LINE                                                                             | 1C      |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 48                              |  | CONDUIT                                                                               | 4C      |                                                                     |       |                     | \$0  | \$0                                                         |      |
| 49                              |  |                                                                                       |         |                                                                     |       |                     |      |                                                             |      |
| 50                              |  |                                                                                       |         |                                                                     |       |                     |      |                                                             |      |
| 51                              |  | SPAN SUMMARY                                                                          | \$0     | \$0                                                                 | \$0   | \$0                 | \$0  | \$0                                                         | \$0  |
| 52                              |  |                                                                                       |         |                                                                     |       |                     | \$0  |                                                             |      |
| 53                              |  |                                                                                       |         |                                                                     |       |                     |      |                                                             |      |
| 54                              |  |                                                                                       |         |                                                                     |       |                     |      |                                                             |      |
| 55                              |  |                                                                                       |         |                                                                     |       |                     |      |                                                             |      |

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

| C:\123R24\LCATR027\RESULTS1  |         | LOOP COST ANALYSIS TOOL                                    |         |                     |      | Bellcore (R)    |          |
|------------------------------|---------|------------------------------------------------------------|---------|---------------------|------|-----------------|----------|
| OUTPUT - WORKSHEET D         |         | PROSPECTIVE INVESTMENT WORKSHEET SUMMARY                   |         |                     |      | LCAT Rel: 1.0.4 |          |
| SHEET 8 of 10                |         |                                                            |         |                     |      | Issued: 7/31/95 |          |
| COMPANY: CINCINNATI BELL TEL |         | CIRCUIT DESIGN: 5 FOMUX                                    |         | STUDY YR: 1998      |      |                 |          |
| CITY / AREA: CINCINNATI      |         | LOOP SPAN DIVISION: ALL LOOP SPANS                         |         | TEST CASE: 1        |      |                 |          |
| STATE / PROV: OHIO           |         | SERVICE CLASS: BAND 1 - BUSINESS PBX                       |         | RUN DATE: 28-Jan-97 |      |                 |          |
| JOB IDENT: CINCINNATI        |         | TOTAL LOOP LENGTH: 6403 FEET                               |         | TIME: 07:44         |      |                 |          |
| Circuit Design Mix: 0.0000   |         | UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY |         |                     |      | TOTAL           | WEIGHTED |
| PLANT NAME                   | FEEDER  | DISTRIBUTION                                               | NETWORK | INTERFACE           | LOOP | LOOP            |          |
| SEG. NAME                    | PRIMARY | EXTENSION                                                  | SUB-    |                     |      |                 |          |
| EQPT                         |         |                                                            |         |                     |      |                 |          |
| PLANT                        | CODE    |                                                            |         |                     |      |                 |          |
| ITEM DESCRIPTION             |         |                                                            |         |                     |      |                 |          |
| <b>SHARED RESOURCES</b>      |         |                                                            |         |                     |      |                 |          |
| LAND                         | 20C     |                                                            |         |                     | \$0  | \$0             |          |
| BUILDING                     | 10C     |                                                            |         |                     | \$0  | \$0             |          |
| BLDG ENTRANCE CABLE          | 12C     |                                                            |         |                     | \$0  | \$0             |          |
| INTRABLDG CABLE              | 52C     |                                                            |         |                     | \$0  | \$0             |          |
| AERIAL CABLE (COPPER)        | 22C     |                                                            |         |                     | \$0  | \$0             |          |
| BURIED CABLE (COPPER)        | 45C     |                                                            |         |                     | \$0  | \$0             |          |
| UNDERGROUND (CU) CA.         | 5C      |                                                            |         |                     | \$0  | \$0             |          |
| CO EQPT - LOW CAP TERM       | 257C    |                                                            |         |                     | \$0  | \$0             |          |
| CO EQPT - LOW CAP CHAN       | 257C    |                                                            |         |                     | \$0  | \$0             |          |
| CO EQPT - HI CAP TERM        | 857C    |                                                            |         |                     | \$0  | \$0             |          |
| CO EQPT - HI CAP CHAN        | 857C    |                                                            |         |                     | \$0  | \$0             |          |
| CO EQPT - ANALOG SW          | 77C     |                                                            |         |                     | \$0  | \$0             |          |
| CO EQPT - DIGITAL SW         | 377C    |                                                            |         |                     | \$0  | \$0             |          |
| AERIAL CABLE (FIBER)         | 822C    |                                                            |         |                     | \$0  | \$0             |          |
| BURIED CABLE (FIBER)         | 845C    |                                                            |         |                     | \$0  | \$0             |          |
| UNDERGROUND (FO) CA.         | 85C     |                                                            |         |                     | \$0  | \$0             |          |
| CONNECTORS                   | 57C     |                                                            |         |                     | \$0  | \$0             |          |
| MISC. COM EQP & PWR          | 57C     |                                                            |         |                     | \$0  | \$0             |          |
| POLE LINE                    | 1C      |                                                            |         |                     | \$0  | \$0             |          |
| CONDUIT                      | 4C      |                                                            |         |                     | \$0  | \$0             |          |
| <b>DIRECT RESOURCES</b>      |         |                                                            |         |                     |      |                 |          |
| LAND                         | 20C     |                                                            |         |                     | \$0  | \$0             |          |
| BUILDING                     | 10C     |                                                            |         |                     | \$0  | \$0             |          |
| BLDG ENTRANCE CABLE          | 12C     |                                                            |         |                     | \$0  | \$0             |          |
| INTRABLDG CABLE              | 52C     |                                                            |         |                     | \$0  | \$0             |          |
| AERIAL CABLE (COPPER)        | 22C     |                                                            |         |                     | \$0  | \$0             |          |
| BURIED CABLE (COPPER)        | 45C     |                                                            |         |                     | \$0  | \$0             |          |
| UNDERGROUND (CU) CA.         | 5C      |                                                            |         |                     | \$0  | \$0             |          |
| CO EQPT - LOW CAP TERM       | 257C    |                                                            |         |                     | \$0  | \$0             |          |
| CO EQPT - LOW CAP CHAN       | 257C    |                                                            |         |                     | \$0  | \$0             |          |
| CO EQPT - HI CAP TERM        | 857C    |                                                            |         |                     | \$0  | \$0             |          |
| CO EQPT - HI CAP CHAN        | 857C    |                                                            |         |                     | \$0  | \$0             |          |
| CO EQPT - ANALOG SW          | 77C     |                                                            |         |                     | \$0  | \$0             |          |
| CO EQPT - DIGITAL SW         | 377C    |                                                            |         |                     | \$0  | \$0             |          |
| AERIAL CABLE (FIBER)         | 822C    |                                                            |         |                     | \$0  | \$0             |          |
| BURIED CABLE (FIBER)         | 845C    |                                                            |         |                     | \$0  | \$0             |          |
| UNDERGROUND (FO) CA.         | 85C     |                                                            |         |                     | \$0  | \$0             |          |
| CONNECTORS                   | 57C     |                                                            |         |                     | \$0  | \$0             |          |
| MISC. COM EQP & PWR          | 57C     |                                                            |         |                     | \$0  | \$0             |          |
| POLE LINE                    | 1C      |                                                            |         |                     | \$0  | \$0             |          |
| CONDUIT                      | 4C      |                                                            |         |                     | \$0  | \$0             |          |
| SPAN SUMMARY                 |         | \$0                                                        | \$0     | \$0                 | \$0  | \$0             | \$0      |
|                              |         |                                                            |         |                     |      | \$0             |          |

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR027\RESULTS1<br>OUTPUT - WORKSHEET D<br>SHEET 9 of 10                  |      | LOOP COST ANALYSIS TOOL<br>PROSPECTIVE INVESTMENT WORKSHEET SUMMARY |     |                      |     |                 | Bellcore |  |
|---------------------------------------------------------------------------------------|------|---------------------------------------------------------------------|-----|----------------------|-----|-----------------|----------|--|
| COMPANY: CINCINNATI BELL TEL                                                          |      | CIRCUIT DESIGN: 6 FOMUX                                             |     | LCAT Rel: 1.0.4      |     | Issued: 7/31/95 |          |  |
| CITY / AREA: CINCINNATI                                                               |      | LOOP SPAN DIVISION: ALL LOOP SPANS                                  |     | STUDY YR: 1996       |     | TEST CASE: 1    |          |  |
| STATE / PROV: OHIO                                                                    |      | SERVICE CLASS: BAND 1 - BUSINESS PBX                                |     | RUN DATE: 28-Jan-97  |     | TIME: 07:44     |          |  |
| JOB IDENT: CINCINNATI                                                                 |      | TOTAL LOOP LENGTH: 6403 FEET                                        |     |                      |     |                 |          |  |
| Circuit Design Mix: 0.0000 UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY |      |                                                                     |     |                      |     |                 |          |  |
| PLANT NAME                                                                            |      | FEEDER                                                              |     | DISTRIBUTION NETWORK |     | TOTAL           | WEIGHTED |  |
| SEG. NAME                                                                             |      | PRIMARY                                                             |     | EXTENSION            |     | SUB-            |          |  |
| EQPT                                                                                  |      | INTERFACE                                                           |     |                      |     | LOOP            | LOOP     |  |
| PLANT                                                                                 | CODE |                                                                     |     |                      |     |                 |          |  |
| ITEM DESCRIPTION                                                                      |      |                                                                     |     |                      |     |                 |          |  |
| <b>SHARED RESOURCES</b>                                                               |      |                                                                     |     |                      |     |                 |          |  |
| LAND                                                                                  | 20C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| BUILDING                                                                              | 10C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| BLDG ENTRANCE CABLE                                                                   | 12C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| INTRABLDG CABLE                                                                       | 52C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| AERIAL CABLE (COPPER)                                                                 | 22C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| BURIED CABLE (COPPER)                                                                 | 45C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| UNDERGROUND (CU) CA.                                                                  | 5C   |                                                                     |     |                      |     | \$0             | \$0      |  |
| CO EQPT - LOW CAP TERM                                                                | 257C |                                                                     |     |                      |     | \$0             | \$0      |  |
| CO EQPT - LOW CAP CHAN                                                                | 257C |                                                                     |     |                      |     | \$0             | \$0      |  |
| CO EQPT - HI CAP TERM                                                                 | 857C |                                                                     |     |                      |     | \$0             | \$0      |  |
| CO EQPT - HI CAP CHAN                                                                 | 857C |                                                                     |     |                      |     | \$0             | \$0      |  |
| CO EQPT - ANALOG SW                                                                   | 77C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| CO EQPT - DIGITAL SW                                                                  | 377C |                                                                     |     |                      |     | \$0             | \$0      |  |
| AERIAL CABLE (FIBER)                                                                  | 822C |                                                                     |     |                      |     | \$0             | \$0      |  |
| BURIED CABLE (FIBER)                                                                  | 845C |                                                                     |     |                      |     | \$0             | \$0      |  |
| UNDERGROUND (FO) CA.                                                                  | 85C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| CONNECTORS                                                                            | 57C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| MISC. COM EQP & PWR                                                                   | 57C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| POLE LINE                                                                             | 1C   |                                                                     |     |                      |     | \$0             | \$0      |  |
| CONDUIT                                                                               | 4C   |                                                                     |     |                      |     | \$0             | \$0      |  |
| <b>DIRECT RESOURCES</b>                                                               |      |                                                                     |     |                      |     |                 |          |  |
| LAND                                                                                  | 20C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| BUILDING                                                                              | 10C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| BLDG ENTRANCE CABLE                                                                   | 12C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| INTRABLDG CABLE                                                                       | 52C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| AERIAL CABLE (COPPER)                                                                 | 22C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| BURIED CABLE (COPPER)                                                                 | 45C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| UNDERGROUND (CU) CA.                                                                  | 5C   |                                                                     |     |                      |     | \$0             | \$0      |  |
| CO EQPT - LOW CAP TERM                                                                | 257C |                                                                     |     |                      |     | \$0             | \$0      |  |
| CO EQPT - LOW CAP CHAN                                                                | 257C |                                                                     |     |                      |     | \$0             | \$0      |  |
| CO EQPT - HI CAP TERM                                                                 | 857C |                                                                     |     |                      |     | \$0             | \$0      |  |
| CO EQPT - HI CAP CHAN                                                                 | 857C |                                                                     |     |                      |     | \$0             | \$0      |  |
| CO EQPT - ANALOG SW                                                                   | 77C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| CO EQPT - DIGITAL SW                                                                  | 377C |                                                                     |     |                      |     | \$0             | \$0      |  |
| AERIAL CABLE (FIBER)                                                                  | 822C |                                                                     |     |                      |     | \$0             | \$0      |  |
| BURIED CABLE (FIBER)                                                                  | 845C |                                                                     |     |                      |     | \$0             | \$0      |  |
| UNDERGROUND (FO) CA.                                                                  | 85C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| CONNECTORS                                                                            | 57C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| MISC. COM EQP & PWR                                                                   | 57C  |                                                                     |     |                      |     | \$0             | \$0      |  |
| POLE LINE                                                                             | 1C   |                                                                     |     |                      |     | \$0             | \$0      |  |
| CONDUIT                                                                               | 4C   |                                                                     |     |                      |     | \$0             | \$0      |  |
| SPAN SUMMARY                                                                          |      | \$0                                                                 | \$0 | \$0                  | \$0 | \$0             | \$0      |  |
|                                                                                       |      |                                                                     |     |                      |     | \$0             | \$0      |  |

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

A  
B  
C  
D  
E  
F  
GC:\123R24\LCATR027\RESULTS1  
OUTPUT - WORKSHEET D  
SHEET 10 of 10**LOOP COST ANALYSIS TOOL**  
PROSPECTIVE INVESTMENT WORKSHEET SUMMARYBellcore<sup>®</sup>LCAT Ref: 1.0.4  
Issued: 7/31/95  
STUDY YR: 1996  
TEST CASE: 1  
RUN DATE: 28-Jan-97  
TIME: 07:44COMPANY: CINCINNATI BELL TEL  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIO  
JOB IDENT: CINCINNATICIRCUIT DESIGN: MELDED FOMUX  
LOOP SPAN DIVISION: ALL LOOP SPANS  
SERVICE CLASS: BAND 1 - BUSINESS PBX  
TOTAL LOOP LENGTH: 6403 FEET

| Technology Type Mix: 1.0000 |      | UNIT WEIGHTED MONTHLY RECURRING COSTS BY ACCOUNT FOR A BAND STUDY |           |                      |           |         |          | TECHNOLOGY |
|-----------------------------|------|-------------------------------------------------------------------|-----------|----------------------|-----------|---------|----------|------------|
| PLANT NAME                  |      | FEEDER                                                            |           | DISTRIBUTION NETWORK |           | TOTAL   | WEIGHTED |            |
| SEG. NAME                   |      | PRIMARY                                                           | EXTENSION | SUB-                 | INTERFACE | LOOP    | TOTAL    | LOOP       |
| EQPT                        |      |                                                                   |           |                      |           |         |          |            |
| PLANT CODE                  |      |                                                                   |           |                      |           |         |          |            |
| ITEM DESCRIPTION            |      |                                                                   |           |                      |           |         |          |            |
| <b>SHARED RESOURCES</b>     |      |                                                                   |           |                      |           |         |          |            |
| LAND                        | 20C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.01              | \$ 0.00   | \$ 0.00 | \$ 0.01  | \$ 0.0100  |
| BUILDING                    | 10C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.28              | \$ 0.00   | \$ 0.00 | \$ 0.28  | \$ 0.2800  |
| BLDG ENTRANCE CABLE         | 12C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| INTRABLDG CABLE             | 52C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| AERIAL CABLE (COPPER)       | 22C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| BURIED CABLE (COPPER)       | 45C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| UNDERGROUND (CU) CA.        | 5C   | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| CO EQPT - LOW CAP TERM      | 257C | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| CO EQPT - LOW CAP CHAN      | 257C | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| CO EQPT - HI CAP TERM       | 857C | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| CO EQPT - HI CAP CHAN       | 857C | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| CO EQPT - ANALOG SW         | 77C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| CO EQPT - DIGITAL SW        | 377C | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| AERIAL CABLE (FIBER)        | 822C | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| BURIED CABLE (FIBER)        | 845C | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| UNDERGROUND (FO) CA.        | 85C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| CONNECTORS                  | 57C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| MISC. COM EQP & PWR         | 57C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.29              | \$ 0.00   | \$ 0.00 | \$ 0.29  | \$ 0.2900  |
| POLE LINE                   | 1C   | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| CONDUIT                     | 4C   | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| <b>DIRECT RESOURCES</b>     |      |                                                                   |           |                      |           |         |          |            |
| LAND                        | 20C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| BUILDING                    | 10C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| BLDG ENTRANCE CABLE         | 12C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 2.45 | \$ 2.45  | \$ 2.4513  |
| INTRABLDG CABLE             | 52C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| AERIAL CABLE (COPPER)       | 22C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.47              | \$ 1.43   | \$ 0.00 | \$ 1.90  | \$ 1.9000  |
| BURIED CABLE (COPPER)       | 45C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.55   | \$ 0.00 | \$ 0.55  | \$ 0.5500  |
| UNDERGROUND (CU) CA.        | 5C   | \$ 0.00                                                           | \$ 0.00   | \$ 2.81              | \$ 0.00   | \$ 0.00 | \$ 2.81  | \$ 2.8100  |
| CO EQPT - LOW CAP TERM      | 257C | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| CO EQPT - LOW CAP CHAN      | 257C | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| CO EQPT - HI CAP TERM       | 857C | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| CO EQPT - HI CAP CHAN       | 857C | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| CO EQPT - ANALOG SW         | 77C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| CO EQPT - DIGITAL SW        | 377C | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| AERIAL CABLE (FIBER)        | 822C | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| BURIED CABLE (FIBER)        | 845C | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| UNDERGROUND (FO) CA.        | 85C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| CONNECTORS                  | 57C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| MISC. COM EQP & PWR         | 57C  | \$ 0.00                                                           | \$ 0.00   | \$ 0.00              | \$ 0.00   | \$ 0.00 | \$ 0.00  | \$ 0.0000  |
| POLE LINE                   | 1C   | \$ 0.00                                                           | \$ 0.00   | \$ 0.11              | \$ 0.34   | \$ 0.00 | \$ 0.45  | \$ 0.4500  |
| CONDUIT                     | 4C   | \$ 0.00                                                           | \$ 0.00   | \$ 1.00              | \$ 0.28   | \$ 0.00 | \$ 1.28  | \$ 1.2800  |
| SPAN SUMMARY                |      | \$ 0.00                                                           | \$ 0.00   | \$ 7.25              | \$ 3.39   | \$ 2.45 | \$ 13.09 | \$ 13.09   |
|                             |      |                                                                   |           |                      |           |         | \$ 13.09 |            |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

A  
B  
C  
D  
E  
F  
GC:\123R24\LCATR027 RESULTS1  
OUTPUT - REPORT D  
SHEET 1 of 1**LOOP COST ANALYSIS TOOL**  
PROSPECTIVE INVESTMENT SUMMARY REPORTBellcore<sup>®</sup>LCAT Rel: 1.0.4  
Issued: 7/31/95COMPANY: CINCINNATI BELL TEL  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIO  
JOB IDENT: CINCINNATICIRCUIT DESIGN: TOTAL TECHNOLOGIES  
LOOP SPAN DIVISION: ALL LOOP SPANS  
SERVICE CLASS: BAND 1 - BUSINESS PBX  
TOTAL LOOP LENGTH: 6403 FEETSTUDY YR: 1996  
TEST CASE: 1  
RUN DATE: 28-Jan-97  
TIME: 07:44Loop Span Set Weighting: ☐ 1 UNIT WEIGHTED MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDYWEIGHTED  
TOTAL  
LOOP

| PLANT NAME              | SEG. NAME | EQPT | CODE | SEG. LGTH. | PRIMARY | FEEDER  | EXTENSION | SUB-    | DISTRIBUTION NETWORK | INTERFACE | WEIGHTED TOTAL LOOP |
|-------------------------|-----------|------|------|------------|---------|---------|-----------|---------|----------------------|-----------|---------------------|
| <b>SHARED RESOURCES</b> |           |      |      |            |         |         |           |         |                      |           |                     |
| LAND                    | 20C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.01   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0100           |
| BUILDING                | 10C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.28   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.2800           |
| BLDG ENTRANCE CABLE     | 12C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| INTRABLDG CABLE         | 52C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| AERIAL CABLE (COPPER)   | 22C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| BURIED CABLE (COPPER)   | 45C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| UNDERGROUND (CU) CA.    | 5C        |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| CO EQPT - LOW CAP TERM  | 257C      |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| CO EQPT - LOW CAP CHAN  | 257C      |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| CO EQPT - HI CAP TERM   | 857C      |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| CO EQPT - HI CAP CHAN   | 857C      |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| CO EQPT - ANALOG SW     | 77C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| CO EQPT - DIGITAL SW    | 377C      |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| AERIAL CABLE (FIBER)    | 822C      |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| BURIED CABLE (FIBER)    | 845C      |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| UNDERGROUND (FO) CA.    | 85C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| CONNECTORS              | 57C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| MISC. COM EQP & PWR     | 57C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.29   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.2900           |
| POLE LINE               | 1C        |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| CONDUIT                 | 4C        |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| <b>DIRECT RESOURCES</b> |           |      |      |            |         |         |           |         |                      |           |                     |
| LAND                    | 20C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| BUILDING                | 10C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| BLDG ENTRANCE CABLE     | 12C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 2.45              | \$ 0.00   | \$ 2.4513           |
| INTRABLDG CABLE         | 52C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| AERIAL CABLE (COPPER)   | 22C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.47   | \$ 1.43 | \$ 0.00              | \$ 0.00   | \$ 1.9000           |
| BURIED CABLE (COPPER)   | 45C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.55 | \$ 0.00              | \$ 0.00   | \$ 0.5500           |
| UNDERGROUND (CU) CA.    | 5C        |      |      |            | \$ 0.00 | \$ 0.00 | \$ 2.81   | \$ 0.79 | \$ 0.00              | \$ 0.00   | \$ 3.6000           |
| CO EQPT - LOW CAP TERM  | 257C      |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| CO EQPT - LOW CAP CHAN  | 257C      |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| CO EQPT - HI CAP TERM   | 857C      |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| CO EQPT - HI CAP CHAN   | 857C      |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| CO EQPT - ANALOG SW     | 77C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| CO EQPT - DIGITAL SW    | 377C      |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| AERIAL CABLE (FIBER)    | 822C      |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| BURIED CABLE (FIBER)    | 845C      |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| UNDERGROUND (FO) CA.    | 85C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| CONNECTORS              | 57C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| MISC. COM EQP & PWR     | 57C       |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.00              | \$ 0.00   | \$ 0.0000           |
| POLE LINE               | 1C        |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.11   | \$ 0.34 | \$ 0.00              | \$ 0.00   | \$ 0.4500           |
| CONDUIT                 | 4C        |      |      |            | \$ 0.00 | \$ 0.00 | \$ 0.00   | \$ 0.28 | \$ 0.00              | \$ 0.00   | \$ 1.2800           |
| SPAN SUMMARY            |           |      |      |            | \$ 0.00 | \$ 0.00 | \$ 7.25   | \$ 3.39 | \$ 2.45              |           | \$ 13.09            |
|                         |           |      |      |            |         |         |           |         |                      |           | \$ 13.09            |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATR027\RESULTS1  
OUTPUT - COST\_REPORTS

**Belcore**<sup>(R)</sup>  
LCAT  
Release: 1.0.4  
Issued: 7/31/95

## LOOP COST ANALYSIS TOOL

### COST MODEL - INVESTMENT BY ACCOUNT REPORTS

STUDY NAME: 1996 BAND 1 (OHIO ONLY) BUSINESS PBX 0 - 12000 FEET INTRASTATE

CURRENT TEST PLAN :

|                               |           |           |         |           |
|-------------------------------|-----------|-----------|---------|-----------|
| CURRENT JOB IDENT. CINCINNATI |           |           |         |           |
| BASIS                         | NETWORK   | TEST CASE | 1       | LAST SAVE |
| FR / DS                       | FLAT RATE | #BANDS    | 0       | 20-Jan-97 |
| SVC LEVEL                     | NARBAND   | #CKTS     | 1       | 08:59     |
| CST METH                      | UN INCR   | INV LEVEL | ANNCOST | TIME      |

....your report is ready for viewing

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

PROPRIETARY - NOT FOR USE/DISCLOSURE OUTSIDE Belcore WITHOUT LICENSED PERMISSION

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCAT\CALC\DIST  
DIST\_PLNT - WORKSHEET A  
Sheet 1 of 3

**LOOP COST ANALYSIS TOOL**  
BASIC INVESTMENT WORKSHEET  
SERVING AREA INTERFACE TO SERVICE ACCESS POINT INVESTMENT COST MODEL  
FACILITY TYPE: COPPER CABLE  
CIRCUIT SEGMENT: DISTRIBUTION PLANT (NON-DLC, NON-COLLOC.)  
COMPANY: CINCINNATI BELL TEL.  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIO  
SERVICE CLASS: BAND 1 - BUSINESS PBX

Bellicore (P)  
LCAT Release: 1.0.4  
Issue Date: 8/31/95  
STUDY YR: 1995  
TEST CASE: 1  
RUN DATE: 28-Jan-97  
TIME: 07:39

| SEGMENT LENGTH<br>IN FEET<br>[A]                                                                                                                  | TYPE OF<br>CABLE<br>PLANT | FROM<br>TABLE 2 -<br>RELATIVE<br>MIX OF<br>TYPE OF<br>CA. PLANT<br>[B] | LENGTH<br>SUBSET<br>BY TYPE<br>OF PLANT<br>[C=A*B] | FROM<br>TABLE 4 -<br>CABLE<br>INVESTMENT<br>PER<br>PAIR FOOT<br>[D] | CABLE<br>INVESTMENT<br>PER PAIR<br>[E=C*D] | CABLE COMPONENTS |        |      | (NOTE 4)<br>WEIGHTED<br>TERMINAL<br>INVESTMENT | AIR DRYER<br>INVESTMENT<br>PER PAIR<br>[F=E*ctr] | DROP WIRE<br>ADJUSTMENT<br>PER PAIR<br>[F=E*ctr] | (NOTE 4)<br>WEIGHTED<br>DROP WIRE<br>INVESTMENT |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------------------------------------------------|----------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------|------------------|--------|------|------------------------------------------------|--------------------------------------------------|--------------------------------------------------|-------------------------------------------------|
|                                                                                                                                                   |                           |                                                                        |                                                    |                                                                     |                                            |                  |        |      |                                                |                                                  |                                                  |                                                 |
| 638.0                                                                                                                                             | AERIAL                    | 0.590000                                                               | 376.4                                              | 0.039700                                                            | 14.94                                      |                  | 0.00   | 0.00 |                                                |                                                  |                                                  |                                                 |
| CONSIDERS:<br>MELDED                                                                                                                              | BURIED                    | 0.160000                                                               | 102.1                                              | 0.065700                                                            | 6.71                                       |                  | 0.00   | 0.00 |                                                |                                                  |                                                  |                                                 |
| COPPER<br>CABLE                                                                                                                                   | UNDERGRND                 | 0.250000                                                               | 159.5                                              | 0.056900                                                            | 9.08                                       |                  | 0.00   | 0.00 |                                                |                                                  |                                                  |                                                 |
| Check =                                                                                                                                           |                           | 1.000000                                                               | 638.0                                              |                                                                     |                                            |                  |        |      |                                                |                                                  |                                                  |                                                 |
| <b>OUTSIDE PLANT LOADINGS</b> (NOTE 4)                                                                                                            |                           |                                                                        |                                                    |                                                                     |                                            |                  |        |      |                                                |                                                  |                                                  |                                                 |
| <b>DROP WIRE ADJUSTMENT:</b>                                                                                                                      |                           |                                                                        |                                                    |                                                                     |                                            |                  |        |      |                                                |                                                  |                                                  |                                                 |
| AERIAL CA. =                                                                                                                                      |                           | 0.0000                                                                 | <b>AIR DRYER LOADINGS:</b>                         |                                                                     | AERIAL CA. =                               |                  | 0.0000 |      |                                                |                                                  |                                                  |                                                 |
| BURIED CA. =                                                                                                                                      |                           | 0.0000                                                                 | BURIED CA. =                                       |                                                                     | 0.0000                                     |                  |        |      |                                                |                                                  |                                                  |                                                 |
| UNDERGRND =                                                                                                                                       |                           | 0.0000                                                                 | UNDERGRND =                                        |                                                                     | 0.0000                                     |                  |        |      |                                                |                                                  |                                                  |                                                 |
| <b>OTHER INVESTMENT</b>                                                                                                                           |                           |                                                                        |                                                    |                                                                     |                                            |                  |        |      |                                                |                                                  |                                                  |                                                 |
| POLE LINE FACTOR (PLF) =                                                                                                                          |                           | inv / unit lgth: 0.0000                                                |                                                    | inv rth fctr: 0.253                                                 |                                            |                  |        |      |                                                |                                                  |                                                  |                                                 |
| POLE LINE INVESTMENT (UTIL AERIAL INVEST x PLF) =                                                                                                 |                           | \$ 10.80                                                               |                                                    | 0.253                                                               |                                            |                  |        |      |                                                |                                                  |                                                  |                                                 |
| UG CONDUIT FACTOR (UCF) =                                                                                                                         |                           | 0.0000                                                                 |                                                    | 0.253                                                               |                                            |                  |        |      |                                                |                                                  |                                                  |                                                 |
| CONDUIT INVESTMENT (UTIL UNDGRND INVST x UCF) =                                                                                                   |                           | \$ 13.39                                                               |                                                    | 0.253                                                               |                                            |                  |        |      |                                                |                                                  |                                                  |                                                 |
| <b>FOOTNOTES</b>                                                                                                                                  |                           |                                                                        |                                                    |                                                                     |                                            |                  |        |      |                                                |                                                  |                                                  |                                                 |
| NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.                                                                                     |                           |                                                                        |                                                    |                                                                     |                                            |                  |        |      |                                                |                                                  |                                                  |                                                 |
| NOTE 2: TABLE 4 & 6 DEVELOPMENT SHOWN ON WORKSHEET A.                                                                                             |                           |                                                                        |                                                    |                                                                     |                                            |                  |        |      |                                                |                                                  |                                                  |                                                 |
| NOTE 3: DESIGN AT THIS DISTANCE HAS NO LOAD COILS; THEREFORE, TERMINAL INVESTMENT IS ZERO                                                         |                           |                                                                        |                                                    |                                                                     |                                            |                  |        |      |                                                |                                                  |                                                  |                                                 |
| NOTE 4: BY FCC MANDATE, THIS INVESTMENT IS INCORPORATED INTO THE APPROPRIATE CABLE ACCOUNT<br>(SEE BUILDING AND TERMINATING INVESTMENT WORKSHEET) |                           |                                                                        |                                                    |                                                                     |                                            |                  |        |      |                                                |                                                  |                                                  |                                                 |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.



| LOOP COST ANALYSIS TOOL       |                       |                                                                      |                     |                                                   |                      |                                                                      |                           |                            |                                                                      |                            |  |  |  |  |  | Bellcore (R)         |  |
|-------------------------------|-----------------------|----------------------------------------------------------------------|---------------------|---------------------------------------------------|----------------------|----------------------------------------------------------------------|---------------------------|----------------------------|----------------------------------------------------------------------|----------------------------|--|--|--|--|--|----------------------|--|
| C:\123R24\LCATCALCDIST        |                       | ACCOUNT INVESTMENT WORKSHEET                                         |                     |                                                   |                      |                                                                      |                           |                            |                                                                      |                            |  |  |  |  |  | LCAT Release : 1.0.4 |  |
| DIST_PLNT - WORKSHEET A       |                       | SERVING AREA INTERFACE TO SERVICE ACCESS POINT INVESTMENT COST MODEL |                     |                                                   |                      |                                                                      |                           |                            |                                                                      |                            |  |  |  |  |  | Issue Date : 8/31/95 |  |
| Sheet 2 of 3                  |                       | FACILITY TYPE : COPPER CABLE                                         |                     |                                                   |                      |                                                                      |                           |                            |                                                                      |                            |  |  |  |  |  | STUDY YR : 1996      |  |
|                               |                       | CIRCUIT SEGMENT : DISTRIBUTION PLANT (NON-DUCT NON-COLLOC)           |                     |                                                   |                      |                                                                      |                           |                            |                                                                      |                            |  |  |  |  |  | TEST CASE : 1        |  |
| COMPANY: CINCINNATI BELL TEL. |                       | SERVICE CLASS : BAND 1 ~ BUSINESS PBX                                |                     |                                                   |                      |                                                                      |                           |                            |                                                                      |                            |  |  |  |  |  | RUN DATE : 26-Jan-97 |  |
| CITY / AREA: CINCINNATI       |                       |                                                                      |                     |                                                   |                      |                                                                      |                           |                            |                                                                      |                            |  |  |  |  |  | TIME : 07:39         |  |
| STATE / PROV : OHIO           |                       |                                                                      |                     |                                                   |                      |                                                                      |                           |                            |                                                                      |                            |  |  |  |  |  |                      |  |
|                               | PLANT ACCT CODE       | CAT. FIXED VARI                                                      | RESOURCE ALLOCATION | 1996 UNIT INVESTMENT BY ACCOUNT COST EQUATION [F] | CIRCUIT QUANTITY [G] | 1996 UNIT LOOP INVESTMENT EXCL. UTILIZATION SHARED RESOURCES [H=F*G] | DIRECT RESOURCES [H'=F*G] | ADMIN. UTIL. LINE FILL [J] | 1996 UNIT LOOP INVESTMENT INCL. UTILIZATION SHARED RESOURCES [K=H/J] | DIRECT RESOURCES [K'=H'/J] |  |  |  |  |  |                      |  |
| 8                             | LAND                  | 20C                                                                  | F                   | SHARED                                            |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |  |  |  |  |                      |  |
| 9                             | BUILDING              | 10C                                                                  | F                   | SHARED                                            |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |  |  |  |  |                      |  |
| 10                            | BLDG ENTRANCE CABLE   | 12C                                                                  | V                   | DIRECT                                            |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |  |  |  |  |                      |  |
| 11                            | INTRABLDG CABLE       | 52C                                                                  | V                   | DIRECT                                            |                      |                                                                      |                           | 0.3500                     |                                                                      |                            |  |  |  |  |  |                      |  |
| 12                            | AERIAL CABLE (COPPER) | 22C                                                                  | V                   | DIRECT                                            | 14.94                | 1                                                                    | \$ 15                     | 0.3500                     |                                                                      | \$ 43                      |  |  |  |  |  |                      |  |
| 13                            | BURIED CABLE (COPPER) | 45C                                                                  | V                   | DIRECT                                            | 6.71                 | 1                                                                    | \$ 7                      | 0.3500                     |                                                                      | \$ 19                      |  |  |  |  |  |                      |  |
| 14                            | UNDERGROUND (CU) CA.  | 5C                                                                   | V                   | DIRECT                                            | 9.08                 | 1                                                                    | \$ 9                      | 0.3500                     |                                                                      | \$ 25                      |  |  |  |  |  |                      |  |
| 15                            | CO EQPT - P GAIN TERM | 257C                                                                 | F                   | DIRECT                                            |                      |                                                                      |                           | 0.7000                     |                                                                      |                            |  |  |  |  |  |                      |  |
| 16                            | CO EQPT - P GAIN CHAN | 257C                                                                 | V                   | DIRECT                                            |                      |                                                                      |                           | 0.7000                     |                                                                      |                            |  |  |  |  |  |                      |  |
| 17                            | CO EQPT - FO MUX TERM | 857C                                                                 | F                   | DIRECT                                            |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |  |  |  |  |                      |  |
| 18                            | CO EQPT - FO MUX CHAN | 857C                                                                 | F                   | DIRECT                                            |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |  |  |  |  |                      |  |
| 19                            | CO EQPT - ANALOG SW   | 77C                                                                  | V                   | DIRECT                                            |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |  |  |  |  |                      |  |
| 20                            | CO EQPT - DIGITAL SW  | 377C                                                                 | V                   | DIRECT                                            |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |  |  |  |  |                      |  |
| 21                            | AERIAL CABLE (FIBER)  | 822C                                                                 | F                   | DIRECT                                            |                      |                                                                      |                           | 0.0000                     |                                                                      |                            |  |  |  |  |  |                      |  |
| 22                            | BURIED CABLE (FIBER)  | 845C                                                                 | F                   | DIRECT                                            |                      |                                                                      |                           | 0.0000                     |                                                                      |                            |  |  |  |  |  |                      |  |
| 23                            | UNDERGROUND (FO) CA.  | 85C                                                                  | F                   | DIRECT                                            |                      |                                                                      |                           | 0.0000                     |                                                                      |                            |  |  |  |  |  |                      |  |
| 24                            | CONNECTORS            | 57C                                                                  | V                   | DIRECT                                            |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |  |  |  |  |                      |  |
| 25                            | MISC. COM EQP & PWR   | 57C                                                                  | V                   | SHARED                                            |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |  |  |  |  |                      |  |
| 26                            | POLE LINE             | 1C                                                                   | F                   | DIRECT                                            | 10.80                | 1                                                                    |                           | 1.0000                     |                                                                      | \$ 11                      |  |  |  |  |  |                      |  |
| 27                            | CONDUIT               | 4C                                                                   | F                   | DIRECT                                            | 13.39                | 1                                                                    | \$ 13                     | 1.0000                     |                                                                      | \$ 13                      |  |  |  |  |  |                      |  |

**CONFIDENTIAL**

NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC

PROVIDED TO PUCO

1 FOOTNOTES

2 NOTE 1: APPARENT INCONSISTENCIES BETWEEN COLUMNS F(F') AND H(H') ARE CAUSED BY COMPUTER ROUNDING.

3 NOTE 2: COLUMN F IS AN ACCOUNT SUMMARY.

4 AERIAL CABLE + TERM INV - AIR DRYER + DROP WIRE; BURIED CABLE... ETC;

5 CO EQPT - ESS = CONNECTORS + MISC. CP&E.

| C:\123R24\LCATCALC.DIST                                                        |                 |                                      | <b>LOOP COST ANALYSIS TOOL</b>                                                                                                                                                                                    |                        |                                   |                          |                                              | Belcore (P)                                                                                                           |                             |
|--------------------------------------------------------------------------------|-----------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------|--------------------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------|
| DIST PLNT - WORKSHEET A<br>Sheet 3 of 3                                        |                 |                                      | <b>PROSPECTIVE AND ANNUAL COSTS WORKSHEET</b><br>SERVING AREA INTERFACE TO SERVICE ACCESS POINT INVESTMENT COST MODEL<br>FACILITY TYPE : COPPER CABLE<br>CIRCUIT SEGMENT : DISTRIBUTION PLANT(NON-DLG,NON-COLLOC) |                        |                                   |                          |                                              | LCAT Release : 1.0.4<br>Issue Date : 8/31/95<br>STUDY YR.: 1996<br>TEST CASE:<br>RUN DATE : 28-Jan-97<br>TIME : 07:39 |                             |
| COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO |                 |                                      | SERVICE CLASS : BAND 1 - BUSINESS PBX                                                                                                                                                                             |                        |                                   |                          |                                              |                                                                                                                       |                             |
| PLANT ITEM                                                                     | PLANT ACCT CODE | 1996 UNIT LOOP INVESTMENT BY ACCOUNT |                                                                                                                                                                                                                   | ANNUAL COST FACTOR [N] | 1996 UNIT ANNUAL COSTS BY ACCOUNT |                          | 1996 UNIT MONTHLY RECURRING COSTS BY ACCOUNT |                                                                                                                       |                             |
|                                                                                |                 | TO 1996 TPI [L]                      | SHARED RESOURCES [M=K*L]                                                                                                                                                                                          |                        | DIRECT RESOURCES [M'=K'*L]        | SHARED RESOURCES [P=M*N] | DIRECT RESOURCES [P'=M'*N]                   | SHARED RESOURCES [R=P/12]                                                                                             | DIRECT RESOURCES [R'=P'/12] |
|                                                                                |                 | [L]                                  | [M=K*L]                                                                                                                                                                                                           |                        | [M'=K'*L]                         | [P=M*N]                  | [P'=M'*N]                                    | [R=P/12]                                                                                                              | [R'=P'/12]                  |
| LAND                                                                           | 20C             | 1.0000                               |                                                                                                                                                                                                                   | 0.2322                 |                                   |                          |                                              |                                                                                                                       |                             |
| BUILDING                                                                       | 10C             | 1.0000                               |                                                                                                                                                                                                                   | 0.2937                 |                                   |                          |                                              |                                                                                                                       |                             |
| BLDG ENTRANCE CABLE                                                            | 12C             | 1.0000                               |                                                                                                                                                                                                                   | 0.3922                 |                                   |                          |                                              |                                                                                                                       |                             |
| INTRABLDG CABLE                                                                | 52C             | 1.0000                               |                                                                                                                                                                                                                   | 0.3922                 |                                   |                          |                                              |                                                                                                                       |                             |
| AERIAL CABLE (COPPER)                                                          | 22C             | 1.0000                               |                                                                                                                                                                                                                   | \$ 43 0.4033           |                                   | \$ 17.22                 |                                              | \$ 1.43                                                                                                               |                             |
| BURIED CABLE (COPPER)                                                          | 45C             | 1.0000                               |                                                                                                                                                                                                                   | \$ 19 0.3467           |                                   | \$ 6.64                  |                                              | \$ 0.55                                                                                                               |                             |
| UNDERGROUND (CU) CA.                                                           | 5C              | 1.0000                               |                                                                                                                                                                                                                   | \$ 25 0.3663           |                                   | \$ 9.50                  |                                              | \$ 0.79                                                                                                               |                             |
| CO EQPT - P GAIN TERM                                                          | 257C            | 1.0000                               |                                                                                                                                                                                                                   | 0.3881                 |                                   |                          |                                              |                                                                                                                       |                             |
| CO EQPT - P GAIN CHAN                                                          | 257C            | 1.0000                               |                                                                                                                                                                                                                   | 0.3881                 |                                   |                          |                                              |                                                                                                                       |                             |
| CO EQPT - FO MUX TERM                                                          | 857C            | 1.0000                               |                                                                                                                                                                                                                   | 0.3881                 |                                   |                          |                                              |                                                                                                                       |                             |
| CO EQPT - FO MUX CHAN                                                          | 857C            | 1.0000                               |                                                                                                                                                                                                                   | 0.3881                 |                                   |                          |                                              |                                                                                                                       |                             |
| CO EQPT - ANALOG SW                                                            | 77C             | 1.0000                               |                                                                                                                                                                                                                   | 0.0000                 |                                   |                          |                                              |                                                                                                                       |                             |
| CO EQPT - DIGITAL SW                                                           | 377C            | 1.0000                               |                                                                                                                                                                                                                   | 0.3458                 |                                   |                          |                                              |                                                                                                                       |                             |
| AERIAL CABLE (FIBER)                                                           | 822C            | 1.0000                               |                                                                                                                                                                                                                   | 0.2983                 |                                   |                          |                                              |                                                                                                                       |                             |
| BURIED CABLE (FIBER)                                                           | 845C            | 1.0000                               |                                                                                                                                                                                                                   | 0.2724                 |                                   |                          |                                              |                                                                                                                       |                             |
| UNDERGROUND (FO) CA.                                                           | 85C             | 1.0000                               |                                                                                                                                                                                                                   | 0.2689                 |                                   |                          |                                              |                                                                                                                       |                             |
| CONNECTORS                                                                     | 57C             | 1.0000                               |                                                                                                                                                                                                                   | 0.3881                 |                                   |                          |                                              |                                                                                                                       |                             |
| MISC. COM EQP & PWR                                                            | 57C             | 1.0000                               |                                                                                                                                                                                                                   | 0.3881                 |                                   |                          |                                              |                                                                                                                       |                             |
| POLE LINE                                                                      | 1C              | 1.0000                               |                                                                                                                                                                                                                   | \$ 11 0.3807           |                                   |                          |                                              | \$ 0.34                                                                                                               |                             |
| CONDUIT                                                                        | 4C              | 1.0000                               |                                                                                                                                                                                                                   | \$ 13 0.2521           |                                   |                          |                                              | \$ 0.28                                                                                                               |                             |
| TOTALS                                                                         |                 |                                      |                                                                                                                                                                                                                   | \$ 0 \$ 112            |                                   | \$ 40.85                 |                                              | \$ 3.39                                                                                                               |                             |
|                                                                                |                 |                                      |                                                                                                                                                                                                                   | \$ 112                 |                                   | \$ 40.85                 |                                              | \$ 3.39                                                                                                               |                             |
|                                                                                |                 |                                      |                                                                                                                                                                                                                   | distrinvy              |                                   | distribn                 |                                              | distribc                                                                                                              |                             |

CONFIDENTIAL  
NOTICE MUST BE GIVEN PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCCO

\*\*\*\*\*  
\*\*\*\*\*  
\*\*\*\*\*

| LOOP COST ANALYSIS TOOL                                                                            |          |                                      |                      | Belcore®            |
|----------------------------------------------------------------------------------------------------|----------|--------------------------------------|----------------------|---------------------|
| BASIC INVESTMENT WORKSHEET                                                                         |          |                                      |                      | LCAT                |
| C:\123R24\LCATCALC\DIST                                                                            |          | FACILITY TYPE: COPPER CABLE          |                      | Release: 1.0.4      |
| DIST. PLNT - WORKSHEET B                                                                           |          | CIRCUIT SEGMENT: SERVICE ACCESS      |                      | STUDY YR: 1996      |
| Sheet 1 of 3                                                                                       |          | SERVICE CLASS: BAND 1 - BUSINESS PBX |                      | TEST CASE: 1        |
| COMPANY: CINCINNATI BELL TEL.                                                                      |          |                                      |                      | RUN DATE: 28-Jan-97 |
| CITY / AREA: CINCINNATI                                                                            |          |                                      |                      | TIME: 07:39         |
| STATE / PROV: OH                                                                                   |          |                                      |                      |                     |
| TYPE OF PLANT                                                                                      | UNIT     | PROB.                                | WEIGHTED             |                     |
| TEM                                                                                                | PLANT    | OF                                   | TERMINAL             |                     |
|                                                                                                    | INVEST.  | OCCURRENCE                           | INVESTMENT           |                     |
|                                                                                                    | [A]      | [B]                                  | [C=A*B]              |                     |
| INTRABLDG CABLE                                                                                    | \$ 0.00  | 0.0000                               | \$ 0.00              |                     |
| BLDG ENTRANCE CABLE                                                                                | \$ 75.00 | 1.0000                               | \$ 75.00             |                     |
| AERIAL TERMINAL                                                                                    | \$ 0.00  | 0.0000                               | \$ 0.00              |                     |
| BURIED TERMINAL                                                                                    | \$ 0.00  | 0.0000                               | \$ 0.00              |                     |
| AERIAL DROP WIRE                                                                                   | \$ 0.00  | 0.0000                               | \$ 0.00              |                     |
| BURIED DROP WIRE                                                                                   | \$ 0.00  | 0.0000                               | \$ 0.00              |                     |
| COAXIAL DROP                                                                                       | \$ 0.00  | 0.0000                               | \$ 0.00              |                     |
| POLE LINE FACTOR (PLF) =                                                                           |          | from length: 0.0000                  | from invest.: 0.2530 |                     |
| POLE LINE INVESTMENT (UTIL AERIAL INVEST. x PLF) =                                                 |          | \$ 0.00                              |                      |                     |
| <b>CONFIDENTIAL</b>                                                                                |          |                                      |                      |                     |
| NOTICE MUST BE GIVEN                                                                               |          |                                      |                      |                     |
| PRIOR TO RELEASE TO PUBLIC                                                                         |          |                                      |                      |                     |
| PROVIDED TO PUCO                                                                                   |          |                                      |                      |                     |
| FOOTNOTES                                                                                          |          |                                      |                      |                     |
| NOTE 1: FOR 4 WIRE SERVICES ONLY, THE ABOVE PLANT INVESTMENTS HAVE BEEN DOUBLED.                   |          |                                      |                      |                     |
| NOTE 2: THIS DATA IS USED IN WORKSHEET E FOR CALCULATION OF PAIR GAIN INVESTMENT AND MONTHLY COSTS |          |                                      |                      |                     |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.



CA123R24LCATCALC1DIST  
DIST. PLNT - WORKSHEET B  
Sheet 3 of 3

**LOOP COST ANALYSIS TOOL**  
PROSPECTIVE AND ANNUAL COSTS WORKSHEET

Bellicore (P)  
LCAT  
Release: 1.0.4  
STUDY YR: 1996  
TEST CASE: 1  
RUN DATE: 28-Jan-97  
TIME: 07:39

COMPANY: CINCINNATI BELL TEL.  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIO

FACILITY TYPE: COPPER CABLE  
CIRCUIT SEGMENT: SERVICE ACCESS  
SERVICE CLASS: BAND 1 - BUSINESS PBX

| PLANT ITEM            | PLANT ACCT CODE | 1996 TO 1996 | 1996 UNIT LOOP INVESTMENT BY ACCOUNT |                            | ANNUAL COST FACTOR [N] | 1996 UNIT ANNUAL COSTS BY ACCOUNT |                            | 1996 UNIT MONTHLY RECURRING COSTS BY ACCOUNT |                             |
|-----------------------|-----------------|--------------|--------------------------------------|----------------------------|------------------------|-----------------------------------|----------------------------|----------------------------------------------|-----------------------------|
|                       |                 |              | SHARED RESOURCES [L]                 | DIRECT RESOURCES [M'=K'*L] |                        | SHARED RESOURCES [P=M*N]          | DIRECT RESOURCES [P'=M'*N] | SHARED RESOURCES [R=P/12]                    | DIRECT RESOURCES [R'=P'/12] |
| LAND                  | 20C             | 1.0000       |                                      |                            | 0.2322                 |                                   |                            |                                              |                             |
| BUILDING              | 10C             | 1.0000       |                                      |                            | 0.2937                 |                                   |                            |                                              |                             |
| BLDG ENTRANCE CABLE   | 12C             | 1.0000       |                                      | \$ 75                      | 0.3922                 |                                   | \$ 29.42                   |                                              | \$ 2.45                     |
| INTRABLDG CABLE       | 52C             | 1.0000       |                                      |                            | 0.3922                 |                                   |                            |                                              |                             |
| AERIAL CABLE (COPPER) | 22C             | 1.0000       |                                      |                            | 0.4033                 |                                   |                            |                                              |                             |
| BURIED CABLE (COPPER) | 45C             | 1.0000       |                                      |                            | 0.3467                 |                                   |                            |                                              |                             |
| UNDERGROUND (CU) CA.  | 5C              | 1.0000       |                                      |                            | 0.3663                 |                                   |                            |                                              |                             |
| CO EQPT - P GAIN TERM | 257C            | 1.0000       |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |
| CO EQPT - P GAIN CHAN | 257C            | 1.0000       |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |
| CO EQPT - FO MUX TERM | 857C            | 1.0000       |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |
| CO EQPT - FO MUX CHAN | 857C            | 1.0000       |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |
| CO EQPT - ANALOG SW   | 77C             | 1.0000       |                                      |                            | 0.0000                 |                                   |                            |                                              |                             |
| CO EQPT - DIGITAL SW  | 377C            | 1.0000       |                                      |                            | 0.3458                 |                                   |                            |                                              |                             |
| AERIAL CABLE (FIBER)  | 822C            | 1.0000       |                                      |                            | 0.2983                 |                                   |                            |                                              |                             |
| BURIED CABLE (FIBER)  | 845C            | 1.0000       |                                      |                            | 0.2724                 |                                   |                            |                                              |                             |
| UNDERGROUND (FO) CA.  | 85C             | 1.0000       |                                      |                            | 0.2689                 |                                   |                            |                                              |                             |
| CONNECTORS            | 57C             | 1.0000       |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |
| MISC. COM EQP & PWR   | 57C             | 1.0000       |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |
| POLE LINE             | 1C              | 1.0000       |                                      |                            | 0.3807                 |                                   |                            |                                              |                             |
| CONDUIT               | 4C              | 1.0000       |                                      |                            | 0.2521                 |                                   |                            |                                              |                             |
| TOTALS                |                 |              | \$ 0                                 | \$ 75                      |                        | \$ 0.00                           | \$ 29.42                   | \$ 0.00                                      | \$ 2.45                     |

FOOTNOTES  
NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.  
NOTE 2: AN INVESTMENT-ONLY STUDY NEGATES ANNUAL COST COMPUTATION.  
THUS, THIS COLUMN MAY BE PRESENTED FOR CONSISTENCY ONLY.

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| LOOP COST ANALYSIS TOOL                                                                            |                                 |                                      |                                               | Belcore®            |
|----------------------------------------------------------------------------------------------------|---------------------------------|--------------------------------------|-----------------------------------------------|---------------------|
| BASIC INVESTMENT WORKSHEET                                                                         |                                 |                                      |                                               | LCAT                |
| C:\123R24\LCATCALC.DIST                                                                            |                                 | FACILITY TYPE: COPPER CABLE          |                                               | Release: 1.0.4      |
| DIST. PLNT - WORKSHEET B                                                                           |                                 | CIRCUIT SEGMENT: SERVICE ACCESS      |                                               | STUDY YR: 1996      |
| Sheet 1 of 3                                                                                       |                                 | SERVICE CLASS: BAND 1 - BUSINESS PBX |                                               | TEST CASE: 1        |
| COMPANY: CINCINNATI BELL TEL.                                                                      |                                 |                                      |                                               | RUN DATE: 28-Jan-97 |
| CITY / AREA: CINCINNATI                                                                            |                                 |                                      |                                               | TIME: 07:40         |
| STATE / PROV: OHIO                                                                                 |                                 |                                      |                                               |                     |
| TYPE OF PLANT<br>ITEM                                                                              | UNIT<br>PLANT<br>INVEST.<br>[A] | PROB.<br>OF<br>OCCURRENCE<br>[B]     | WEIGHTED<br>TERMINAL<br>INVESTMENT<br>[C=A*B] |                     |
| INTRABLDG CABLE                                                                                    | \$ 0.00                         | 0.0000                               | \$ 0.00                                       |                     |
| BLDG ENTRANCE CABLE                                                                                | \$ 75.00                        | 1.0000                               | \$ 75.00                                      |                     |
| AERIAL TERMINAL                                                                                    | \$ 0.00                         | 0.0000                               | \$ 0.00                                       |                     |
| BURIED TERMINAL                                                                                    | \$ 0.00                         | 0.0000                               | \$ 0.00                                       |                     |
| AERIAL DROP WIRE                                                                                   | \$ 0.00                         | 0.0000                               | \$ 0.00                                       |                     |
| BURIED DROP WIRE                                                                                   | \$ 0.00                         | 0.0000                               | \$ 0.00                                       |                     |
| COAXIAL DROP                                                                                       | \$ 0.00                         | 0.0000                               | \$ 0.00                                       |                     |
| POLE LINE FACTOR (PLF) = $\frac{\text{from length}}{\text{from invest.}}$                          |                                 |                                      |                                               |                     |
| POLE LINE INVESTMENT (UTIL AERIAL INVEST. x PLF) = \$ 0.00                                         |                                 |                                      |                                               |                     |
| NOTE 1: FOR 4 WIRE SERVICES ONLY, THE ABOVE PLANT INVESTMENTS HAVE BEEN DOUBLED.                   |                                 |                                      |                                               |                     |
| NOTE 2: THIS DATA IS USED IN WORKSHEET E FOR CALCULATION OF PAIR GAIN INVESTMENT AND MONTHLY COSTS |                                 |                                      |                                               |                     |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| LOOP COST ANALYSIS TOOL               |                 |                   |             |                                                   |                      |                                                                      |                                                                       |                            |                                                                      | Bellcore (R)                                                           |       |
|---------------------------------------|-----------------|-------------------|-------------|---------------------------------------------------|----------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------|----------------------------|----------------------------------------------------------------------|------------------------------------------------------------------------|-------|
| ACCOUNT INVESTMENT WORKSHEET          |                 |                   |             |                                                   |                      |                                                                      |                                                                       |                            |                                                                      | LCAT                                                                   |       |
| FACILITY TYPE : COPPER CABLE          |                 |                   |             |                                                   |                      |                                                                      |                                                                       |                            |                                                                      | Release : 1.0.4                                                        |       |
| CIRCUIT SEGMENT : SERVICE ACCESS      |                 |                   |             |                                                   |                      |                                                                      |                                                                       |                            |                                                                      | STUDY YR : 1996                                                        |       |
| SERVICE CLASS : BAND 1 - BUSINESS PBX |                 |                   |             |                                                   |                      |                                                                      |                                                                       |                            |                                                                      | TEST CASE : 1                                                          |       |
|                                       |                 |                   |             |                                                   |                      |                                                                      |                                                                       |                            |                                                                      | RUN DATE : 28-Jan-97                                                   |       |
|                                       |                 |                   |             |                                                   |                      |                                                                      |                                                                       |                            |                                                                      | TIME : 07:40                                                           |       |
| PLANT ITEM                            | PLANT ACCT CODE | CAT. FIXED RESOUR | CAT. RESOUR | 1996 UNIT INVESTMENT BY ACCOUNT COST EQUATION [F] | CIRCUIT QUANTITY [G] | 1996 UNIT LOOP INVESTMENT EXCL. UTILIZATION SHARED RESOURCES [H=F*G] | 1996 UNIT LOOP INVESTMENT EXCL. UTILIZATION DIRECT RESOURCES [H'=F*G] | ADMIN. UTIL. LINE FILL [J] | 1996 UNIT LOOP INVESTMENT INCL. UTILIZATION SHARED RESOURCES [K=H/J] | 1996 UNIT LOOP INVESTMENT INCL. UTILIZATION DIRECT RESOURCES [K'=H'/J] |       |
| LAND                                  | 20C             | F                 | SHARED      |                                                   |                      |                                                                      |                                                                       | 1.0000                     |                                                                      |                                                                        |       |
| BUILDING                              | 10C             | F                 | SHARED      |                                                   |                      |                                                                      |                                                                       | 1.0000                     |                                                                      |                                                                        |       |
| BLDG ENTRANCE CABLE                   | 12C             | V                 | DIRECT      | 75.00                                             | 1                    |                                                                      | \$ 75                                                                 | 1.0000                     |                                                                      | \$ 75                                                                  |       |
| INTRABLDG CABLE                       | 52C             | V                 | DIRECT      | 0.00                                              |                      |                                                                      |                                                                       | 0.3500                     |                                                                      |                                                                        |       |
| AERIAL CABLE (COPPER)                 | 22C             | V                 | DIRECT      | 0.00                                              |                      |                                                                      |                                                                       | 0.3500                     |                                                                      |                                                                        |       |
| BURIED CABLE (COPPER)                 | 45C             | V                 | DIRECT      | 0.00                                              |                      |                                                                      |                                                                       | 0.3500                     |                                                                      |                                                                        |       |
| UNDERGROUND (CU) CA.                  | 5C              | V                 | DIRECT      |                                                   |                      |                                                                      |                                                                       | 0.3500                     |                                                                      |                                                                        |       |
| CO EQPT - P GAIN TERM                 | 257C            | F                 | DIRECT      |                                                   |                      |                                                                      |                                                                       | 0.7000                     |                                                                      |                                                                        |       |
| CO EQPT - P GAIN CHAN                 | 257C            | V                 | DIRECT      |                                                   |                      |                                                                      |                                                                       | 0.7000                     |                                                                      |                                                                        |       |
| CO EQPT - FO MUX TERM                 | 857C            | F                 | DIRECT      |                                                   |                      |                                                                      |                                                                       | 1.0000                     |                                                                      |                                                                        |       |
| CO EQPT - FO MUX CHAN                 | 857C            | F                 | DIRECT      |                                                   |                      |                                                                      |                                                                       | 1.0000                     |                                                                      |                                                                        |       |
| CO EQPT - ANALOG SW                   | 77C             | V                 | DIRECT      |                                                   |                      |                                                                      |                                                                       | 1.0000                     |                                                                      |                                                                        |       |
| CO EQPT - DIGITAL SW                  | 377C            | V                 | DIRECT      |                                                   |                      |                                                                      |                                                                       | 1.0000                     |                                                                      |                                                                        |       |
| AERIAL CABLE (FIBER)                  | 822C            | F                 | DIRECT      |                                                   |                      |                                                                      |                                                                       | 0.0000                     |                                                                      |                                                                        |       |
| BURIED CABLE (FIBER)                  | 845C            | F                 | DIRECT      |                                                   |                      |                                                                      |                                                                       | 0.0000                     |                                                                      |                                                                        |       |
| UNDERGROUND (FO) CA.                  | 85C             | F                 | DIRECT      |                                                   |                      |                                                                      |                                                                       | 0.0000                     |                                                                      |                                                                        |       |
| CONNECTORS                            | 57C             | V                 | DIRECT      |                                                   |                      |                                                                      |                                                                       | 1.0000                     |                                                                      |                                                                        |       |
| MISC. COM EQP & PWR                   | 57C             | V                 | SHARED      |                                                   |                      |                                                                      |                                                                       | 1.0000                     |                                                                      |                                                                        |       |
| POLE LINE                             | 1C              | F                 | DIRECT      | 0.00                                              |                      |                                                                      |                                                                       | 1.0000                     |                                                                      |                                                                        |       |
| CONDUIT                               | 4C              | F                 | DIRECT      |                                                   |                      |                                                                      |                                                                       | 1.0000                     |                                                                      |                                                                        |       |
| CONFIDENTIAL                          |                 |                   |             |                                                   |                      |                                                                      |                                                                       |                            |                                                                      |                                                                        |       |
| NOTICE MUST BE GIVEN                  |                 |                   |             |                                                   |                      |                                                                      |                                                                       |                            |                                                                      |                                                                        |       |
| PRIOR TO RELEASE TO PUBLIC            |                 |                   |             |                                                   |                      |                                                                      |                                                                       |                            |                                                                      |                                                                        |       |
| PROVIDED TO PUCO                      |                 |                   |             |                                                   |                      |                                                                      |                                                                       |                            |                                                                      | \$ 0                                                                   | \$ 75 |
|                                       |                 |                   |             |                                                   |                      |                                                                      |                                                                       |                            |                                                                      | \$ 0                                                                   | \$ 75 |
|                                       |                 |                   |             |                                                   |                      |                                                                      |                                                                       |                            |                                                                      | activity                                                               |       |

FOOTNOTES  
 NOTE 1: APPARENT INCONSISTENCIES BETWEEN COLUMNS F(F) AND H(H') ARE CAUSED BY COMPUTER ROUNDING.  
 NOTE 2: COLUMN F IS AN ACCOUNT SUMMARY.  
 AERIAL CABLE + TERM INV + AIR DRYER + DROP WIRE; BURIED CABLE, ... ETC;  
 CO EQPT - ESS = CONNECTORS + MISC. CP&E.

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATCALC.DIST                 |             | LOOP COST ANALYSIS TOOL<br>PROSPECTIVE AND ANNUAL COSTS WORKSHEET |                     |                          |                                         |                     |                                                    | Belcore <sup>®</sup> |  |
|-----------------------------------------|-------------|-------------------------------------------------------------------|---------------------|--------------------------|-----------------------------------------|---------------------|----------------------------------------------------|----------------------|--|
| DIST_PLNT - WORKSHEET B<br>Sheet 3 of 3 |             |                                                                   |                     |                          |                                         |                     |                                                    | LCAT                 |  |
| COMPANY: CINCINNATI BE... TEL.          |             | FACILITY TYPE : COPPER CABLE                                      |                     |                          |                                         |                     |                                                    | Release : 1.0.4      |  |
| CITY / AREA: CINCINNATI                 |             | CIRCUIT SEGMENT : SERVICE ACCESS                                  |                     |                          |                                         |                     |                                                    | STUDY YR: 1996       |  |
| STATE / PROV: OHIO                      |             | SERVICE CLASS : BAND 1 - BUSINESS PBX                             |                     |                          |                                         |                     |                                                    | TEST CASE: 1         |  |
|                                         |             |                                                                   |                     |                          |                                         |                     |                                                    | RUN DATE: 28-Jan-97  |  |
|                                         |             |                                                                   |                     |                          |                                         |                     |                                                    | TIME: 07:40          |  |
| PLANT<br>ACCT                           | TO          | 1996 UNIT<br>LOOP INVESTMENT<br>BY ACCOUNT                        |                     | ANNUAL<br>COST<br>FACTOR | 1996 UNIT<br>ANNUAL COSTS<br>BY ACCOUNT |                     | 1996 UNIT<br>MONTHLY RECURRING COSTS<br>BY ACCOUNT |                      |  |
|                                         |             | SHARED<br>RESOURCES                                               | DIRECT<br>RESOURCES |                          | SHARED<br>RESOURCES                     | DIRECT<br>RESOURCES | SHARED<br>RESOURCES                                | DIRECT<br>RESOURCES  |  |
| <u>PLANT ITEM</u>                       | <u>CODE</u> | <u>TPI</u>                                                        | [M=K*L]             | [N]                      | [P=M*N]                                 | [P'=M'*N]           | [R=P/12]                                           | [R'=P'/12]           |  |
| LAND                                    | 20C         | 1.0000                                                            |                     | 0.2322                   |                                         |                     |                                                    |                      |  |
| BUILDING                                | 10C         | 1.0000                                                            |                     | 0.2937                   |                                         |                     |                                                    |                      |  |
| BLDG ENTRANCE CABLE                     | 12C         | 1.0000                                                            |                     | 0.3922                   | \$ 75                                   | \$ 29.42            |                                                    | \$ 2.45              |  |
| INTRABLDG CABLE                         | 52C         | 1.0000                                                            |                     | 0.3922                   |                                         |                     |                                                    |                      |  |
| AERIAL CABLE (COPPER)                   | 22C         | 1.0000                                                            |                     | 0.4033                   |                                         |                     |                                                    |                      |  |
| BURIED CABLE (COPPER)                   | 45C         | 1.0000                                                            |                     | 0.3467                   |                                         |                     |                                                    |                      |  |
| UNDERGROUND (CU) CA.                    | 5C          | 1.0000                                                            |                     | 0.3663                   |                                         |                     |                                                    |                      |  |
| CO EQPT - P GAIN TERM                   | 257C        | 1.0000                                                            |                     | 0.3881                   |                                         |                     |                                                    |                      |  |
| CO EQPT - P GAIN CHAN                   | 257C        | 1.0000                                                            |                     | 0.3881                   |                                         |                     |                                                    |                      |  |
| CO EQPT - FO MUX TERM                   | 857C        | 1.0000                                                            |                     | 0.3881                   |                                         |                     |                                                    |                      |  |
| CO EQPT - FO MUX CHAN                   | 857C        | 1.0000                                                            |                     | 0.3881                   |                                         |                     |                                                    |                      |  |
| CO EQPT - ANALOG SW                     | 77C         | 1.0000                                                            |                     | 0.0000                   |                                         |                     |                                                    |                      |  |
| CO EQPT - DIGITAL SW                    | 377C        | 1.0000                                                            |                     | 0.3458                   |                                         |                     |                                                    |                      |  |
| AERIAL CABLE (FIBER)                    | 822C        | 1.0000                                                            |                     | 0.2983                   |                                         |                     |                                                    |                      |  |
| BURIED CABLE (FIBER)                    | 845C        | 1.0000                                                            |                     | 0.2724                   |                                         |                     |                                                    |                      |  |
| UNDERGROUND (FO) CA.                    | 85C         | 1.0000                                                            |                     | 0.2689                   |                                         |                     |                                                    |                      |  |
| CONNECTORS                              | 57C         | 1.0000                                                            |                     | 0.3881                   |                                         |                     |                                                    |                      |  |
| MISC. COM EQP & PWR                     | 57C         | 1.0000                                                            |                     | 0.3881                   |                                         |                     |                                                    |                      |  |
| POLE LINE                               | 1C          | 1.0000                                                            |                     | 0.3807                   |                                         |                     |                                                    |                      |  |
| CONDUIT                                 | 4C          | 1.0000                                                            |                     | 0.2521                   |                                         |                     |                                                    |                      |  |
| TOTALS                                  |             |                                                                   | \$ 0                | \$ 75                    |                                         | \$ 29.42            |                                                    | \$ 2.45              |  |
|                                         |             |                                                                   |                     | \$ 75                    |                                         | \$ 29.42            |                                                    | \$ 2.45              |  |

CONFIDENTIAL  
NOT TO BE RELEASED TO PUBLIC  
PRIOR TO REVIEW BY THE PROSECUTOR GENERAL'S OFFICE

FOOTNOTES:  
NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.  
NOTE 2: AN INVESTMENT-ONLY STUDY NEGATES ANNUAL COST COMPUTATION,  
THUS, THIS COLUMN MAY BE PRESENTED FOR CONSISTENCY ONLY.



| LOOP COST ANALYSIS TOOL                                   |  |  |  | Bellcore®                          |  |
|-----------------------------------------------------------|--|--|--|------------------------------------|--|
| PROSPECTIVE INVESTMENT WORKSHEET SUMMARY                  |  |  |  | LCAT Release: 1.0.4                |  |
| COMPANY: CINCINNATI BELL TEL.                             |  |  |  | Issue Date: 8/31/95                |  |
| CITY / AREA: CINCINNATI                                   |  |  |  | STUDY YR: 1996                     |  |
| STATE / PROV: OHIO                                        |  |  |  | TEST CASE: 1                       |  |
| FACILITY TYPE: COPPER CABLE                               |  |  |  | RUN DATE: 28-Jan-97                |  |
| CIRCUIT SEGMENT: DISTRIBUTION PLANT (NON-DLC, NON-COLLOC) |  |  |  | TIME: 07:40                        |  |
| SERVICE CLASS: BAND 1 - BUSINESS PBX                      |  |  |  |                                    |  |
| 1996 UNIT MONTHLY RECURRING COST BY ACCOUNT               |  |  |  | (See Note)                         |  |
| logic-14a                                                 |  |  |  | TOTAL                              |  |
| BAND MIX                                                  |  |  |  | AVG. WEIGHTED                      |  |
| 1.0000                                                    |  |  |  | INVESTMENT                         |  |
| PLANT ACCT                                                |  |  |  | 638.0                              |  |
| CODE                                                      |  |  |  | 638.0                              |  |
| LGTH.                                                     |  |  |  |                                    |  |
| SEG. LGTH.                                                |  |  |  |                                    |  |
| 6403                                                      |  |  |  |                                    |  |
| 638.0                                                     |  |  |  |                                    |  |
| SHARED RESOURCES                                          |  |  |  |                                    |  |
| LAND 20C                                                  |  |  |  | \$0.00                             |  |
| BUILDING 10C                                              |  |  |  | \$0.00                             |  |
| BLDG ENTRANCE CABLE 12C                                   |  |  |  | \$0.00                             |  |
| INTRABLDG CABLE 52C                                       |  |  |  | \$0.00                             |  |
| AERIAL CABLE (COPPER) 22C                                 |  |  |  | \$0.00                             |  |
| BURIED CABLE (COPPER) 45C                                 |  |  |  | \$0.00                             |  |
| UNDERGROUND (CU) CA. 5C                                   |  |  |  | \$0.00                             |  |
| CO EQPT - P GAIN TERM 257C                                |  |  |  | \$0.00                             |  |
| CO EQPT - P GAIN CHAN 257C                                |  |  |  | \$0.00                             |  |
| CO EQPT - FO MUX TERM 857C                                |  |  |  | \$0.00                             |  |
| CO EQPT - FO MUX CHAN 857C                                |  |  |  | \$0.00                             |  |
| CO EQPT - ANALOG SW 77C                                   |  |  |  | \$0.00                             |  |
| CO EQPT - DIGITAL SW 377C                                 |  |  |  | \$0.00                             |  |
| AERIAL CABLE (FIBER) 822C                                 |  |  |  | \$0.00                             |  |
| BURIED CABLE (FIBER) 845C                                 |  |  |  | \$0.00                             |  |
| UNDERGROUND (FO) CA. 85C                                  |  |  |  | \$0.00                             |  |
| CONNECTORS 57C                                            |  |  |  | \$0.00                             |  |
| MISC. COM EQP & PWR 57C                                   |  |  |  | \$0.00                             |  |
| POLE LINE 1C                                              |  |  |  | \$0.00                             |  |
| CONDUIT 4C                                                |  |  |  | \$0.00                             |  |
| DIRECT RESOURCES                                          |  |  |  |                                    |  |
| LAND 20C                                                  |  |  |  | \$0.00                             |  |
| BUILDING 10C                                              |  |  |  | \$0.00                             |  |
| BLDG ENTRANCE CABLE 12C                                   |  |  |  | \$0.00                             |  |
| INTRABLDG CABLE 52C                                       |  |  |  | \$0.00                             |  |
| AERIAL CABLE (COPPER) 22C                                 |  |  |  | \$1.43                             |  |
| BURIED CABLE (COPPER) 45C                                 |  |  |  | \$0.55                             |  |
| UNDERGROUND (CU) CA. 5C                                   |  |  |  | \$0.79                             |  |
| CO EQPT - P GAIN TERM 257C                                |  |  |  | \$0.00                             |  |
| CO EQPT - P GAIN CHAN 257C                                |  |  |  | \$0.00                             |  |
| CO EQPT - FO MUX TERM 857C                                |  |  |  | \$0.00                             |  |
| CO EQPT - FO MUX CHAN 857C                                |  |  |  | \$0.00                             |  |
| CO EQPT - ANALOG SW 77C                                   |  |  |  | \$0.00                             |  |
| CO EQPT - DIGITAL SW 377C                                 |  |  |  | \$0.00                             |  |
| AERIAL CABLE (FIBER) 822C                                 |  |  |  | \$0.00                             |  |
| BURIED CABLE (FIBER) 845C                                 |  |  |  | \$0.00                             |  |
| UNDERGROUND (FO) CA. 85C                                  |  |  |  | \$0.00                             |  |
| CONNECTORS 57C                                            |  |  |  | \$0.00                             |  |
| MISC. COM EQP & PWR 57C                                   |  |  |  | \$0.00                             |  |
| POLE LINE 1C                                              |  |  |  | \$0.34                             |  |
| CONDUIT 4C                                                |  |  |  | \$0.28                             |  |
| SPAN SUMMARY                                              |  |  |  | \$3.39 \$0.00 \$0.00 \$0.00 \$0.00 |  |
| AVG. WTD. SPAN SUMMARY                                    |  |  |  | \$3.39 \$0.00 \$0.00 \$0.00 \$0.00 |  |
| NOTE: [sum(INV ACCT BAND * MIX BAND)]                     |  |  |  | \$3.39                             |  |

CONFIDENTIAL  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

| C:\123R24\LCAT\CALC\DIST                    |                 |                     | LOOP COST ANALYSIS TOOL                  |  | Belcore (R)         |  |
|---------------------------------------------|-----------------|---------------------|------------------------------------------|--|---------------------|--|
| DIST_PLNT - REPORT 148                      |                 |                     | PROSPECTIVE INVESTMENT WORKSHEET SUMMARY |  |                     |  |
| Sheet 1 of 1                                |                 |                     | CIRCUIT SEGMENT : SERVICE ACCESS         |  | Release : 1.0.4     |  |
| COMPANY: CINCINNATI BELL TEL                |                 |                     | SERVICE CLASS: BAND 1 - BUSINESS PSX     |  | STUDY YR: 1998      |  |
| CITY / AREA: CINCINNATI                     |                 |                     |                                          |  | TEST CASE: 1        |  |
| STATE / PROV: OHIO                          |                 |                     |                                          |  | RUN DATE: 28-Jan-97 |  |
|                                             |                 |                     |                                          |  | TIME: 07:40         |  |
| 1996 UNIT MONTHLY RECURRING COST BY ACCOUNT |                 |                     |                                          |  |                     |  |
| ALL                                         |                 |                     |                                          |  |                     |  |
| PLANT ITEM                                  | PLANT ACCT CODE | BAND MIX AVG. LGTH. |                                          |  |                     |  |
| SHARED RESOURCES                            |                 |                     |                                          |  |                     |  |
| LAND                                        | 20C             |                     |                                          |  |                     |  |
| BUILDING                                    | 10C             |                     |                                          |  |                     |  |
| BLDG ENTRANCE CABLE                         | 12C             |                     |                                          |  |                     |  |
| INTRABLDG CABLE                             | 52C             |                     |                                          |  |                     |  |
| AERIAL CABLE (COPPER)                       | 22C             |                     |                                          |  |                     |  |
| BURIED CABLE (COPPER)                       | 45C             |                     |                                          |  |                     |  |
| UNDERGROUND (CU) CA.                        | 5C              |                     |                                          |  |                     |  |
| CO EQPT - P GAIN TERM                       | 257C            |                     |                                          |  |                     |  |
| CO EQPT - P GAIN CHAN                       | 257C            |                     |                                          |  |                     |  |
| CO EQPT - FO MUX TERM                       | 857C            |                     |                                          |  |                     |  |
| CO EQPT - FO MUX CHAN                       | 857C            |                     |                                          |  |                     |  |
| CO EQPT - ANALOG SW                         | 77C             |                     |                                          |  |                     |  |
| CO EQPT - DIGITAL SW                        | 377C            |                     |                                          |  |                     |  |
| AERIAL CABLE (FIBER)                        | 822C            |                     |                                          |  |                     |  |
| BURIED CABLE (FIBER)                        | 845C            |                     |                                          |  |                     |  |
| UNDERGROUND (FO) CA.                        | 85C             |                     |                                          |  |                     |  |
| CONNECTORS                                  | 57C             |                     |                                          |  |                     |  |
| MISC. COM EQP & PWR                         | 57C             |                     |                                          |  |                     |  |
| POLE LINE                                   | 1C              |                     |                                          |  |                     |  |
| CONDUIT                                     | 4C              |                     |                                          |  |                     |  |
| DIRECT RESOURCES                            |                 |                     |                                          |  |                     |  |
| LAND                                        | 20C             |                     |                                          |  |                     |  |
| BUILDING                                    | 10C             |                     |                                          |  |                     |  |
| BLDG ENTRANCE CABLE                         | 12C             | 2.45                |                                          |  |                     |  |
| INTRABLDG CABLE                             | 52C             |                     |                                          |  |                     |  |
| AERIAL CABLE (COPPER)                       | 22C             |                     |                                          |  |                     |  |
| BURIED CABLE (COPPER)                       | 45C             |                     |                                          |  |                     |  |
| UNDERGROUND (CU) CA.                        | 5C              |                     |                                          |  |                     |  |
| CO EQPT - P GAIN TERM                       | 257C            |                     |                                          |  |                     |  |
| CO EQPT - P GAIN CHAN                       | 257C            |                     |                                          |  |                     |  |
| CO EQPT - FO MUX TERM                       | 857C            |                     |                                          |  |                     |  |
| CO EQPT - FO MUX CHAN                       | 857C            |                     |                                          |  |                     |  |
| CO EQPT - ANALOG SW                         | 77C             |                     |                                          |  |                     |  |
| CO EQPT - DIGITAL SW                        | 377C            |                     |                                          |  |                     |  |
| AERIAL CABLE (FIBER)                        | 822C            |                     |                                          |  |                     |  |
| BURIED CABLE (FIBER)                        | 845C            |                     |                                          |  |                     |  |
| UNDERGROUND (FO) CA.                        | 85C             |                     |                                          |  |                     |  |
| CONNECTORS                                  | 57C             |                     |                                          |  |                     |  |
| MISC. COM EQP & PWR                         | 57C             |                     |                                          |  |                     |  |
| POLE LINE                                   | 1C              |                     |                                          |  |                     |  |
| CONDUIT                                     | 4C              |                     |                                          |  |                     |  |
| SPAN TOTAL                                  |                 |                     |                                          |  |                     |  |

CONFIDENTIAL  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATCALC\CUTECH

RUN - SUB PRI

LAST UPDATE

27-Jan-97

14:40

## LOOP COST ANALYSIS TOOL

Bellcore<sup>(R)</sup>

LCAT

Release: 1.0.4

Issued: 7/31/95

## FEEDER SEGMENT COST MODEL - BASIC COPPER TECHNOLOGY

STUDY NAME: 1996 BAND 1 (OHIO ONLY) BUSINESS PBX 0 - 12000 FEET INTRAST

CURRENT TEST PLAN : CURRENT JOB IDENT. CINCINNATI

|           |           |           |          |
|-----------|-----------|-----------|----------|
| BASIS     | NETWORK   | TEST CASE | 1        |
| FR / DS   | FLAT RATE | #BANDS    | 0        |
| SVC LEVEL | NARBAND   | #PORTS    | 0        |
| CST METH  | UN INCE   | INV LEVEL | ANN COST |

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE  
 PROVIDED TO PUCO

PROPRIETARY - NOT FOR USE OR DISCLOSURE OUTSIDE Bellcore WITHOUT LICENSED PERMISSION

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCAT\CALC\OUTECH  
 SUB\_PRI - WORKSHEET  
 Sheet 1 of 3

**LOOP COST ANALYSIS TOOL**  
**BASIC INVESTMENT WORKSHEET**  
 CENTRAL OFFICE TO SERVING AREA INVESTMENT CALCULATIONS  
 FACILITY TYPE: COPPER CABLE  
 CIRCUIT SEGMENT: MELDED GAUGE/S/ SUB-PRIMARY  
 SERVICE CLASS: BAND 1 - BUSINESS PBX

**Bellcore**  
 LCAT Release: 1.0.4  
 Issue Date: 7/31/95  
 STUDY YR: 1996  
 TEST CASE: 1  
 RUN DATE: 25-Jan-97  
 TIME: 07:41

| SEGMENT<br>LENGTH<br>IN FEET | TYPE OF<br>CABLE<br>PLANT | FROM<br>TABLE 2                            |                                         | FROM<br>TABLE 4                                 |                                 | CABLE COMPONENTS                   |                                     |                                     |                                                 |  |
|------------------------------|---------------------------|--------------------------------------------|-----------------------------------------|-------------------------------------------------|---------------------------------|------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------------------|--|
|                              |                           | RELATIVE<br>MIX OF<br>TYPE OF<br>CA. PLANT | LENGTH<br>SUBSET<br>BY TYPE<br>OF PLANT | M/D CABLE<br>DESIGN<br>INVEST. PER<br>PAIR FOOT | CABLE<br>INVESTMENT<br>PER PAIR | WEIGHTED<br>TERMINAL<br>INVESTMENT | AIR DRYER<br>INVESTMENT<br>PER PAIR | DROP WIRE<br>ADJUSTMENT<br>PER PAIR | WEIGHTED<br>DROP WIRE<br>ADJUSTMENT<br>PER PAIR |  |
| [A]                          |                           | [B]                                        | [C=A*B]                                 | [D]                                             | [E=C*D]                         | [UI*DTC]                           |                                     | [E*fcfr]                            | [UI*DTC]                                        |  |
| 5765                         | AERIAL                    | 0.120000                                   | 691.80                                  | 0.012100                                        | 8.37                            |                                    | 0.00                                | 0.00                                |                                                 |  |
| MELDED GAUGE/S/<br>COPPER    | BURIED                    | 0.000000                                   | 0.00                                    | 0.016600                                        | 0.00                            |                                    | 0.00                                | 0.00                                |                                                 |  |
| CABLE                        | UNDERGRND                 | 0.880000                                   | 5073.20                                 | 0.010900                                        | 55.30                           |                                    | 0.00                                | 0.00                                |                                                 |  |
| CHECK =                      |                           | 1.000000                                   |                                         |                                                 |                                 |                                    |                                     |                                     |                                                 |  |

ADDITIONAL CALCULATIONS FOR CENTRAL OFFICE INVESTMENTS  
 INVESTMENT PER CIRCUIT TERMINATION  
 (CO CONN) CONNECTORS (cpi77c) = \$ 79.08  
 inv / unit lgth: inv rtn fcfr  
 0.000000 0.253000  
 POLE LINE FACTOR = \$ 3.53  
 POLE LINE INVESTMENT =  
 (UTIL AERIAL INVEST x PLF)  
 UG CONDUIT FACTOR = 0.000000 0.516500  
 CONDUIT INVESTMENT = \$ 47.60  
 (UTIL UNDGRND INVEST x UCF)

MISC. COMMON EQPT. & POWER FACTOR = 0.112700  
 MCE&P INVESTMENT (CO CONN x FACTOR) = \$ 8.91  
 LAND FACTOR = 0.00560  
 LAND NVST (CO CONN + MCE&P) x FACTOR = \$ 0.49  
 BUILDING FACTOR = 0.71100  
 BLDG NVST (CO CONN + MCE&P) x FACTOR = \$ 11.58  
 PERCENT OF CO CONN AT DIGITAL SWITCHES 100.0000  
 PERCENT OF CO CONN AT ANALOG SWITCHES 0.0000

**CONFIDENTIAL**  
 NOTICE: NOT TO BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

**FOOTNOTES**  
 NOTE 1: APPARENT INCONSISTANCIES MAY BE CAUSED BY COMPUTER ROUNDING.  
 NOTE 2: E \* fcfr = INVESTMENT x DROP WIRE ADJUSTMENT FACTOR (MISCA or MISCB)  
 NOTE 3: UI \* DTC = UNIT INVESTMENT x PROBABILITY OF OCCURANCE.  
 NOTE 4: MATRIX 2 & 4 DEVELOPMENT SHOWN ON WORKSHEET C (#5,#6).

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| LOOP COST ANALYSIS TOOL                                |                 |                 |                       |                                                   |                      |                                                                      |                           |                            |                                                                      | Bellcore (R)               |        |
|--------------------------------------------------------|-----------------|-----------------|-----------------------|---------------------------------------------------|----------------------|----------------------------------------------------------------------|---------------------------|----------------------------|----------------------------------------------------------------------|----------------------------|--------|
| ACCOUNT INVESTMENT WORKSHEET                           |                 |                 |                       |                                                   |                      |                                                                      |                           |                            |                                                                      | LCAT Release: 1.0.4        |        |
| CENTRAL OFFICE TO SERVING AREA INVESTMENT CALCULATIONS |                 |                 |                       |                                                   |                      |                                                                      |                           |                            |                                                                      | Issue Date: 7/31/95        |        |
| FACILITY TYPE: COPPER CABLE                            |                 |                 |                       |                                                   |                      |                                                                      |                           |                            |                                                                      | STUDY YR: 1996             |        |
| CIRCUIT SEGMENT: [MELDED GAUGE 3/ SUB-PRIMARY]         |                 |                 |                       |                                                   |                      |                                                                      |                           |                            |                                                                      | TEST CASE: 1               |        |
| SERVICE CLASS: BAND 1 - BUSINESS PBX                   |                 |                 |                       |                                                   |                      |                                                                      |                           |                            |                                                                      | RUN DATE: 28-Jan-97        |        |
|                                                        |                 |                 |                       |                                                   |                      |                                                                      |                           |                            |                                                                      | TIME: 07:41                |        |
| PLANT ITEM                                             | PLANT ACCT CODE | FIXED VARI CAT. | RESOURCE ALLOCATION T | 1996 UNIT INVESTMENT BY ACCOUNT COST EQUATION [F] | CIRCUIT QUANTITY [G] | 1996 UNIT LOOP INVESTMENT EXCL. UTILIZATION SHARED RESOURCES [H=F*G] | DIRECT RESOURCES [H'=F*G] | ADMIN. UTIL. LINE FILL [J] | 1996 UNIT LOOP INVESTMENT INCL. UTILIZATION SHARED RESOURCES [K=H/J] | DIRECT RESOURCES [K'=H'/J] |        |
| 8 LAND                                                 | 20C             | F               | SHARED                | 0.49                                              | 1                    | \$ 0                                                                 |                           | 1.0000                     | \$ 0                                                                 |                            |        |
| 9 BUILDING                                             | 10C             | F               | SHARED                | 11.58                                             | 1                    | \$ 12                                                                |                           | 1.0000                     | \$ 12                                                                |                            |        |
| 10 BLDG ENTRANCE CABLE                                 | 12C             | V               | DIRECT                |                                                   |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |        |
| 11 INTRABLDG CABLE                                     | 52C             | V               | DIRECT                |                                                   |                      |                                                                      |                           | 0.3500                     |                                                                      |                            |        |
| 12 AERIAL CABLE (COPPER)                               | 22C             | V               | DIRECT                | 8.37                                              | 1                    |                                                                      | \$ 8                      | 0.6000                     |                                                                      | \$ 14                      |        |
| 13 BURIED CABLE (COPPER)                               | 45C             | V               | DIRECT                | 0.00                                              |                      |                                                                      |                           | 0.6000                     |                                                                      |                            |        |
| 14 UNDERGROUND (CU) CA.                                | 5C              | V               | DIRECT                | 55.30                                             | 1                    |                                                                      | \$ 55                     | 0.6000                     |                                                                      | \$ 92                      |        |
| 15 CO EQPT - LOW CAP TERM                              | 257C            | F               | DIRECT                |                                                   |                      |                                                                      |                           | 0.7000                     |                                                                      |                            |        |
| 16 CO EQPT - LOW CAP CHAN                              | 257C            | V               | DIRECT                |                                                   |                      |                                                                      |                           | 0.7000                     |                                                                      |                            |        |
| 17 CO EQPT - HI CAP TERM                               | 857C            | F               | DIRECT                |                                                   |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |        |
| 18 CO EQPT - HI CAP CHAN                               | 857C            | F               | DIRECT                |                                                   |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |        |
| 19 CO EQPT - ANALOG SW                                 | 77C             | V               | DIRECT                | 0.00                                              |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |        |
| 20 CO EQPT - DIGITAL SW                                | 377C            | V               | DIRECT                | 79.08                                             | 1                    |                                                                      | \$ 79                     | 1.0000                     |                                                                      | \$ 79                      |        |
| 21 AERIAL CABLE (FIBER)                                | 822C            | F               | DIRECT                |                                                   |                      |                                                                      |                           | 0.3300                     |                                                                      |                            |        |
| 22 BURIED CABLE (FIBER)                                | 845C            | F               | DIRECT                |                                                   |                      |                                                                      |                           | 0.3300                     |                                                                      |                            |        |
| 23 UNDERGROUND (FO) CA.                                | 85C             | F               | DIRECT                |                                                   |                      |                                                                      |                           | 0.3300                     |                                                                      |                            |        |
| 24 CONNECTORS                                          | 57C             | V               | DIRECT                |                                                   |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |        |
| 25 MISC. COM EQP & PWR                                 | 57C             | V               | SHARED                | 8.91                                              | 1                    | \$ 9                                                                 |                           | 1.0000                     |                                                                      | \$ 4                       |        |
| 26 POLE LINE                                           | 1C              | F               | DIRECT                | 3.53                                              | 1                    |                                                                      |                           | 1.0000                     |                                                                      | \$ 48                      |        |
| 27 CONDUIT                                             | 4C              | F               | DIRECT                | 47.60                                             | 1                    |                                                                      |                           | 1.0000                     |                                                                      | \$ 48                      |        |
| TOTALS                                                 |                 |                 |                       |                                                   |                      |                                                                      |                           |                            |                                                                      | \$ 236                     | \$ 257 |

CONFIDENTIAL  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

culprivity

FOOTNOTES  
NOTE 1: APPARENT INCONSISTENCIES BETWEEN COLUMNS F AND H (H') ARE CAUSED BY COMPUTER ROUNDING.  
NOTE 2: COLUMN F IS AN ACCOUNT SUMMARY OF CABLE COMPONENTS:  
AERIAL CABLE + TERM INV + AIR DRYER + DROP WIRE ADJ; BURIED CABLE, ... ETC;  
CO EQPT - ESS = CONNECTORS + MISC. CP&E.

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

Q1123R24\LCATCALC\OUTECH  
SUB\_PRI - WORKSHEET  
Sheet 1 of 3

COMPANY: CINCINNATI BELL TEL.  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIO

**LOOP COST ANALYSIS TOOL**  
PROSPECTIVE AND ANNUAL COSTS WORKSHEET  
CENTRAL OFFICE TO SERVING AREA INVESTMENT CALCULATIONS  
FACILITY TYPE: COPPER CABLE  
CIRCUIT SEGMENT: MELDED GAUGE'S SUB-PRIMARY  
SERVICE CLASS: BAND 1 - BUSINESS PBX

LCAT Release: 1.0.4  
Issue Date: 7/31/95  
STUDY YR: 1996  
TEST CASE: 1  
RUN DATE: 28-Jan-97  
TIME: 07:41

| PLANT ITEM                                                           | PLANT ACCT CODE | 1996 TO 1996 TPI [L] | 1996 UNIT LOOP INVESTMENTS BY ACCOUNT |                            | ANNUAL COST FACTOR [N] | 1996 UNIT ANNUAL COSTS BY ACCOUNT |                            | 1996 UNIT MONTHLY RECURRING COSTS BY ACCOUNT |                             |
|----------------------------------------------------------------------|-----------------|----------------------|---------------------------------------|----------------------------|------------------------|-----------------------------------|----------------------------|----------------------------------------------|-----------------------------|
|                                                                      |                 |                      | SHARED RESOURCES [M=K*L]              | DIRECT RESOURCES [M'=K'*L] |                        | SHARED RESOURCES [P=M*N]          | DIRECT RESOURCES [P'=M'*N] | SHARED RESOURCES [R=P/12]                    | DIRECT RESOURCES [R'=P'/12] |
| 8 LAND                                                               | 20C             | 1.0000               | \$ 0                                  |                            | 0.2322                 | \$ 0.11                           |                            | \$ 0.01                                      |                             |
| 9 BUILDING                                                           | 10C             | 1.0000               | \$ 12                                 |                            | 0.2937                 | \$ 3.40                           |                            | \$ 0.28                                      |                             |
| 10 BLDG ENTRANCE CABLE                                               | 12C             | 1.0000               |                                       |                            | 0.3922                 |                                   |                            |                                              |                             |
| 11 INTRABLDG CABLE                                                   | 52C             | 1.0000               |                                       |                            | 0.3922                 |                                   |                            |                                              |                             |
| 12 AERIAL CABLE (COPPER)                                             | 22C             | 1.0000               |                                       | \$ 14                      | 0.4033                 |                                   | \$ 5.63                    | \$ 0.47                                      |                             |
| 13 BURIED CABLE (COPPER)                                             | 45C             | 1.0000               |                                       |                            | 0.3467                 |                                   |                            |                                              |                             |
| 14 UNDERGROUND (CU) CA.                                              | 5C              | 1.0000               |                                       | \$ 92                      | 0.3663                 |                                   | \$ 33.76                   | \$ 2.81                                      |                             |
| 15 CO EQPT - LOW CAP TERM                                            | 257C            | 1.0000               |                                       |                            | 0.3881                 |                                   |                            |                                              |                             |
| 16 CO EQPT - LOW CAP CHAN                                            | 257C            | 1.0000               |                                       |                            | 0.3881                 |                                   |                            |                                              |                             |
| 17 CO EQPT - HI CAP TERM                                             | 857C            | 1.0000               |                                       |                            | 0.3881                 |                                   |                            |                                              |                             |
| 18 CO EQPT - HI CAP CHAN                                             | 857C            | 1.0000               |                                       |                            | 0.3881                 |                                   |                            |                                              |                             |
| 19 CO EQPT - ANALOG SW                                               | 77C             | 1.0000               |                                       |                            | 0.0000                 |                                   |                            |                                              |                             |
| 20 CO EQPT - DIGITAL SW                                              | 377C            | 1.0000               |                                       | \$ 79                      | 0.3458                 |                                   | \$ 27.35                   | \$ 2.28                                      |                             |
| 21 AERIAL CABLE (FIBER)                                              | 822C            | 1.0000               |                                       |                            | 0.2983                 |                                   |                            |                                              |                             |
| 22 BURIED CABLE (FIBER)                                              | 845C            | 1.0000               |                                       |                            | 0.2724                 |                                   |                            |                                              |                             |
| 23 UNDERGROUND (FO) CA.                                              | 85C             | 1.0000               |                                       |                            | 0.2689                 |                                   |                            |                                              |                             |
| 24 CONNECTORS                                                        | 57C             | 1.0000               |                                       |                            | 0.3881                 |                                   |                            |                                              |                             |
| 25 MISC. COM EQP & PWR                                               | 57C             | 1.0000               | \$ 9                                  |                            | 0.3881                 | \$ 3.46                           |                            | \$ 0.29                                      |                             |
| 26 POLE LINE                                                         | 1C              | 1.0000               |                                       | \$ 4                       | 0.3807                 |                                   |                            | \$ 0.11                                      |                             |
| 27 CONDUIT                                                           | 4C              | 1.0000               |                                       | \$ 48                      | 0.2521                 |                                   |                            | \$ 1.00                                      |                             |
| 28                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 29 SUBTOTALS                                                         |                 |                      | \$ 21                                 | \$ 236                     |                        |                                   | \$ 80.34                   | \$ 6.67                                      |                             |
| 30                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 31 TOTALS                                                            |                 |                      |                                       | \$ 257                     |                        |                                   | \$ 81.69                   | \$ 7.25                                      |                             |
| 32                                                                   |                 |                      |                                       | culpinvsy                  |                        |                                   | culpinrc                   |                                              |                             |
| 33                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 34                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 35                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 36                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 37                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 38                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 39                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 40                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 41                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 42                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 43                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 44                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 45                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 46                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 47 FOOTNOTES                                                         |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 48 NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.     |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 49 NOTE 2: AN INVESTMENT-ONLY STUDY NEGATES ANNUAL COST COMPUTATION. |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 50 THUS, THIS COLUMN MAY BE PRESENTED FOR CONSISTENCY ONLY.          |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 51                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 52                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 53                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 54                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |
| 55                                                                   |                 |                      |                                       |                            |                        |                                   |                            |                                              |                             |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.



C:\123R24\LCATC\LC\UPRGN  
RUN - CDLC PLANT

LAST UPDATE

27-Jan-97

14:40

## LOOP COST ANALYSIS TOOL

Belcore<sup>TM</sup>

LCAT

Release: 1.0.4

Issued: 8/31/95

### FEEDER SEGMENT COST MODEL - COPPER DLC TECHNOLOGY

STUDY NAME: 1996 BAND 1 (OHIO ONLY) BUSINESS PBX 0 - 12000 FEET INTRASTATE

CURRENT TEST PLAN : CURRENT JOB IDENT: CINCINNATI

|           |           |            |
|-----------|-----------|------------|
| BASIS     | NETWORK   | TEST CASE  |
| FR / DS   | FLAT RATE | #BANDS     |
| SVC LEVEL | NARBAND   | #CPTS      |
| CST METH  | UN INCR   | CONV LEVEL |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

PROPRIETARY - NOT FOR USE OR DISCLOSURE OUTSIDE Belcore WITHOUT LICENSED PERMISSION

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.



| LOOP COST ANALYSIS TOOL                                                                                                                                                        |  |  |  |  |  |  |  |  |  | Bellcore            |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|---------------------|--|
| BASIC INVESTMENT WORKSHEET                                                                                                                                                     |  |  |  |  |  |  |  |  |  | LCAT Release: 1.0.4 |  |
| CENTRAL OFFICE TO REMOTE TERMINAL (PRIMARY SECTION) WORKSHEET                                                                                                                  |  |  |  |  |  |  |  |  |  | Issue Date: 8/31/95 |  |
| FOR DIGITAL LOOP CARRIER IN THE FEEDER SEGMENT ONLY                                                                                                                            |  |  |  |  |  |  |  |  |  | STUDY YR: 1996      |  |
| FACILITY TYPE: COPPER DIG LOOP CRR                                                                                                                                             |  |  |  |  |  |  |  |  |  | TEST CASE: 1        |  |
| CIRCUIT DESIGN: T C                                                                                                                                                            |  |  |  |  |  |  |  |  |  | DATE: 28-Jan-97     |  |
| SERVICE CLASS: BAND 1 - B'S-NESS PBX                                                                                                                                           |  |  |  |  |  |  |  |  |  | TIME: 07:42 AM      |  |
| COMPANY: CINCINNATI BELL TEL.                                                                                                                                                  |  |  |  |  |  |  |  |  |  |                     |  |
| CITY / AREA: OHIO                                                                                                                                                              |  |  |  |  |  |  |  |  |  |                     |  |
| STATE / PROV: CINCINNATI                                                                                                                                                       |  |  |  |  |  |  |  |  |  |                     |  |
| 6403 cur. lgth                                                                                                                                                                 |  |  |  |  |  |  |  |  |  |                     |  |
| 5765 cur. dr. lgth                                                                                                                                                             |  |  |  |  |  |  |  |  |  |                     |  |
| f = 0.125 pgfactor                                                                                                                                                             |  |  |  |  |  |  |  |  |  |                     |  |
| CABLE COMPONENTS (NOTE 5)                                                                                                                                                      |  |  |  |  |  |  |  |  |  |                     |  |
| (NOTE 4)                                                                                                                                                                       |  |  |  |  |  |  |  |  |  |                     |  |
| (NOTE 5)                                                                                                                                                                       |  |  |  |  |  |  |  |  |  |                     |  |
| CABLE WEIGHTED AIR DRYER DROP WIRE DROP WIRE                                                                                                                                   |  |  |  |  |  |  |  |  |  |                     |  |
| INVESTMENT TERMINAL INVESTMENT ADJUSTMENT INVESTMENT                                                                                                                           |  |  |  |  |  |  |  |  |  |                     |  |
| PER CHAN INVESTMENT PER PAIR PER PAIR PER PAIR                                                                                                                                 |  |  |  |  |  |  |  |  |  |                     |  |
| [E=C*D] [U1*DTC] [E1*ctr] [E1*ctr] [U1*DTC]                                                                                                                                    |  |  |  |  |  |  |  |  |  |                     |  |
| [A] [B] [C=A*B] [D]                                                                                                                                                            |  |  |  |  |  |  |  |  |  |                     |  |
| CO TO RT LINK 0.120000 0.00 0.024200 \$ 0.00 \$ 0.00                                                                                                                           |  |  |  |  |  |  |  |  |  |                     |  |
| ON BURIED 0.000000 0.00 0.033200 \$ 0.00 \$ 0.00                                                                                                                               |  |  |  |  |  |  |  |  |  |                     |  |
| COPPER CABLE DLC UNDERGRND 0.880000 0.00 0.021800 \$ 0.00 \$ 0.00                                                                                                              |  |  |  |  |  |  |  |  |  |                     |  |
| 24.00 GA. FACILITIES 1.000000                                                                                                                                                  |  |  |  |  |  |  |  |  |  |                     |  |
| OUTSIDE PLANT LOADINGS (NOTE 5):                                                                                                                                               |  |  |  |  |  |  |  |  |  |                     |  |
| ADJUST. / LOAD FACTORS TO AERIAL PFI                                                                                                                                           |  |  |  |  |  |  |  |  |  |                     |  |
| ADJUST. / LOAD FACTORS TO BURIED PFI                                                                                                                                           |  |  |  |  |  |  |  |  |  |                     |  |
| ADJUST. / LOAD FACTORS TO UGD PFI                                                                                                                                              |  |  |  |  |  |  |  |  |  |                     |  |
| DLC EQUIPMENT INVEST. (NOTE 2):                                                                                                                                                |  |  |  |  |  |  |  |  |  |                     |  |
| INT DLC EQUIP. INVEST. (CU COMUX) =                                                                                                                                            |  |  |  |  |  |  |  |  |  |                     |  |
| INT DLC EQUIP. INVEST. (CU RTMUX) =                                                                                                                                            |  |  |  |  |  |  |  |  |  |                     |  |
| UNIV DLC EQUIP. INVEST. (CU COMUX) =                                                                                                                                           |  |  |  |  |  |  |  |  |  |                     |  |
| UNIV DLC EQUIP. INVEST. (CU RTMUX) =                                                                                                                                           |  |  |  |  |  |  |  |  |  |                     |  |
| DLC EQUIP. INVEST. (CU LINE) =                                                                                                                                                 |  |  |  |  |  |  |  |  |  |                     |  |
| CONDUIT INVEST. FOR DLC CEV FACILITIES = compgmst \$ 4.17                                                                                                                      |  |  |  |  |  |  |  |  |  |                     |  |
| OTHER INVESTMENT inv / unit lgth : inv rltm fctr :                                                                                                                             |  |  |  |  |  |  |  |  |  |                     |  |
| POLE LINE FACTOR (PLF) = 0.0000 0.2530                                                                                                                                         |  |  |  |  |  |  |  |  |  |                     |  |
| POLE LINE INVESTMENT (UTIL AERIAL INVEST. x PLF) = \$ 0.00                                                                                                                     |  |  |  |  |  |  |  |  |  |                     |  |
| UGD CONDUIT FACTOR (UCF) = 0.0000 0.5165                                                                                                                                       |  |  |  |  |  |  |  |  |  |                     |  |
| CONDUIT INVESTMENT (UTIL UNDGRD INVEST x UCF) = \$ 0.00                                                                                                                        |  |  |  |  |  |  |  |  |  |                     |  |
| LOOP TOPOLOGY                                                                                                                                                                  |  |  |  |  |  |  |  |  |  |                     |  |
| AVERAGE NUMBER OF HUBS                                                                                                                                                         |  |  |  |  |  |  |  |  |  |                     |  |
| ADDITIONAL LENGTH OF RING OSP REQUIRED                                                                                                                                         |  |  |  |  |  |  |  |  |  |                     |  |
| MIX OF CENT. OFC. ANALOG INTFC                                                                                                                                                 |  |  |  |  |  |  |  |  |  |                     |  |
| MIX OF CENT. OFC. DIGITAL INTFC                                                                                                                                                |  |  |  |  |  |  |  |  |  |                     |  |
| MIX OF UNIVERSAL DLC INTFC                                                                                                                                                     |  |  |  |  |  |  |  |  |  |                     |  |
| MIX OF INTEGRATED DIGITAL INTFC                                                                                                                                                |  |  |  |  |  |  |  |  |  |                     |  |
| STAR                                                                                                                                                                           |  |  |  |  |  |  |  |  |  |                     |  |
| NA                                                                                                                                                                             |  |  |  |  |  |  |  |  |  |                     |  |
| NA                                                                                                                                                                             |  |  |  |  |  |  |  |  |  |                     |  |
| 0.0000                                                                                                                                                                         |  |  |  |  |  |  |  |  |  |                     |  |
| 1.0000                                                                                                                                                                         |  |  |  |  |  |  |  |  |  |                     |  |
| 1.0000                                                                                                                                                                         |  |  |  |  |  |  |  |  |  |                     |  |
| 0.0000                                                                                                                                                                         |  |  |  |  |  |  |  |  |  |                     |  |
| CONFIDENTIAL                                                                                                                                                                   |  |  |  |  |  |  |  |  |  |                     |  |
| NOTICE MUST BE GIVEN TO RELEASE TO PUBLIC                                                                                                                                      |  |  |  |  |  |  |  |  |  |                     |  |
| PROVIDED TO PUCO                                                                                                                                                               |  |  |  |  |  |  |  |  |  |                     |  |
| FOOTNOTES                                                                                                                                                                      |  |  |  |  |  |  |  |  |  |                     |  |
| NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.                                                                                                                  |  |  |  |  |  |  |  |  |  |                     |  |
| NOTE 2: THE SUBSCRIBER LINE CARRIER EQUIPMENT INVESTMENTS ARE DEVELOPED OUTSIDE OF THE SPREADSHEET WITH APPROPRIATE UTILIZATION FACTORS APPLIED.                               |  |  |  |  |  |  |  |  |  |                     |  |
| NOTE 3: TABLE 4 DEVELOPMENT IS SHOWN ON WORKSHEET B; FOR 4 WIRE SERVICES, TABLE 4 IS MULTIPPLIED BY 4.                                                                         |  |  |  |  |  |  |  |  |  |                     |  |
| NOTE 4: THIS ADJUSTMENT MAY ONLY BE TAKEN AGAINST COPPER PLANT.                                                                                                                |  |  |  |  |  |  |  |  |  |                     |  |
| NOTE 5: ALL DROP WIRE AND PREMISES CONN. INVEST. IS INCLUDED IN THE APPROPRIATE CABLE ACCOUNT ON THE BUILDING CABLE & TERMINATION WORKSHEET AND INCORPORATED INTO WORKSHEET E. |  |  |  |  |  |  |  |  |  |                     |  |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| LOOP COST ANALYSIS TOOL                                       |                 |                 |                     |                   |                      |                          |                            |                            |                          | Bellcore                   |  |
|---------------------------------------------------------------|-----------------|-----------------|---------------------|-------------------|----------------------|--------------------------|----------------------------|----------------------------|--------------------------|----------------------------|--|
| ACCOUNT INVESTMENT WORKSHEET                                  |                 |                 |                     |                   |                      |                          |                            |                            |                          | LCAT Release: 1.0.4        |  |
| CENTRAL OFFICE TO REMOTE TERMINAL (PRIMARY SECTION) WORKSHEET |                 |                 |                     |                   |                      |                          |                            |                            |                          | Issue Date: 8/31/95        |  |
| FOR DIGITAL LOOP CARRIER IN THE FEEDER SEGMENT ONLY           |                 |                 |                     |                   |                      |                          |                            |                            |                          | STUDY YR: 1996             |  |
| FACILITY TYPE: COPPER DIG LOOP CXR                            |                 |                 |                     |                   |                      |                          |                            |                            |                          | TEST CASE: 1               |  |
| CIRCUIT DESIGN: 1 C                                           |                 |                 |                     |                   |                      |                          |                            |                            |                          | DATE: 28-Jan-97            |  |
| SERVICE CLASS: HAND 1 - BUSINESS PBX                          |                 |                 |                     |                   |                      |                          |                            |                            |                          | TIME: 07:42 AM             |  |
| COMPANY: CINCINNATI BELL TEL                                  |                 |                 |                     |                   |                      |                          |                            |                            |                          |                            |  |
| CITY / AREA: OHIO                                             |                 |                 |                     |                   |                      |                          |                            |                            |                          |                            |  |
| STATE / PROV: CINCINNATI                                      |                 |                 |                     |                   |                      |                          |                            |                            |                          |                            |  |
| 1996 UNIT INVESTMENTS BY ACCOUNT                              |                 |                 |                     |                   |                      |                          |                            |                            |                          |                            |  |
| 1996 UNIT LOOP INVESTMENT EXCL UTILIZATION                    |                 |                 |                     |                   |                      |                          |                            |                            |                          |                            |  |
| ADMIN. UTIL. LINE FILL [J]                                    |                 |                 |                     |                   |                      |                          |                            |                            |                          |                            |  |
| 1996 UNIT LOOP INVESTMENT INCL UTILIZATION                    |                 |                 |                     |                   |                      |                          |                            |                            |                          |                            |  |
| SHARED RESOURCES [K=H/J]                                      |                 |                 |                     |                   |                      |                          |                            |                            |                          |                            |  |
| DIRECT RESOURCES [K'=H'/J]                                    |                 |                 |                     |                   |                      |                          |                            |                            |                          |                            |  |
| PLANT ITEM                                                    | PLANT ACCT CODE | FIXED VARI SUNK | RESOURCE ALLOCATION | COST EQUATION [F] | CIRCUIT QUANTITY [G] | SHARED RESOURCES [H=F*G] | DIRECT RESOURCES [H'=F'*G] | ADMIN. UTIL. LINE FILL [J] | SHARED RESOURCES [K=H/J] | DIRECT RESOURCES [K'=H'/J] |  |
| LAND                                                          | 20C             | F               | SHARED              | 1.47              | 0                    |                          |                            | 1.0000                     |                          |                            |  |
| BUILDING                                                      | 10C             | F               | SHARED              | 34.76             | 0                    |                          |                            | 1.0000                     |                          |                            |  |
| BLDG ENTRANCE CABLE                                           | 12C             | ---             | ---                 |                   | 0                    |                          |                            | 1.0000                     |                          |                            |  |
| INTRABLDG CABLE                                               | 52C             | ---             | ---                 |                   | 0                    |                          |                            | 0.3500                     |                          |                            |  |
| AERIAL CABLE (COPPER)                                         | 22C             | V               | DIRECT              | 0.00              | 0                    |                          |                            | 0.6000                     |                          |                            |  |
| BURIED CABLE (COPPER)                                         | 45C             | V               | DIRECT              | 0.00              | 0                    |                          |                            | 0.6000                     |                          |                            |  |
| UNDERGROUND (CU) CA.                                          | 5C              | V               | DIRECT              | 4.17              | 0                    |                          |                            | 0.6000                     |                          |                            |  |
| CO EQPT - P GAIN TERM                                         | 257C            | F               | DIRECT              | 79.13             | 0                    |                          |                            | 0.7000                     |                          |                            |  |
| CO EQPT - P GAIN CHAN                                         | 257C            | V               | DIRECT              | 172.79            | 0                    |                          |                            | 0.7000                     |                          |                            |  |
| CO EQPT - FO MUX TERM                                         | 857C            | F               | DIRECT              |                   | 0                    |                          |                            | 1.0000                     |                          |                            |  |
| CO EQPT - FO MUX CHAN                                         | 857C            | F               | DIRECT              |                   | 0                    |                          |                            | 1.0000                     |                          |                            |  |
| CO EQPT - ESS - ANALOG                                        | 77C             | V               | DIRECT              | 0.00              | 0                    |                          |                            | 1.0000                     |                          |                            |  |
| CO EQPT - ESS - DIGITAL                                       | 377C            | V               | DIRECT              | 0.00              | 0                    |                          |                            | 1.0000                     |                          |                            |  |
| AERIAL CABLE (FIBER)                                          | 822C            | F               | DIRECT              |                   | 0                    |                          |                            | 0.3300                     |                          |                            |  |
| BURIED CABLE (FIBER)                                          | 845C            | F               | DIRECT              |                   | 0                    |                          |                            | 0.3300                     |                          |                            |  |
| UNDERGROUND (FO) CA.                                          | 85C             | F               | DIRECT              |                   | 0                    |                          |                            | 0.3300                     |                          |                            |  |
| CONNECTORS                                                    | 57C             | V               | DIRECT              |                   | 0                    |                          |                            | 1.0000                     |                          |                            |  |
| MISC. COM EQP & PWR                                           | 57C             | V               | SHARED              | 11.23             | 0                    |                          |                            | 1.0000                     |                          |                            |  |
| POLE LINE                                                     | 1C              | F               | DIRECT              | 0.00              | 0                    |                          |                            | 1.0000                     |                          |                            |  |
| CONDUIT                                                       | 4C              | F               | DIRECT              | 0.00              | 0                    |                          |                            | 1.0000                     |                          |                            |  |
| TOTALS                                                        |                 |                 |                     |                   |                      |                          |                            |                            |                          |                            |  |

CONFIDENTIAL  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

FOOTNOTES  
NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.  
NOTE 2: CO EQPT - CKT PG TERM = PG EQ INV TERM + MC&P INV  
CO EQPT - CKT PG CHAN = PG EQ INV CHAN + ORB INV  
CO EQPT - ANALOG/DIGITAL ESS = C.O. CONN INV + MC&P INV

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCAT\CALC\CLPRGN   |                 | LOOP COST ANALYSIS TOOL                                       |                                      |                            |                        |                                   |                            |                                              |                             |  |  | Bellcore <sup>®</sup> |  |
|------------------------------|-----------------|---------------------------------------------------------------|--------------------------------------|----------------------------|------------------------|-----------------------------------|----------------------------|----------------------------------------------|-----------------------------|--|--|-----------------------|--|
| COLC PLANT - WORKSHEET 1     |                 | PROSPECTIVE AND ANNUAL COSTS WORKSHEET                        |                                      |                            |                        |                                   |                            |                                              |                             |  |  | LCAT Release: 1.0.4   |  |
| Sheet 3 of 3                 |                 | CENTRAL OFFICE TO REMOTE TERMINAL (PRIMARY SECTION) WORKSHEET |                                      |                            |                        |                                   |                            |                                              |                             |  |  | Issue Date: 8/31/95   |  |
|                              |                 | FOR DIGITAL LOOP CARRIER IN THE FEEDER SEGMENT ONLY           |                                      |                            |                        |                                   |                            |                                              |                             |  |  | STUDY YR: 1996        |  |
|                              |                 | FACILITY TYPE: COPPER DIG LOOP CXR                            |                                      |                            |                        |                                   |                            |                                              |                             |  |  | TEST CASE: 1          |  |
|                              |                 | CIRCUIT DESIGN: 1 C                                           |                                      |                            |                        |                                   |                            |                                              |                             |  |  | DATE: 26-Jan-97       |  |
|                              |                 | SERVICE CLASS: SANDT - BUSINESS PBX                           |                                      |                            |                        |                                   |                            |                                              |                             |  |  | TIME: 07:42 AM        |  |
| COMPANY: CINCINNATI BELL TEL |                 |                                                               |                                      |                            |                        |                                   |                            |                                              |                             |  |  |                       |  |
| CITY / AREA: OHIO            |                 |                                                               |                                      |                            |                        |                                   |                            |                                              |                             |  |  |                       |  |
| STATE / PROV: CINCINNATI     |                 |                                                               |                                      |                            |                        |                                   |                            |                                              |                             |  |  |                       |  |
| PLANT ITEM                   | PLANT ACCT CODE | 1996 TO 1996 TPI [L]                                          | 1996 UNIT LOOP INVESTMENT BY ACCOUNT |                            | ANNUAL COST FACTOR [N] | 1996 UNIT ANNUAL COSTS BY ACCOUNT |                            | 1996 UNIT MONTHLY RECURRING COSTS BY ACCOUNT |                             |  |  |                       |  |
|                              |                 |                                                               | SHARED RESOURCES [M=K*L]             | DIRECT RESOURCES [M'=K'*L] |                        | SHARED RESOURCES [P=M*N]          | DIRECT RESOURCES [P'=M'*N] | SHARED RESOURCES [R=P/12]                    | DIRECT RESOURCES [R'=P'/12] |  |  |                       |  |
| LAND                         | 20C             | 1.0000                                                        |                                      |                            | 0.2322                 |                                   |                            |                                              |                             |  |  |                       |  |
| BUILDING                     | 10C             | 1.0000                                                        |                                      |                            | 0.2937                 |                                   |                            |                                              |                             |  |  |                       |  |
| BLDG ENTRANCE CABLE          | 12C             | 1.0000                                                        |                                      |                            | 0.3922                 |                                   |                            |                                              |                             |  |  |                       |  |
| INTRABLDG CABLE              | 52C             | 1.0000                                                        |                                      |                            | 0.3922                 |                                   |                            |                                              |                             |  |  |                       |  |
| AERIAL CABLE (COPPER)        | 22C             | 1.0000                                                        |                                      |                            | 0.4033                 |                                   |                            |                                              |                             |  |  |                       |  |
| BURIED CABLE (COPPER)        | 45C             | 1.0000                                                        |                                      |                            | 0.3467                 |                                   |                            |                                              |                             |  |  |                       |  |
| UNDERGROUND (CU) CA.         | 5C              | 1.0000                                                        |                                      |                            | 0.3663                 |                                   |                            |                                              |                             |  |  |                       |  |
| CO EQPT - P GAIN TERM        | 257C            | 1.0000                                                        |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |  |  |                       |  |
| CO EQPT - P GAIN CHAN        | 257C            | 1.0000                                                        |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |  |  |                       |  |
| CO EQPT - FO MUX TERM        | 857C            | 1.0000                                                        |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |  |  |                       |  |
| CO EQPT - FO MUX CHAN        | 857C            | 1.0000                                                        |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |  |  |                       |  |
| CO EQPT - ESS - ANALOG       | 77C             | 1.0000                                                        |                                      |                            | 0.0000                 |                                   |                            |                                              |                             |  |  |                       |  |
| CO EQPT - ESS - DIGITAL      | 377C            | 1.0000                                                        |                                      |                            | 0.3458                 |                                   |                            |                                              |                             |  |  |                       |  |
| AERIAL CABLE (FIBER)         | 822C            | 1.0000                                                        |                                      |                            | 0.2983                 |                                   |                            |                                              |                             |  |  |                       |  |
| BURIED CABLE (FIBER)         | 845C            | 1.0000                                                        |                                      |                            | 0.2724                 |                                   |                            |                                              |                             |  |  |                       |  |
| UNDERGROUND (FO) CA.         | 85C             | 1.0000                                                        |                                      |                            | 0.2689                 |                                   |                            |                                              |                             |  |  |                       |  |
| CONNECTORS                   | 57C             | 1.0000                                                        |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |  |  |                       |  |
| MISC. COM EQP & PWR          | 57C             | 1.0000                                                        |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |  |  |                       |  |
| POLE LINE                    | 1C              | 1.0000                                                        |                                      |                            | 0.3807                 |                                   |                            |                                              |                             |  |  |                       |  |
| CONDUIT                      | 4C              | 1.0000                                                        |                                      |                            | 0.2521                 |                                   |                            |                                              |                             |  |  |                       |  |
| TOTALS                       |                 |                                                               |                                      |                            |                        |                                   |                            |                                              |                             |  |  |                       |  |
|                              |                 |                                                               | \$ 0                                 | \$ 0                       |                        | \$ 0.00                           | \$ 0.00                    | \$ 0.00                                      | \$ 0.00                     |  |  |                       |  |
|                              |                 |                                                               |                                      |                            |                        |                                   |                            |                                              |                             |  |  |                       |  |
|                              |                 |                                                               |                                      | \$ 0                       |                        |                                   | \$ 0.00                    |                                              | \$ 0.00                     |  |  |                       |  |
|                              |                 |                                                               |                                      | FEEDISY                    |                        |                                   | FEEDISY                    |                                              | FEED1MRC                    |  |  |                       |  |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

**FOOTNOTES**  
NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.  
NOTE 2: AN INVESTMENT - ONLY STUDY NEGATES ANNUAL COST COMPUTATION.  
HOWEVER, THIS COLUMN IS PRESENTED FOR CONSISTENCY OF FORMAT ONLY.



C:\123R24\LCAT\CALC\FOPRGN

Bellcore (R)

RUN - FO MUX

LAST UPDATE

27-Jan-97

14:41

## LOOP COST ANALYSIS TOOL

LCAT

Release: 1.0.4

Issued: 7/31/95

## FEEDER SEGMENT COST MODEL - FIBER IN THE LOOP TECHNOLOGY

STUDY NAME: 1996 BAND 1 (OHIO ONLY) BUSINESS PBX 0 - 12000 FEET INTRASTATE

CURRENT TEST PLAN :

|                    |           |            |
|--------------------|-----------|------------|
| CURRENT JOB IDENT. |           | CINCINNATI |
| BASIS              | NETWORK   | TEST CASE  |
| FR / DS            | FLAT RATE | #BANDS     |
| SVC LEVEL          | NARBAND   | #CKTS      |
| CST METH           | UN INCR   | INV LEVEL  |
|                    |           | ANN COST   |

....your run is finished

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

PROPRIETARY - NOT FOR USE OR DISCLOSURE OUTSIDE Bellcore WITHOUT LICENSED PERMISSION

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| LOOP COST ANALYSIS TOOL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 | Bellcore            |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------------------|-----------------------------------|----------------------------------------|--------------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|-------------------------------------------------|---------------------|--|------------------------|---------------------|-----------------------------------|-----------------------------------|----------------------------------------|--------------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|-------------------------------------------------|----------------------|--|-----|-----------|-----|--|--|--|--|--|---|--------|----------|------|----------|------|--|------|--|--|-------------------|--------|----------|------|----------|------|--|------|--|--|------------------------|-----------|----------|------|----------|------|--|------|--|--|--|--|----------|--|--|--|--|--|--|--|
| BASIC INVESTMENT WORKSHEET                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 | LCAT Ref: 1.0.4     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| FOR PRIMARY FEEDER PLANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 | ISSUE DATE: 7/31/95 |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| FACILITY TYPE: FIBER IN THE LOOP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 | STUDY YR: 1995      |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| CIRCUIT DESIGN: 3 FOMUX TO HUB / REM.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 | TEST CASE: 1        |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| SERVICE CLASS: BAND 1 - BUSIN SERVICE LEVEL: NARROW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 | LAST RUN: 26-Jan-97 |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 | TIME: 07:43         |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| from stdr_tbl: 5765 cur_stdrlgth 0 cur_pnlgth<br>from bw_mix: f = 1979.04 wtdeqvmn                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| CABLE COMPONENTS (NOTE 5)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| <table border="1"> <thead> <tr> <th>SEGMENT LENGTH IN FEET</th> <th>TYPE OF CABLE PLANT</th> <th>RELATIVE MIX OF TYPE OF CA. PLANT</th> <th>EFFECTIVE LENGTH BY TYPE OF PLANT</th> <th>MLD CABLE DESIGN INVEST. PER PAIR FOOT</th> <th>WEIGHTED EFFECTIVE LGTH CABLE INVESTMENT [E=C*D]</th> <th>WEIGHTED TERMINAL INVESTMENT [UI*DTC]</th> <th>AIR DRYER INVESTMENT PER PAIR [E*tdr]</th> <th>DROP WIRE ADJUSTMENT PER PAIR [E*tdr]</th> <th>WEIGHTED DROP WIRE INVESTMENT PER PAIR [UI*DTC]</th> </tr> </thead> <tbody> <tr> <td>fo3pri_seglength [A]</td> <td></td> <td>[B]</td> <td>[C=A*B/F]</td> <td>[D]</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>0</td> <td>AERIAL</td> <td>0.180000</td> <td>0.00</td> <td>0.282300</td> <td>0.00</td> <td></td> <td>0.00</td> <td></td> <td></td> </tr> <tr> <td>CO TO HUB LINK ON</td> <td>BURIED</td> <td>0.000000</td> <td>0.00</td> <td>0.269400</td> <td>0.00</td> <td></td> <td>0.00</td> <td></td> <td></td> </tr> <tr> <td>FIBER OPTIC FACILITIES</td> <td>UNDERGRND</td> <td>0.820000</td> <td>0.00</td> <td>0.168600</td> <td>0.00</td> <td></td> <td>0.00</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>1.000000</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>                                                                                                      |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  | SEGMENT LENGTH IN FEET | TYPE OF CABLE PLANT | RELATIVE MIX OF TYPE OF CA. PLANT | EFFECTIVE LENGTH BY TYPE OF PLANT | MLD CABLE DESIGN INVEST. PER PAIR FOOT | WEIGHTED EFFECTIVE LGTH CABLE INVESTMENT [E=C*D] | WEIGHTED TERMINAL INVESTMENT [UI*DTC] | AIR DRYER INVESTMENT PER PAIR [E*tdr] | DROP WIRE ADJUSTMENT PER PAIR [E*tdr] | WEIGHTED DROP WIRE INVESTMENT PER PAIR [UI*DTC] | fo3pri_seglength [A] |  | [B] | [C=A*B/F] | [D] |  |  |  |  |  | 0 | AERIAL | 0.180000 | 0.00 | 0.282300 | 0.00 |  | 0.00 |  |  | CO TO HUB LINK ON | BURIED | 0.000000 | 0.00 | 0.269400 | 0.00 |  | 0.00 |  |  | FIBER OPTIC FACILITIES | UNDERGRND | 0.820000 | 0.00 | 0.168600 | 0.00 |  | 0.00 |  |  |  |  | 1.000000 |  |  |  |  |  |  |  |
| SEGMENT LENGTH IN FEET                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TYPE OF CABLE PLANT | RELATIVE MIX OF TYPE OF CA. PLANT | EFFECTIVE LENGTH BY TYPE OF PLANT | MLD CABLE DESIGN INVEST. PER PAIR FOOT | WEIGHTED EFFECTIVE LGTH CABLE INVESTMENT [E=C*D] | WEIGHTED TERMINAL INVESTMENT [UI*DTC] | AIR DRYER INVESTMENT PER PAIR [E*tdr] | DROP WIRE ADJUSTMENT PER PAIR [E*tdr] | WEIGHTED DROP WIRE INVESTMENT PER PAIR [UI*DTC] |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| fo3pri_seglength [A]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     | [B]                               | [C=A*B/F]                         | [D]                                    |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | AERIAL              | 0.180000                          | 0.00                              | 0.282300                               | 0.00                                             |                                       | 0.00                                  |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| CO TO HUB LINK ON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | BURIED              | 0.000000                          | 0.00                              | 0.269400                               | 0.00                                             |                                       | 0.00                                  |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| FIBER OPTIC FACILITIES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | UNDERGRND           | 0.820000                          | 0.00                              | 0.168600                               | 0.00                                             |                                       | 0.00                                  |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                     | 1.000000                          |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| EQUIPMENT INVESTMENT LOADINGS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| INVST. PER CHAN. FOR CA TERM (CA CONN) = \$ 0.00<br>MISC. COM. EQPT. & POWER FACTOR (DLCrem) = 0.1127<br>MISC. COM. EQPT. & POWER FACTOR (MUXrem) = 0.1127<br>MISC. COM. EQPT. & POWER FACTOR (OTHrem) = 0.1127<br>MISC. COM. EQPT. & POWER FACTOR (MUXc.o.) = 0.1127<br>MISC. COM. EQPT. & POWER FACTOR (DLCc.o.) = 0.1127<br>MISC. COM. EQPT. & POWER FACTOR (OTHc.o.) = 0.1127<br>MCE&P INVST. (MUXc.o.+DLCc.o.) x MCEPfc.o.) = \$ 13.71<br>MCE&P INVST. (MUXrem+DLCrem) x MCEPfc.o.) = \$ 17.77<br>MCE&P INVST. (CA CONN x MCEPfc.o.) = \$ 0.00<br>MCE&P INVST. (CA CONN x MCEPfc.o.) = \$ 0.00<br>LAND FACTOR FOR MUX EQP (LANDfrem) = 0.0056<br>LAND FACTOR FOR MUX EQP (LANDfrem) = 0.0056<br>LAND FACTOR FOR OTH (LANDfrem) = 0.0056<br>LAND FACTOR FOR DLC EQP (LANDfc.o.) = 0.0056<br>LAND FACTOR FOR MUX EQP (LANDfc.o.) = 0.0056<br>LAND FACTOR FOR OTH (LANDfc.o.) = 0.0056<br>LAND INVST. (DLC+MUX+MCEP) x LANDfc.o. = \$ 0.76<br>LAND INVST. (MUX+DLC+MCEP) x LANDfc.o. = \$ 0.98<br>BUILDING FACTOR FOR MUX EQP (BLDGfrem) = 0.1316<br>BUILDING FACTOR FOR MUX EQP (BLDGfrem) = 0.1316<br>BUILDING FACTOR FOR OTH (BLDGfrem) = 0.1316<br>BUILDING FACTOR FOR MUX EQP (BLDGfc.o.) = 0.1316<br>BUILDING FACTOR FOR MUX EQP (BLDGfc.o.) = 0.1316<br>BUILDING FACTOR FOR OTH (BLDGfc.o.) = 0.1316<br>BLDG INVST. (MUX+DLC+MCEP) x BLDGfc.o. = \$ 17.81<br>BLDG INVST. (MUX+DLC+MCEP) x BLDGfc.o. = \$ 23.09 |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| OUTSIDE PLANT LOADINGS (NOTE 5):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| ADJUST. / LOAD FACTORS TO AERIAL PFI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| ADJUST. / LOAD FACTORS TO BURIED PFI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| ADJUST. / LOAD FACTORS TO UGD PFI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| DLC EQUIPMENT INVEST. (NOTE 2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| INT DLC EQUIP INVEST. (CU COMUX) =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| INT DLC EQUIP INVEST. (CU RTMUX) =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| UNIV DLC EQUIP INVEST. (CU COMUX) =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| UNIV DLC EQUIP INVEST. (CU RTMUX) =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| FIBER MUX EQUIP. INV. (FO COMUX) =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| FIBER MUX EQUIP. INV. (FO RTMUX) =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| OTHER INVESTMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| POLE LINE FACTOR (PLf) =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| POLE LINE INVESTMENT (UTIL AERIAL INVEST. x PLf) =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| UNDERGROUND CONDUIT FACTOR (PLf) =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| CONDUIT INVESTMENT (UTIL UNDERGRND INVST x UCF) =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| LOOP TOPOLOGY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| STAR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| AVERAGE NUMBER OF HUBS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| ADDITIONAL LENGTH OF RING OSP REQUIRED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| MIX OF CENT. OFC. ANALOG INTFC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| MIX OF CENT. OFC. DIGITAL INTFC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| MIX OF UNIVERSAL DLC INTFC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| MIX OF CENT. OFC. INTEGRATED DLC INTFC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| FOOTNOTES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| NOTE 2: THE SUBSCRIBER LINE CARRIER EQUIPMENT INVESTMENTS ARE DEVELOPED OUTSIDE OF THE SPREADSHEET WITH APPROPRIATE UTILIZATION FACTORS APPLIED.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| NOTE 3: TABLE 4 DEVELOPMENT IS SHOWN ON WORKSHEET B; FOR 4 WIRE SERVICES, TABLE 4 IS MULT BY 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| NOTE 4: THIS ADJUSTMENT MAY ONLY BE TAKEN AGAINST COPPER PLANT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |
| NOTE 5: ALL DROP WIRE AND PREMISES CONN. INVEST. IS INCLUDED IN THE APPROPRIATE CABLE ACCOUNT ON THE BUILDING CABLE & TERMINATION WORKSHEET AND INCORPORATED INTO WORKSHEET E.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                     |  |                        |                     |                                   |                                   |                                        |                                                  |                                       |                                       |                                       |                                                 |                      |  |     |           |     |  |  |  |  |  |   |        |          |      |          |      |  |      |  |  |                   |        |          |      |          |      |  |      |  |  |                        |           |          |      |          |      |  |      |  |  |  |  |          |  |  |  |  |  |  |  |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.



J:\123R24\LCAT\CALC\DIST

**Bellcore** (R)

RUN - DIST PLNT

LCAT

Release: 1.0.4

Issued: 8/31/95

LAST UPDATE

27-Jan-97

14:40

**LOOP COST ANALYSIS TOOL****DISTRIBUTION SEGMENT COST MODEL - BASIC COPPER TECHNOLOGY**

STUDY NAME: 1996 BAND 1 (OHIO ONLY) BUSINESS PBX 0 - 12000 FEET INTRAS

CURRENT TEST PLAN :

CURRENT JOB IDENT: CINCINNATI

|           |           |           |          |
|-----------|-----------|-----------|----------|
| BASIS     | NETWORK   | TEST CASE | 1        |
| FR / DS   | FLAT RATE | #BANDS    | 0        |
| SVC LEVEL | NARBAND   | #CKTS     | 1        |
| CST METH  | UN INCR   | INV LEVEL | ANN COST |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

PROPRIETARY - NOT FOR USE OR DISCLOSURE OUTSIDE Bellcore WITHOUT LICENSED PERMISSION

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**



| CA123R24/LCATR027 CRITERIA                             |  | LOOP COST ANALYSIS TOOL                                        |  | Bellcore (R)                                |  |
|--------------------------------------------------------|--|----------------------------------------------------------------|--|---------------------------------------------|--|
| INPUT - STUDY SETUP                                    |  | GENERAL STUDY REQUIREMENTS                                     |  | TODAY IS: 28-Jan-97                         |  |
| LCAT Rel.: 1.0.4                                       |  |                                                                |  | LAST UPDATE:                                |  |
| Issue Date: 3/31/95                                    |  |                                                                |  | 28-Oct-96 08:50 AM                          |  |
| STUDY NAME                                             |  | 1996 BAND 1 (OHIO ONLY) BUSINESS PBX 0 - 12000 FEET INTRASTATE |  |                                             |  |
| COMMENTS                                               |  |                                                                |  |                                             |  |
| SERVICE CLASS                                          |  | BAND 1 - BUSINESS PBX                                          |  | STUDY BASIS                                 |  |
|                                                        |  |                                                                |  | <input checked="" type="checkbox"/> NETWORK |  |
|                                                        |  |                                                                |  | <input type="checkbox"/> INDIVIDUAL         |  |
| COMPANY                                                |  | CINCINNATI BELL TEL.                                           |  | INVESTMENT YEAR                             |  |
|                                                        |  |                                                                |  | 1996                                        |  |
| STATE / PROVINCE                                       |  | OHIO                                                           |  | LOOP CHAR. STUDY YEAR                       |  |
|                                                        |  |                                                                |  | 1996                                        |  |
| CITY / AREA                                            |  | CINCINNATI                                                     |  | STUDY YEAR                                  |  |
|                                                        |  |                                                                |  | 1996                                        |  |
| DENSITY CELL MIX                                       |  | 0 100 0 0                                                      |  | TEST CASE                                   |  |
|                                                        |  | VH HI MED LO                                                   |  | 1                                           |  |
| DIGITAL LOOP CARRIER FACILITIES INCLUDED IN THE STUDY: |  |                                                                |  |                                             |  |
| Type Percent Mix:                                      |  |                                                                |  |                                             |  |
| 100 FIBER IN THE LOOP                                  |  |                                                                |  |                                             |  |
| 0 COPPER DIG LOOP CXR                                  |  |                                                                |  |                                             |  |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

CH123R24 LCAT027/CRITERIA  
INPUT - STUDY SETUP  
Sheet 1 of 2

HELP SCREENBelcore<sup>®</sup>

LCAT Rel. 1.0.4

ISSUED: 3/31/95

**THIS DISPLAY** This display's data and the data on the subsequent display are a record of this study's criteria and the system's parameters and is the TITLE PAGE of this study. Printouts should accompany the input, worksheets, and results.

**STUDY NAME** Enter in Free Form up to 35 Characters for a Study Title. This data will be inserted in the title box of the title display of each run module.

**COMMENTS** Enter in Free Form (as in a Word Processor) FOUR lines (Word Wrap is active) of Commentary that will help Explain the study criteria and rationale. The space will allow approximately 72 proportionately spaced characters per line, 288 total. To begin just start typing in the data after <Enter>ing the previous item. The character guide will appear after the first character is entered. Data can be edited in the normal WP manner, using the <BS>, <Del>, <Up>, <Dn>, etc... keys. PRESS THE < Enter > KEY TO STOP INPUTTING DATA.

**STUDY BASIS** Select with an 'X' either an average NETWORK study or an INDIVIDUAL CASE study.

**FACILITY TYPE** Select by entering the percent of technology mix, the Facility types in the loop network that support the service/s/ under study or enter an 'X' to denote inclusion.

**CELL DENSITY** Select by entering the percent of cell density mix, based upon the service area jurisdiction and the definitions of the cell layers: C1, C2, C3, C4; which represent the VERY HIGH, HIGH, MEDIUM, LOW qualifiers, such as, METRO, URBAN, SUBURBAN, and RURAL.

\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR INFORMATION  
\*\*\*\*\* CONCERNING ANY OTHER DATA INPUT ITEMS ON THIS DISPLAY \*\*\*\*\*  
PRESS < Enter > KEY TO RETURN TO THE MAIN MENU

**CONFIDENTIAL**  
ALL INFORMATION CONTAINED HEREIN  
MUST BE GIVEN  
TO THE PUBLIC  
UPON REQUEST  
PROVIDED TO PUC

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATRC27.CP.TERIA                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | LOOP COST ANALYSIS TOOL                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Bellcore <sup>®</sup>                                                                                              |           |     |          |   |            |   |     |     |   |   |       |            |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-----------|-----|----------|---|------------|---|-----|-----|---|---|-------|------------|
| <b>INPUT - STUDY SET-UP</b><br>SHEET 2 / 2<br><br>COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>GENERAL STUDY REQUIREMENTS</b><br><b>STUDY QUESTIONS</b><br>FOR<br>INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 1 - BUSINESS PBX                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | LCAT Rel. 1.0.4<br>ISSUED: 3/31/95<br>STUDY YEAR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 28-Oct-96<br>TIME: 08:50 AM |           |     |          |   |            |   |     |     |   |   |       |            |
| SELECTED QUESTIONS                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    |           |     |          |   |            |   |     |     |   |   |       |            |
| CONCERNING -<br>SERVICE SPEC.                                                                                                    | 1. Is this Study for a NEW Installation or an ADDITION ? .....<br>2. Is this Study for a SWITCHED or PRIVATE LINE Service ? .....<br>3. Is this Study for Narrow, Wide, or Broadband Services .....<br>4. Is this Study for 2 Wire or 4 Wire Transmission ? .....                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    |           |     |          |   |            |   |     |     |   |   |       |            |
| OFFICE CHAR.                                                                                                                     | 5. What Percent of the C.O. Switch Installations are DIGITAL Switches? .....<br>6. What Percent of Loop Carrier Installations are INTEGRATED DLC's? .....<br>7. What Percent of Loop Carrier Cross-connects are Electronic DCS's? .....<br>8. Deploy Digital Loop Carrier (loop pair gain) exclusively at ? .....                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    |           |     |          |   |            |   |     |     |   |   |       |            |
| RESULTS SPEC.                                                                                                                    | 9. Do you want FLAT RATE or DISTANCE SENSITIVE parameters ? .....<br>9a. If Distance Sensitive, what band increment do you want ? .....<br>10. How many Cost Bands in this study ? .....<br>11. Should this Study result in Investment, Cost, or All values ? .....<br>12. Is this study for Total Incremental or Marginal Costs ? .....<br>13. How many circuits (loops) in this Study ? .....<br>14. The study classification is .....(e.g., RATES PLAN, TEST DATA, NEW SERVICE)<br>Required for the "Footer" of each Report page. |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    |           |     |          |   |            |   |     |     |   |   |       |            |
|                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | VALID<br>RESPONSE                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    |           |     |          |   |            |   |     |     |   |   |       |            |
|                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | SET<br>N or A<br>S or P<br>N, W or B<br>2 or 4<br><br>0 → 100<br>0 → 100<br>0 → 100<br>e.g., 12000                                                                                                                                                                                                                                                                                                                                           | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%;">NEW</td><td style="width: 20%; text-align: center;">100</td></tr> <tr><td>SWITCHED</td><td style="text-align: center;">0</td></tr> <tr><td>NARROWBAND</td><td style="text-align: center;">2</td></tr> <tr><td>100</td><td style="text-align: center;">100</td></tr> <tr><td>0</td><td style="text-align: center;">0</td></tr> <tr><td>12000</td><td style="text-align: center;">12000 Feet</td></tr> </table> |                                                                                                                    | NEW       | 100 | SWITCHED | 0 | NARROWBAND | 2 | 100 | 100 | 0 | 0 | 12000 | 12000 Feet |
| NEW                                                                                                                              | 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    |           |     |          |   |            |   |     |     |   |   |       |            |
| SWITCHED                                                                                                                         | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    |           |     |          |   |            |   |     |     |   |   |       |            |
| NARROWBAND                                                                                                                       | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    |           |     |          |   |            |   |     |     |   |   |       |            |
| 100                                                                                                                              | 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    |           |     |          |   |            |   |     |     |   |   |       |            |
| 0                                                                                                                                | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    |           |     |          |   |            |   |     |     |   |   |       |            |
| 12000                                                                                                                            | 12000 Feet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    |           |     |          |   |            |   |     |     |   |   |       |            |
|                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | F or D<br>1,2,3,4<br>0 → 5<br>I, C or A<br>1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99 | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 80%;">FLAT RATE</td><td style="width: 20%; text-align: center;">0</td></tr> <tr><td>TOT INCR</td><td style="text-align: center;">0</td></tr> </table>                                                                                                                                                                                                                                                               |                                                                                                                    | FLAT RATE | 0   | TOT INCR | 0 |            |   |     |     |   |   |       |            |
| FLAT RATE                                                                                                                        | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    |           |     |          |   |            |   |     |     |   |   |       |            |
| TOT INCR                                                                                                                         | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                    |           |     |          |   |            |   |     |     |   |   |       |            |

CONFIDENTIAL  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |             |                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------|
| CA123R24\LCATR027\CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | HELP SCREEN | Belcore <sup>®</sup>               |
| INPUT - STUDY SETUP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |             | LCAT Rel. 1.0.4<br>ISSUED: 3/31/95 |
| <ol style="list-style-type: none"> <li>1. Specify <b>N</b> for New Installations or <b>A</b> for Addition to existing installations are being studied.</li> <li>2. Specify <b>S</b> for the Switched Services or <b>P</b> for the Private Line (Special) Service category.</li> <li>3. Specify <b>N</b> for Narrowband (DS0), <b>W</b> for Wideband (DS1), or <b>B</b> for Broadband Services category.</li> <li>4. Specify as <b>2</b> for 2-wire or <b>4</b> for 4-wire, the circuit transmission paths used by the service/s/ being studied.</li> <li>5. Specify Digital Switch Mix as a Percentage of Installations over Analog in the Jurisdiction.</li> <li>6. &amp; 7. Specify Integrated DLC Mix as a Percentage of the DLC equipment requirements.<br/>Using <b>6.</b> for Switched Services or Using <b>7.</b> for Special (Private Line) Services.</li> <li>8. Enter in feet, the loop length beyond which only Digital Loop Carrier Technology will be considered</li> <li>9. Specify <b>F</b> for Flat Rate Loop or <b>D</b> for Distance Sensitive Bands, for the Cost Structure of the study</li> <li>9A. Enter <b>1, 2, 3,</b> or <b>4</b> to specify either 1/4, 1/2, 3/4, or 1 mile, respectively, band increments in a <u>Distance Sensitive</u> Study</li> <li>10. Specify the quantity of Cost Bands of Loop Lengths will be studied, for upto a maximum of 5 bands.<br/>Enter <b>0</b> for Network Averaged (non-Banded) Input or Individual Circuit Flat Rate Cost Studies.</li> <li>11. Specify <b>I</b> for Investment Only results or <b>C</b> for resultant Annual and Monthly Recurring Costs or <b>A</b> for All values.</li> <li>12. Specify <b>T</b> for Total Incremental or <b>M</b> for Marginal (Direct Incremental) Average Weighted Costs Study.</li> <li>13. Enter the quantity of loop circuits that will be the demand basis of this cost study.<br/>Nominally, entering <b>1</b> provides a 'UNIT' cost and any other value, a 'TOTAL' cost.</li> </ol> |             |                                    |
| <p style="text-align: center;">CONFIDENTIAL<br/>NOTICE MUST BE GIVEN<br/>BEFORE RELEASE TO PUBLIC<br/>PROVIDED TO PUCO</p> <p style="text-align: center;">PRESS &lt;Enter&gt; KEY TO RETURN TO THE MAIN MENU</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |             |                                    |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

|                                                                                                                          |  |                                                                                                                                                 |  |                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------|
| C:\123R24\LCATR027\DESIGN                                                                                                |  | <b>LOOP COST ANALYSIS TOOL</b>                                                                                                                  |  | <b>Belcore</b>                                                                                                     |
| INPUT - LOOP_DESIGN<br>Sheet 1 / 1<br><br>COMPANY :CINCINNATI BELL TEL.<br>CITY / AREA :CINCINNATI<br>STATE / PROV :OHIO |  | CIRCUIT DESIGN REQUIREMENTS<br>CHARACTERISTICS<br>FOR<br>INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 1 - BUSINESS PBX |  | LCAT Rel :1.0.4<br>Issued :07/31/95<br>STUDY YR : 1996<br>TEST CASE : 1<br>LAST UPDATE : 28-Oct-96<br>TIME : 08:51 |

  

**CIRCUIT DESIGN**

|                  |  |                            |                        |                     |
|------------------|--|----------------------------|------------------------|---------------------|
| Study Parameters |  | Study Basis: NETWORK STUDY | Service Level: NARBAND | Loop Topology: STAR |
|------------------|--|----------------------------|------------------------|---------------------|

  

**CIRCUIT LAYOUT REQUIREMENTS -  
FOR FIBER HUBS & FEEDER EXTENSIONS**

(FIBER HUB TO REMOTE TERMINAL LINK)

**FACILITY INTERFACE SITES :**

Proportion of Fiber Circuits  
WITHOUT Fiber Hubs 0.0000

**FACILITY TECHNOLOGIES:**

Of the Hubbed Circuits -

Proportion of links on Fiber Tech. 0.0000

Proportion of links on CDLC / MAR 0.0000

**FOR SERVICE ACCESS NETWORK**

(REMOTE TERMINAL TO CUSTOMER LINK)

**FACILITY INTERFACE SITES :**

Proportion of Remote terminals  
colocated at Customer Premises 0.0000

**CIRCUIT DESIGN REQUIREMENTS -  
SELECTION & DISTRIBUTION:**

Note

**FOR FIBER DLC DESIGNS:**

|                        |           |
|------------------------|-----------|
| Weighting of Design #1 | 0.0000    |
| Weighting of Design #2 | 0.0000    |
| Weighting of Design #3 | 1.0000    |
| Weighting of Design #4 | NA 0.0000 |
| Weighting of Design #5 | NA 0.0000 |
| Weighting of Design #6 | NA 0.0000 |
|                        | 1.0000    |

ChkSum

  

**FOR COPPER DLC DESIGNS:**

|                        |           |
|------------------------|-----------|
| Weighting of Design #1 | 1.0000    |
| Weighting of Design #2 | NA 0.0000 |
|                        | 1.0000    |

ChkSum

**CONFIDENTIAL**

**NOTICE MUST BE GIVEN**

**PRIOR TO RELEASE TO PUBLIC**

NA DENOTES THAT THE CIRCUIT DESIGN  
PROBABLY DOES NOT APPLY TO THIS  
SET OF STUDY PARAMETERS.

C:\123R24\LCATR027\DESIGN  
 INPUT - LOOP\_DESIGN  
 Sheet: 1 of 1

HELP SCREEN

Bellcore

LCAT Rel :1.0.4  
 Issued :07/31/95

**DIGITAL LOOP  
CARRIER  
DESIGNS**

Each Loop's circuit layout is broken down into potentially the FEEDER, the DISTRIBUTION, and the DROP segment. The FEEDER segment can have THREE Spans, the PRIMARY and EXTENSION are realtime, but, the SUBFEEDER is a "filler" for spans or distances under PAIR GAIN Deployment and will be employed using engineering rules and network characteristics. The potential Fiber Optic DLC and Copper DLC circuit layouts have been categorized into several generic designs for purposes of narrowing down the complexity of the network contribution. The *DESIGN*s represent unique combinations of layers (COLLOCATION) and the transport media. There is a chart of these *DESIGN*s included in the DATA CATALOG and the METHODOLOGY sections of the User Guide.

**COLLOCATIONS**

To be defined as the combining of Loop functions at the same location, excluding the need for translation of the transport function (eliminating the OSP and termination equipment). Note that the sum of the probabilities do not have to equal total universe, therefore, the proportions are a function of the total serving universe (total loop network).

**FIBER HUBS &  
FEEDER  
EXTENSIONS**

These values represent the proportion of each technology used in the layouts which DO NOT have collocated FIBER HUB and REMOTE TERMINAL functions.

**WARNING** → This function must be in place for "RING" topologies as 100% FIBER, therefore, the *DESIGN* choices are limited for RING to *DESIGN*s 1 and 5. All other *DESIGN* are to be avoided.

**SERVICE  
SPECIFIC**

To avoid circuit layout conflict with certain service levels, the input choices will be limited for BROADBAND service levels to those which currently support DS3 Xcon at both ends. Currently, this is, *DESIGN* 4, 5, & 6.

\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR INFORMATION \*\*\*\*\*  
 \*\*\*\*\* CONCERNING ANY OTHER DATA INPUT ITEMS ON THIS DISPLAY. \*\*\*\*\*

PRESS < Enter > KEY TO RETURN TO THE MAIN MENU

**CONFIDENTIAL**  
 COPIES MUST BE GIVEN  
 TO PUCO  
 TO BE RELEASED TO PUBLIC

\\LCATR027\FACILITY  
SPAN\_INV  
/4

HELP\_SCREEN

**Bellcore** (R)  
LCAT Rel : 1.0.4  
Issued : 07/31/95

terna These terminals may include the Serving Area Interface Cross Box, Drop Wire Block, and/or the Network  
termb interface Block summary per circuit pair installation investment.

adropinv These facility investments may also include Drop Wire Block and/or Network Interface summary per circuit  
bdropinv pair installation investment.  
bec  
coaxinv

ibc This facility investment should include ALL the internal cross-connects and terminations for this type of  
installation as a circuit pair installation investment.

**CONFIDENTIAL**

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS - REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*

\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION \*\*\*\*\*

PRESS "ENTER" TO RETURN TO THE MAIN

**NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO**

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

| C:\123R24\LCATR027\FACILITY   |  | LOOP COST ANALYSIS TOOL                   |  | Belcore                |
|-------------------------------|--|-------------------------------------------|--|------------------------|
| TABLE - SPAN INV              |  | LOOP FACILITY INFO                        |  | LCAT Ver: 1.0.4        |
| SHEET 1A / 4                  |  | FIBER CABLE DATA - BY CABLE SHEATH DETAIL |  | Issued: 07/31/95       |
| COMPANY: CINCINNATI BELL TEL. |  | FOR                                       |  | STUDY YR: 1996         |
| CITY / AREA: CINCINNATI       |  | INVESTMENT YEAR: 1996                     |  | TEST CASE: 1           |
| STATE/PROV: OHIO              |  | LOOP STUDY YEAR: 1996                     |  | LAST UPDATE: 26-Oct-96 |
|                               |  | SERVICE CLASS: BAND 1 - BUSINESS PBX      |  | TIME: 08:54            |

## FIBER OPTIC CABLE INVESTMENT REFERENCE TABLE

| Cable Sheath Sizes |             | CAPACITY | Unit Investment per Cable Pair Foot, by Cable Type, by Cable Size |        |             |    |
|--------------------|-------------|----------|-------------------------------------------------------------------|--------|-------------|----|
|                    |             | INDEX    | AERIAL                                                            | BURIED | UNDERGROUND |    |
| 4                  | Fiber Cable | 2 pr     | \$                                                                | \$     | \$          | \$ |
| 6                  | Fiber Cable | 3 pr     | \$                                                                | \$     | \$          | \$ |
| 12                 | Fiber Cable | 6 pr     | \$                                                                | \$     | \$          | \$ |
| 18                 | Fiber Cable | 9 pr     | \$                                                                | \$     | \$          | \$ |
| 24                 | Fiber Cable | 12 pr    | \$                                                                | \$     | \$          | \$ |
| 36                 | Fiber Cable | 18 pr    | \$                                                                | \$     | \$          | \$ |
| 48                 | Fiber Cable | 24 pr    | \$                                                                | \$     | \$          | \$ |
| 60                 | Fiber Cable | 30 pr    | \$                                                                | \$     | \$          | \$ |
| 72                 | Fiber Cable | 36 pr    | \$                                                                | \$     | \$          | \$ |
| 84                 | Fiber Cable | 42 pr    | \$                                                                | \$     | \$          | \$ |
| 96                 | Fiber Cable | 48 pr    | \$                                                                | \$     | \$          | \$ |
| 144                | Fiber Cable | 72 pr    | \$                                                                | \$     | \$          | \$ |
| 192                | Fiber Cable | 96 pr    | \$                                                                | \$     | \$          | \$ |
| 216                | Fiber Cable | 108 pr   | \$                                                                | \$     | \$          | \$ |

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.



CA123R24\LCATR027\FACILITY  
TABLE - SPAN\_INV  
SHEET 1 / 4

HELP SCREEN

**Bellcore**  
LCAT Rel: 1.0.4  
Issued: 07/31/95

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*

\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION \*\*\*\*\*

PRESS 'ENTER' TO RETURN TO THE MAIN MENU

**CONFIDENTIAL**  
**NOTICE MUST BE GIVEN**  
**PRIOR TO RELEASE TO PUBLIC**  
**PROVIDED TO PUCO**

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**



| C:\123R24\LCATR027\FACILITY                                                                                                         |              | <b>LOOP COST ANALYSIS TOOL</b>                                                         |           |        |        |        |        |        |        |        |        | Bellcore                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------------------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|-------------------------------------------------------------------------|
| TABLE - SPAN INV<br>SHEET 2A / 4                                                                                                    |              | LOOP FACILITY INPUT<br>COPPER CABLE DATA - BY CABLE SHEATH DETAIL<br>FOR               |           |        |        |        |        |        |        |        |        | LCAT Ver: 1.0.4<br>Issued: 07/31/95                                     |
| COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OH-C                                                      |              | INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 1 - BUSINESS P9X |           |        |        |        |        |        |        |        |        | STUDY YR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 26-Oct-96<br>TIME: 08:54 |
| <b>COPPER CABLE INVESTMENT REFERENCE TABLE</b><br>Unit Investment Per Cable Pair Foot, By Cable Gauge, By Cable Type, By Cable Size |              |                                                                                        |           |        |        |        |        |        |        |        |        |                                                                         |
| Cable Sheath Sizes                                                                                                                  |              | Capacity                                                                               | Gauge: => | 26 GA. |        |        | 24 GA. |        |        | 22 GA. |        |                                                                         |
|                                                                                                                                     |              |                                                                                        | INDEX     | AERIAL | BURIED | UNDGRD | AERIAL | BURIED | UNDGRD | AERIAL | BURIED | UNDGRD                                                                  |
| 40                                                                                                                                  | Copper Cable | 20 pr                                                                                  | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 50                                                                                                                                  | Copper Cable | 25 pr                                                                                  | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 80                                                                                                                                  | Copper Cable | 40 pr                                                                                  | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 100                                                                                                                                 | Copper Cable | 50 pr                                                                                  | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 140                                                                                                                                 | Copper Cable | 70 pr                                                                                  | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 200                                                                                                                                 | Copper Cable | 100 pr                                                                                 | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 400                                                                                                                                 | Copper Cable | 200 pr                                                                                 | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 600                                                                                                                                 | Copper Cable | 300 pr                                                                                 | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 800                                                                                                                                 | Copper Cable | 400 pr                                                                                 | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 1200                                                                                                                                | Copper Cable | 600 pr                                                                                 | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 1800                                                                                                                                | Copper Cable | 900 pr                                                                                 | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 2400                                                                                                                                | Copper Cable | 1200 pr                                                                                | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 3000                                                                                                                                | Copper Cable | 1500 pr                                                                                | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 3600                                                                                                                                | Copper Cable | 1800 pr                                                                                | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 4200                                                                                                                                | Copper Cable | 2100 pr                                                                                | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 4800                                                                                                                                | Copper Cable | 2400 pr                                                                                | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 5400                                                                                                                                | Copper Cable | 2700 pr                                                                                | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 6000                                                                                                                                | Copper Cable | 3000 pr                                                                                | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 7200                                                                                                                                | Copper Cable | 3600 pr                                                                                | \$        |        |        |        |        |        |        |        |        |                                                                         |
| 8400                                                                                                                                | Copper Cable | 4200 pr                                                                                | \$        |        |        |        |        |        |        |        |        |                                                                         |

CONFIDENTIAL

NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATR027\FACILITY  
TABLE - SPAN\_INV  
SHEET 2 / 4

HELP SCREEN

**Bellcore**<sup>TM</sup>  
LCAT Rel: 1.0.4  
Issued: 07/31/95

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*

\*\*\*\*\*PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION\*\*\*\*\*

PRESS 'ENTER' TO RETURN TO THE MAIN MENU

**CONFIDENTIAL**  
**NOTICE MUST BE GIVEN**  
**PRIOR TO RELEASE TO PUBLIC**  
**PROVIDED TO PUCO**

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

LCAT

INPUT SCREEN

Page -1-

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

C:\123R24\LCATR027\FACILITY.WK1

## LOOP COST ANALYSIS TOOL

Bellcore<sup>®</sup>SPAN INV - WORKSHEET  
Sheet 1 / 3COPPER CABLE DISTRIBUTIONS MELDING  
WORKSHEET ALCAT Ver: 1.0.3  
Issue Date: 07/31/95  
STUDY YR: 1996  
TEST CASE: 1996  
DATE: 1  
LAST UPDATE: 28-Oct-96  
TIME: 08:54COMPANY: CINCINNATI BELL TEL.  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIOFACILITY TYPE: COPPER CABLE  
DESIGN TYPE: DISTRIBUTION SEGMENT

SERVICE CLASS: BAND 1 - BUSINESS PBX

## MELDED CABLE INVESTMENT PER PAIR FOOT

| DATA<br>DESC.         | (DISTRIBUTION<br>TO CODE)<br>CABLE TYPE MIX<br>(p...dst) | PER FOOT<br>INVESTMENT<br>(pfi..ds) | CABLE<br>GAUGE MIX<br>(copper..dst) | ADJUSTED<br>CABLE TYPE | ADJUSTED<br>PFI |
|-----------------------|----------------------------------------------------------|-------------------------------------|-------------------------------------|------------------------|-----------------|
| CHARACTERISTICS FOR : | [A]                                                      | [B]                                 | [C]                                 | [D=A*C]                | [E=B*C]         |
| AERIAL @ 26 GA.       | 0.590000                                                 | \$ 0.039700                         | 0.1500                              | 0.088500               | \$ 0.005855     |
| BURIED @ 26 GA.       | 0.160000                                                 | \$ 0.065700                         | 0.1500                              | 0.024000               | \$ 0.009855     |
| UNDGRND @ 26 GA.      | 0.250000                                                 | \$ 0.056900                         | 0.1500                              | 0.037500               | \$ 0.008535     |
| AERIAL @ 24 GA.       | 0.590000                                                 | \$ 0.039700                         | 0.8500                              | 0.501500               | \$ 0.033745     |
| BURIED @ 24 GA.       | 0.160000                                                 | \$ 0.065700                         | 0.8500                              | 0.136000               | \$ 0.055845     |
| UNDGRND @ 24 GA.      | 0.250000                                                 | \$ 0.056900                         | 0.8500                              | 0.212500               | \$ 0.048385     |
| AERIAL @ 22 GA.       | 0.000000                                                 | \$ 0.000000                         | 0.0000                              | 0.000000               | \$ 0.000000     |
| BURIED @ 22 GA.       | 0.000000                                                 | \$ 0.000000                         | 0.0000                              | 0.000000               | \$ 0.000000     |
| UNDGRND @ 22 GA.      | 0.000000                                                 | \$ 0.000000                         | 0.0000                              | 0.000000               | \$ 0.000000     |

Check = 1.00

--- TABLE 2 ---

--- TABLE 4 ---

--- TABLE 6 ---

| DATA<br>DESC.         | CABLE TYPE MIX<br>RANGE<br>NAME | MELDED<br>GAUGES |
|-----------------------|---------------------------------|------------------|
| CHARACTERISTICS FOR : | [F=sum(D*TYPE)]                 |                  |
| AERIAL                | 0.590000                        |                  |
| BURIED                | 0.160000                        |                  |
| UNDERGRND             | 0.250000                        |                  |

Check = 1.000000

| PAIR / FOOT INVESTMENT<br>RANGE<br>NAME | MELDED<br>GAUGES |
|-----------------------------------------|------------------|
| [G=sum(E*TYPE)]                         |                  |
| \$ 0.039700                             |                  |
| \$ 0.065700                             |                  |
| \$ 0.056900                             |                  |

PAIR / FOOT INVESTMENT  
RENORMALIZED  
AERIAL / BURIED

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

Check = 1.000000

## FOOTNOTES

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**



| C:\123R24\LCATR027\FACILITY                                                                                                                                                                                                                                                                                                                                                                                            |                                                                       | <b>LOOP COST ANALYSIS TOOL</b>                                                                                                                         |  | Bellcore                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------|
| TABLE - SPAN_INV<br>SHEET 3 / 4<br><br>COMPANY: CINCINNATI BELL TEL<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO                                                                                                                                                                                                                                                                                                   |                                                                       | LOOP FACILITY INPUT<br>COPPER PAIR GAIN CABLE DATA<br>FOR<br>INVESTMENT YEAR : 1996<br>LOOP STUDY YEAR : 1996<br>SERVICE CLASS : BAND 1 - BUSINESS PBX |  | LCAT Rel : 1.0.4<br>Issued : 07/31/95<br>STUDY YR : 1996<br>TEST CASE : 1<br>LAST UPDATE : 28-Oct-96<br>TIME : 08:54 |
| <b><u>COPPER CABLE CHARACTERISTICS FOR CDLC SYSTEMS</u></b>                                                                                                                                                                                                                                                                                                                                                            |                                                                       |                                                                                                                                                        |  |                                                                                                                      |
| <b><u>FOR DLC SYSTEMS ON COPPER LOOPS</u></b>                                                                                                                                                                                                                                                                                                                                                                          |                                                                       |                                                                                                                                                        |  |                                                                                                                      |
| Cable Gauge :                                                                                                                                                                                                                                                                                                                                                                                                          | Please Enter the NUMBER for 22 GA., 24 GA., or 26 GA. :               |                                                                                                                                                        |  | 24                                                                                                                   |
| Pair Gain Factor :                                                                                                                                                                                                                                                                                                                                                                                                     | (When Investment Utilities or Band Width Mix are NOT Used)            |                                                                                                                                                        |  |                                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                        | The Average Number Of Voice Grade Circuit Equivalents Per System :    |                                                                                                                                                        |  | 96                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                        | The Average Number Of Transmission Pairs Plus Protection Per System : |                                                                                                                                                        |  | 10                                                                                                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                        | The Average Number Of Support (Power, Alarm, Etc) Pairs Per System :  |                                                                                                                                                        |  | 2                                                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                        | Ratio Of Required Pairs To Derived Pairs [ Pair Gain Factor ] :       |                                                                                                                                                        |  | 0.1250                                                                                                               |
| <b>NOTE:</b><br>① The value represents the extent to which copper pairs are gained. For example, A 96 Channel System uses 4 Transmit Pairs, 4 Receive Pairs, 2 Protection Pairs and 2 Support Pairs (Test and Order Wire). Then the Derived Pairs would be the Sum of the Pairs divided by the Working Channels Or $(10 + 2) / 96 = 0.125$ . When applied to segment length, it becomes the Effective Length per Pair. |                                                                       |                                                                                                                                                        |  |                                                                                                                      |

**CONFIDENTIAL**  
 WORKS MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO RUCO

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

CM123R24\LCATR027\FACILITY  
TABLE - SPAN\_INV  
SHEET 3 / 4

HELP SCREEN

**Bellcore**®  
LCAT Rel : 07/31/95  
Issued : 07/31/95

|          |                                                                                                                                                                         |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| pggauge  | In CSA rules, a single gauge is preferred for CDLC                                                                                                                      |
| vgcheqv  | Each CDLC has a voice grade equivalent, usually referred to as a ____ Channel System.<br>Domestic systems are basic 96 Channel, whereas, international are 120 Channel  |
| xmsnpr   | CDLC uses a Transmit/Receive Pair for each direction (unidirectional), therefore, the basic<br>structure is four sets of two pairs plus one protection set ( 10 pairs ) |
| suptpr   | CDLC is customarily supported by a power pair and an alarm pair ( 2 pair)                                                                                               |
| pgfactor | Where : pgfactor = ( # of xmsnpr + # of suptpr ) / vgcheqv                                                                                                              |

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS - REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*

\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION \*\*\*\*\*

PRESS "ENTER" TO RETURN TO THE MAIN MENU

**CONFIDENTIAL**  
**NOTICE MUST BE GIVEN**  
**PRIOR TO RELEASE TO PUBLIC**  
**PROVIDED TO PUCO**

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR027\FACILITY.WK1                                                                             |                                                                   | <b>LOOP COST ANALYSIS TOOL</b>                                                                                    |                                                              | Bellcore (R)                                                                                      |
|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| SPAN INV - WORKSHEET<br>Sheet 3 / 3                                                                         |                                                                   | COPPER CABLE DISTRIBUTIONS MELDING<br>WORKSHEET B                                                                 |                                                              | LCAT Ver: 1.0.4<br>Issue Date: 07/31/95                                                           |
| COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: OHIO<br>STATE / PROV: CINCINNATI                              |                                                                   | FOR<br>FACILITY TYPE: COPPER CABLE for DLC<br>DESIGN TYPE: FEEDER SEGMENT<br>SERVICE CLASS: BAND 1 - BUSINESS PBX |                                                              | STUDY YR: 1996<br>TEST CASE: 1996<br>DATE: 1<br>LAST UPDATE: 28-Oct-96<br>TIME: 03:54             |
| INVESTMENT DEVELOPMENT FOR:                                                                                 |                                                                   | MELDED CABLE INVESTMENT PER PAIR FOOT<br>LINE REPEATER EQUIPMENT                                                  |                                                              |                                                                                                   |
| DESCRIPTION                                                                                                 | REPEATER<br>SPACING                                               | UNIT<br>REPEATER<br>INVESTMENT                                                                                    | REPEATER<br>INVEST.<br>PER FOOT                              |                                                                                                   |
|                                                                                                             | [A]                                                               | [B]                                                                                                               | [C=B/A]                                                      |                                                                                                   |
| LINE REPEATER AT 26 GA.                                                                                     | 3500                                                              | \$ 0                                                                                                              | \$ 0.000000                                                  |                                                                                                   |
| LINE REPEATER AT 24 GA.                                                                                     | 4500                                                              | \$ 0                                                                                                              | \$ 0.000000                                                  |                                                                                                   |
| LINE REPEATER AT 22 GA.                                                                                     | 5500                                                              | \$ 0                                                                                                              | \$ 0.000000                                                  |                                                                                                   |
| TABLE 4 DEVELOPMENT FOR:                                                                                    |                                                                   | COPPER CABLE UNIT INVESTMENT                                                                                      |                                                              |                                                                                                   |
| ADJUSTED<br>PAIR / FOOT INVESTMENT                                                                          | PAIR / FOOT INVESTMENT<br>BY CODE<br>BY GAUGE<br>2 * (PF1cgg) [D] | REPEATER<br>BY GAUGE<br>(RPTR ggg) [E=C]                                                                          | WORKING CHANNEL<br>INVESTMENT / FOOT<br>(ADLCFF1cgg) [F=D+E] | FOR DLC Gauge: 24.00<br>- TABLE 4 -<br>WORKING CHANNEL<br>INVESTMENT / FOOT<br>(ADLCFF1c) [G=D+E] |
| DESCRIPTION                                                                                                 |                                                                   |                                                                                                                   |                                                              |                                                                                                   |
| AERIAL @ 26 GA.                                                                                             | \$ 0.024200                                                       | \$ 0.000000                                                                                                       | \$ 0.024200                                                  | \$ 0.024200                                                                                       |
| BURIED @ 26 GA.                                                                                             | \$ 0.033200                                                       | \$ 0.000000                                                                                                       | \$ 0.033200                                                  | \$ 0.033200                                                                                       |
| UNDGRND @ 26 GA.                                                                                            | \$ 0.021800                                                       | \$ 0.000000                                                                                                       | \$ 0.021800                                                  | \$ 0.021800                                                                                       |
| AERIAL @ 24 GA.                                                                                             | \$ 0.024200                                                       | \$ 0.000000                                                                                                       | \$ 0.024200                                                  | \$ 0.024200                                                                                       |
| BURIED @ 24 GA.                                                                                             | \$ 0.033200                                                       | \$ 0.000000                                                                                                       | \$ 0.033200                                                  | \$ 0.033200                                                                                       |
| UNDGRND @ 24 GA.                                                                                            | \$ 0.021800                                                       | \$ 0.000000                                                                                                       | \$ 0.021800                                                  | \$ 0.021800                                                                                       |
| AERIAL @ 22 GA.                                                                                             | \$ 0.000000                                                       | \$ 0.000000                                                                                                       | \$ 0.000000                                                  | \$ 0.000000                                                                                       |
| BURIED @ 22 GA.                                                                                             | \$ 0.000000                                                       | \$ 0.000000                                                                                                       | \$ 0.000000                                                  | \$ 0.000000                                                                                       |
| UNDGRND @ 22 GA.                                                                                            | \$ 0.000000                                                       | \$ 0.000000                                                                                                       | \$ 0.000000                                                  | \$ 0.000000                                                                                       |
| <p>NOTES:</p> <p>① The Facility Table Investments are for each Cable Pair Foot, DLC Systems are 4 wire.</p> |                                                                   |                                                                                                                   |                                                              |                                                                                                   |

CONFIDENTIAL

NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

| C:\123R24\LCATR027\FACILITY                                                        |                                                                                                                                                                                                                                                                                                    | <b>LOOP COST ANALYSIS TOOL</b>                                                         |                                                                                                                                                                                                                                                                                                         | Belcore®                                                                |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|---------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------|----------------------------------------------------------|---------|--|
| TABLE ~ SPAN_INV<br>SHEET 4/4                                                      |                                                                                                                                                                                                                                                                                                    | LOOP FACILITY INPUT<br>SERVICE ACCESS SEGMENT<br>FOR                                   |                                                                                                                                                                                                                                                                                                         | LCAT Rel: 1.0.4<br>Issued: 07/31/95                                     |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| COM: COMPANY: CINCINNATI BELL TEL<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO |                                                                                                                                                                                                                                                                                                    | INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 1 - BUSINESS PBX |                                                                                                                                                                                                                                                                                                         | STUDY YR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 28-Oct-96<br>TIME: 08:54 |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| <b>SERVICE ACCESS CHARACTERISTICS AND INVESTMENTS</b>                              |                                                                                                                                                                                                                                                                                                    |                                                                                        |                                                                                                                                                                                                                                                                                                         |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| <b>AVERAGE UNIT MIX :</b>                                                          |                                                                                                                                                                                                                                                                                                    | <b>AVERAGE UNIT INVESTMENT :</b>                                                       |                                                                                                                                                                                                                                                                                                         |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| <b>The Average Number of Terminals in the Service Access Segment of a Loop -</b>   |                                                                                                                                                                                                                                                                                                    |                                                                                        |                                                                                                                                                                                                                                                                                                         |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| Proportion of Loops that use.....                                                  | <table border="1" style="display: inline-table; vertical-align: top;"> <tr><td>Aerial</td><td>0.00</td></tr> <tr><td>Buried</td><td>0.00</td></tr> </table>                                                                                                                                        | Aerial                                                                                 | 0.00                                                                                                                                                                                                                                                                                                    | Buried                                                                  | 0.00    | Per Unit Installation..... | <table border="1" style="display: inline-table; vertical-align: top;"> <tr><td>Aerial Termination</td><td>0</td></tr> <tr><td>Buried Termination</td><td>0</td></tr> </table> | Aerial Termination     | 0        | Buried Termination                                       | 0       |  |
| Aerial                                                                             | 0.00                                                                                                                                                                                                                                                                                               |                                                                                        |                                                                                                                                                                                                                                                                                                         |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| Buried                                                                             | 0.00                                                                                                                                                                                                                                                                                               |                                                                                        |                                                                                                                                                                                                                                                                                                         |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| Aerial Termination                                                                 | 0                                                                                                                                                                                                                                                                                                  |                                                                                        |                                                                                                                                                                                                                                                                                                         |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| Buried Termination                                                                 | 0                                                                                                                                                                                                                                                                                                  |                                                                                        |                                                                                                                                                                                                                                                                                                         |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| <b>The Average Drop Wire &amp; Building Entrance Cable Installation -</b>          |                                                                                                                                                                                                                                                                                                    |                                                                                        |                                                                                                                                                                                                                                                                                                         |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| Proportion of Loops that use..                                                     | <table border="1" style="display: inline-table; vertical-align: top;"> <tr><td>Aerial Wire Drops</td><td>0.0000</td></tr> <tr><td>Buried Wire Drops</td><td>0.0000</td></tr> <tr><td>Bldg Entrance Cable</td><td>1.0000</td></tr> <tr><td>Aerial Coax/Wire Drops</td><td>0.0000</td></tr> </table> | Aerial Wire Drops                                                                      | 0.0000                                                                                                                                                                                                                                                                                                  | Buried Wire Drops                                                       | 0.0000  | Bldg Entrance Cable        | 1.0000                                                                                                                                                                        | Aerial Coax/Wire Drops | 0.0000   | Adjust Cable Pair Foot Invest. for DW Investment ? (Y/N) | N       |  |
| Aerial Wire Drops                                                                  | 0.0000                                                                                                                                                                                                                                                                                             |                                                                                        |                                                                                                                                                                                                                                                                                                         |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| Buried Wire Drops                                                                  | 0.0000                                                                                                                                                                                                                                                                                             |                                                                                        |                                                                                                                                                                                                                                                                                                         |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| Bldg Entrance Cable                                                                | 1.0000                                                                                                                                                                                                                                                                                             |                                                                                        |                                                                                                                                                                                                                                                                                                         |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| Aerial Coax/Wire Drops                                                             | 0.0000                                                                                                                                                                                                                                                                                             |                                                                                        |                                                                                                                                                                                                                                                                                                         |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
|                                                                                    |                                                                                                                                                                                                                                                                                                    | Per Unit Installation.....                                                             | <table border="1" style="display: inline-table; vertical-align: top;"> <tr><td>Aerial Wire Drops</td><td>\$ 0.00</td></tr> <tr><td>Buried Wire Drops</td><td>\$ 0.00</td></tr> <tr><td>Bldg Entrance Cable</td><td>\$ 75.00</td></tr> <tr><td>Aerial Coax/Wire Drops</td><td>\$ 0.00</td></tr> </table> | Aerial Wire Drops                                                       | \$ 0.00 | Buried Wire Drops          | \$ 0.00                                                                                                                                                                       | Bldg Entrance Cable    | \$ 75.00 | Aerial Coax/Wire Drops                                   | \$ 0.00 |  |
| Aerial Wire Drops                                                                  | \$ 0.00                                                                                                                                                                                                                                                                                            |                                                                                        |                                                                                                                                                                                                                                                                                                         |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| Buried Wire Drops                                                                  | \$ 0.00                                                                                                                                                                                                                                                                                            |                                                                                        |                                                                                                                                                                                                                                                                                                         |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| Bldg Entrance Cable                                                                | \$ 75.00                                                                                                                                                                                                                                                                                           |                                                                                        |                                                                                                                                                                                                                                                                                                         |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| Aerial Coax/Wire Drops                                                             | \$ 0.00                                                                                                                                                                                                                                                                                            |                                                                                        |                                                                                                                                                                                                                                                                                                         |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| <b>The Average Intrabuilding Cable Installation -</b>                              |                                                                                                                                                                                                                                                                                                    |                                                                                        |                                                                                                                                                                                                                                                                                                         |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |
| Proportion of Installations with Intrabuilding Cable                               | 0.0000                                                                                                                                                                                                                                                                                             | Per Install for Intrabuilding Network Cable Pair                                       | \$ 0.00                                                                                                                                                                                                                                                                                                 |                                                                         |         |                            |                                                                                                                                                                               |                        |          |                                                          |         |  |

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

HLCATR027\FACILITY  
SPAN\_INV  
4

HELP SCREEN

**Bellcore**®  
LCAT Rel: 1.0.4  
Issued: 07/31/95

terma These terminas may include the Serving Area Interface Cross Box, Drop Wire Block, and/or the Network  
termb interface Block summary per circuit pair installation investment.

adropinv These facility investments may also include Drop Wire Block and/or Network Interface summary per circuit  
bdropinv pair installation investment.  
bec  
coaxinv

ibc This facility investment should include ALL the internal cross-connects and terminations for this type of  
installation as a circuit pair installation investment.

**CONFIDENTIAL**  
**NOTICE MUST BE GIVEN**  
**PRIOR TO RELEASE TO PUBLIC**  
**PROVIDED TO PUCO**

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS - REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*

\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION \*\*\*\*\*

PRESS "ENTER" TO RETURN TO THE MAIN MENU

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

| C:\123R24\LCATR027\FACTORS     |  | LOOP COST ANALYSIS TOOL              |                | Belcore                |
|--------------------------------|--|--------------------------------------|----------------|------------------------|
| TABLE - FACTORS<br>SHEET 1 / 1 |  | INVESTMENT RELATED FACTOR TABLES     |                | LCAT Rel: 1.0.4        |
|                                |  | FOR                                  |                | Issued: 3/31/95        |
|                                |  | ANNUALIZATION FACTORS                |                | STUDY YR: 1996         |
|                                |  | INVESTMENT YEAR: 1996                |                | TEST CASE: 1           |
|                                |  | STUDY YEAR: 1996                     |                | LAST UPDATE: 17-Jan-97 |
| COMPANY: CINCINNATI BELL TEL.  |  | SERVICE CLASS: BAND 1 - BUSINESS PBX |                | TIME: 15:22            |
| CITY / AREA: CINCINNATI        |  |                                      |                |                        |
| STATE / PROV: OHIO             |  |                                      |                |                        |
| plant list                     |  | PRICE<br>INDEX                       | ANNUAL<br>COST |                        |
| LAND                           |  | 1.0000                               | 0.2322         |                        |
| BUILDING                       |  | 1.0000                               | 0.2937         |                        |
| BLDG ENTRANCE CABLE            |  | 1.0000                               | 0.3922         |                        |
| INTRABLDG CABLE                |  | 1.0000                               | 0.3922         |                        |
| AERIAL CABLE (COPPER)          |  | 1.0000                               | 0.4033         |                        |
| BURIED CABLE (COPPER)          |  | 1.0000                               | 0.3467         |                        |
| UNDERGROUND (CU) CA.           |  | 1.0000                               | 0.3663         |                        |
| CO EQPT - LOW CAP TERM         |  | 1.0000                               | 0.3881         |                        |
| CO EQPT - LOW CAP CHAN         |  | 1.0000                               | 0.3881         |                        |
| CO EQPT - HI CAP TERM          |  | 1.0000                               | 0.3881         |                        |
| CO EQPT - HI CAP CHAN          |  | 1.0000                               | 0.3881         |                        |
| CO EQPT - ANALOG SW            |  | 1.0000                               | 0.0000         |                        |
| CO EQPT - DIGITAL SW           |  | 1.0000                               | 0.0000         |                        |
| AERIAL CABLE (FIBER)           |  | 1.0000                               | 0.2908         |                        |
| BURIED CABLE (FIBER)           |  | 1.0000                               | 0.2724         |                        |
| UNDERGROUND (FO) CA.           |  | 1.0000                               | 0.2689         |                        |
| CONNECTORS                     |  | 1.0000                               | 0.3881         |                        |
| MISC. COM EQP & PWR            |  | 1.0000                               | 0.3881         |                        |
| POLE LINE                      |  | 1.0000                               | 0.3807         |                        |
| CONDUIT                        |  | 1.0000                               | 0.2521         |                        |

**CONFIDENTIAL**  
NOT TO BE RELEASED TO PUBLIC  
PRIOR TO RELEASE TO PUBLIC

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24.LCATR027\INVEST                                                                          |  | LOOP COST ANALYSIS TOOL              |                       |                | Bellcore (R)           |                 |
|----------------------------------------------------------------------------------------------------|--|--------------------------------------|-----------------------|----------------|------------------------|-----------------|
| TABLE - EQUIP_INV                                                                                  |  | DATA REFERENCE TABLE                 |                       |                | LCAT Rel: 1.0.4        |                 |
| Sheet 1 of 1                                                                                       |  | EQUIPMENT & OTHER INVESTMENTS        |                       |                | Issued: 07/31/95       |                 |
| FOR                                                                                                |  | INVESTMENT YEAR: 1996                |                       |                | STUDY YR: 1996         |                 |
| COMPANY: CINCINNATI BELL TEL.                                                                      |  | SERVICE LEVEL: NARBAND               |                       |                | TEST CASE: 1           |                 |
| CITY / AREA: CINCINNATI                                                                            |  | SERVICE CLASS: BAND 1 - BUSINESS PBX |                       |                | LAST UPDATE: 28-Oct-96 |                 |
| STATE / PROV: OHIO                                                                                 |  |                                      |                       |                | 08:56                  |                 |
| <b>EQUIPMENT INVESTMENT</b> (Including Engineer, Furnish, & Install Costs)                         |  |                                      |                       |                |                        |                 |
|                                                                                                    |  |                                      | <b>CENTRAL OFFICE</b> |                | <b>REMOTE LOCATION</b> |                 |
|                                                                                                    |  |                                      | <b>LINE</b>           | <b>CHANNEL</b> | <b>CHANNEL</b>         | <b>TERMINAL</b> |
| <b>AIR DRYERS INVESTMENT:</b>                                                                      |  |                                      |                       |                |                        |                 |
| For an AERIAL Installed Cable Pair                                                                 |  |                                      |                       | \$ 0.00        |                        |                 |
| For a BURIED Installed Cable Pair                                                                  |  |                                      |                       | \$ 0.00        |                        |                 |
| For an UNDERGROUND Installed Cable Pair                                                            |  |                                      |                       | \$ 0.00        |                        |                 |
| <b>CENTRAL OFFICE TERMINATION INVESTMENT:</b>                                                      |  |                                      |                       |                |                        |                 |
| For each cable pair associated with twisted pair copper cable                                      |  |                                      |                       | \$ 79.08       |                        |                 |
| For each per cable pair associated with digital loop carrier technology                            |  |                                      |                       | \$ 0.00        |                        |                 |
| <b>COPPER LOOP CARRIER UNIT CIRCUIT INVESTMENT by SERVICE LEVEL:</b>                               |  |                                      |                       |                |                        |                 |
| For each line repeater for one copper digroup (not svc lev)                                        |  |                                      | \$ 0.00               |                |                        |                 |
| For an Office Repeater Bay for a T1 Line                                                           |  |                                      | \$ 0.00               |                |                        |                 |
| For a Universal DLC Equipment Arrangement                                                          |  |                                      | \$ 0.00               | \$ 87.51       | \$ 12.14               | \$ 85.28        |
| For an Integrated DLC Equipment Arrangement                                                        |  |                                      | \$ 0.00               | \$ 0.00        | \$ 0.00                | \$ 85.28        |
| <b>FIBER OPTIC MULTIPLEXERS UNIT CIRCUIT INVESTMENT by SERVICE LEVEL:</b>                          |  |                                      |                       |                |                        |                 |
| 1. For a Hub with nonFiber Extensions or nonHub Arrangement                                        |  |                                      | \$ 19.62              | \$ 0.00        | \$ 18.35               | \$ 2.35         |
| 2. For a Hub with Fiber Extensions or a Fiber Ended Arrangement                                    |  |                                      | \$ 0.00               | \$ 0.00        | \$ 0.00                | \$ 0.00         |
| 3. For a Fiber HUB and Fiber Remote Terminal Arrangement                                           |  |                                      |                       | \$ 0.00        | \$ 0.00                | \$ 0.00         |
| 4. For Fiber Ring Hub Arrangements (Extensions)                                                    |  |                                      |                       | \$ 0.00        | \$ 0.00                | \$ 0.00         |
| <b>CEV HOUSING per CIRCUIT by SERVICE LEVEL:</b>                                                   |  |                                      |                       |                |                        |                 |
| For CEV's used as fiber hubs for FO Multiplexer equipment                                          |  |                                      |                       |                |                        | \$ 0.00         |
| For CEV's used as remote terminals for CDLC equipment                                              |  |                                      |                       |                |                        | \$ 8.33         |
| [Unit Investment denotes average weighted unit E.F. Investment at DS0, DS1, or DS3 service equiv.] |  |                                      |                       |                |                        |                 |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATR027\INVEST.WK1

TABLE - EQUIP\_INV

## HELP INFORMATION

Bellcore

LCAT Rel : 1.0.4

Issued : 07/31/95

LCAT Commands      Description

This Command will allow the User -

EDIT                      To Enter Values with DIRECT Input on a cell by cell basis.  
 CLEAR                    To Erase the Display's Current Data Values, then Perform DIRECT Input.

Line Items              Description

This Equipment Item Represents -

Ofc Rept Bay            A Wideband Special Service Circuits Requirement, included in other DLC COE LINE.  
 Integrated DLC        The DLC Class for Source Bandwidth from Digital Line Cards or DSX Term for DS1.  
 Universal DLC        The DLC Class for Source Bandwidth from Analog Subs Line Cards or Voice Grade Term.

See Circuit Designs :

|                  |                                                                          |           |
|------------------|--------------------------------------------------------------------------|-----------|
| COE Field Item 1 | FITL/CDLC Hub Extension or FITL non-Hubbing Arrangements, CO End Equip.  | 2,3,4 & 6 |
| REM Field Item 1 | FITL/CDLC Hub Extension or FITL non-Hubbing Arrangements, REM End Equip. | 2,3,4 & 6 |
| COE Field Item 2 | FITL Hubbed Arrangements, CO to HUB Span Equip, CO End.                  | 1 & 5     |
| REM Field Item 2 | FITL Hubbed Arrangements, CO to HUB Span Equip, Remote Site.             | 1 & 5     |
| REM Field Item 3 | FITL Hubbed Arrangements, HUB to RT Span Equip, Remote Sites.            | 1 & 5     |
| REM Field Item 4 | FITL Hubbed Arrangements, RING Span Equip, HUB Sites.                    | 1,2,5 & 6 |

NOTE: THE DATA VALUES FOR THESE ITEMS SHOULD ALWAYS REPRESENT  
 THE CIRCUIT EQUIVALENTS FOR THE BANDWIDTH DELIVERY OF THE STUDIED SERVICE.

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES. \*\*\*\*\*  
 \*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION. \*\*\*\*\*

PRESS &lt;ENTER&gt; KEY TO RETURN TO THE MAIN MENU

**CONFIDENTIAL**  
 NOT TO BE GIVEN  
 FOR RELEASE TO PUBLIC  
 PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.



| C:\123R24\LCATR027\LOADING                                                                                      |        | <b>LOOP COST ANALYSIS TOOL</b>                                                                                                                                      |  | Bellcore <sup>®</sup>                                                                                         |
|-----------------------------------------------------------------------------------------------------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------|
| TABLE - ADDNL_INV<br>Sheet 1 of 2<br><br>COMPANY: CINCINNATI BELL TEL<br>CITY / AREA: CINCINNATI<br>STATE: OH-O |        | INVESTMENT RELATED FACTOR TABLES<br>ADJUSTMENT AND LOADING FACTORS<br>FOR<br>INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 1 - BUSINESS PBX |  | LCAT Rel: 1.0.4<br>Issued: 3/31/95<br>STUDY YR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 28-Oct-96<br>TIME: 08:57 |
| <b>PLANT UTILIZATION FACTORS:</b>                                                                               |        |                                                                                                                                                                     |  |                                                                                                               |
| Land                                                                                                            | 1.0000 | <b>ALL Non-Traffic Sensitive Equipment</b>                                                                                                                          |  | 1.0000                                                                                                        |
| Building                                                                                                        | 1.0000 | <b>ALL Digital Loop Carrier Equip., or</b>                                                                                                                          |  | 0.7000                                                                                                        |
| <b>ALL Copper Cables, or</b>                                                                                    |        | CO DLC Channel Unit                                                                                                                                                 |  | 0.7000                                                                                                        |
| Copper Feeder Cable                                                                                             | 0.6000 | REM DLC Channel Unit                                                                                                                                                |  | 0.7000                                                                                                        |
| Copper Distribution Cable                                                                                       | 0.3500 | CO DLC Multiplex System                                                                                                                                             |  | 0.7000                                                                                                        |
| Copper Entrance Cable                                                                                           | 1.0000 | REM DLC Multiplex System                                                                                                                                            |  | 0.7000                                                                                                        |
| Copper Building Cable                                                                                           | 0.3500 | CO Digital Signal Crossconnect Bay                                                                                                                                  |  | 0.7000                                                                                                        |
| Copper Building Terminal                                                                                        | 0.3500 | REM Digital Signal Crossconnect Bay                                                                                                                                 |  | 0.7000                                                                                                        |
| <b>ALL Fiber Cables, or</b>                                                                                     |        | <b>ALL Fiber Optic Multiplex Equip., or</b>                                                                                                                         |  | 1.0000                                                                                                        |
| Fiber Feeder Cable                                                                                              | 0.3300 | CO Fiber Optic Channel Unit                                                                                                                                         |  | 1.0000                                                                                                        |
| Fiber Distribution Cable                                                                                        |        | REM Fiber Optic Channel Unit                                                                                                                                        |  | 1.0000                                                                                                        |
| Fiber Entrance Cable                                                                                            |        | CO Fiber Optic Multiplex System                                                                                                                                     |  | 1.0000                                                                                                        |
| Fiber Building Cable                                                                                            |        | REM Fiber Optic Multiplex System                                                                                                                                    |  | 1.0000                                                                                                        |
| Fiber Building Terminal                                                                                         |        | CO Lightguide Terminating Equipment                                                                                                                                 |  | 1.0000                                                                                                        |
|                                                                                                                 |        | REM Lightguide Terminating Equipment                                                                                                                                |  | 1.0000                                                                                                        |
| Poles                                                                                                           | 1.0000 | Remote Housing:                                                                                                                                                     |  | 1.0000                                                                                                        |
| Conduit                                                                                                         | 1.0000 | PCH                                                                                                                                                                 |  | 1.0000                                                                                                        |
|                                                                                                                 |        | Comm. Svc. Cab                                                                                                                                                      |  | 1.0000                                                                                                        |

 CONFIDENTIAL  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

TABLE - ADDNL\_INV  
Sheet 1 of 2

HELP SCREEN

**Belcore** (R)

LCAT Rel: 1.0.4  
Issued: 3/31/95

NOTE:

- ① THIS VALUE REPRESENTS GLOBAL (CATEGORY 1) INPUT FOR THESE ITEMS.  
AN ENTRY SETS CATEGORY 2 VALUES TO THE CATEGORY 1 VALUE BY THE SYSTEM.
- ② THE VALUES IN THIS TABLE REPRESENT DETAIL FACTORS (CATEGORY 2 VALUES).  
THESE ITEMS ARE APPLIED IN THE COST EQUATIONS FOR THE COMPONENT THEY IDENTIFY.  
ENTRIES NEGATE CATEGORY 1 VALUES BY THE SYSTEM.
- ③ THE DESIGNATION "CO" DENOTES CENTRAL OFFICE LOCATED.  
THE DESIGNATION "REM" DENOTES REMOTE SITE LOCATED.

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR INFORMATION \*\*\*\*\*  
\*\*\*\*\* CONCERNING ANY OTHER DATA INPUT ITEMS ON THIS DISPLAY \*\*\*\*\*

PRESS < Enter > KEY TO RETURN TO THE MAIN MENU

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR027\LOADING                                                                                                                                                                                             |  | <b>LOOP COST ANALYSIS TOOL</b>                                                                                                                                                                    |  | Bellcore (R)                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------|
| TABLE - ADDNL_INV<br>Sheet 2 of 2<br><br>COMPANY: CINCINNATI BELL TEL<br>CITY / AREA: CINCINNATI<br>STATE: OHIO                                                                                                        |  | INVESTMENT RELATED FACTOR TABLES<br>ADJUSTMENT AND LOADING FACTORS<br>FOR<br>INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BANO 1 - BUSINESS PBX                               |  | LCAT Ref: 1.0.4<br>Issued: 3/31/95<br>STUDY YR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 28-Oct-96<br>TIME: 08:57 |
| SEGMENT .....<br>DISTRIBUTION   FEEDER<br>② use DEFAULT                                                                                                                                                                |  | <b>DROP WIRE (DW) INVESTMENT ADJUSTMENT:</b><br>The Cable PFI is being Adjusted for DW? NO<br>Aerial Cable<br>Buried Cable<br>Underground Cable<br>use DEFAULT ① ②<br>for: CENT. OFC. REMOTE SITE |  |                                                                                                               |
| <b>POLE LOADINGS:</b><br>Copper Cable Pole Investment Factor 0.2530 0.2530<br>Copper Cable Pole Unit Investment<br>Fiber Cable Pole Investment Factor 0.1965 0.1965<br>Fiber Cable Pole Unit Investment                |  | <b>LAND LOADING FACTORS:</b><br>Other or ALL ① 0.0056 0.0056<br>Digital Loop Carrier 0.0056 0.0056<br>Fiber Optic Mux 0.0056 0.0056                                                               |  |                                                                                                               |
| <b>CONDUIT LOADINGS:</b><br>Copper Cable Conduit Investment Factor 0.5165 0.5165<br>Copper Cable Conduit Unit Investment<br>Fiber Cable Conduit Investment Factor 0.5232 0.5232<br>Fiber Cable Conduit Unit Investment |  | <b>BUILDING LOADING FACTORS:</b><br>Other or ALL ① 0.1316 0.1316<br>Digital Loop Carrier 0.1316 0.1316<br>Fiber Optic Mux 0.1316 0.1316                                                           |  |                                                                                                               |
|                                                                                                                                                                                                                        |  | <b>MISC. EQUIPMENT &amp; POWER LOADING FACTORS:</b><br>Other or ALL ① 0.1127 0.1127<br>Digital Loop Carrier 0.1127 0.1127<br>Fiber Optic Mux 0.1127 0.1127                                        |  |                                                                                                               |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

TABLE - ADDNL\_INV  
Sheet 2 of 2

## HELP SCREEN

Bellcore®

LCAT Rel: 1.0.4

Issued: 3/31/95

|                                        |       |       |       |                                                                                 |
|----------------------------------------|-------|-------|-------|---------------------------------------------------------------------------------|
| Copper Cable Pole Investment Factor    | cpiff | __dst | __fdr | Based on aerial copper cable investment relationship to pole                    |
| Copper Cable Pole Unit Investment      | cpifi | __dst | __fdr | Per unit length of aerial copper cable effective pair feet placed.              |
| Fiber Cable Pole Investment Factor     | fpiff | __dst | __fdr | Based on aerial fiber cable investment relationship to pole                     |
| Fiber Cable Pole Unit Investment       | fpifi | __dst | __fdr | Per unit length of aerial fiber cable effective pair feet placed.               |
| Copper Cable Conduit Investment Factor | cucff | __dst | __fdr | Based on underground copper cable investment relationship to conduit investment |
| Copper Cable Conduit Unit Investment   | cucfi | __dst | __fdr | Per unit length of underground copper cable effective pair feet placed.         |
| Fiber Cable Conduit Investment Factor  | fucff | __dst | __fdr | Based on underground fiber cable investment relationship to conduit investment  |
| Fiber Cable Conduit Unit Investment    | fucfi | __dst | __fdr | Per unit length of underground fiber cable effective pair feet placed.          |

## NOTES

- ① THIS VALUE REPRESENTS GLOBAL (CATEGORY 1) INPUT FOR THESE ITEMS.  
AN ENTRY SETS CATEGORY 2 VALUES TO THE CATEGORY 1 VALUE BY THE SYSTEM.
- ② THE VALUES IN THIS TABLE REPRESENT DETAIL FACTORS (CATEGORY 2 VALUES).  
THESE ITEMS ARE APPLIED IN THE COST EQUATIONS FOR THE COMPONENT THEY IDENTIFY.  
ENTRIES NEGATE CATEGORY 1 VALUES BY THE SYSTEM.

\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR INFORMATION \*\*\*\*\*  
\*\*\*\*\* CONCERNING ANY OTHER DATA INPUT ITEMS ON THIS DISPLAY \*\*\*\*\*

PRESS < Enter > KEY TO RETURN TO THE MAIN MENU

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR027\SPAN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        | <b>LOOP COST ANALYSIS TOOL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | Bellcore                                                                                                       |                |  |         |      |         |    |              |      |            |        |              |       |             |       |         |        |                   |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------|----------------|--|---------|------|---------|----|--------------|------|------------|--------|--------------|-------|-------------|-------|---------|--------|-------------------|--|
| INPUT - PLANT_CHAR.<br>Sheet 1 / 5<br><br>COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |        | LOOP FACILITY INPUT<br>LOOP LENGTH CRITERIA AND NETWORK CHARACTERISTICS<br>FOR<br>INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 1 - BUSINESS PBX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | LCAT Rel: 1.0.4<br>Issued: 07/31/95<br>STUDY YR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 28-Oct-96<br>TIME: 09:01 |                |  |         |      |         |    |              |      |            |        |              |       |             |       |         |        |                   |  |
| <b>FLAT RATE BASIS DATA WITHOUT COST BANDS<br/>FOR A NETWORK CIRCUIT CASE STUDY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                |                |  |         |      |         |    |              |      |            |        |              |       |             |       |         |        |                   |  |
| <b>LOOP TOPOLOGY</b><br>Loop FEEDER Network Configuration Is (S)tar Or (R)ing<br>Average Number Of Hubs In Each Ring<br>Loop DISTRIBUTION Network Configuration Is (S)tar or (B)us<br><br><b>SPAN LENGTHS</b><br>① Average Distance From the Central Office to the Service Access Point<br>② Average Distance From the Serving Area Interface to the Service Access Point<br>③ Average Distance From the Remote Terminal to the Serving Area Interface<br>④ Average Distance From the Central Office to the Fiber Hub or S.A.I.<br>⑤ Average Distance From the Fiber Hub to the Remote Terminal |        | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: left;">ACTION SEGMENT</th> </tr> </thead> <tbody> <tr> <td>PRIMARY</td> <td>STAR</td> </tr> <tr> <td>PRIMARY</td> <td>NA</td> </tr> <tr> <td>DISTRIBUTION</td> <td>STAR</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>TOTAL LOOP</td> <td>6403.0</td> </tr> <tr> <td>DISTRIBUTION</td> <td>638.0</td> </tr> <tr> <td>SUB-PRIMARY</td> <td>300.0</td> </tr> <tr> <td>PRIMARY</td> <td>5465.0</td> </tr> <tr> <td>PRIMARY-EXTENSION</td> <td></td> </tr> </tbody> </table> |  |                                                                                                                | ACTION SEGMENT |  | PRIMARY | STAR | PRIMARY | NA | DISTRIBUTION | STAR | TOTAL LOOP | 6403.0 | DISTRIBUTION | 638.0 | SUB-PRIMARY | 300.0 | PRIMARY | 5465.0 | PRIMARY-EXTENSION |  |
| ACTION SEGMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                |                |  |         |      |         |    |              |      |            |        |              |       |             |       |         |        |                   |  |
| PRIMARY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | STAR   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                |                |  |         |      |         |    |              |      |            |        |              |       |             |       |         |        |                   |  |
| PRIMARY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | NA     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                |                |  |         |      |         |    |              |      |            |        |              |       |             |       |         |        |                   |  |
| DISTRIBUTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | STAR   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                |                |  |         |      |         |    |              |      |            |        |              |       |             |       |         |        |                   |  |
| TOTAL LOOP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 6403.0 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                |                |  |         |      |         |    |              |      |            |        |              |       |             |       |         |        |                   |  |
| DISTRIBUTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 638.0  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                |                |  |         |      |         |    |              |      |            |        |              |       |             |       |         |        |                   |  |
| SUB-PRIMARY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 300.0  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                |                |  |         |      |         |    |              |      |            |        |              |       |             |       |         |        |                   |  |
| PRIMARY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 5465.0 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                |                |  |         |      |         |    |              |      |            |        |              |       |             |       |         |        |                   |  |
| PRIMARY-EXTENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                |                |  |         |      |         |    |              |      |            |        |              |       |             |       |         |        |                   |  |
| <b>LOOP LENGTH AT EACH COST BAND</b><br>BAND 1 <input type="text"/><br>BAND 2 <input type="text"/><br>BAND 3 <input type="text"/><br>BAND 4 <input type="text"/><br>BAND 5 <input type="text"/>                                                                                                                                                                                                                                                                                                                                                                                                 |        | <b>DISTRIBUTION OF COST BANDS IN THE NETWORK</b><br>BAND 1 <input type="text"/><br>BAND 2 <input type="text"/><br>BAND 3 <input type="text"/><br>BAND 4 <input type="text"/><br>BAND 5 <input type="text"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                |                |  |         |      |         |    |              |      |            |        |              |       |             |       |         |        |                   |  |
| LAST <input type="text" value="6403.0"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |        | LAST <input type="text" value="1.0000"/> <input type="text" value="1.0000 Hint"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                                                                                                |                |  |         |      |         |    |              |      |            |        |              |       |             |       |         |        |                   |  |

CONFIDENTIAL  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

| C:\123R24\LCATR027\SPAN                                                                                          |  | LOOP COST ANALYSIS TOOL                          |  | Bellcore <sup>®</sup>   |  |
|------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------|--|-------------------------|--|
| INPUT - PLANT_CHAR.<br>Sheet 1 / 1                                                                               |  | LOOP FACILITY INPUT                              |  | LCAT Ref : 1.0.4        |  |
| COMPANY: CINCINNATI BELL TEL.                                                                                    |  | LOOP LENGTH CRITERIA AND NETWORK CHARACTERISTICS |  | Issued : 07/31/95       |  |
| CITY / AREA: CINCINNATI                                                                                          |  | FOR                                              |  | STUDY YR : 1996         |  |
| STATE / PROV: OHIO                                                                                               |  | INVESTMENT YEAR : 1996                           |  | TEST CASE : 1           |  |
|                                                                                                                  |  | LOOP STUDY YEAR : 1996                           |  | LAST UPDATE : 28-Oct-96 |  |
|                                                                                                                  |  | SERVICE CLASS : BAND 1 - BUSINESS PBX            |  | TIME : 09:01            |  |
| <p align="center"><u>FLAT RATE BASIS DATA WITHOUT COST BANDS</u><br/><u>FOR A NETWORK CIRCUIT CASE STUDY</u></p> |  |                                                  |  |                         |  |
|                                                                                                                  |  |                                                  |  |                         |  |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

|                                                                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                   |  |                                       |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------|--|
| C:\123P24\LCATR027\SPAN                                                                                                                                                                                                |  | <b>LOOP COST ANALYSIS TOOL</b>                                                                                                                                                                                                                                                                                                                                                    |  | <b>Bellcore</b> (TM)                  |  |
| INPUT = FANT_CHAR.<br>Sheet 1 of 2                                                                                                                                                                                     |  | LOOP FACILITY INPUT<br>HELP SCREEN                                                                                                                                                                                                                                                                                                                                                |  | LCAT Rel : 1.0.4<br>Issued : 07/31/95 |  |
| <b>AVERAGE NETWORK STUDY -</b>                                                                                                                                                                                         |  | This mode of LCAT is used where the cost study may be broad in scope and lack sufficient detail data to use the Loop OSP cost calculators on Sheets 2, 3, and 4. Instead, it relies on table data from the FACILITY file, representing jurisdictional average value mixes or proportions. Input for these values is placed on Sheet 1.                                            |  |                                       |  |
| <b>INDIVIDUAL CIRCUIT STUDY -</b>                                                                                                                                                                                      |  | This mode of LCAT is used to cost study circuit specifics on an Individual Circuit Basis for Request For Proposals, Special Constructions, and CENTREX-like Services. Data input is usually actual per the circuit configuration's span by span requirements as detailed by Product Management. This mode will require the use of the Loop OSP calculators on Sheets 2, 3, and 4. |  |                                       |  |
| <b>DATA SAMPLE NETWORK STUDY -</b>                                                                                                                                                                                     |  | This mode of LCAT functions well with the Loop OSP cost calculators on Sheets 2, 3, and 4. The data samples are inputted on the sheets cumulatively and cost calculated directly. Then the weightings formulae are applied to create an average weighted Loop cost per pair foot.                                                                                                 |  |                                       |  |
| <b>BANDWIDTH AVERAGING -</b>                                                                                                                                                                                           |  | This feature of LCAT permits study level weighting of fiber multiplexer bandwidth transport. The range of multiplexers goes from 1.5 Mbps through 1.7 Gbps and designating the mix of usage develops a more precise unit investment to the feeder calculations.                                                                                                                   |  |                                       |  |
| <p>***** THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES *****</p> <p>***** PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION *****</p> <p>PRESS 'ENTER' TO RETURN TO THE MAIN MENU</p> |  |                                                                                                                                                                                                                                                                                                                                                                                   |  |                                       |  |

**CONFIDENTIAL**  
**NOT TO BE GIVEN**  
**TO PUBLIC**  
**FOR RELEASE**  
**PROVIDED TO PUCO**

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATR027 SPAN

## LOOP COST ANALYSIS TOOL

Bellcore (R)

INPUT - PLANT CHAR.

LCAT Ref: T.O.4

Sheet 2 of 2

## HELP SCREEN

Issued : 07/31/95

## COST DETAILS

When the Loop Study is specified as DISTANCE SENSITIVE, the data required is inputted as part of STUDY SETUP input and the ROUTE TO AIR RATIO [ B ] on WORKSHEET F and the resultant Rate Band delimiters are copied into the RATE BANDS field on SCREEN 1 by the System. The SPAN LENGTHS data is input by the User.

When the Loop Study is specified as FLAT RATE, then ALL the data required is input on SCREEN 1 in the COST BANDS field and/or SPAN LENGTHS field by the User.

## LOOP TOPOLOGY

When the Loop Topology ( circuit layout format ) for the Feeder Layer is specified as STAR, the Primary Feeder ( C.O. to HUB ) is variable and the Feeder Extension ( HUB to R.T. ) is held as an average length link. When the Loop Topology is specified as RING, the Primary Feeder is held as an average length link and the Feeder Extension is variable. This input Sheet is adjusted to each possibility. The SPAN LENGTHS input cells are rearranged to support the Topology specified and only request the necessary data that is required.

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS - REFERENCE TO THEIR DATA-ORIGIN NAMES \*\*\*\*\*  
 \*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION \*\*\*\*\*

PRESS 'ENTER' TO RETURN TO THE MAIN MENU

NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.



| C:\123R24\LCATR027\SPAN        |        | LOOP COST ANALYSIS TOOL                                     |                                                 |                                            |                                                 | Bellcore (P)                               |                                                 |
|--------------------------------|--------|-------------------------------------------------------------|-------------------------------------------------|--------------------------------------------|-------------------------------------------------|--------------------------------------------|-------------------------------------------------|
| INPUT - PLANT_CHAR.            |        | LOOP FACILITY INPUT                                         |                                                 |                                            |                                                 | LCAT Rev: 1.0.4                            |                                                 |
| Sheet 2a / 5                   |        | FIBER OPTIC CABLE SPAN CHARACTERISTICS FOR THE FEEDER LAYER |                                                 |                                            |                                                 | Issued: 07/31/95                           |                                                 |
| COMPANY: 0                     |        | INVESTMENT YEAR: 1996                                       |                                                 |                                            |                                                 | STUDY YR: 1996                             |                                                 |
| CITY / AREA: 0                 |        | LOOP STUDY YEAR: 1996                                       |                                                 |                                            |                                                 | TEST CASE: 1                               |                                                 |
| STATE / PROV: 0                |        | SERVICE CLASS: BAND 1 - BUSINESS PBX                        |                                                 |                                            |                                                 | LAST UPDATE: 25-Oct-96                     |                                                 |
|                                |        |                                                             |                                                 |                                            |                                                 | TIME: 09:01                                |                                                 |
| NETWORK CIRCUIT LAYOUT STUDIES |        |                                                             |                                                 | WORKSHEET A                                |                                                 |                                            |                                                 |
| CAPACITY                       |        | AERIAL FIBER                                                |                                                 | BURIED FIBER                               |                                                 | UNDERGROUND FIBER                          |                                                 |
| [C]                            | idx    | CUMULATIVE FEEDER LENGTH [D <sub>A</sub> ]                  | EFFECTIVE LENGTH BY PAIR FOOT [E <sub>A</sub> ] | CUMULATIVE FEEDER LENGTH [D <sub>B</sub> ] | EFFECTIVE LENGTH BY PAIR FOOT [E <sub>B</sub> ] | CUMULATIVE FEEDER LENGTH [D <sub>U</sub> ] | EFFECTIVE LENGTH BY PAIR FOOT [E <sub>U</sub> ] |
| 4 FIBER CABLE                  | 2 pr   |                                                             | 0.0                                             |                                            | 0.0                                             |                                            | 0.0                                             |
| 6 FIBER CABLE                  | 3 pr   |                                                             | 0.0                                             |                                            | 0.0                                             |                                            | 0.0                                             |
| 12 FIBER CABLE                 | 6 pr   |                                                             | 0.0                                             |                                            | 0.0                                             |                                            | 0.0                                             |
| 18 FIBER CABLE                 | 9 pr   |                                                             | 0.0                                             |                                            | 0.0                                             |                                            | 0.0                                             |
| 24 FIBER CABLE                 | 12 pr  |                                                             | 0.0                                             |                                            | 0.0                                             |                                            | 0.0                                             |
| 36 FIBER CABLE                 | 18 pr  |                                                             | 0.0                                             |                                            | 0.0                                             |                                            | 0.0                                             |
| 48 FIBER CABLE                 | 24 pr  |                                                             | 0.0                                             |                                            | 0.0                                             |                                            | 0.0                                             |
| 60 FIBER CABLE                 | 30 pr  |                                                             | 0.0                                             |                                            | 0.0                                             |                                            | 0.0                                             |
| 72 FIBER CABLE                 | 36 pr  |                                                             | 0.0                                             |                                            | 0.0                                             |                                            | 0.0                                             |
| 84 FIBER CABLE                 | 42 pr  |                                                             | 0.0                                             |                                            | 0.0                                             |                                            | 0.0                                             |
| 96 FIBER CABLE                 | 48 pr  |                                                             | 0.0                                             |                                            | 0.0                                             |                                            | 0.0                                             |
| 144 FIBER CABLE                | 72 pr  |                                                             | 0.0                                             |                                            | 0.0                                             |                                            | 0.0                                             |
| 192 FIBER CABLE                | 96 pr  |                                                             | 0.0                                             |                                            | 0.0                                             |                                            | 0.0                                             |
| 216 FIBER CABLE                | 108 pr |                                                             | 0.0                                             |                                            | 0.0                                             |                                            | 0.0                                             |
| CUMULATIVE LENGTHS OF FEEDER:  |        |                                                             |                                                 |                                            |                                                 |                                            |                                                 |
| AERIAL FIBER SUBTOTAL          |        | 0                                                           |                                                 | 0                                          |                                                 | 0                                          |                                                 |
| BURIED FIBER SUBTOTAL          |        | 0                                                           |                                                 | 0                                          |                                                 | 0                                          |                                                 |
| UNDGRD FIBER SUBTOTAL          |        | 0                                                           |                                                 | 0                                          |                                                 | 0                                          |                                                 |
| FIBER SUBTOTAL                 |        | 0                                                           |                                                 | 0                                          |                                                 | 0                                          |                                                 |

**CONFIDENTIAL**

NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR027\SPAN                                                                                                                                                        |             | LOOP COST ANALYSIS TOOL                                                       |     |                        |         | Bellcore (R)                          |         |                   |         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------|-----|------------------------|---------|---------------------------------------|---------|-------------------|---------|
| PLANT CHAR - WORKSHEET 2B<br>Sheet 2b / 5                                                                                                                                      |             | LOOP FACILITY INPUT<br>FIBER OPTIC CABLE SPAN INVESTMENT FOR THE FEEDER LAYER |     |                        |         | LCAT Rel : 1.0.4<br>Issued : 07/31/95 |         |                   |         |
| COMPANY: CINCINNATI BELL TEL.                                                                                                                                                  |             | INVESTMENT YEAR: 1996                                                         |     | STUDY YR : 1996        |         | TEST CASE : 1                         |         |                   |         |
| CITY / AREA: CINCINNATI                                                                                                                                                        |             | LOOP STUDY YEAR: 1996                                                         |     | LAST UPDATE: 28-Oct-96 |         | TIME: 09:01                           |         |                   |         |
| STATE: OH:O                                                                                                                                                                    |             | SERVICE CLASS: BAND 1 - BUSINESS PBX                                          |     |                        |         |                                       |         |                   |         |
| NETWORK CIRCUIT LAYOUT STUDIES                                                                                                                                                 |             |                                                                               |     | WORKSHEET B            |         |                                       |         |                   |         |
| <p>EFFECTIVE CHANNEL LENGTH BY CABLE PAIR FOOT [A] = [E] WKSH A / [F] WKSH C</p> <p>CUMULATIVE INVESTMENT BY CABLE CHANNEL FOOT [B] = [A] * [C] * UNIT INV FACILITY WKSH B</p> |             |                                                                               |     |                        |         |                                       |         |                   |         |
| For these sizes ...                                                                                                                                                            |             | CAPACITY<br>[C]                                                               | idx | AERIAL FIBER           |         | BURIED FIBER                          |         | UNDERGROUND FIBER |         |
|                                                                                                                                                                                |             |                                                                               |     | [A]                    | [B]     | [A]                                   | [B]     | [A]               | [B]     |
| 4                                                                                                                                                                              | FIBER CABLE | 2 pr                                                                          |     | 0.000                  | \$ 0.00 | 0.000                                 | \$ 0.00 | 0.000             | \$ 0.00 |
| 6                                                                                                                                                                              | FIBER CABLE | 3 pr                                                                          |     | 0.000                  | \$ 0.00 | 0.000                                 | \$ 0.00 | 0.000             | \$ 0.00 |
| 12                                                                                                                                                                             | FIBER CABLE | 6 pr                                                                          |     | 0.000                  | \$ 0.00 | 0.000                                 | \$ 0.00 | 0.000             | \$ 0.00 |
| 18                                                                                                                                                                             | FIBER CABLE | 9 pr                                                                          |     | 0.000                  | \$ 0.00 | 0.000                                 | \$ 0.00 | 0.000             | \$ 0.00 |
| 24                                                                                                                                                                             | FIBER CABLE | 12 pr                                                                         |     | 0.000                  | \$ 0.00 | 0.000                                 | \$ 0.00 | 0.000             | \$ 0.00 |
| 36                                                                                                                                                                             | FIBER CABLE | 18 pr                                                                         |     | 0.000                  | \$ 0.00 | 0.000                                 | \$ 0.00 | 0.000             | \$ 0.00 |
| 48                                                                                                                                                                             | FIBER CABLE | 24 pr                                                                         |     | 0.000                  | \$ 0.00 | 0.000                                 | \$ 0.00 | 0.000             | \$ 0.00 |
| 60                                                                                                                                                                             | FIBER CABLE | 30 pr                                                                         |     | 0.000                  | \$ 0.00 | 0.000                                 | \$ 0.00 | 0.000             | \$ 0.00 |
| 72                                                                                                                                                                             | FIBER CABLE | 36 pr                                                                         |     | 0.000                  | \$ 0.00 | 0.000                                 | \$ 0.00 | 0.000             | \$ 0.00 |
| 84                                                                                                                                                                             | FIBER CABLE | 42 pr                                                                         |     | 0.000                  | \$ 0.00 | 0.000                                 | \$ 0.00 | 0.000             | \$ 0.00 |
| 96                                                                                                                                                                             | FIBER CABLE | 48 pr                                                                         |     | 0.000                  | \$ 0.00 | 0.000                                 | \$ 0.00 | 0.000             | \$ 0.00 |
| 144                                                                                                                                                                            | FIBER CABLE | 72 pr                                                                         |     | 0.000                  | \$ 0.00 | 0.000                                 | \$ 0.00 | 0.000             | \$ 0.00 |
| 192                                                                                                                                                                            | FIBER CABLE | 96 pr                                                                         |     | 0.000                  | \$ 0.00 | 0.000                                 | \$ 0.00 | 0.000             | \$ 0.00 |
| 216                                                                                                                                                                            | FIBER CABLE | 108 pr                                                                        |     | 0.000                  | \$ 0.00 | 0.000                                 | \$ 0.00 | 0.000             | \$ 0.00 |
| SUBTOTAL                                                                                                                                                                       |             |                                                                               |     | \$ 0.00                |         | \$ 0.00                               |         | \$ 0.00           |         |

CONFIDENTIAL  
NOTICE MUST BE RELEASED TO PUBLIC  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO DIRECTOR

| CN123R24\LCATR027\SPAN                                                         |                 | LOOP COST ANALYSIS TOOL                                                              |        |        | Bellcore                                                                                                             |        |        |        |        |         |
|--------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------------|--------|--------|----------------------------------------------------------------------------------------------------------------------|--------|--------|--------|--------|---------|
| INPUT - PLANT CHAR.<br>Sheet 3a / 5                                            |                 | LOOP FACILITY INPUT<br>COPPER CABLE SPAN CHARACTERISTICS FOR THE FEEDER LAYER<br>FOR |        |        | LCAT Ref : 1.0.4<br>Issued : 07/31/96<br>STUDY YR : 1996<br>TEST CASE : 1<br>LAST UPDATE : 28-Oct-96<br>TIME : 09:01 |        |        |        |        |         |
| COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO |                 | INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 1 -- BUSINESS  |        |        |                                                                                                                      |        |        |        |        |         |
| NETWORK CIRCUIT LAYOUT STUDIES                                                 |                 | WORKSHEET A<br>CUMULATIVE LENGTHS BY CABLE PAIR FOOT                                 |        |        |                                                                                                                      |        |        |        |        |         |
| CABLE SHEATH SIZES                                                             | CAPACITY<br>idx | 26 GA.                                                                               |        |        | 24 GA.                                                                                                               |        |        | 22 GA. |        |         |
|                                                                                |                 | AERIAL                                                                               | BURIED | UNDGRD | AERIAL                                                                                                               | BURIED | UNDGRD | AERIAL | BURIED | UNDGRD  |
| 40 COPPER CABLE                                                                | 20 pr           |                                                                                      |        |        |                                                                                                                      |        |        |        |        |         |
| 50 COPPER CABLE                                                                | 25 pr           |                                                                                      |        |        |                                                                                                                      |        |        |        |        |         |
| 80 COPPER CABLE                                                                | 40 pr           |                                                                                      |        |        |                                                                                                                      |        |        |        |        |         |
| 100 COPPER CABLE                                                               | 50 pr           |                                                                                      |        |        |                                                                                                                      |        |        |        |        |         |
| 140 COPPER CABLE                                                               | 70 pr           |                                                                                      |        |        |                                                                                                                      |        |        |        |        |         |
| 200 COPPER CABLE                                                               | 100 pr          |                                                                                      |        |        |                                                                                                                      |        |        |        |        |         |
| 400 COPPER CABLE                                                               | 200 pr          |                                                                                      |        |        |                                                                                                                      |        |        |        |        |         |
| 600 COPPER CABLE                                                               | 300 pr          |                                                                                      |        |        |                                                                                                                      |        |        |        |        |         |
| 800 COPPER CABLE                                                               | 400 pr          |                                                                                      |        |        |                                                                                                                      |        |        |        |        |         |
| 1200 COPPER CABLE                                                              | 600 pr          |                                                                                      |        |        |                                                                                                                      |        |        |        |        |         |
| 1800 COPPER CABLE                                                              | 900 pr          |                                                                                      |        |        |                                                                                                                      |        |        |        |        |         |
| 2400 COPPER CABLE                                                              | 1200 pr         |                                                                                      |        |        |                                                                                                                      |        |        |        |        |         |
| 3000 COPPER CABLE                                                              | 1500 pr         |                                                                                      |        |        |                                                                                                                      |        |        |        |        |         |
| 3600 COPPER CABLE                                                              | 1800 pr         |                                                                                      |        |        |                                                                                                                      |        |        |        |        |         |
| 4200 COPPER CABLE                                                              | 2100 pr         |                                                                                      |        |        |                                                                                                                      |        |        |        |        |         |
| 4800 COPPER CABLE                                                              | 2400 pr         |                                                                                      |        |        |                                                                                                                      |        |        |        |        |         |
| 5400 COPPER CABLE                                                              | 2700 pr         |                                                                                      |        |        |                                                                                                                      |        |        |        |        | 0.0     |
| 6000 COPPER CABLE                                                              | 3000 pr         |                                                                                      |        |        |                                                                                                                      |        |        |        |        | tdrcprf |
| 7200 COPPER CABLE                                                              | 3600 pr         |                                                                                      |        |        |                                                                                                                      |        |        |        |        | 0.0     |
| 8400 COPPER CABLE                                                              | 4200 pr         |                                                                                      |        |        |                                                                                                                      |        |        |        |        | tdrcprf |
| SUB TOTALS                                                                     |                 | 0.0                                                                                  | 0.0    | 0.0    | 0.0                                                                                                                  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0     |
| TOTALS                                                                         |                 |                                                                                      |        | 0.0    |                                                                                                                      |        | 0.0    |        |        | 0.0     |

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR027 SPAN                                  |         | LOOP COST ANALYSIS TOOL                           |        |        |       |        |        | Bellcore                              |        |        |       |
|----------------------------------------------------------|---------|---------------------------------------------------|--------|--------|-------|--------|--------|---------------------------------------|--------|--------|-------|
| PLANT CHAR - WORKSHEET 3B<br>Sheet 3b / 5                |         | COPPER CABLE SPAN INVESTMENT FOR THE FEEDER LAYER |        |        |       |        |        | LCAT Rel : 1.0.4<br>Issued : 07/31/95 |        |        |       |
| COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI |         | INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996    |        |        |       |        |        | STUDY YR : 1996<br>TEST CASE : 1      |        |        |       |
| STATE: OHIO                                              |         | SERVICE CLASS: BAND 1 - BUSINESS                  |        |        |       |        |        | LAST UPDATE: 28-Oct-96<br>TIME: 09:01 |        |        |       |
| NETWORK CIRCUIT LAYOUT STUDIES                           |         |                                                   |        |        |       |        |        |                                       |        |        |       |
| WORKSHEET B                                              |         |                                                   |        |        |       |        |        |                                       |        |        |       |
| CUMMULATIVE INVESTMENTS BY CABLE PAIR FOOT               |         |                                                   |        |        |       |        |        |                                       |        |        |       |
| CABLE SHEATH SIZES                                       |         | CAPACITY                                          | 26 GA. |        |       | 24 GA. |        |                                       | 22 GA. |        |       |
|                                                          |         | idx                                               | AERIAL | BURIED | UNGRD | AERIAL | BURIED | UNGRD                                 | AERIAL | BURIED | UNGRD |
| 40 COPPER CABLE                                          | 20 pr   | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 50 COPPER CABLE                                          | 25 pr   | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 80 COPPER CABLE                                          | 40 pr   | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 100 COPPER CABLE                                         | 50 pr   | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 140 COPPER CABLE                                         | 70 pr   | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 200 COPPER CABLE                                         | 100 pr  | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 400 COPPER CABLE                                         | 200 pr  | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 600 COPPER CABLE                                         | 300 pr  | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 800 COPPER CABLE                                         | 400 pr  | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 1200 COPPER CABLE                                        | 600 pr  | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 1800 COPPER CABLE                                        | 900 pr  | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 2400 COPPER CABLE                                        | 1200 pr | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 3000 COPPER CABLE                                        | 1500 pr | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 3600 COPPER CABLE                                        | 1800 pr | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 4200 COPPER CABLE                                        | 2100 pr | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 4800 COPPER CABLE                                        | 2400 pr | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 5400 COPPER CABLE                                        | 2700 pr | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 6000 COPPER CABLE                                        | 3000 pr | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 7200 COPPER CABLE                                        | 3600 pr | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| 8400 COPPER CABLE                                        | 4200 pr | \$                                                | 0.00   | 0.00   | 0.00  | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   | 0.00  |
| AERIAL CABLE SUBTOTAL                                    |         |                                                   | 0.00   |        |       | 0.00   |        |                                       | 0.00   |        |       |
| BURIED CABLE SUBTOTAL                                    |         |                                                   |        | 0.00   |       |        | 0.00   |                                       |        | 0.00   |       |
| UNGRD CABLE SUBTOTAL                                     |         |                                                   |        |        | 0.00  |        |        | 0.00                                  |        |        | 0.00  |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATR027\SPAN

## LOOP COST ANALYSIS TOOL

Bellcore

INPUT - PLANT\_CHAR.  
Sheet 4a / 5LOOP FACILITY INPUT  
COPPER CABLE SPAN CHARACTERISTICS FOR THE DISTRIBUTION LAYER  
FOR

LCAT Rel: 1.0.4

Issued: 07/31/95

STUDY YR: 1996

TEST CASE: 1

LAST UPDATE: 28-Oct-96

TIME: 09:01

COMPANY: CINCINNATI BELL TEL.  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIOINVESTMENT YEAR: 1996  
LOOP STUDY YEAR: 1996  
SERVICE CLASS: BAND 1 - BUSINESS

## NETWORK CIRCUIT LAYOUT STUDIES

## WORKSHEET A

## CUMULATIVE LENGTHS BY CABLE PAIR FOOT

| CABLE SHEATH SIZES | CAPACITY<br>IDX | 26 GA. |        |        | 24 GA. |        |        | 22 GA. |        |        |
|--------------------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                    |                 | AERIAL | BURIED | UNDGRD | AERIAL | BURIED | UNDGRD | AERIAL | BURIED | UNDGRD |
| 40 COPPER CABLE    | 20 pr           |        |        |        |        |        |        |        |        |        |
| 50 COPPER CABLE    | 25 pr           |        |        |        |        |        |        |        |        |        |
| 80 COPPER CABLE    | 40 pr           |        |        |        |        |        |        |        |        |        |
| 100 COPPER CABLE   | 50 pr           |        |        |        |        |        |        |        |        |        |
| 140 COPPER CABLE   | 70 pr           |        |        |        |        |        |        |        |        |        |
| 200 COPPER CABLE   | 100 pr          |        |        |        |        |        |        |        |        |        |
| 400 COPPER CABLE   | 200 pr          |        |        |        |        |        |        |        |        |        |
| 600 COPPER CABLE   | 300 pr          |        |        |        |        |        |        |        |        |        |
| 800 COPPER CABLE   | 400 pr          |        |        |        |        |        |        |        |        |        |
| 1200 COPPER CABLE  | 500 pr          |        |        |        |        |        |        |        |        |        |
| 1800 COPPER CABLE  | 900 pr          |        |        |        |        |        |        |        |        |        |
| 2400 COPPER CABLE  | 1200 pr         |        |        |        |        |        |        |        |        |        |
| 3000 COPPER CABLE  | 1500 pr         |        |        |        |        |        |        |        |        |        |
| 3600 COPPER CABLE  | 1800 pr         |        |        |        |        |        |        |        |        |        |
| 4200 COPPER CABLE  | 2100 pr         |        |        |        |        |        |        |        |        |        |
| 4800 COPPER CABLE  | 2400 pr         |        |        |        |        |        |        |        |        |        |
| 5400 COPPER CABLE  | 2700 pr         |        |        |        |        |        |        |        |        |        |
| 6000 COPPER CABLE  | 3000 pr         |        |        |        |        |        |        |        |        |        |
| 7200 COPPER CABLE  | 3600 pr         |        |        |        |        |        |        |        |        |        |
| 8400 COPPER CABLE  | 4200 pr         |        |        |        |        |        |        |        |        |        |
| SUB TOTALS         |                 | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| TOTALS             |                 |        |        | 0.0    |        |        | 0.0    |        |        | 0.0    |

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR027\SPAN                                |          | LOOP COST ANALYSIS TOOL                                                            |        |        |        |        |        | Bellcore                              |        |        |
|--------------------------------------------------------|----------|------------------------------------------------------------------------------------|--------|--------|--------|--------|--------|---------------------------------------|--------|--------|
| PLANT CHAR - WORKSHEET 4B<br>Sheet 4b / 5              |          | LOOP FACILITY INPUT<br>COPPER CABLE SPAN INVESTMENT FOR THE DISTRIBUTION LAYER FOR |        |        |        |        |        | LCAT Rel : 1.0.4<br>Issued : 07/31/95 |        |        |
| COMPANY:CINCINNATI BELL TEL.<br>CITY / AREA:CINCINNATI |          | INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996                                     |        |        |        |        |        | STUDY YR : 1996<br>TEST CASE : 1      |        |        |
| STATE: OHIO                                            |          | SERVICE CLASS:BAND 1 - BUSINESS                                                    |        |        |        |        |        | LAST UPDATE: 25-Oct-96                |        |        |
| <b><i>NETWORK CIRCUIT LAYOUT STUDIES</i></b>           |          | <b>WORKSHEET B</b>                                                                 |        |        |        |        |        | <b>TIME : 09:01</b>                   |        |        |
|                                                        |          | CUMMULATIVE INVESTMENTS BY CABLE PAIR FOOT                                         |        |        |        |        |        |                                       |        |        |
| CABLE SHEATH SIZES                                     | CAPACITY | 26 GA.                                                                             |        |        | 24 GA. |        |        | 22 GA.                                |        |        |
|                                                        | idx      | AERIAL                                                                             | BURIED | UNDGRD | AERIAL | BURIED | UNDGRD | AERIAL                                | BURIED | UNDGRD |
| 40 COPPER CABLE                                        | 20 pr    | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 50 COPPER CABLE                                        | 25 pr    | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 80 COPPER CABLE                                        | 40 pr    | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 100 COPPER CABLE                                       | 50 pr    | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 140 COPPER CABLE                                       | 70 pr    | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 200 COPPER CABLE                                       | 100 pr   | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 400 COPPER CABLE                                       | 200 pr   | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 600 COPPER CABLE                                       | 300 pr   | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 800 COPPER CABLE                                       | 400 pr   | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 1200 COPPER CABLE                                      | 600 pr   | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 1800 COPPER CABLE                                      | 900 pr   | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 2400 COPPER CABLE                                      | 1200 pr  | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 3000 COPPER CABLE                                      | 1500 pr  | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 3600 COPPER CABLE                                      | 1800 pr  | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 4200 COPPER CABLE                                      | 2100 pr  | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 4800 COPPER CABLE                                      | 2400 pr  | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 5400 COPPER CABLE                                      | 2700 pr  | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 6000 COPPER CABLE                                      | 3000 pr  | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 7200 COPPER CABLE                                      | 3600 pr  | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| 8400 COPPER CABLE                                      | 4200 pr  | \$ 0.00                                                                            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00                                  | 0.00   | 0.00   |
| AERIAL CABLE SUBTOTAL                                  |          | 0.00                                                                               |        |        | 0.00   |        |        | 0.00                                  |        |        |
| BURIED CABLE SUBTOTAL                                  |          |                                                                                    | 0.00   |        |        | 0.00   |        |                                       | 0.00   |        |
| UNDGRND CABLE SUBTOTAL                                 |          |                                                                                    |        | 0.00   |        |        | 0.00   |                                       |        | 0.00   |
|                                                        |          | NOTICE TO RELEASE                                                                  |        |        |        |        |        |                                       |        |        |
|                                                        |          | FOR RELEASE                                                                        |        |        |        |        |        |                                       |        |        |

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

| C:\23R24\LCATR027\SPAN                                                                                                             |         | <b>LOOP COST ANALYSIS TOOL</b>                                                         |          |          |        |        |        | <b>Bellcore</b> ®                                                       |            |             |
|------------------------------------------------------------------------------------------------------------------------------------|---------|----------------------------------------------------------------------------------------|----------|----------|--------|--------|--------|-------------------------------------------------------------------------|------------|-------------|
| INPUT - PLANT_CHAR.<br>Sheet 5 / 5                                                                                                 |         | LOOP FACILITY INPUT<br>DIGITAL LOOP CARRIER CABLE PAIR EQUIVALENTS AND MIX<br>FOR      |          |          |        |        |        | LCAT Rel: 1.0.4<br>Issued: 07/31/95                                     |            |             |
| COMPANY: CINCINNATI BELL TEL<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO                                                      |         | INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 1 - BUSINESS PBX |          |          |        |        |        | STUDY YR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 28-Oct-96<br>TIME: 09:01 |            |             |
| FIBER BANDWIDTH<br>TRANSMISSION FLOW IS: <input checked="" type="checkbox"/> UNIDIRECTIONAL <input type="checkbox"/> BIDIRECTIONAL |         |                                                                                        |          |          |        |        |        |                                                                         |            |             |
| LEVEL OF SERVICE: <u>NARBAND</u>                                                                                                   |         |                                                                                        |          |          |        |        |        |                                                                         |            |             |
| BITRATE INDEX                                                                                                                      | 1       | 2                                                                                      | 3        | 4        | 5      | 6      | 7      | SERVICE                                                                 | PROTECTION | WEIGHTED    |
| FIBER BANDWIDTH                                                                                                                    | 45 Mbps | 90 Mbps                                                                                | 155 Mbps | 180 Mbps | 0      | 0      | 0      | LEVEL                                                                   | n:1        | EQUIVALENT  |
| MUX DS3 MULTIPLIER                                                                                                                 | 1       | 2                                                                                      | 3        | 4        | 0      | 0      | 0      | MULTIPLE                                                                | [E]        | CHANNELS    |
| VOICE GRADE CHANNELS                                                                                                               | 672     | 1344                                                                                   | 2016     | 2688     | 0      | 0      | 0      | [SLM]                                                                   | [E]        | PER FO PAIR |
| FEEDER - PRIMARY                                                                                                                   | 0.0000  | 0.1370                                                                                 | 0.7810   | 0.0820   | 0.0000 | 0.0000 | 0.0000 | 2                                                                       | 1          | 1979.04     |
| FEEDER - EXTENSION                                                                                                                 | 0.0000  | 0.1370                                                                                 | 0.7810   | 0.0820   | 0.0000 | 0.0000 | 0.0000 | 2                                                                       | 1          | 1979.04     |
|                                                                                                                                    |         |                                                                                        |          |          |        |        |        |                                                                         |            |             |
|                                                                                                                                    |         |                                                                                        |          |          |        |        |        |                                                                         |            |             |
|                                                                                                                                    |         |                                                                                        |          |          |        |        |        |                                                                         |            |             |
|                                                                                                                                    |         |                                                                                        |          |          |        |        |        |                                                                         |            |             |

**FOOTNOTES**

1 Where Service Level Multiple EQUALS {1 for NARBAND, 28 for WIDEBAND, 672 for BRDBAND} TIMES {2 for Unidirectional and 1 for Bidirectional}.

2 Where Wtd Eqv Chan per FO Pr [F] EQUALS {The Avg Wtd VGE for BR1 -> 7} DIVIDED BY {The [SLM] TIMES {1 PLUS OVER PROT [E]}}

CONFIDENTIAL

NOT TO BE GIVEN TO PUBLIC

PRIOR TO RELEASE TO PICO

PROVIDED TO PICO

PLANT CHAR. - WORKSHEET DS  
Sheet 1 / 1COMPANY: CINCINNATI BELL TEL  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIOLCAT Ref: 1.0.4  
Issued: 07/31/95STUDY YR: 1995  
TEST CASE: 1  
LAST UPDATE: 28-Oct-95  
TIME: 09:01

## WORKSHEET DS

| DIGITAL SIGNAL TABLE (dssig.tbl) |       |                |          |         |         |             |
|----------------------------------|-------|----------------|----------|---------|---------|-------------|
| SELECT                           | MODE  | HIERARCHY      | BNDWDTFS | DS1MULT | DS3MULT | VEG         |
| 0                                |       |                |          |         |         |             |
| 1                                |       | DS1 1.5 Mbps   |          | 1       | 0.04    | 24          |
| 2                                |       | DS1 1.5 Mbps   |          | 1       | 0.04    | 24          |
| 3                                | MODE3 | V11.5 1.5 Mbps |          | 1       | 0.04    | 24          |
| 4                                |       | V12 2 Mbps     |          | 1       | 0       | UNDIR.FIBER |
| 5                                |       | E1 2 Mbps      |          | 1       | 0.06    | 30          |
| 6                                | MODE1 | DS1C 3.2 Mbps  | NA       |         |         | 48          |
| 7                                | MODE2 | DS1C 3.2 Mbps  |          | 2       | 0.07    | 48          |
| 8                                |       | V13 3.2 Mbps   |          | 2       | 0.07    | 58          |
| 9                                |       | 4 Mbps         |          | 2       | 0       | 60          |
| 10                               |       | DS2 6.3 Mbps   |          | 4       | 0.14    | 72          |
| 11                               | MODE4 | DS2 6.3 Mbps   | NA       |         | 0       | 72          |
| 12                               |       | V16 6.3 Mbps   |          | 4       | 0.14    | 84          |
| 13                               |       | E2 8 Mbps      |          | 4       | 0.25    | 120         |
| 14                               |       | E3 34 Mbps     |          | 16      | 1       | 480         |
| 15                               | X     | DS3 45 Mbps    |          | 28      | 1       | 672         |
| 16                               | STST  | OC1 50 Mbps    |          | 28      |         | 672         |
| 17                               | X     | 90 Mbps        |          |         | 2       | 1344        |
| 18                               |       | 90 Mbps        |          |         | 2       | 1344        |
| 19                               |       | DS4 135 Mbps   |          |         | 3       | 2016        |
| 20                               |       | 135 Mbps       |          |         | 3       | 2016        |
| 21                               |       | DS4NA 135 Mbps |          |         | 3       | 2016        |
| 22                               |       | E4 140 Mbps    |          |         | 3       | 1920        |
| 23                               |       | 14M 139 Mbps   |          |         | 6       | 4032        |
| 24                               |       | P140 139 Mbps  |          |         | 6       | 4032        |
| 25                               | X     | OC3 155 Mbps   |          |         | 31      | 2016        |
| 26                               | X     | 180 Mbps       |          |         | 4       | 2880        |
| 27                               |       | 417 Mbps       |          |         | 9       | 6048        |
| 28                               |       | OC9 466 Mbps   |          |         | 9       | 6048        |
| 29                               |       | OC12 560 Mbps  |          |         | 12      | 7680        |
| 30                               |       | 565 Mbps       |          |         | 12      | 8064        |
| 31                               |       | 1.2 Gbps       |          |         | 24      | 16128       |
| 32                               |       | 1.7 Gbps       |          |         | 36      | 24192       |
| 33                               |       | OC24 1.8 Gbps  |          |         | 24      | 24192       |
| 34                               |       | 2.5 Gbps       |          |         | 24      | 34560       |
| 35                               |       |                |          |         |         |             |
| 36                               |       |                |          |         |         |             |
| OFFSET                           |       |                |          |         |         |             |
| 0                                | 1     | 2              | 3        | 4       | 6       |             |

CONFIDENTIAL  
NOTICE: INFORMATION GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.



| PLANT CHAR. - WORKSHEET F<br>Sheet 1 of 1                             |                                                                                          | LOOP LENGTH DEVELOPMENT WORKSHEET                                                                   |                                                |                                                                          |                                                | LCAT Rel: 1.0.4<br>Issued: 07/31/95      |  |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------|------------------------------------------|--|
| COMPANY: CINCINNATI BELL TEL.<br>CITY/AREA: CINCINNATI<br>STATE: OHIO |                                                                                          | INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 1 - BUSINESS                  |                                                | STUDY YR.: 1996<br>TEST CASE: 1<br>LAST UPDATE: 26-Oct-96<br>TIME: 09:01 |                                                | WORKSHEET F                              |  |
| [A]<br>BAND<br>NUMBER<br>[C]                                          | DISTANCE INCREMENTS:<br>[B]<br>NUMBER OF BANDS:<br>TOTAL<br>WORKING<br>FEET<br>[D=input] | 0 / 4 MILE BETWEEN BANDS<br>0 TO BE CARRIED INTO THE STUDY<br>TOTAL<br>WORKING<br>FEET<br>[E=(B*D)] | [R]<br>[K]<br>UNIT MILE/FEET CONSTANT:<br>T320 | ROUTE TO AIR RATIO: 1.539947<br>ratio                                    | LOOP<br>LENGTH<br>@ MIDPOINT<br>[G (see note)] | WORKING<br>FEET<br>@ MIDPOINT<br>[H=G*R] |  |
| 1                                                                     |                                                                                          | 0                                                                                                   |                                                |                                                                          | 0                                              | 0                                        |  |
| 2                                                                     |                                                                                          | 0                                                                                                   |                                                |                                                                          | 0                                              | 0                                        |  |
| 3                                                                     |                                                                                          | 0                                                                                                   |                                                |                                                                          | 0                                              | 0                                        |  |
| 4                                                                     |                                                                                          | 0                                                                                                   |                                                |                                                                          | 0                                              | 0                                        |  |
| 5                                                                     |                                                                                          | 0                                                                                                   |                                                |                                                                          | 0                                              | 0                                        |  |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

NOTE - SPAN MIDPOINT [G] equals the  $\text{SQRT}((F_{\text{CURR}}^2/2) + (F_{\text{PREV}}^2/2))$

ERROR MESSAG 0

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATRC27\SPAN                                                                                                                                                                                                                                                   |       | LOOP COST ANALYSIS TOOL |       |       |       | Bellcore <sup>®</sup>                                                                                          |       |       |       |        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------------------------|-------|-------|-------|----------------------------------------------------------------------------------------------------------------|-------|-------|-------|--------|
| PLANT CHAR. - WORKSHEET SA<br>Sheet 1 / 1<br>COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO                                                                                                                                               |       | WORKSHEET SA            |       |       |       | LCAT Ver: 1.0.4<br>Issued: 07/31/95<br>STUDY YR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 28-Oct-96<br>TIME: 39:01 |       |       |       |        |
| <b>Sub Feeder Allocation Table</b>                                                                                                                                                                                                                                        |       |                         |       |       |       |                                                                                                                |       |       |       |        |
| OFFSET      1      2      3      4      5      6      7      8      9      10                                                                                                                                                                                             |       |                         |       |       |       |                                                                                                                |       |       |       |        |
| Sub Feeder Allocation Table      section alloc                                                                                                                                                                                                                            |       |                         |       |       |       |                                                                                                                |       |       |       |        |
| cur lplgth = 6403      NO COLOCATED      dstopo = BUS      COLOCATED RT AND CP, where<br>dlcdapl = 12000      dstopo = STAF      dstopo = BUS      COLOCATED Fdstopo = BUS<br>[8] distsba = 638      dstopo = STAF      dstopo = BUS      dstopo = STAF      dstopo = BUS |       |                         |       |       |       |                                                                                                                |       |       |       |        |
| nom_rangcur - disubfeedonfeedesubfeed      prfeeder      subfeedonfeedesubfeed      prfeeder dif                                                                                                                                                                          |       |                         |       |       |       |                                                                                                                |       |       |       |        |
| [C] [D=C-I]      [E] [F=D-E]      [G] [H=D-G]      [I] [J=C-I]      [K] [L=C-K]      [M=A-C]                                                                                                                                                                              |       |                         |       |       |       |                                                                                                                |       |       |       |        |
| 500                                                                                                                                                                                                                                                                       | 0     | 0                       | 0     | 0     | 0     | 500                                                                                                            | 0     | 500   | 0     | 6403   |
| 1000                                                                                                                                                                                                                                                                      | 362   | 362                     | 0     | 362   | 0     | 1000                                                                                                           | 0     | 1000  | 0     | 5903   |
| 2000                                                                                                                                                                                                                                                                      | 1362  | 1362                    | 0     | 1362  | 0     | 2000                                                                                                           | 0     | 2000  | 0     | 5403   |
| 3000                                                                                                                                                                                                                                                                      | 2362  | 2362                    | 0     | 2362  | 0     | 3000                                                                                                           | 0     | 3000  | 0     | 4403   |
| 4000                                                                                                                                                                                                                                                                      | 3362  | 3362                    | 0     | 3362  | 0     | 4000                                                                                                           | 0     | 4000  | 0     | 3403   |
| 5000                                                                                                                                                                                                                                                                      | 4362  | 4362                    | 0     | 4362  | 0     | 5000                                                                                                           | 0     | 5000  | 0     | 2403   |
| 6000                                                                                                                                                                                                                                                                      | 5362  | 5362                    | 0     | 5362  | 0     | 6000                                                                                                           | 0     | 6000  | 0     | 1403   |
| 7000                                                                                                                                                                                                                                                                      | 6362  | 6362                    | 0     | 6362  | 0     | 7000                                                                                                           | 0     | 7000  | 0     | 403    |
| 8000                                                                                                                                                                                                                                                                      | 7362  | 7362                    | 0     | 7362  | 0     | 8000                                                                                                           | 0     | 8000  | 0     | -597   |
| 9000                                                                                                                                                                                                                                                                      | 8362  | 8362                    | 0     | 8362  | 0     | 9000                                                                                                           | 0     | 9000  | 0     | -1597  |
| 10000                                                                                                                                                                                                                                                                     | 9362  | 9362                    | 0     | 9362  | 0     | 10000                                                                                                          | 0     | 10000 | 0     | -2597  |
| 11000                                                                                                                                                                                                                                                                     | 10362 | 10362                   | 0     | 10362 | 0     | 11000                                                                                                          | 0     | 11000 | 0     | -3597  |
| 12000                                                                                                                                                                                                                                                                     | 11362 | 5681                    | 5681  | 0     | 11362 | 6000                                                                                                           | 6000  | 0     | 12000 | -4597  |
| 13000                                                                                                                                                                                                                                                                     | 12362 | 6181                    | 6181  | 0     | 12362 | 6500                                                                                                           | 6500  | 0     | 13000 | -5597  |
| 14000                                                                                                                                                                                                                                                                     | 13362 | 6681                    | 6681  | 0     | 13362 | 7000                                                                                                           | 7000  | 0     | 14000 | -6597  |
| 15000                                                                                                                                                                                                                                                                     | 14362 | 7181                    | 7181  | 0     | 14362 | 7500                                                                                                           | 7500  | 0     | 15000 | -7597  |
| 16000                                                                                                                                                                                                                                                                     | 15362 | 7681                    | 7681  | 0     | 15362 | 8000                                                                                                           | 8000  | 0     | 16000 | -8597  |
| 17000                                                                                                                                                                                                                                                                     | 16362 | 8181                    | 8181  | 0     | 16362 | 8500                                                                                                           | 8500  | 0     | 17000 | -9597  |
| 18000                                                                                                                                                                                                                                                                     | 17362 | 8681                    | 8681  | 1000  | 16362 | 9000                                                                                                           | 9000  | 1000  | 17000 | -10597 |
| 19000                                                                                                                                                                                                                                                                     | 18362 | 9181                    | 9181  | 2000  | 16362 | 9500                                                                                                           | 9500  | 2000  | 17000 | -11597 |
| 20000                                                                                                                                                                                                                                                                     | 19362 | 9681                    | 9681  | 3000  | 16362 | 10000                                                                                                          | 10000 | 3000  | 17000 | -12597 |
| 80000                                                                                                                                                                                                                                                                     | 79362 | 11362                   | 68000 | 4000  | 75362 | 11362                                                                                                          | 68638 | 4000  | 76000 | -73597 |

**RULES**

**ASSUMPTION - Table LOOKUP will select from the lower NOM\_RANGE or a CUR\_LPLGTH intermediate value**

**H CUR\_LPLGTH is**

- = < DISTSPAN, then CUR\_SEGLGTH<sup>OST</sup> Equals CUR\_LPLGTH - NOM\_RANGE difference
- > DISTSPAN and < DLCDEPL, then CUR\_SEGLGTH<sup>OST</sup> Equals CUR\_LPLGTH - NOM\_RANGE difference
- = > DLCDEPL, then CUR\_SEGLGTH<sup>OST</sup> Equals CUR\_LPLGTH - NOM\_RANGE difference

**CUR\_SEGLGTH - Calculation Assumptions**

The DISTSPAN can not exceed the DLCDEPL value input on DISTSPAN.

Therefore, set the DLCDEPL at the DISTSPAN to get an ALL FIBER Network.

C:\123R24\LCATR027\COSTMETH

## LOOP COST ANALYSIS TOOL

Bellcore (R)

TABLE - COST\_METH

SHEET 1 of 2

COST METHODS ASSIGNMENT TABLE  
DISTRIBUTION SEGMENTCOMPANY: CINCINNATI BELL TEL  
STATE: OHIO

SWITCHED SERVICES

LCAT Rel: 1.0.4

Issued: 07/31/95

STUDY YR: 1996

TEST CASE: 1

LAST UPDATE: 28-Oct-96

TIME: 08:48

| PLANT ITEM              | LCAT CODE | WHEN BANDWIDTH DELIVERY IS |             |          |             |           |             |
|-------------------------|-----------|----------------------------|-------------|----------|-------------|-----------|-------------|
|                         |           | NARROWBAND                 |             | WIDEBAND |             | BROADBAND |             |
|                         |           | CATEGORY                   | SENS. INDEX | CATEGORY | SENS. INDEX | CATEGORY  | SENS. INDEX |
| LAND                    | LAND      | 20C                        | F           | SHARED   | F           | SHARED    | F           |
| BUILDING                | BLDG      | 10C                        | F           | SHARED   | F           | SHARED    | F           |
| BLDG ENTRANCE CABLE     | BEC       | 12C                        | V           | DIRECT   | V           | DIRECT    | V           |
| INTRABLDG CABLE         | IBC       | 52C                        | V           | DIRECT   | V           | DIRECT    | V           |
| AERIAL CABLE (COPPER) ① | ACU       | 22C                        | V           | DIRECT   | V           | DIRECT    | V           |
| BURIED CABLE (COPPER) ① | BCU       | 45C                        | V           | DIRECT   | V           | DIRECT    | V           |
| UNDERGROUND (CU) CA. ①  | UCU       | 5C                         | V           | DIRECT   | V           | DIRECT    | V           |
| CO EQPT - LOW CAP TERM  | DLCT      | 257C                       | F           | DIRECT   | V           | DIRECT    | V           |
| CO EQPT - LOW CAP CHAN  | DLCC      | 257C                       | V           | DIRECT   | V           | DIRECT    | V           |
| CO EQPT - HI CAP TERM   | MUXT      | 857C                       | F           | DIRECT   | F           | DIRECT    | F           |
| CO EQPT - HI CAP CHAN   | MUXC      | 857C                       | F           | DIRECT   | F           | DIRECT    | V           |
| CO EQPT - ANALOG SW     | ACOE      | 77C                        | V           | DIRECT   | V           | DIRECT    | V           |
| CO EQPT - DIGITAL SW    | DCOE      | 377C                       | V           | DIRECT   | V           | DIRECT    | V           |
| AERIAL CABLE (FIBER)    | AFO       | 822C                       | F           | DIRECT   | F           | DIRECT    | F           |
| BURIED CABLE (FIBER)    | BFO       | 845C                       | F           | DIRECT   | F           | DIRECT    | F           |
| UNDERGROUND (FO) CA.    | UFO       | 85C                        | F           | DIRECT   | F           | DIRECT    | F           |
| CONNECTORS              | CONN      | 57C                        | V           | DIRECT   | V           | DIRECT    | V           |
| MISC. COM EQP & PWR     | MCEP      | 57C                        | V           | SHARED   | V           | SHARED    | V           |
| POLE LINE               | POLE      | 1C                         | F           | DIRECT   | F           | DIRECT    | F           |
| CONDUIT                 | COND      | 4C                         | F           | DIRECT   | F           | DIRECT    | F           |

## FOOTNOTES

① THESE ASSIGNMENTS APPLY TO DEDICATED COPPER - PAIRS (NON-MULTIPLEXED) FEEDER & DISTRIBUTION  
 BY DEFINITION: ITEMS LABELED F(ixed) OR SHARED ARE EXCLUDED IN MARGINAL COST STUDIES  
 ITEMS LABELED F(ixed) ARE EXCLUDED FROM ADDITIONS IN INCREMENTAL STUDIES  
 ALL ITEMS ARE INCLUDED IN A PROSPECTIVE, REPLACEMENT OR NEW INSTALLATION.

NOTICE OF RELEASE  
 MAY 10 1996  
 PUCO

C:\123R24\LCATR027\COSTMETH  
TABLE - COST\_METH  
Sheet 1 of 2

HELP SCREEN**Belcore** (TM)

LCAT Rel : 1.0.4

Issued : 07/31/95

| <u>Field / Group Title</u> | <u>Valid Inputs</u>    | <u>This field or grouping defines -</u>                                                                                                                                                                                                                                                                                             |
|----------------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SERVICES                   | (none)                 | The system matrix for DISTRIBUTION cost methodology for -<br>The User selected Service Category - SWITCHED or PRIVATE LINE.                                                                                                                                                                                                         |
| LCAT CODE                  | (none)                 | The system key code for this cost component                                                                                                                                                                                                                                                                                         |
| PLANT CODE                 | Any 5 (max) char. code | The User cross-reference code for the cost component or component group. Examples are "field" codes, sub-accounts.                                                                                                                                                                                                                  |
| DELIVERY                   | (none)                 | The Service Delivery Bandwidth Capacity for each group of methodology categories. The system defines 3 -<br>Narrowband - denotes voice grade and sub-voice grade band width.<br>Wideband - denotes bandwidths of the first level of digital hierarchy.<br>Broadband - denotes bandwidths of the higher levels of digital hierarchy. |
| CATEGORY                   | (none)                 | The group of Methodology Categories                                                                                                                                                                                                                                                                                                 |
| SENSITIVITY INDEX          | F, V                   | The Volatility Index to Distance or Demand Sensitivity -<br>F for Fixed Value, Low sensitivity to Distance or Demand.<br>V for Variable Usage, Cost Sensitive to Distance or Demand.<br>S for Sunk Investment which only has an Annual Component.                                                                                   |
| RESOURCE ASSIGNMENT        | SHARED, DIRECT         | The Assigned Category of Circuit Function -<br>DIRECT for Dedicated or Circuit Specific Investment.<br>SHARED - for Multi-Circuit or Non-Specific Investment.                                                                                                                                                                       |

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*  
\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION \*\*\*\*\*

PRESS <ENTER> TO RETURN TO THE MAIN MENU

**CONFIDENTIAL**  
**NOTICE: DO NOT BE GIVEN TO THE PUBLIC**  
**PROVIDED TO PUCO**

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATR027.COSTMETH

## LOOP COST ANALYSIS TOOL

Bellcore (R)

TABLE - COST METH  
SHEET 2 of 2COST METHODS ASSIGNMENT TABLE  
FEEDER SEGMENTCOMPANY: CINCINNATI BELL TEL.  
STATE: OHIO

SWITCHED SERVICES

LCAT Rel: 1.0.4  
Issued: 07/31/95  
STUDY YR: 1996  
TEST CASE: 1  
LAST UPDATE: 28-Oct-96  
TIME: 08:48

| PLANT ITEM              | WHEN BANDWIDTH DELIVERY IS |                |            |                |            |                |
|-------------------------|----------------------------|----------------|------------|----------------|------------|----------------|
|                         | NARROWBAND                 |                | WIDEBAND   |                | BROADBAND  |                |
|                         | CATEGORY                   | SENS. RESOURCE | CATEGORY   | SENS. RESOURCE | CATEGORY   | SENS. RESOURCE |
|                         | CODE                       | INDEX          | ASSIGNMENT | INDEX          | ASSIGNMENT | INDEX          |
| LAND                    | 20C                        | F              | SHARED     | F              | SHARED     | F              |
| BUILDING                | 10C                        | F              | SHARED     | F              | SHARED     | F              |
| BLDG ENTRANCE CABLE     |                            |                |            |                |            |                |
| INTRABLDG CABLE         |                            |                |            |                |            |                |
| AERIAL CABLE (COPPER) ① | 22C                        | V              | DIRECT     | V              | DIRECT     | V              |
| BURIED CABLE (COPPER) ① | 45C                        | V              | DIRECT     | V              | DIRECT     | V              |
| UNDERGROUND (CU) CA. ①  | 5C                         | V              | DIRECT     | V              | DIRECT     | V              |
| CO EQPT - LOW CAP TERM  | 257C                       | F              | DIRECT     | V              | DIRECT     | V              |
| CO EQPT - LOW CAP CHAN  | 257C                       | V              | DIRECT     | V              | DIRECT     | V              |
| CO EQPT - HI CAP TERM   | 857C                       | F              | DIRECT     | F              | DIRECT     | F              |
| CO EQPT - HI CAP CHAN   | 857C                       | F              | DIRECT     | F              | DIRECT     | F              |
| CO EQPT - ANALOG SW     | 77C                        | V              | DIRECT     | V              | DIRECT     | V              |
| CO EQPT - DIGITAL SW    | 377C                       | V              | DIRECT     | V              | DIRECT     | V              |
| AERIAL CABLE (FIBER)    | 822C                       | F              | DIRECT     | F              | DIRECT     | F              |
| BURIED CABLE (FIBER)    | 845C                       | F              | DIRECT     | F              | DIRECT     | F              |
| UNDERGROUND (FO) CA.    | 85C                        | F              | DIRECT     | F              | DIRECT     | F              |
| CONNECTORS              | 57C                        | V              | DIRECT     | V              | DIRECT     | V              |
| MISC. COM EQP & PWR     | 57C                        | V              | SHARED     | V              | SHARED     | V              |
| POLE LINE               | 1C                         | F              | DIRECT     | F              | DIRECT     | F              |
| CONDUIT                 | 4C                         | F              | DIRECT     | F              | DIRECT     | F              |

## FOOTNOTES

- ① THESE ASSIGNMENTS APPLY TO MULTIPLEXED COPPER FEEDERS ONLY  
 BY DEFINITION: ITEMS LABELED F (fixed) OR SHARED ARE EXCLUDED IN A MARGINAL COST STUDY  
 ITEMS LABELED F (fixed) ARE EXCLUDED FROM ADDITIONS IN INCREMENTAL STUDIES  
 ALL ITEMS ARE INCLUDED IN A PROSPECTIVE REPLACEMENT OR NEW INSTALLATION.

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATR027\COSTMETH

HELP SCREEN**Belcore**

TABLE - COST\_METH

LCAT Rel : 1.0.4

Sheet 2 of 2

Issued : 07/31/95

| <u>Field / Group Title</u> | <u>Valid Inputs</u> | <u>This field or grouping defines -</u>                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SERVICES                   | (none)              | The system matrix for FEEDER cost methodology for -<br>The User selected Service Category - SWITCHED or PRIVATE LINE.                                                                                                                                                                                                               |
| LCAT CODE                  | (none)              | The system key code for this cost component                                                                                                                                                                                                                                                                                         |
| PLANT CODE                 | (none)              | The User nominated cross-reference code for the cost component or component group from the previous screen.                                                                                                                                                                                                                         |
| DELIVERY                   | (none)              | The Service Delivery Bandwidth Capacity for each group of methodology categories. The system defines 3 -<br>Narrowband - denotes voice grade and sub-voice grade band width.<br>Wideband - denotes bandwidths of the first level of digital hierarchy.<br>Broadband - denotes bandwidths of the higher levels of digital hierarchy. |
| CATEGORY                   | (none)              | The group of Methodology Categories                                                                                                                                                                                                                                                                                                 |
| SENSITIVITY INDEX          | F, V                | The Volatility Index to Distance or Demand Sensitivity -<br>F for Fixed Value, Low sensitivity to Distance or Demand.<br>V for Variable Usage, Cost Sensitive to Distance or Demand.<br>S for Sunk Investment which only has an Annual Component                                                                                    |
| RESOURCE ASSIGNMENT        | SHARED, DIRECT      | The Assigned Category of Circuit Function -<br>DIRECT for Dedicated or Circuit Specific Investment.<br>SHARED - for Multi-Circuit or Non-Specific Investment.                                                                                                                                                                       |

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*  
 \*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION \*\*\*\*\*

PRESS <ENTER> TO RETURN TO THE MAIN MENU

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

**OHIO ONLY  
3 Geographic Areas**

07/26/96  
Revised

**Band 1**

|   |                 |
|---|-----------------|
| 1 | 0-12,000        |
| 2 | # Of Entries    |
| 3 | 12,001-INFINITY |
| 4 | # Of Entries    |
| 5 | Ratio           |
| 6 | 0-12,000        |
| 7 | 12,001-INFINITY |

| Residence         |                   |              | Business          |                   |              |
|-------------------|-------------------|--------------|-------------------|-------------------|--------------|
| Average F1 Length | Average F2 Length | Average Loop | Average F1 Length | Average F2 Length | Average Loop |
| A                 | B                 | C            | D                 | E                 | F            |
| 6,081             | 1,103             | 7,184        | 5,765             | 638               | 6,403        |
| 107               |                   |              | 255               |                   |              |
| 14,881            | 2,346             | 17,226       | 13,630            | 2,046             | 15,677       |
| 53                |                   |              | 38                |                   |              |
|                   |                   |              |                   |                   |              |
| 0.5744            |                   |              | 0.7433            |                   |              |
| 0.4256            |                   |              | 0.2567            |                   |              |
| 1.0000            |                   |              | 1.0000            |                   |              |

**Band 2**

|    |                 |
|----|-----------------|
| 8  | 0-14,000        |
| 9  | # Of Entries    |
| 10 | 14,001-INFINITY |
| 11 | # Of Entries    |
| 12 | Ratio           |
| 13 | 0-14,000        |
| 14 | 14,001-INFINITY |

|        |       |        |        |       |        |
|--------|-------|--------|--------|-------|--------|
| 6,697  | 1,836 | 8,534  | 5,698  | 1,013 | 6,711  |
| 69     |       |        | 90     |       |        |
| 19,582 | 2,699 | 22,282 | 21,785 | 1,989 | 23,774 |
| 70     |       |        | 74     |       |        |
|        |       |        |        |       |        |
| 0.4964 |       |        | 0.5488 |       |        |
| 0.5036 |       |        | 0.4512 |       |        |
| 1.0000 |       |        | 1.0000 |       |        |

**Band 3**

|    |                 |
|----|-----------------|
| 15 | 0-18,000        |
| 16 | # Of Entries    |
| 17 | 18,001-INFINITY |
| 18 | # Of Entries    |
| 19 | Ratio           |
| 20 | 0-18,000        |
| 21 | 18,001-INFINITY |

|        |       |        |        |       |        |
|--------|-------|--------|--------|-------|--------|
| 4,845  | 1,981 | 6,825  | 4,572  | 1,095 | 5,608  |
| 46     |       |        | 47     |       |        |
| 23,301 | 4,826 | 28,127 | 23,881 | 3,479 | 27,360 |
| 56     |       |        | 36     |       |        |
|        |       |        |        |       |        |
| 0.4510 |       |        | 0.5775 |       |        |
| 0.5490 |       |        | 0.4225 |       |        |
| 1.0000 |       |        | 1.0000 |       |        |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

| CA123R24\LCATR028\RESULTS1<br>OUTPUT - WORKSHEET D<br>SHEET 4 of 10                                    |      | LOOP COST ANALYSIS TOOL<br>PROSPECTIVE INVESTMENT WORKSHEET SUMMARY                                                                    |     |                                                                      |     |                     | Bellcore <sup>®</sup><br>LCAT Rel: 1.0.4<br>Issued: 7/31/95 |  |
|--------------------------------------------------------------------------------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------|-----|----------------------------------------------------------------------|-----|---------------------|-------------------------------------------------------------|--|
| COMPANY: CINCINNATI BELL TEL<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO<br>JOB IDENT: CINCINNATI |      | CIRCUIT DESIGN: 1 FOMUX<br>LOOP SPAN DIVISION: ALL LOOP SPANS<br>SERVICE CLASS: BAND 1 - BUSINESS PBX<br>TOTAL LOOP LENGTH: 15677 FEET |     | STUDY YR: 1996<br>TEST CASE: 1<br>RUN DATE: 28-Jan-97<br>TIME: 08:02 |     |                     |                                                             |  |
| Circuit Design Mix: 0.0000                                                                             |      | UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY                                                                             |     |                                                                      |     |                     |                                                             |  |
| PLANT NAME                                                                                             |      | FEEDER                                                                                                                                 |     | DISTRIBUTION NETWORK                                                 |     | TOTAL               |                                                             |  |
| SEG. NAME                                                                                              |      | PRIMARY                                                                                                                                |     | EXTENSION                                                            |     | SUB-                |                                                             |  |
| EQPT                                                                                                   |      | INTERFACE                                                                                                                              |     | TOTAL LOOP                                                           |     | WEIGHTED TOTAL LOOP |                                                             |  |
| PLANT CODE                                                                                             |      |                                                                                                                                        |     |                                                                      |     |                     |                                                             |  |
| ITEM DESCRIPTION                                                                                       |      |                                                                                                                                        |     |                                                                      |     |                     |                                                             |  |
| <b>SHARED RESOURCES</b>                                                                                |      |                                                                                                                                        |     |                                                                      |     |                     |                                                             |  |
| LAND                                                                                                   | 20C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| BUILDING                                                                                               | 10C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| BLDG ENTRANCE CABLE                                                                                    | 12C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| INTRABLDG CABLE                                                                                        | 52C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| AERIAL CABLE (COPPER)                                                                                  | 22C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| BURIED CABLE (COPPER)                                                                                  | 45C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| UNDERGROUND (CU) CA.                                                                                   | 5C   |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| CO EQPT - LOW CAP TERM                                                                                 | 257C |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| CO EQPT - LOW CAP CHAN                                                                                 | 257C |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| CO EQPT - HI CAP TERM                                                                                  | 857C |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| CO EQPT - HI CAP CHAN                                                                                  | 857C |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| CO EQPT - ANALOG SW                                                                                    | 77C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| CO EQPT - DIGITAL SW                                                                                   | 377C |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| AERIAL CABLE (FIBER)                                                                                   | 822C |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| BURIED CABLE (FIBER)                                                                                   | 845C |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| UNDERGROUND (FO) CA.                                                                                   | 85C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| CONNECTORS                                                                                             | 57C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| MISC. COM EQP & PWR                                                                                    | 57C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| POLE LINE                                                                                              | 1C   |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| CONDUIT                                                                                                | 4C   |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| <b>DIRECT RESOURCES</b>                                                                                |      |                                                                                                                                        |     |                                                                      |     |                     |                                                             |  |
| LAND                                                                                                   | 20C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| BUILDING                                                                                               | 10C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| BLDG ENTRANCE CABLE                                                                                    | 12C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| INTRABLDG CABLE                                                                                        | 52C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| AERIAL CABLE (COPPER)                                                                                  | 22C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| BURIED CABLE (COPPER)                                                                                  | 45C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| UNDERGROUND (CU) CA.                                                                                   | 5C   |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| CO EQPT - LOW CAP TERM                                                                                 | 257C |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| CO EQPT - LOW CAP CHAN                                                                                 | 257C |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| CO EQPT - HI CAP TERM                                                                                  | 857C |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| CO EQPT - HI CAP CHAN                                                                                  | 857C |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| CO EQPT - ANALOG SW                                                                                    | 77C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| CO EQPT - DIGITAL SW                                                                                   | 377C |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| AERIAL CABLE (FIBER)                                                                                   | 822C |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| BURIED CABLE (FIBER)                                                                                   | 845C |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| UNDERGROUND (FO) CA.                                                                                   | 85C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| CONNECTORS                                                                                             | 57C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| MISC. COM EQP & PWR                                                                                    | 57C  |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| POLE LINE                                                                                              | 1C   |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| CONDUIT                                                                                                | 4C   |                                                                                                                                        |     |                                                                      |     | \$0                 | \$0                                                         |  |
| SPAN SUMMARY                                                                                           |      | \$0                                                                                                                                    | \$0 | \$0                                                                  | \$0 | \$0                 | \$0                                                         |  |

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUBLIC

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.



|                              |  |                                          |  |                     |  |                 |  |
|------------------------------|--|------------------------------------------|--|---------------------|--|-----------------|--|
| C:\123R24\LCATR028\RESULTS1  |  | LOOP COST ANALYSIS TOOL                  |  |                     |  | Bellcore        |  |
| OUTPUT - WORKSHEET D         |  | PROSPECTIVE INVESTMENT WORKSHEET SUMMARY |  |                     |  | LCAT Rel: 1.0.4 |  |
| SHEET 5 of 10                |  |                                          |  |                     |  | Issued: 7/31/95 |  |
| COMPANY: CINCINNATI BELL TEL |  | CIRCUIT DESIGN: 2 FOMUX                  |  | STUDY YR: 1996      |  | TEST CASE: 1    |  |
| CITY / AREA: CINCINNATI      |  | LOOP SPAN DIVISION: ALL LOOP SPANS       |  | RUN DATE: 28-Jan-97 |  | TIME: 08:02     |  |
| STATE / PROV: OHIO           |  | SERVICE CLASS: BAND 1 - BUSINESS PBX     |  |                     |  |                 |  |
| JOB IDENT: CINCINNATI        |  | TOTAL LOOP LENGTH: 15677 FEET            |  |                     |  |                 |  |

|                            |                                                            |                      |      |           |       |          |     |
|----------------------------|------------------------------------------------------------|----------------------|------|-----------|-------|----------|-----|
| Circuit Design Mix: 0.0000 | UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY |                      |      |           | TOTAL | WEIGHTED |     |
| PLANT NAME                 | FEEDER                                                     | DISTRIBUTION NETWORK |      | LOOP      | TOTAL |          |     |
| SEG. NAME                  | PRIMARY                                                    | EXTENSION            | SUB- | INTERFACE | LOOP  |          |     |
| EQPT                       |                                                            |                      |      |           |       |          |     |
| PLANT                      |                                                            |                      |      |           |       |          |     |
| ITEM DESCRIPTION           |                                                            |                      |      |           |       |          |     |
| SHARED RESOURCES           |                                                            |                      |      |           |       |          |     |
| LAND                       | 20C                                                        |                      |      |           | \$0   | \$0      |     |
| BUILDING                   | 10C                                                        |                      |      |           | \$0   | \$0      |     |
| BLDG ENTRANCE CABLE        | 12C                                                        |                      |      |           | \$0   | \$0      |     |
| INTRABLDG CABLE            | 52C                                                        |                      |      |           | \$0   | \$0      |     |
| AERIAL CABLE (COPPER)      | 22C                                                        |                      |      |           | \$0   | \$0      |     |
| BURIED CABLE (COPPER)      | 45C                                                        |                      |      |           | \$0   | \$0      |     |
| UNDERGROUND (CU) CA.       | 5C                                                         |                      |      |           | \$0   | \$0      |     |
| CO EQPT - LOW CAP TERM     | 257C                                                       |                      |      |           | \$0   | \$0      |     |
| CO EQPT - LOW CAP CHAN     | 257C                                                       |                      |      |           | \$0   | \$0      |     |
| CO EQPT - HI CAP TERM      | 857C                                                       |                      |      |           | \$0   | \$0      |     |
| CO EQPT - HI CAP CHAN      | 857C                                                       |                      |      |           | \$0   | \$0      |     |
| CO EQPT - ANALOG SW        | 77C                                                        |                      |      |           | \$0   | \$0      |     |
| CO EQPT - DIGITAL SW       | 377C                                                       |                      |      |           | \$0   | \$0      |     |
| AERIAL CABLE (FIBER)       | 822C                                                       |                      |      |           | \$0   | \$0      |     |
| BURIED CABLE (FIBER)       | 845C                                                       |                      |      |           | \$0   | \$0      |     |
| UNDERGROUND (FO) CA.       | 85C                                                        |                      |      |           | \$0   | \$0      |     |
| CONNECTORS                 | 57C                                                        |                      |      |           | \$0   | \$0      |     |
| MISC. COM EQP & PWR        | 57C                                                        |                      |      |           | \$0   | \$0      |     |
| POLE LINE                  | 1C                                                         |                      |      |           | \$0   | \$0      |     |
| CONDUIT                    | 4C                                                         |                      |      |           | \$0   | \$0      |     |
| DIRECT RESOURCES           |                                                            |                      |      |           |       |          |     |
| LAND                       | 20C                                                        |                      |      |           | \$0   | \$0      |     |
| BUILDING                   | 10C                                                        |                      |      |           | \$0   | \$0      |     |
| BLDG ENTRANCE CABLE        | 12C                                                        |                      |      |           | \$0   | \$0      |     |
| INTRABLDG CABLE            | 52C                                                        |                      |      |           | \$0   | \$0      |     |
| AERIAL CABLE (COPPER)      | 22C                                                        |                      |      |           | \$0   | \$0      |     |
| BURIED CABLE (COPPER)      | 45C                                                        |                      |      |           | \$0   | \$0      |     |
| UNDERGROUND (CU) CA.       | 5C                                                         |                      |      |           | \$0   | \$0      |     |
| CO EQPT - LOW CAP TERM     | 257C                                                       |                      |      |           | \$0   | \$0      |     |
| CO EQPT - LOW CAP GHAN     | 257C                                                       |                      |      |           | \$0   | \$0      |     |
| CO EQPT - HI CAP TERM      | 857C                                                       |                      |      |           | \$0   | \$0      |     |
| CO EQPT - HI CAP CHAN      | 857C                                                       |                      |      |           | \$0   | \$0      |     |
| CO EQPT - ANALOG SW        | 77C                                                        |                      |      |           | \$0   | \$0      |     |
| CO EQPT - DIGITAL SW       | 377C                                                       |                      |      |           | \$0   | \$0      |     |
| AERIAL CABLE (FIBER)       | 822C                                                       |                      |      |           | \$0   | \$0      |     |
| BURIED CABLE (FIBER)       | 845C                                                       |                      |      |           | \$0   | \$0      |     |
| UNDERGROUND (FO) CA.       | 85C                                                        |                      |      |           | \$0   | \$0      |     |
| CONNECTORS                 | 57C                                                        |                      |      |           | \$0   | \$0      |     |
| MISC. COM EQP & PWR        | 57C                                                        |                      |      |           | \$0   | \$0      |     |
| POLE LINE                  | 1C                                                         |                      |      |           | \$0   | \$0      |     |
| CONDUIT                    | 4C                                                         |                      |      |           | \$0   | \$0      |     |
| SPAN SUMMARY               |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |
|                            |                                                            |                      |      |           |       | \$0      | \$0 |

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED \$6 TO PUC

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

|                              |  |                                          |  |                     |  |                         |  |
|------------------------------|--|------------------------------------------|--|---------------------|--|-------------------------|--|
| C:\123R24\LCATR028\RESULTS1  |  | LOOP COST ANALYSIS TOOL                  |  |                     |  | Bellcore <sup>(R)</sup> |  |
| OUTPUT - WORKSHEET D         |  | PROSPECTIVE INVESTMENT WORKSHEET SUMMARY |  |                     |  | LCAT Rel: 1.0.4         |  |
| SHEET 6 of 10                |  |                                          |  |                     |  | Issued: 7/31/95         |  |
| COMPANY: CINCINNATI BELL TEL |  | CIRCUIT DESIGN: 3 FOMUX                  |  | STUDY YR: 1996      |  |                         |  |
| CITY / AREA: CINCINNATI      |  | LOOP SPAN DIVISION: ALL LOOP SPANS       |  | TEST CASE: 1        |  |                         |  |
| STATE / PROV: OHIO           |  | SERVICE CLASS: BAND 1 - BUSINESS PBX     |  | RUN DATE: 28-Jan-97 |  |                         |  |
| JOB IDENT: CINCINNATI        |  | TOTAL LOOP LENGTH: 15677 FEET            |  | TIME: 08:02         |  |                         |  |

|                            |      |                                                            |         |                      |          |         |          |          |
|----------------------------|------|------------------------------------------------------------|---------|----------------------|----------|---------|----------|----------|
| Circuit Design Mix: 1.0000 |      | UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY |         |                      |          |         | WEIGHTED |          |
| PLANT NAME                 |      | FEEDER                                                     |         | DISTRIBUTION NETWORK |          | TOTAL   |          | TOTAL    |
| SEG. NAME                  |      | PRIMARY                                                    |         | EXTENSION            |          | SUB-    |          | LOOP     |
| EQPT                       |      |                                                            |         |                      |          |         |          | LOOP     |
| CODE                       |      |                                                            |         |                      |          |         |          |          |
| PLANT                      |      |                                                            |         |                      |          |         |          |          |
| ITEM DESCRIPTION           |      |                                                            |         |                      |          |         |          |          |
| <u>SHARED RESOURCES</u>    |      |                                                            |         |                      |          |         |          |          |
| LAND                       | 20C  | \$ 0.03                                                    |         | \$ 0.01              | \$ 0.00  |         | \$ 0.04  | \$ 0.04  |
| BUILDING                   | 10C  | \$ 1.00                                                    |         | \$ 0.28              | \$ 0.00  |         | \$ 1.28  | \$ 1.28  |
| BLDG ENTRANCE CABLE        | 12C  | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| INTRABLDG CABLE            | 52C  | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| AERIAL CABLE (COPPER)      | 22C  | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| BURIED CABLE (COPPER)      | 45C  | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| UNDERGROUND (CU) CA.       | 5C   | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| CO EQPT - LOW CAP TERM     | 257C | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| CO EQPT - LOW CAP CHAN     | 257C | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| CO EQPT - HI CAP TERM      | 857C | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| CO EQPT - HI CAP CHAN      | 857C | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| CO EQPT - ANALOG SW        | 77C  | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| CO EQPT - DIGITAL SW       | 377C | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| AERIAL CABLE (FIBER)       | 822C | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| BURIED CABLE (FIBER)       | 845C | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| UNDERGROUND (FO) CA.       | 85C  | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| CONNECTORS                 | 57C  | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| MISC. COM EQP & PWR        | 57C  | \$ 0.44                                                    |         | \$ 0.29              | \$ 0.00  |         | \$ 0.73  | \$ 0.73  |
| POLE LINE                  | 1C   | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| CONDUIT                    | 4C   | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| <u>DIRECT RESOURCES</u>    |      |                                                            |         |                      |          |         |          |          |
| LAND                       | 20C  | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| BUILDING                   | 10C  | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| BLDG ENTRANCE CABLE        | 12C  | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  | \$ 2.45 | \$ 2.45  | \$ 2.45  |
| INTRABLDG CABLE            | 52C  | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| AERIAL CABLE (COPPER)      | 22C  | \$ 0.00                                                    |         | \$ 0.02              | \$ 4.60  |         | \$ 4.62  | \$ 4.62  |
| BURIED CABLE (COPPER)      | 45C  | \$ 0.00                                                    |         | \$ 0.00              | \$ 1.78  |         | \$ 1.78  | \$ 1.78  |
| UNDERGROUND (CU) CA.       | 5C   | \$ 0.00                                                    |         | \$ 0.15              | \$ 2.54  |         | \$ 2.69  | \$ 2.69  |
| CO EQPT - LOW CAP TERM     | 257C | \$ 2.94                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 2.94  | \$ 2.94  |
| CO EQPT - LOW CAP CHAN     | 257C | \$ 7.98                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 7.98  | \$ 7.98  |
| CO EQPT - HI CAP TERM      | 857C | \$ 0.73                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.73  | \$ 0.73  |
| CO EQPT - HI CAP CHAN      | 857C | \$ 1.23                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 1.23  | \$ 1.23  |
| CO EQPT - ANALOG SW        | 77C  | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| CO EQPT - DIGITAL SW       | 377C | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| AERIAL CABLE (FIBER)       | 822C | \$ 0.03                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.03  | \$ 0.03  |
| BURIED CABLE (FIBER)       | 845C | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| UNDERGROUND (FO) CA.       | 85C  | \$ 0.06                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.06  | \$ 0.06  |
| CONNECTORS                 | 57C  | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| MISC. COM EQP & PWR        | 57C  | \$ 0.00                                                    |         | \$ 0.00              | \$ 0.00  |         | \$ 0.00  | \$ 0.00  |
| POLE LINE                  | 1C   | \$ 0.01                                                    |         | \$ 0.01              | \$ 1.10  |         | \$ 1.12  | \$ 1.12  |
| CONDUIT                    | 4C   | \$ 0.03                                                    |         | \$ 0.05              | \$ 0.92  |         | \$ 0.98  | \$ 0.98  |
| SPAN SUMMARY               |      | \$ 14.49                                                   | \$ 0.00 | \$ 0.81              | \$ 10.92 | \$ 2.45 | \$ 28.67 | \$ 28.67 |
|                            |      |                                                            |         |                      |          |         | \$ 28.67 |          |

CONFIDENTIAL  
NOT TO BE GIVEN TO PUBLIC  
PRIOR TO RELEASE TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR028\RESULTS1<br>OUTPUT - WORKSHEET D<br>SHEET 7 of 10                                   |                         | LOOP COST ANALYSIS TOOL<br>PROSPECTIVE INVESTMENT WORKSHEET SUMMARY                                                                    |              |                                                                                                            |           | Belcore® |      |
|--------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------------------------------------------------------------------------------------|-----------|----------|------|
| COMPANY: CINCINNATI BELL TEL<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO<br>JOB IDENT: CINCINNATI |                         | CIRCUIT DESIGN: 4 FOMUX<br>LOOP SPAN DIVISION: ALL LOOP SPANS<br>SERVICE CLASS: BAND 1 - BUSINESS PBX<br>TOTAL LOOP LENGTH: 15677 FEET |              | LCAT Rel: 1.0.4<br>Issued: 7/31/95<br>STUDY YR: 1996<br>TEST CASE: 1<br>RUN DATE: 28-Jan-97<br>TIME: 08:02 |           |          |      |
| Circuit Design Mix: 0.0000                                                                             |                         | UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY                                                                             |              |                                                                                                            |           |          |      |
|                                                                                                        | PLANT NAME              | FEEDER                                                                                                                                 | DISTRIBUTION | NETWORK                                                                                                    | TOTAL     | WEIGHTED |      |
|                                                                                                        | SEG. NAME               | PRIMARY                                                                                                                                | EXTENSION    | SUB-                                                                                                       | INTERFACE | LOOP     | LOOP |
|                                                                                                        | EQPT                    |                                                                                                                                        |              |                                                                                                            |           |          |      |
|                                                                                                        | PLANT                   |                                                                                                                                        |              |                                                                                                            |           |          |      |
|                                                                                                        | CODE                    |                                                                                                                                        |              |                                                                                                            |           |          |      |
|                                                                                                        | ITEM DESCRIPTION        |                                                                                                                                        |              |                                                                                                            |           |          |      |
|                                                                                                        | <b>SHARED RESOURCES</b> |                                                                                                                                        |              |                                                                                                            |           |          |      |
|                                                                                                        | LAND                    | 20C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | BUILDING                | 10C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | BLDG ENTRANCE CABLE     | 12C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | INTRABLDG CABLE         | 52C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | AERIAL CABLE (COPPER)   | 22C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | BURIED CABLE (COPPER)   | 45C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | UNDERGROUND (CU) CA.    | 5C                                                                                                                                     |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | CO EQPT - LOW CAP TERM  | 257C                                                                                                                                   |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | CO EQPT - LOW CAP CHAN  | 257C                                                                                                                                   |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | CO EQPT - HI CAP TERM   | 857C                                                                                                                                   |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | CO EQPT - HI CAP CHAN   | 857C                                                                                                                                   |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | CO EQPT - ANALOG SW     | 77C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | CO EQPT - DIGITAL SW    | 377C                                                                                                                                   |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | AERIAL CABLE (FIBER)    | 822C                                                                                                                                   |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | BURIED CABLE (FIBER)    | 845C                                                                                                                                   |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | UNDERGROUND (FO) CA.    | 85C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | CONNECTORS              | 57C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | MISC. COM EQP & PWR     | 57C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | POLE LINE               | 1C                                                                                                                                     |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | CONDUIT                 | 4C                                                                                                                                     |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | <b>DIRECT RESOURCES</b> |                                                                                                                                        |              |                                                                                                            |           |          |      |
|                                                                                                        | LAND                    | 20C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | BUILDING                | 10C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | BLDG ENTRANCE CABLE     | 12C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | INTRABLDG CABLE         | 52C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | AERIAL CABLE (COPPER)   | 22C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | BURIED CABLE (COPPER)   | 45C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | UNDERGROUND (CU) CA.    | 5C                                                                                                                                     |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | CO EQPT - LOW CAP TERM  | 257C                                                                                                                                   |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | CO EQPT - LOW CAP CHAN  | 257C                                                                                                                                   |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | CO EQPT - HI CAP TERM   | 857C                                                                                                                                   |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | CO EQPT - HI CAP CHAN   | 857C                                                                                                                                   |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | CO EQPT - ANALOG SW     | 77C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | CO EQPT - DIGITAL SW    | 377C                                                                                                                                   |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | AERIAL CABLE (FIBER)    | 822C                                                                                                                                   |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | BURIED CABLE (FIBER)    | 845C                                                                                                                                   |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | UNDERGROUND (FO) CA.    | 85C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | CONNECTORS              | 57C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | MISC. COM EQP & PWR     | 57C                                                                                                                                    |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | POLE LINE               | 1C                                                                                                                                     |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | CONDUIT                 | 4C                                                                                                                                     |              |                                                                                                            |           | \$0      | \$0  |
|                                                                                                        | SPAN SUMMARY            | \$0                                                                                                                                    | \$0          | \$0                                                                                                        | \$0       | \$0      | \$0  |

CONFIDENTIAL  
 NO PRICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO  
 \$0.0000

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| A B C D E F G H I J K L M N O P Q R S T U V W X Y Z |  | LOOP COST ANALYSIS TOOL                  |         |           |      |                      |           |            |                     |  |  | Bellcore <sup>(R)</sup>                                    |  |
|-----------------------------------------------------|--|------------------------------------------|---------|-----------|------|----------------------|-----------|------------|---------------------|--|--|------------------------------------------------------------|--|
| C:\123R24\LCATR028\RESULTS1                         |  | PROSPECTIVE INVESTMENT WORKSHEET SUMMARY |         |           |      |                      |           |            |                     |  |  | LCAT Ref: 1.0.4                                            |  |
| OUTPUT - WORKSHEET D                                |  |                                          |         |           |      |                      |           |            |                     |  |  | Issued: 7/31/95                                            |  |
| SHEET 8 of 10                                       |  |                                          |         |           |      |                      |           |            |                     |  |  | STUDY YR: 1996                                             |  |
| COMPANY: CINCINNATI BELL TEL                        |  | CIRCUIT DESIGN: 5 FOMUX                  |         |           |      |                      |           |            |                     |  |  | TEST CASE: 1                                               |  |
| CITY / AREA: CINCINNATI                             |  | LOOP SPAN DIVISION: ALL LOOP SPANS       |         |           |      |                      |           |            |                     |  |  | RUN DATE: 28-Jan-97                                        |  |
| STATE / PROV: OHIO                                  |  | SERVICE CLASS: BAND 1 - BUSINESS PBX     |         |           |      |                      |           |            |                     |  |  | TIME: 08:02                                                |  |
| JOB IDENT: CINCINNATI                               |  | TOTAL LOOP LENGTH: 15677 FEET            |         |           |      |                      |           |            |                     |  |  |                                                            |  |
| 0                                                   |  | Circuit Design Mix: 0.0000               |         |           |      |                      |           |            |                     |  |  | UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY |  |
| 1                                                   |  | PLANT NAME                               | FEEDER  | EXTENSION | SUB- | DISTRIBUTION NETWORK | INTERFACE | TOTAL LOOP | WEIGHTED TOTAL LOOP |  |  |                                                            |  |
| 2                                                   |  | SEG. NAME                                | PRIMARY | EXTENSION | SUB- | DISTRIBUTION NETWORK | INTERFACE | TOTAL LOOP | WEIGHTED TOTAL LOOP |  |  |                                                            |  |
| 3                                                   |  | EQPT                                     |         |           |      |                      |           |            |                     |  |  |                                                            |  |
| 4                                                   |  | PLANT                                    |         |           |      |                      |           |            |                     |  |  |                                                            |  |
| 5                                                   |  | CODE                                     |         |           |      |                      |           |            |                     |  |  |                                                            |  |
| 6                                                   |  | ITEM DESCRIPTION                         |         |           |      |                      |           |            |                     |  |  |                                                            |  |
| 7                                                   |  | <b>SHARED RESOURCES</b>                  |         |           |      |                      |           |            |                     |  |  |                                                            |  |
| 8                                                   |  | LAND                                     | 20C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 9                                                   |  | BUILDING                                 | 10C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 10                                                  |  | BLDG ENTRANCE CABLE                      | 12C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 11                                                  |  | INTRABLDG CABLE                          | 52C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 12                                                  |  | AERIAL CABLE (COPPER)                    | 22C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 13                                                  |  | BURIED CABLE (COPPER)                    | 45C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 14                                                  |  | UNDERGROUND (CU) CA.                     | 5C      |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 15                                                  |  | CO EQPT - LOW CAP TERM                   | 257C    |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 16                                                  |  | CO EQPT - LOW CAP CHAN                   | 257C    |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 17                                                  |  | CO EQPT - HI CAP TERM                    | 857C    |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 18                                                  |  | CO EQPT - HI CAP CHAN                    | 857C    |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 19                                                  |  | CO EQPT - ANALOG SW                      | 77C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 20                                                  |  | CO EQPT - DIGITAL SW                     | 377C    |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 21                                                  |  | AERIAL CABLE (FIBER)                     | 822C    |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 22                                                  |  | BURIED CABLE (FIBER)                     | 845C    |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 23                                                  |  | UNDERGROUND (FO) CA.                     | 85C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 24                                                  |  | CONNECTORS                               | 57C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 25                                                  |  | MISC. COM EQP & PWR                      | 57C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 26                                                  |  | POLE LINE                                | 1C      |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 27                                                  |  | CONDUIT                                  | 4C      |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 28                                                  |  |                                          |         |           |      |                      |           |            |                     |  |  |                                                            |  |
| 29                                                  |  | <b>DIRECT RESOURCES</b>                  |         |           |      |                      |           |            |                     |  |  |                                                            |  |
| 30                                                  |  | LAND                                     | 20C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 31                                                  |  | BUILDING                                 | 10C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 32                                                  |  | BLDG ENTRANCE CABLE                      | 12C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 33                                                  |  | INTRABLDG CABLE                          | 52C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 34                                                  |  | AERIAL CABLE (COPPER)                    | 22C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 35                                                  |  | BURIED CABLE (COPPER)                    | 45C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 36                                                  |  | UNDERGROUND (CU) CA.                     | 5C      |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 37                                                  |  | CO EQPT - LOW CAP TERM                   | 257C    |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 38                                                  |  | CO EQPT - LOW CAP CHAN                   | 257C    |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 39                                                  |  | CO EQPT - HI CAP TERM                    | 857C    |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 40                                                  |  | CO EQPT - HI CAP CHAN                    | 857C    |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 41                                                  |  | CO EQPT - ANALOG SW                      | 77C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 42                                                  |  | CO EQPT - DIGITAL SW                     | 377C    |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 43                                                  |  | AERIAL CABLE (FIBER)                     | 822C    |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 44                                                  |  | BURIED CABLE (FIBER)                     | 845C    |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 45                                                  |  | UNDERGROUND (FO) CA.                     | 85C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 46                                                  |  | CONNECTORS                               | 57C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 47                                                  |  | MISC. COM EQP & PWR                      | 57C     |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 48                                                  |  | POLE LINE                                | 1C      |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 49                                                  |  | CONDUIT                                  | 4C      |           |      |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 50                                                  |  |                                          |         |           |      |                      |           |            |                     |  |  |                                                            |  |
| 51                                                  |  | SPAN SUMMARY                             |         | \$0       | \$0  |                      |           | \$0        | \$0                 |  |  |                                                            |  |
| 52                                                  |  |                                          |         |           |      |                      |           |            |                     |  |  |                                                            |  |
| 53                                                  |  |                                          |         |           |      |                      |           |            |                     |  |  |                                                            |  |
| 54                                                  |  |                                          |         |           |      |                      |           |            |                     |  |  |                                                            |  |
| 55                                                  |  |                                          |         |           |      |                      |           |            |                     |  |  |                                                            |  |

CONFIDENTIAL  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| A<br>B<br>C<br>D<br>E<br>F<br>G |  | CA123R24\LCATR028\RESULTS1<br>OUTPUT - WORKSHEET D<br>SHEET 9 of 10                   |         | LOOP COST ANALYSIS TOOL<br>PROSPECTIVE INVESTMENT WORKSHEET SUMMARY |       |                     |      | Bellcore<br>LCAT Ref: 1.0.4<br>Issued: 7/31/95 |      |
|---------------------------------|--|---------------------------------------------------------------------------------------|---------|---------------------------------------------------------------------|-------|---------------------|------|------------------------------------------------|------|
|                                 |  | COMPANY: CINCINNATI BELL TEL                                                          |         | CIRCUIT DESIGN: 6 FOMUX                                             |       | STUDY YR: 1996      |      |                                                |      |
|                                 |  | CITY / AREA: CINCINNATI                                                               |         | LOOP SPAN DIVISION: ALL LOOP SPANS                                  |       | TEST CASE: 1        |      |                                                |      |
|                                 |  | STATE / PROV: OHIO                                                                    |         | SERVICE CLASS: BAND 1 - BUSINESS PBX                                |       | RUN DATE: 25-Jan-97 |      |                                                |      |
|                                 |  | JOB IDENT: CINCINNATI                                                                 |         | TOTAL LOOP LENGTH: 15677 FEET                                       |       | TIME: 08:02         |      |                                                |      |
| 0                               |  | Circuit Design Mix: 0.0000 UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY |         |                                                                     |       |                     |      |                                                |      |
| 1                               |  | PLANT NAME                                                                            | FEEDER  | DISTRIBUTION NETWORK                                                | TOTAL | WEIGHTED            |      |                                                |      |
| 2                               |  | SEG. NAME                                                                             | PRIMARY | EXTENSION                                                           | SUB-  | INTERFACE           | LOOP | TOTAL                                          | LOOP |
| 3                               |  | EQPT                                                                                  |         |                                                                     |       |                     |      |                                                |      |
| 4                               |  | PLANT                                                                                 | CODE    |                                                                     |       |                     |      |                                                |      |
| 5                               |  | ITEM DESCRIPTION                                                                      |         |                                                                     |       |                     |      |                                                |      |
| 6                               |  | <b>SHARED RESOURCES</b>                                                               |         |                                                                     |       |                     |      |                                                |      |
| 7                               |  | LAND                                                                                  | 20C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 8                               |  | BUILDING                                                                              | 10C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 9                               |  | BLDG ENTRANCE CABLE                                                                   | 12C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 10                              |  | INTRABLDG CABLE                                                                       | 52C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 11                              |  | AERIAL CABLE (COPPER)                                                                 | 22C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 12                              |  | BURIED CABLE (COPPER)                                                                 | 45C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 13                              |  | UNDERGROUND (CU) CA.                                                                  | 5C      |                                                                     |       |                     | \$0  | \$0                                            |      |
| 14                              |  | CO EQPT - LOW CAP TERM                                                                | 257C    |                                                                     |       |                     | \$0  | \$0                                            |      |
| 15                              |  | CO EQPT - LOW CAP CHAN                                                                | 257C    |                                                                     |       |                     | \$0  | \$0                                            |      |
| 16                              |  | CO EQPT - HI CAP TERM                                                                 | 857C    |                                                                     |       |                     | \$0  | \$0                                            |      |
| 17                              |  | CO EQPT - HI CAP CHAN                                                                 | 857C    |                                                                     |       |                     | \$0  | \$0                                            |      |
| 18                              |  | CO EQPT - ANALOG SW                                                                   | 77C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 19                              |  | CO EQPT - DIGITAL SW                                                                  | 377C    |                                                                     |       |                     | \$0  | \$0                                            |      |
| 20                              |  | AERIAL CABLE (FIBER)                                                                  | 822C    |                                                                     |       |                     | \$0  | \$0                                            |      |
| 21                              |  | BURIED CABLE (FIBER)                                                                  | 845C    |                                                                     |       |                     | \$0  | \$0                                            |      |
| 22                              |  | UNDERGROUND (FO) CA.                                                                  | 85C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 23                              |  | CONNECTORS                                                                            | 57C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 24                              |  | MISC. COM EQP & PWR                                                                   | 57C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 25                              |  | POLE LINE                                                                             | 1C      |                                                                     |       |                     | \$0  | \$0                                            |      |
| 26                              |  | CONDUIT                                                                               | 4C      |                                                                     |       |                     | \$0  | \$0                                            |      |
| 27                              |  |                                                                                       |         |                                                                     |       |                     |      |                                                |      |
| 28                              |  | <b>DIRECT RESOURCES</b>                                                               |         |                                                                     |       |                     |      |                                                |      |
| 29                              |  | LAND                                                                                  | 20C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 30                              |  | BUILDING                                                                              | 10C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 31                              |  | BLDG ENTRANCE CABLE                                                                   | 12C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 32                              |  | INTRABLDG CABLE                                                                       | 52C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 33                              |  | AERIAL CABLE (COPPER)                                                                 | 22C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 34                              |  | BURIED CABLE (COPPER)                                                                 | 45C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 35                              |  | UNDERGROUND (CU) CA.                                                                  | 5C      |                                                                     |       |                     | \$0  | \$0                                            |      |
| 36                              |  | CO EQPT - LOW CAP TERM                                                                | 257C    |                                                                     |       |                     | \$0  | \$0                                            |      |
| 37                              |  | CO EQPT - LOW CAP CHAN                                                                | 257C    |                                                                     |       |                     | \$0  | \$0                                            |      |
| 38                              |  | CO EQPT - HI CAP TERM                                                                 | 857C    |                                                                     |       |                     | \$0  | \$0                                            |      |
| 39                              |  | CO EQPT - HI CAP CHAN                                                                 | 857C    |                                                                     |       |                     | \$0  | \$0                                            |      |
| 40                              |  | CO EQPT - ANALOG SW                                                                   | 77C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 41                              |  | CO EQPT - DIGITAL SW                                                                  | 377C    |                                                                     |       |                     | \$0  | \$0                                            |      |
| 42                              |  | AERIAL CABLE (FIBER)                                                                  | 822C    |                                                                     |       |                     | \$0  | \$0                                            |      |
| 43                              |  | BURIED CABLE (FIBER)                                                                  | 845C    |                                                                     |       |                     | \$0  | \$0                                            |      |
| 44                              |  | UNDERGROUND (FO) CA.                                                                  | 85C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 45                              |  | CONNECTORS                                                                            | 57C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 46                              |  | MISC. COM EQP & PWR                                                                   | 57C     |                                                                     |       |                     | \$0  | \$0                                            |      |
| 47                              |  | POLE LINE                                                                             | 1C      |                                                                     |       |                     | \$0  | \$0                                            |      |
| 48                              |  | CONDUIT                                                                               | 4C      |                                                                     |       |                     | \$0  | \$0                                            |      |
| 49                              |  |                                                                                       |         |                                                                     |       |                     |      |                                                |      |
| 50                              |  |                                                                                       |         |                                                                     |       |                     |      |                                                |      |
| 51                              |  | SPAN SUMMARY                                                                          |         | \$0                                                                 | \$0   | \$0                 | \$0  | \$0                                            | \$0  |
| 52                              |  |                                                                                       |         |                                                                     |       |                     | \$0  |                                                |      |
| 53                              |  |                                                                                       |         |                                                                     |       |                     |      |                                                |      |
| 54                              |  |                                                                                       |         |                                                                     |       |                     |      |                                                |      |
| 55                              |  |                                                                                       |         |                                                                     |       |                     |      |                                                |      |

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PECO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

|        |        |        |         |        |
|--------|--------|--------|---------|--------|
| \$0.00 | \$0.00 | \$0.00 | \$0.00  | \$0.00 |
| \$0.00 | \$0.00 | \$0.00 | \$0.06  | \$0.00 |
| \$0.00 | \$0.00 | \$0.00 | \$0.00  | \$0.00 |
| \$0.00 | \$0.00 | \$0.00 | \$0.00  | \$0.00 |
| \$0.01 | \$1.10 | \$0.00 | \$0.00  | \$1.12 |
| \$0.05 | \$0.90 | \$0.00 | \$0.98  | \$0.00 |
| \$0.01 | \$0.92 | \$2.45 | \$28.67 | \$2.45 |
|        |        |        | \$28.67 |        |

A  
B  
C  
D  
E  
F  
GCA123R24\LCATR028\RESULTS1  
OUTPUT - REPORT D  
SHEET 1 of 1**LOOP COST ANALYSIS TOOL**  
PROSPECTIVE INVESTMENT SUMMARY REPORT**Bellcore**<sup>®</sup>LCAT Rel: 1.0.4  
Issued: 7/31/95  
STUDY YR: 1996  
TEST CASE: 1  
RUN DATE: 28-Jan-97  
TIME: 08:02COMPANY: CINCINNATI BELL TEL  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIO  
JOB IDENT.: CINCINNATICIRCUIT DESIGN: TOTAL TECHNOLOGIES  
LOOP SPAN DIVISION: ALL LOOP SPANS  
SERVICE CLASS: BAND 1 - BUSINESS PBX  
TOTAL LOOP LENGTH: 15977 FEETLoop Span Set Weighting: ☐ 1 UNIT WEIGHTED MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDYWEIGHTED  
TOTAL  
LOOP

|                        | PLANT NAME | FEEDER   | DISTRIBUTION | NETWORK | INTERFACE | TOTAL   |           |
|------------------------|------------|----------|--------------|---------|-----------|---------|-----------|
|                        | SEG. NAME  | PRIMARY  | EXTENSION    | SUB--   |           | LOOP    |           |
|                        | EQPT       |          |              |         |           |         |           |
| PLANT                  | CODE       |          |              |         |           |         |           |
| ITEM DESCRIPTION       | SEG.LGTH.  |          |              |         |           |         |           |
| SHARED RESOURCES       |            |          |              |         |           |         |           |
| LAND                   | 20C        | \$ 0.03  | \$ 0.00      | \$ 0.01 | \$ 0.00   | \$ 0.00 | \$ 0.0437 |
| BUILDING               | 10C        | \$ 1.00  | \$ 0.00      | \$ 0.28 | \$ 0.00   | \$ 0.00 | \$ 1.2810 |
| BLDG ENTRANCE CABLE    | 12C        | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| INTRABLDG CABLE        | 52C        | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| AERIAL CABLE (COPPER)  | 22C        | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| BURIED CABLE (COPPER)  | 45C        | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| UNDERGROUND (CU) CA.   | 5C         | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| CO EQPT - LOW CAP TERM | 257C       | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| CO EQPT - LOW CAP CHAN | 257C       | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| CO EQPT - HI CAP TERM  | 857C       | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| CO EQPT - HI CAP CHAN  | 857C       | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| CO EQPT - ANALOG SW    | 77C        | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| CO EQPT - DIGITAL SW   | 377C       | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| AERIAL CABLE (FIBER)   | 822C       | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| BURIED CABLE (FIBER)   | 845C       | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| UNDERGROUND (FO) CA.   | 85C        | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| CONNECTORS             | 57C        | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| MISC. COM EQP & PWR    | 57C        | \$ 0.44  | \$ 0.00      | \$ 0.29 | \$ 0.00   | \$ 0.00 | \$ 0.7333 |
| POLE LINE              | 1C         | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| CONDUIT                | 4C         | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| DIRECT RESOURCES       |            |          |              |         |           |         |           |
| LAND                   | 20C        | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| BUILDING               | 10C        | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| BLDG ENTRANCE CABLE    | 12C        | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 2.45 | \$ 2.4513 |
| INTRABLDG CABLE        | 52C        | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| AERIAL CABLE (COPPER)  | 22C        | \$ 0.00  | \$ 0.00      | \$ 0.02 | \$ 4.60   | \$ 0.00 | \$ 4.6200 |
| BURIED CABLE (COPPER)  | 45C        | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 1.78   | \$ 0.00 | \$ 1.7800 |
| UNDERGROUND (CU) CA.   | 5C         | \$ 0.00  | \$ 0.00      | \$ 0.15 | \$ 2.54   | \$ 0.00 | \$ 2.6900 |
| CO EQPT - LOW CAP TERM | 257C       | \$ 2.94  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 2.9436 |
| CO EQPT - LOW CAP CHAN | 257C       | \$ 7.98  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 7.9833 |
| CO EQPT - HI CAP TERM  | 857C       | \$ 0.73  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.7268 |
| CO EQPT - HI CAP CHAN  | 857C       | \$ 1.23  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 1.2325 |
| CO EQPT - ANALOG SW    | 77C        | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| CO EQPT - DIGITAL SW   | 377C       | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| AERIAL CABLE (FIBER)   | 822C       | \$ 0.03  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0258 |
| BURIED CABLE (FIBER)   | 845C       | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| UNDERGROUND (FO) CA.   | 85C        | \$ 0.06  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0632 |
| CONNECTORS             | 57C        | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| MISC. COM EQP & PWR    | 57C        | \$ 0.00  | \$ 0.00      | \$ 0.00 | \$ 0.00   | \$ 0.00 | \$ 0.0000 |
| POLE LINE              | 1C         | \$ 0.01  | \$ 0.00      | \$ 0.01 | \$ 1.10   | \$ 0.00 | \$ 1.1165 |
| CONDUIT                | 4C         | \$ 0.03  | \$ 0.00      | \$ 0.05 | \$ 0.90   | \$ 0.00 | \$ 0.9810 |
| SPAN SUMMARY           |            | \$ 14.49 | \$ 0.00      | \$ 0.81 | \$ 10.92  | \$ 2.45 | \$ 28.67  |
|                        |            |          |              |         |           |         | \$ 28.67  |

**CONFIDENTIAL**  
NOT TO BE GIVEN  
TO PUBLIC  
PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATR028\RESULTS1  
OUTPUT - COST\_REPORTS

**Bellcore**<sup>(R)</sup>  
LCAT  
Release: 1.0.4  
Issued: 7/31/95

### LOOP COST ANALYSIS TOOL

#### COST MODEL - INVESTMENT BY ACCOUNT REPORTS

STUDY NAME: 1996 BAND 1 (OHIO ONLY) BUSINESS PBX 12001 FEET - INFINITY INTRASTATE

CURRENT TEST PLAN :

CURRENT JOB IDENT. CINCINNATI

|           |           |           |          |           |
|-----------|-----------|-----------|----------|-----------|
| BASIS     | NETWORK   | TEST CASE | 1        | LAST SAVE |
| FR / DS   | FLAT RATE | #BANDS    | 91       | 20-Jan-97 |
| SVC LEVEL | NARBAND   | #CKTS     |          | 09:03     |
| CST METH  | UN INCR   | INV LEVEL | ANN COST | TIME      |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO  
Your report is ready for viewing

PROPRIETARY - NOT FOR USE/DISCLOSURE OUTSIDE Bellcore WITHOUT LICENSED PERMISSION

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.



A  
B  
C  
D  
E  
F  
GC:\123R24\LCAT028\RESULTS  
OUTPUT - WORKSHEET D  
SHEET 1 of 10**LOOP COST ANALYSIS TOOL**  
PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore®

LCAT Rel: 1.0.4  
Issued: 7/31/95  
STUDY YR: 1996  
TEST CASE: 1  
RUN DATE: 28-Jan-97  
TIME: 08:02COMPANY: CINCINNATI BELL TEL  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIO  
JOB IDENT: CINCINNATICIRCUIT DESIGN: 1 CDLC  
LOOP SPAN DIVISION: ALL LOOP SPANS  
SERVICE CLASS: BAND 1 - BUSINESS PBX  
TOTAL LOOP LENGTH: 15677 FEET

Circuit Design Mix: 1.0000 UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

| PLANT                   | SEG. NAME | PRIMARY | FEEDER | EXTENSION | SUB-    | DISTRIBUTION NETWORK | INTERFACE | TOTAL LOOP | WEIGHTED TOTAL LOOP |
|-------------------------|-----------|---------|--------|-----------|---------|----------------------|-----------|------------|---------------------|
| ITEM DESCRIPTION        | EQPT CODE |         |        |           |         |                      |           |            |                     |
| <b>SHARED RESOURCES</b> |           |         |        |           |         |                      |           |            |                     |
| LAND                    | 20C       | \$ 0.03 |        |           | \$ 0.01 | \$ 0.00              |           | \$ 0.04    | \$ 0.04             |
| BUILDING                | 10C       | \$ 0.85 |        |           | \$ 0.28 | \$ 0.00              |           | \$ 1.13    | \$ 1.13             |
| BLDG ENTRANCE CABLE     | 12C       | \$ 0.00 |        |           | \$ 0.00 | \$ 0.00              |           | \$ 0.00    | \$ 0.00             |
| INTRABLDG CABLE         | 52C       | \$ 0.00 |        |           | \$ 0.00 | \$ 0.00              |           | \$ 0.00    | \$ 0.00             |
| AERIAL CABLE (COPPER)   | 22C       | \$ 0.00 |        |           | \$ 0.00 | \$ 0.00              |           | \$ 0.00    | \$ 0.00             |
| BURIED CABLE (COPPER)   | 45C       | \$ 0.00 |        |           | \$ 0.00 | \$ 0.00              |           | \$ 0.00    | \$ 0.00             |
| UNDERGROUND (CU) CA.    | 5C        | \$ 0.00 |        |           | \$ 0.00 | \$ 0.00              |           | \$ 0.00    | \$ 0.00             |
| CO EQPT - LOW CAP TERM  | 257C      | \$ 0.00 |        |           | \$ 0.00 | \$ 0.00              |           | \$ 0.00    | \$ 0.00             |
| CO EQPT - LOW CAP CHAN  | 257C      | \$ 0.00 |        |           | \$ 0.00 | \$ 0.00              |           | \$ 0.00    | \$ 0.00             |
| CO EQPT - HI CAP TERM   | 857C      | \$ 0.00 |        |           | \$ 0.00 | \$ 0.00              |           | \$ 0.00    | \$ 0.00             |
| CO EQPT - HI CAP CHAN   | 857C      | \$ 0.00 |        |           | \$ 0.00 | \$ 0.00              |           | \$ 0.00    | \$ 0.00             |
| CO EQPT - ANALOG SW     | 77C       | \$ 0.00 |        |           | \$ 0.00 | \$ 0.00              |           | \$ 0.00    | \$ 0.00             |
| CO EQPT - DIGITAL SW    | 377C      | \$ 0.00 |        |           | \$ 0.00 | \$ 0.00              |           | \$ 0.00    | \$ 0.00             |
| AERIAL CABLE (FIBER)    | 822C      | \$ 0.00 |        |           | \$ 0.00 | \$ 0.00              |           | \$ 0.00    | \$ 0.00             |
| BURIED CABLE (FIBER)    | 845C      | \$ 0.00 |        |           | \$ 0.00 | \$ 0.00              |           | \$ 0.00    | \$ 0.00             |
| UNDERGROUND (FO) CA.    | 85C       | \$ 0.00 |        |           | \$ 0.00 | \$ 0.00              |           | \$ 0.00    | \$ 0.00             |
| CONNECTORS              | 57C       | \$ 0.00 |        |           | \$ 0.00 | \$ 0.00              |           | \$ 0.00    | \$ 0.00             |
| MISC. COM EQP & PWR     | 57C       | \$ 0.36 |        |           | \$ 0.29 | \$ 0.00              |           | \$ 0.65    | \$ 0.65             |
| POLE LINE               | 1C        | \$ 0.00 |        |           | \$ 0.00 | \$ 0.00              |           | \$ 0.00    | \$ 0.00             |
| CONDUIT                 | 4C        | \$ 0.00 |        |           | \$ 0.00 | \$ 0.00              |           | \$ 0.00    | \$ 0.00             |

**DIRECT RESOURCES**

|                        |      |         |  |  |         |         |         |         |         |
|------------------------|------|---------|--|--|---------|---------|---------|---------|---------|
| LAND                   | 20C  | \$ 0.00 |  |  | \$ 0.00 | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |
| BUILDING               | 10C  | \$ 0.00 |  |  | \$ 0.00 | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |
| BLDG ENTRANCE CABLE    | 12C  | \$ 0.00 |  |  | \$ 0.00 | \$ 0.00 | \$ 2.45 | \$ 2.45 | \$ 2.45 |
| INTRABLDG CABLE        | 52C  | \$ 0.00 |  |  | \$ 0.00 | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |
| AERIAL CABLE (COPPER)  | 22C  | \$ 0.27 |  |  | \$ 0.02 | \$ 4.60 |         | \$ 4.89 | \$ 4.89 |
| BURIED CABLE (COPPER)  | 45C  | \$ 0.00 |  |  | \$ 0.00 | \$ 1.78 |         | \$ 1.78 | \$ 1.78 |
| UNDERGROUND (CU) CA.   | 5C   | \$ 1.84 |  |  | \$ 0.15 | \$ 2.54 |         | \$ 4.53 | \$ 4.53 |
| CO EQPT - LOW CAP TERM | 257C | \$ 3.66 |  |  | \$ 0.00 | \$ 0.00 |         | \$ 3.66 | \$ 3.66 |
| CO EQPT - LOW CAP CHAN | 257C | \$ 7.98 |  |  | \$ 0.00 | \$ 0.00 |         | \$ 7.98 | \$ 7.98 |
| CO EQPT - HI CAP TERM  | 857C | \$ 0.00 |  |  | \$ 0.00 | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |
| CO EQPT - HI CAP CHAN  | 857C | \$ 0.00 |  |  | \$ 0.00 | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |
| CO EQPT - ANALOG SW    | 77C  | \$ 0.00 |  |  | \$ 0.00 | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |
| CO EQPT - DIGITAL SW   | 377C | \$ 0.00 |  |  | \$ 0.00 | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |
| AERIAL CABLE (FIBER)   | 822C | \$ 0.00 |  |  | \$ 0.00 | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |
| BURIED CABLE (FIBER)   | 845C | \$ 0.00 |  |  | \$ 0.00 | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |
| UNDERGROUND (FO) CA.   | 85C  | \$ 0.00 |  |  | \$ 0.00 | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |
| CONNECTORS             | 57C  | \$ 0.00 |  |  | \$ 0.00 | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |
| MISC. COM EQP & PWR    | 57C  | \$ 0.00 |  |  | \$ 0.00 | \$ 0.00 |         | \$ 0.00 | \$ 0.00 |
| POLE LINE              | 1C   | \$ 0.06 |  |  | \$ 0.01 | \$ 1.16 |         | \$ 1.23 | \$ 1.17 |
| CONDUIT                | 4C   | \$ 0.58 |  |  | \$ 0.05 | \$ 0.00 |         | \$ 0.53 | \$ 1.53 |

SPAN SUMMARY

\$ 15.63 \$ 0.00

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

CIRCUIT DESIGN SUMMARY

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| A B C D E F G H I J K L M N O P Q R S T U V W X Y Z |  | LOOP COST ANALYSIS TOOL                                                               |         |              |         |           |          |       |     |  |  | Bellcore <sup>®</sup> |  |  |  |  |
|-----------------------------------------------------|--|---------------------------------------------------------------------------------------|---------|--------------|---------|-----------|----------|-------|-----|--|--|-----------------------|--|--|--|--|
| C:\123R24\LCATR028\RESULTS1                         |  | PROSPECTIVE INVESTMENT WORKSHEET SUMMARY                                              |         |              |         |           |          |       |     |  |  | LCAT Rel: 1.0.4       |  |  |  |  |
| OUTPUT - WORKSHEET D                                |  |                                                                                       |         |              |         |           |          |       |     |  |  | Issued: 7/31/95       |  |  |  |  |
| SHEET 2 of 10                                       |  |                                                                                       |         |              |         |           |          |       |     |  |  | STUDY YR: 1996        |  |  |  |  |
| COMPANY: CINCINNATI BELL TEL                        |  | CIRCUIT DESIGN: 2 CDLC                                                                |         |              |         |           |          |       |     |  |  | TEST CASE: 1          |  |  |  |  |
| CITY / AREA: CINCINNATI                             |  | LOOP SPAN DIVISION: ALL LOOP SPANS                                                    |         |              |         |           |          |       |     |  |  | DATE: 28-Jan-97       |  |  |  |  |
| STATE / PROV: OHIO                                  |  | SERVICE CLASS: BAND 1 - BUSINESS PBX                                                  |         |              |         |           |          |       |     |  |  | TIME: 08:02           |  |  |  |  |
| JOB IDENT: CINCINNATI                               |  | TOTAL LOOP LENGTH: 15677 FEET                                                         |         |              |         |           |          |       |     |  |  |                       |  |  |  |  |
| 0                                                   |  | Circuit Design Mix: 0.0000 UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY |         |              |         |           |          |       |     |  |  |                       |  |  |  |  |
| 1                                                   |  | PLANT NAME                                                                            | FEEDER  | DISTRIBUTION | NETWORK | TOTAL     | WEIGHTED |       |     |  |  |                       |  |  |  |  |
| 2                                                   |  | SEG. NAME                                                                             | PRIMARY | EXTENSION    | SUB-    | INTERFACE | LOOP     | TOTAL |     |  |  |                       |  |  |  |  |
| 3                                                   |  | EQPT                                                                                  |         |              |         |           |          |       |     |  |  |                       |  |  |  |  |
| 4                                                   |  | PLANT                                                                                 | CODE    |              |         |           |          |       |     |  |  |                       |  |  |  |  |
| 5                                                   |  | ITEM DESCRIPTION                                                                      |         |              |         |           |          |       |     |  |  |                       |  |  |  |  |
| 6                                                   |  | <u>SHARED RESOURCES</u>                                                               |         |              |         |           |          |       |     |  |  |                       |  |  |  |  |
| 7                                                   |  | LAND                                                                                  | 20C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 8                                                   |  | BUILDING                                                                              | 10C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 9                                                   |  | BLDG ENTRANCE CABLE                                                                   | 12C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 10                                                  |  | INTRABLDG CABLE                                                                       | 52C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 11                                                  |  | AERIAL CABLE (COPPER)                                                                 | 22C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 12                                                  |  | BURIED CABLE (COPPER)                                                                 | 45C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 13                                                  |  | UNDERGROUND (CU) CA.                                                                  | 5C      |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 14                                                  |  | CO EQPT - LOW CAP TERM                                                                | 257C    |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 15                                                  |  | CO EQPT - LOW CAP CHAN                                                                | 257C    |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 16                                                  |  | CO EQPT - HI CAP TERM                                                                 | 857C    |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 17                                                  |  | CO EQPT - HI CAP CHAN                                                                 | 857C    |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 18                                                  |  | CO EQPT - ANALOG SW                                                                   | 77C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 19                                                  |  | CO EQPT - DIGITAL SW                                                                  | 377C    |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 20                                                  |  | AERIAL CABLE (FIBER)                                                                  | 822C    |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 21                                                  |  | BURIED CABLE (FIBER)                                                                  | 845C    |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 22                                                  |  | UNDERGROUND (FO) CA.                                                                  | 85C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 23                                                  |  | CONNECTORS                                                                            | 57C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 24                                                  |  | MISC. COM EQP & PWR                                                                   | 57C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 25                                                  |  | POLE LINE                                                                             | 1C      |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 26                                                  |  | CONDUIT                                                                               | 4C      |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 27                                                  |  |                                                                                       |         |              |         |           |          |       |     |  |  |                       |  |  |  |  |
| 28                                                  |  |                                                                                       |         |              |         |           |          |       |     |  |  |                       |  |  |  |  |
| 29                                                  |  | <u>DIRECT RESOURCES</u>                                                               |         |              |         |           |          |       |     |  |  |                       |  |  |  |  |
| 30                                                  |  | LAND                                                                                  | 20C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 31                                                  |  | BUILDING                                                                              | 10C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 32                                                  |  | BLDG ENTRANCE CABLE                                                                   | 12C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 33                                                  |  | INTRABLDG CABLE                                                                       | 52C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 34                                                  |  | AERIAL CABLE (COPPER)                                                                 | 22C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 35                                                  |  | BURIED CABLE (COPPER)                                                                 | 45C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 36                                                  |  | UNDERGROUND (CU) CA.                                                                  | 5C      |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 37                                                  |  | CO EQPT - P GAIN TERM                                                                 | 257C    |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 38                                                  |  | CO EQPT - P GAIN CHAN                                                                 | 257C    |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 39                                                  |  | CO EQPT - FO MUX TERM                                                                 | 857C    |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 40                                                  |  | CO EQPT - FO MUX CHAN                                                                 | 857C    |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 41                                                  |  | CO EQPT - ANALOG SW                                                                   | 77C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 42                                                  |  | CO EQPT - DIGITAL SW                                                                  | 377C    |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 43                                                  |  | AERIAL CABLE (FIBER)                                                                  | 822C    |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 44                                                  |  | BURIED CABLE (FIBER)                                                                  | 845C    |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 45                                                  |  | UNDERGROUND (FO) CA.                                                                  | 85C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 46                                                  |  | CONNECTORS                                                                            | 57C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 47                                                  |  | MISC. COM EQP & PWR                                                                   | 57C     |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 48                                                  |  | POLE LINE                                                                             | 1C      |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 49                                                  |  | CONDUIT                                                                               | 4C      |              |         |           |          | \$0   | \$0 |  |  |                       |  |  |  |  |
| 50                                                  |  |                                                                                       |         |              |         |           |          |       |     |  |  |                       |  |  |  |  |
| 51                                                  |  | SPAN SUMMARY                                                                          |         |              |         |           |          |       |     |  |  |                       |  |  |  |  |
| 52                                                  |  | CIRCUIT DESIGN SUMMARY                                                                |         |              |         |           |          |       |     |  |  |                       |  |  |  |  |
| 53                                                  |  |                                                                                       |         |              |         |           |          |       |     |  |  |                       |  |  |  |  |
| 54                                                  |  |                                                                                       |         |              |         |           |          |       |     |  |  |                       |  |  |  |  |
| 55                                                  |  |                                                                                       |         |              |         |           |          |       |     |  |  |                       |  |  |  |  |

CONFIDENTIAL  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

| A<br>B<br>C<br>D<br>E<br>F<br>G | LOOP COST ANALYSIS TOOL                                             |      |          |         |         |          |          | Bellcore®                          |           |
|---------------------------------|---------------------------------------------------------------------|------|----------|---------|---------|----------|----------|------------------------------------|-----------|
|                                 | PROSPECTIVE INVESTMENT WORKSHEET SUMMARY                            |      |          |         |         |          |          | LCAT Rel: 1.0.4<br>Issued: 7/31/95 |           |
| 0                               | C:\123R24\LCATR028\RESULTS1                                         |      |          |         |         |          |          | STUDY YR: 1996                     |           |
| 1                               | OUTPUT - WORKSHEET D                                                |      |          |         |         |          |          | TEST CASE: 1                       |           |
| 2                               | SHEET 3 of 10                                                       |      |          |         |         |          |          | RUN DATE: 28-Jan-97                |           |
| 3                               | COMPANY: CINCINNATI BELL TEL                                        |      |          |         |         |          |          | TIME: 08:02                        |           |
| 4                               | CITY / AREA: CINCINNATI                                             |      |          |         |         |          |          |                                    |           |
| 5                               | STATE / PROV: OHIO                                                  |      |          |         |         |          |          |                                    |           |
| 6                               | JOB IDENT: CINCINNATI                                               |      |          |         |         |          |          |                                    |           |
| 7                               | CIRCUIT DESIGN: MELDED CDLC                                         |      |          |         |         |          |          |                                    |           |
| 8                               | LOOP SPAN DIVISION: ALL LOOP SPANS                                  |      |          |         |         |          |          |                                    |           |
| 9                               | SERVICE CLASS: BAND 1 - BUSINESS PBX                                |      |          |         |         |          |          |                                    |           |
| 10                              | TOTAL LOOP LENGTH: 15677 FEET                                       |      |          |         |         |          |          |                                    |           |
| 11                              | Technology Type Mix: 0.0000                                         |      |          |         |         |          |          | TECHNOLOGY                         |           |
| 12                              | UNIT WEIGHTED MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY |      |          |         |         |          |          | WEIGHTED                           |           |
| 13                              | PLANT NAME                                                          |      |          |         |         |          |          | TOTAL                              |           |
| 14                              | SEG. NAME                                                           |      |          |         |         |          |          | LOOP                               |           |
| 15                              | EQPT CODE                                                           |      |          |         |         |          |          | TOTAL                              |           |
| 16                              | PLANT                                                               |      |          |         |         |          |          | LOOP                               |           |
| 17                              | ITEM DESCRIPTION                                                    |      |          |         |         |          |          | LOOP                               |           |
| 18                              | SHARED RESOURCES                                                    |      |          |         |         |          |          |                                    |           |
| 19                              | LAND                                                                | 20C  | \$ 0.03  | \$ 0.00 | \$ 0.01 | \$ 0.00  | \$ 0.00  | \$ 0.04                            | \$ 0.0000 |
| 20                              | BUILDING                                                            | 10C  | \$ 0.85  | \$ 0.00 | \$ 0.28 | \$ 0.00  | \$ 0.00  | \$ 1.13                            | \$ 0.0000 |
| 21                              | BLDG ENTRANCE CABLE                                                 | 12C  | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 22                              | INTRABLDG CABLE                                                     | 52C  | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 23                              | AERIAL CABLE (COPPER)                                               | 22C  | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 24                              | BURIED CABLE (COPPER)                                               | 45C  | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 25                              | UNDERGROUND (CU) CA.                                                | 5C   | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 26                              | CO EQPT - LOW CAP TERM                                              | 257C | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 27                              | CO EQPT - LOW CAP CHAN                                              | 257C | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 28                              | CO EQPT - HI CAP TERM                                               | 857C | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 29                              | CO EQPT - HI CAP CHAN                                               | 857C | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 30                              | CO EQPT - ANALOG SW                                                 | 77C  | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 31                              | CO EQPT - DIGITAL SW                                                | 377C | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 32                              | AERIAL CABLE (FIBER)                                                | 822C | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 33                              | BURIED CABLE (FIBER)                                                | 845C | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 34                              | UNDERGROUND (FO) CA.                                                | 85C  | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 35                              | CONNECTORS                                                          | 57C  | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 36                              | MISC. COM EQP & PWR                                                 | 57C  | \$ 0.36  | \$ 0.00 | \$ 0.29 | \$ 0.00  | \$ 0.00  | \$ 0.65                            | \$ 0.0000 |
| 37                              | POLE LINE                                                           | 1C   | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 38                              | CONDUIT                                                             | 4C   | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 39                              | DIRECT RESOURCES                                                    |      |          |         |         |          |          |                                    |           |
| 40                              | LAND                                                                | 20C  | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 41                              | BUILDING                                                            | 10C  | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 42                              | BLDG ENTRANCE CABLE                                                 | 12C  | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 2.45  | \$ 2.45                            | \$ 0.0000 |
| 43                              | INTRABLDG CABLE                                                     | 52C  | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 44                              | AERIAL CABLE (COPPER)                                               | 22C  | \$ 0.27  | \$ 0.00 | \$ 0.02 | \$ 4.60  | \$ 0.00  | \$ 4.89                            | \$ 0.0000 |
| 45                              | BURIED CABLE (COPPER)                                               | 45C  | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 1.78  | \$ 0.00  | \$ 1.78                            | \$ 0.0000 |
| 46                              | UNDERGROUND (CU) CA.                                                | 5C   | \$ 1.84  | \$ 0.00 | \$ 0.15 | \$ 2.54  | \$ 0.00  | \$ 4.53                            | \$ 0.0000 |
| 47                              | CO EQPT - P GAIN TERM                                               | 257C | \$ 3.66  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 3.66                            | \$ 0.0000 |
| 48                              | CO EQPT - P GAIN CHAN                                               | 257C | \$ 7.98  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 7.98                            | \$ 0.0000 |
| 49                              | CO EQPT - FO MUX TERM                                               | 857C | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 50                              | CO EQPT - FO MUX CHAN                                               | 857C | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 51                              | CO EQPT - ANALOG SW                                                 | 77C  | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 52                              | CO EQPT - DIGITAL SW                                                | 377C | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 53                              | AERIAL CABLE (FIBER)                                                | 822C | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 54                              | BURIED CABLE (FIBER)                                                | 845C | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 55                              | UNDERGROUND (FO) CA.                                                | 85C  | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 56                              | CONNECTORS                                                          | 57C  | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 57                              | MISC. COM EQP & PWR                                                 | 57C  | \$ 0.00  | \$ 0.00 | \$ 0.00 | \$ 0.00  | \$ 0.00  | \$ 0.00                            | \$ 0.0000 |
| 58                              | POLE LINE                                                           | 1C   | \$ 0.06  | \$ 0.00 | \$ 0.01 | \$ 0.00  | \$ 0.00  | \$ 0.07                            | \$ 0.0000 |
| 59                              | CONDUIT                                                             | 4C   | \$ 0.58  | \$ 0.00 | \$ 0.05 | \$ 0.90  | \$ 0.00  | \$ 1.53                            | \$ 0.0000 |
| 60                              | SPAN SUMMARY                                                        |      |          |         |         |          |          |                                    |           |
| 61                              |                                                                     |      | \$ 15.63 | \$ 0.00 | \$ 0.81 | \$ 10.92 | \$ 14.48 | \$ 29.82                           | \$ 0.00   |
| 62                              | TECHNOLOGY DESIGN SUMMARY                                           |      |          |         |         |          |          |                                    |           |
| 63                              |                                                                     |      |          |         |         |          |          | \$ 29.82                           |           |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

.1123R24\LCAT\CALC\DIST

Bellcore (R)

RUN - DIST PLNT

LCAT

Release: 1.0.4

Issued: 8/31/95

LAST UPDATE

28-Jan-97

07:40

## LOOP COST ANALYSIS TOOL

## DISTRIBUTION SEGMENT COST MODEL - BASIC COPPER TECHNOLOGY

STUDY NAME: 1996 BAND 1 (OHIO ONLY) BUSINESS PBX 12001 FEET - INFINITY

CURRENT TEST PLAN :

CURRENT JOB IDENT: CINCINNATI

|           |           |           |          |
|-----------|-----------|-----------|----------|
| BASIS     | NETWORK   | TEST CASE | 1        |
| FR / DS   | FLAT RATE | #BANDS    | 0        |
| SVC LEVEL | NARBAND   | #CKTS     | 1        |
| CST METH  | UN INCR   | INV LEVEL | ANN GOST |

CONFIDENTIAL  
NOTICE: ALL INFORMATION GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

PROPRIETARY - NOT FOR USE OR DISCLOSURE OUTSIDE Bellcore WITHOUT LICENSED PERMISSION

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

CA123R24:LCATCALC/DIST  
DIST. PLANT - WORKSHEET A  
Sheet 1 of 3

**LOOP COST ANALYSIS TOOL**

**Bellcore (R)**

BASIC INVESTMENT WORKSHEET  
SERVING AREA INTERFACE TO SERVICE ACCESS POINT INVESTMENT COST MODEL

COMPANY: CINCINNATI BELL TEL.  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIO

FACILITY TYPE: COPPER CABLE  
CIRCUIT SEGMENT: DISTRIBUTION PLANT (NON-DLC-NON-COLLOC.)

SERVICE CLASS: BAND 1 - BUSINESS PBX

LCAT Release: 1.0.4  
Issue Date: 8/31/95  
STUDY YR: 1999  
TEST CASE: 1  
RUN DATE: 25-Jan-97  
TIME: 07:57

| SEGMENT LENGTH<br>IN FEET                                                                                                                                                                                                                                                                                                                                                                                    | TYPE OF<br>CABLE<br>PLANT | FROM<br>- TABLE 2 -<br>RELATIVE<br>MIX OF<br>TYPE OF<br>CA. PLANT | LENGTH<br>SUBSET<br>BY TYPE<br>OF PLANT | FROM<br>- TABLE 4 -<br>CABLE<br>INVESTMENT<br>PER<br>PAIR FOOT | CABLE<br>INVESTMENT<br>PER PAIR | (NOTE 4)<br>WEIGHTED<br>TERMINAL<br>INVESTMENT | CABLE COMPONENTS |      | (NOTE 4)<br>WEIGHTED<br>DROP WIRE<br>INVESTMENT |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------------------------------------------------------|-----------------------------------------|----------------------------------------------------------------|---------------------------------|------------------------------------------------|------------------|------|-------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                              |                           | [B]                                                               | [C=A*B]                                 | [D]                                                            | [E=C*D]                         | [F=E*factr]                                    | [F=E*factr]      |      |                                                 |
| 2046.0                                                                                                                                                                                                                                                                                                                                                                                                       | AERIAL                    | 0.590000                                                          | 1207.1                                  | 0.039700                                                       | 47.92                           |                                                | 0.00             | 0.00 |                                                 |
| CONSIDERS:<br>MELDED<br>COPPER<br>CABLE                                                                                                                                                                                                                                                                                                                                                                      | BURIED                    | 0.160000                                                          | 327.4                                   | 0.065700                                                       | 21.51                           |                                                | 0.00             | 0.00 |                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                              | UNDERGRND                 | 0.250000                                                          | 511.5                                   | 0.056900                                                       | 29.10                           |                                                | 0.00             | 0.00 |                                                 |
| Check =                                                                                                                                                                                                                                                                                                                                                                                                      |                           | 1.000000                                                          | 2046.0                                  |                                                                |                                 |                                                |                  |      |                                                 |
| <u>OUTSIDE PLANT LOADINGS</u>                                                                                                                                                                                                                                                                                                                                                                                |                           | (NOTE 4)                                                          |                                         |                                                                |                                 |                                                |                  |      |                                                 |
| DROP WIRE ADJUSTMENT:                                                                                                                                                                                                                                                                                                                                                                                        |                           | AIR DRYER LOADINGS:                                               |                                         |                                                                |                                 |                                                |                  |      |                                                 |
| AERIAL CA. =                                                                                                                                                                                                                                                                                                                                                                                                 | 0.0000                    | AERIAL CA. =                                                      |                                         | 0.0000                                                         |                                 |                                                |                  |      |                                                 |
| BURIED CA. =                                                                                                                                                                                                                                                                                                                                                                                                 | 0.0000                    | BURIED CA. =                                                      |                                         | 0.0000                                                         |                                 |                                                |                  |      |                                                 |
| UNDERGRND =                                                                                                                                                                                                                                                                                                                                                                                                  | 0.0000                    | UNDERGRND =                                                       |                                         | 0.0000                                                         |                                 |                                                |                  |      |                                                 |
| <u>OTHER INVESTMENT</u>                                                                                                                                                                                                                                                                                                                                                                                      |                           |                                                                   |                                         |                                                                |                                 |                                                |                  |      |                                                 |
| inv / unit lgth:                                                                                                                                                                                                                                                                                                                                                                                             | inv rthn factr:           |                                                                   |                                         |                                                                |                                 |                                                |                  |      |                                                 |
| POLE LINE FACTOR (PLF) =                                                                                                                                                                                                                                                                                                                                                                                     | 0.0000                    |                                                                   |                                         |                                                                |                                 |                                                |                  |      |                                                 |
| POLE LINE INVESTMENT (UTIL AERIAL INVEST. x PLF) =                                                                                                                                                                                                                                                                                                                                                           | \$ 34.64                  |                                                                   |                                         |                                                                |                                 |                                                |                  |      |                                                 |
| UG CONDUIT FACTOR (UCF) =                                                                                                                                                                                                                                                                                                                                                                                    | 0.0000                    |                                                                   |                                         |                                                                |                                 |                                                |                  |      |                                                 |
| CONDUIT INVESTMENT (UTIL UNDGRND INVST x UCF) =                                                                                                                                                                                                                                                                                                                                                              | \$ 42.95                  |                                                                   |                                         |                                                                |                                 |                                                |                  |      |                                                 |
| <p><b>CONFIDENTIAL</b><br/>NOTICE MUST BE GIVEN<br/>PRIOR TO RELEASE TO PUBLIC<br/>PROVIDED TO PUCO</p>                                                                                                                                                                                                                                                                                                      |                           |                                                                   |                                         |                                                                |                                 |                                                |                  |      |                                                 |
| <p><b>FOOTNOTES</b><br/>NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.<br/>NOTE 2: TABLE 4 &amp; 6 DEVELOPMENT SHOWN ON WORKSHEET A.<br/>NOTE 3: DESIGN AT THIS DISTANCE HAS NO LOAD COILS; THEREFORE, TERMINAL INVESTMENT IS ZERO<br/>NOTE 4: BY FCC MANDATE, THIS INVESTMENT IS INCORPORATED INTO THE APPROPRIATE CABLE ACCOUNT<br/>(SEE BUILDING AND TERMINATING INVESTMENT WORKSHEET)</p> |                           |                                                                   |                                         |                                                                |                                 |                                                |                  |      |                                                 |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| LOOP COST ANALYSIS TOOL                                                                                                                                                                                                                                                                                   |                 |                 |                     |                                                   |                      |                                                                      |                           |                            |                                                                      |                            |  | Bellcore (R)        |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|---------------------|---------------------------------------------------|----------------------|----------------------------------------------------------------------|---------------------------|----------------------------|----------------------------------------------------------------------|----------------------------|--|---------------------|--|
| ACCOUNT INVESTMENT WORKSHEET                                                                                                                                                                                                                                                                              |                 |                 |                     |                                                   |                      |                                                                      |                           |                            |                                                                      |                            |  | LCAT Release: 1.0.4 |  |
| SERVING AREA INTERFACE TO SERVICE ACCESS POINT INVESTMENT COST MODEL                                                                                                                                                                                                                                      |                 |                 |                     |                                                   |                      |                                                                      |                           |                            |                                                                      |                            |  | Issue Date: 8/31/95 |  |
| FACILITY TYPE: COPPER CABLE                                                                                                                                                                                                                                                                               |                 |                 |                     |                                                   |                      |                                                                      |                           |                            |                                                                      |                            |  | STUDY YR: 1996      |  |
| CIRCUIT SEGMENT: DISTRIBUTION PLANT (NON-DLC/NON-COLLOC)                                                                                                                                                                                                                                                  |                 |                 |                     |                                                   |                      |                                                                      |                           |                            |                                                                      |                            |  | TEST CASE: 1        |  |
| SERVICE CLASS: BAND 1 - BUSINESS PBX                                                                                                                                                                                                                                                                      |                 |                 |                     |                                                   |                      |                                                                      |                           |                            |                                                                      |                            |  | RUN DATE: 28-Jan-97 |  |
| TIME: 07:57                                                                                                                                                                                                                                                                                               |                 |                 |                     |                                                   |                      |                                                                      |                           |                            |                                                                      |                            |  |                     |  |
| PLANT ITEM                                                                                                                                                                                                                                                                                                | PLANT ACCT CODE | CAT. FIXED VARI | RESOURCE ALLOCATION | 1996 UNIT INVESTMENT BY ACCOUNT COST EQUATION [F] | CIRCUIT QUANTITY [G] | 1996 UNIT LOOP INVESTMENT EXCL. UTILIZATION SHARED RESOURCES [H=F*G] | DIRECT RESOURCES [H'=F*G] | ADMIN. UTIL. LINE FILL [J] | 1996 UNIT LOOP INVESTMENT INCL. UTILIZATION SHARED RESOURCES [K=H/J] | DIRECT RESOURCES [K'=H'/J] |  |                     |  |
| LAND                                                                                                                                                                                                                                                                                                      | 20C             | F               | SHARED              |                                                   |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |                     |  |
| BUILDING                                                                                                                                                                                                                                                                                                  | 10C             | F               | SHARED              |                                                   |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |                     |  |
| BLDG ENTRANCE CABLE                                                                                                                                                                                                                                                                                       | 12C             | V               | DIRECT              |                                                   |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |                     |  |
| INTRABLDG CABLE                                                                                                                                                                                                                                                                                           | 52C             | V               | DIRECT              |                                                   |                      |                                                                      |                           | 0.3500                     |                                                                      |                            |  |                     |  |
| AERIAL CABLE (COPPER)                                                                                                                                                                                                                                                                                     | 22C             | V               | DIRECT              | 47.92                                             | 1                    |                                                                      | \$ 48                     | 0.3500                     |                                                                      | \$ 137                     |  |                     |  |
| BURIED CABLE (COPPER)                                                                                                                                                                                                                                                                                     | 45C             | V               | DIRECT              | 21.51                                             | 1                    |                                                                      | \$ 22                     | 0.3500                     |                                                                      | \$ 61                      |  |                     |  |
| UNDERGROUND (CU) CA.                                                                                                                                                                                                                                                                                      | 5C              | V               | DIRECT              | 29.10                                             | 1                    |                                                                      | \$ 29                     | 0.3500                     |                                                                      | \$ 83                      |  |                     |  |
| CO EQPT - P GAIN TERM                                                                                                                                                                                                                                                                                     | 257C            | F               | DIRECT              |                                                   |                      |                                                                      |                           | 0.7000                     |                                                                      |                            |  |                     |  |
| CO EQPT - P GAIN CHAN                                                                                                                                                                                                                                                                                     | 257C            | V               | DIRECT              |                                                   |                      |                                                                      |                           | 0.7000                     |                                                                      |                            |  |                     |  |
| CO EQPT - FO MUX TERM                                                                                                                                                                                                                                                                                     | 857C            | F               | DIRECT              |                                                   |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |                     |  |
| CO EQPT - FO MUX CHAN                                                                                                                                                                                                                                                                                     | 857C            | F               | DIRECT              |                                                   |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |                     |  |
| CO EQPT - ANALOG SW                                                                                                                                                                                                                                                                                       | 77C             | V               | DIRECT              |                                                   |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |                     |  |
| CO EQPT - DIGITAL SW                                                                                                                                                                                                                                                                                      | 377C            | V               | DIRECT              |                                                   |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |                     |  |
| AERIAL CABLE (FIBER)                                                                                                                                                                                                                                                                                      | 822C            | F               | DIRECT              |                                                   |                      |                                                                      |                           | 0.0000                     |                                                                      |                            |  |                     |  |
| BURIED CABLE (FIBER)                                                                                                                                                                                                                                                                                      | 845C            | F               | DIRECT              |                                                   |                      |                                                                      |                           | 0.0000                     |                                                                      |                            |  |                     |  |
| UNDERGROUND (FO) CA.                                                                                                                                                                                                                                                                                      | 85C             | F               | DIRECT              |                                                   |                      |                                                                      |                           | 0.0000                     |                                                                      |                            |  |                     |  |
| CONNECTORS                                                                                                                                                                                                                                                                                                | 57C             | V               | DIRECT              |                                                   |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |                     |  |
| MISC. COM EQP & PWR                                                                                                                                                                                                                                                                                       | 57C             | V               | SHARED              |                                                   |                      |                                                                      |                           | 1.0000                     |                                                                      |                            |  |                     |  |
| POLE LINE                                                                                                                                                                                                                                                                                                 | 1C              | F               | DIRECT              | 34.64                                             | 1                    |                                                                      | \$ 35                     | 1.0000                     |                                                                      | \$ 35                      |  |                     |  |
| CONDUIT                                                                                                                                                                                                                                                                                                   | 4C              | F               | DIRECT              | 42.95                                             | 1                    |                                                                      | \$ 43                     | 1.0000                     |                                                                      | \$ 43                      |  |                     |  |
| <p><b>CONFIDENTIAL</b></p> <p>NOTICE MUST BE GIVEN PRIOR TO RELEASE TO PUBLIC</p> <p>PROVIDED TO PUCO</p>                                                                                                                                                                                                 |                 |                 |                     |                                                   |                      |                                                                      |                           |                            |                                                                      |                            |  |                     |  |
| <p>FOOTNOTES</p> <p>NOTE 1: APPARENT INCONSISTENCIES BETWEEN COLUMNS F(F) AND H(H) ARE CAUSED BY COMPUTER ROUNDING.</p> <p>NOTE 2: COLUMN F IS AN ACCOUNT SUMMARY.</p> <p>AERIAL CABLE + TERM INV + AIR DRYER + DROP WIRE; BURIED CABLE, ... ETC;</p> <p>CO EQPT - ESS = CONNECTORS + MISC. CP&amp;E.</p> |                 |                 |                     |                                                   |                      |                                                                      |                           |                            |                                                                      |                            |  |                     |  |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| LOOP COST ANALYSIS TOOL                                              |                 |                         |                                                               |                                                                 |                        |                                                            |                                                              |                                                                        |                                                                          | Bellcore <sup>®</sup> |  |
|----------------------------------------------------------------------|-----------------|-------------------------|---------------------------------------------------------------|-----------------------------------------------------------------|------------------------|------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------|--|
| PROSPECTIVE AND ANNUAL COSTS WORKSHEET                               |                 |                         |                                                               |                                                                 |                        |                                                            |                                                              |                                                                        |                                                                          | LCAT Release: 1.0.4   |  |
| SERVING AREA INTERFACE TO SERVICE ACCESS POINT INVESTMENT COST MODEL |                 |                         |                                                               |                                                                 |                        |                                                            |                                                              |                                                                        |                                                                          | Issue Date: 8/31/95   |  |
| FACILITY TYPE: COPPER CABLE                                          |                 |                         |                                                               |                                                                 |                        |                                                            |                                                              |                                                                        |                                                                          | STUDY YR: 1996        |  |
| CIRCUIT SEGMENT: DISTRIBUTION PLANT (NON-DLC, NON-COLL-50)           |                 |                         |                                                               |                                                                 |                        |                                                            |                                                              |                                                                        |                                                                          | TEST CASE: 1          |  |
| SERVICE CLASS: BAND 1 - BUSINESS PBX                                 |                 |                         |                                                               |                                                                 |                        |                                                            |                                                              |                                                                        |                                                                          | RUN DATE: 28-Jan-97   |  |
|                                                                      |                 |                         |                                                               |                                                                 |                        |                                                            |                                                              |                                                                        |                                                                          | TIME: 07:57           |  |
| COMPANY: CINCINNATI BELL TEL.                                        |                 | CITY / AREA: CINCINNATI |                                                               | STATE / PROV: OHIO                                              |                        |                                                            |                                                              |                                                                        |                                                                          |                       |  |
| PLANT ITEM                                                           | PLANT ACCT CODE | 1996 TO 1996 TPI [L]    | 1996 UNIT LOOP INVESTMENT BY ACCOUNT SHARED RESOURCES [M=K*L] | 1996 UNIT LOOP INVESTMENT BY ACCOUNT DIRECT RESOURCES [M'=K'*L] | ANNUAL COST FACTOR [N] | 1996 UNIT ANNUAL COSTS BY ACCOUNT SHARED RESOURCES [P=M*N] | 1996 UNIT ANNUAL COSTS BY ACCOUNT DIRECT RESOURCES [P'=M'*N] | 1996 UNIT MONTHLY RECURRING COSTS BY ACCOUNT SHARED RESOURCES [R=P/12] | 1996 UNIT MONTHLY RECURRING COSTS BY ACCOUNT DIRECT RESOURCES [R'=P'/12] |                       |  |
| LAND                                                                 | 20C             | 1.0000                  |                                                               |                                                                 | 0.2322                 |                                                            |                                                              |                                                                        |                                                                          |                       |  |
| BUILDING                                                             | 10C             | 1.0000                  |                                                               |                                                                 | 0.2937                 |                                                            |                                                              |                                                                        |                                                                          |                       |  |
| BLDG ENTRANCE CABLE                                                  | 12C             | 1.0000                  |                                                               |                                                                 | 0.3922                 |                                                            |                                                              |                                                                        |                                                                          |                       |  |
| INTRABLDG CABLE                                                      | 52C             | 1.0000                  |                                                               |                                                                 | 0.3922                 |                                                            |                                                              |                                                                        |                                                                          |                       |  |
| AERIAL CABLE (COPPER)                                                | 22C             | 1.0000                  |                                                               | \$ 137                                                          | 0.4033                 |                                                            | \$ 55.22                                                     |                                                                        | \$ 4.60                                                                  |                       |  |
| BURIED CABLE (COPPER)                                                | 45C             | 1.0000                  |                                                               | \$ 61                                                           | 0.3467                 |                                                            | \$ 21.30                                                     |                                                                        | \$ 1.75                                                                  |                       |  |
| UNDERGROUND (CU) CA.                                                 | 5C              | 1.0000                  |                                                               | \$ 83                                                           | 0.3663                 |                                                            | \$ 30.46                                                     |                                                                        | \$ 2.54                                                                  |                       |  |
| CO EQPT - P GAIN TERM                                                | 257C            | 1.0000                  |                                                               |                                                                 | 0.3881                 |                                                            |                                                              |                                                                        |                                                                          |                       |  |
| CO EQPT - P GAIN CHAN                                                | 257C            | 1.0000                  |                                                               |                                                                 | 0.3881                 |                                                            |                                                              |                                                                        |                                                                          |                       |  |
| CO EQPT - FO MUX TERM                                                | 857C            | 1.0000                  |                                                               |                                                                 | 0.3881                 |                                                            |                                                              |                                                                        |                                                                          |                       |  |
| CO EQPT - FO MUX CHAN                                                | 857C            | 1.0000                  |                                                               |                                                                 | 0.3881                 |                                                            |                                                              |                                                                        |                                                                          |                       |  |
| CO EQPT - ANALOG SW                                                  | 77C             | 1.0000                  |                                                               |                                                                 | 0.0000                 |                                                            |                                                              |                                                                        |                                                                          |                       |  |
| CO EQPT - DIGITAL SW                                                 | 377C            | 1.0000                  |                                                               |                                                                 | 0.3458                 |                                                            |                                                              |                                                                        |                                                                          |                       |  |
| AERIAL CABLE (FIBER)                                                 | 822C            | 1.0000                  |                                                               |                                                                 | 0.2983                 |                                                            |                                                              |                                                                        |                                                                          |                       |  |
| BURIED CABLE (FIBER)                                                 | 845C            | 1.0000                  |                                                               |                                                                 | 0.2724                 |                                                            |                                                              |                                                                        |                                                                          |                       |  |
| UNDERGROUND (FO) CA.                                                 | 85C             | 1.0000                  |                                                               |                                                                 | 0.2689                 |                                                            |                                                              |                                                                        |                                                                          |                       |  |
| CONNECTORS                                                           | 57C             | 1.0000                  |                                                               |                                                                 | 0.3881                 |                                                            |                                                              |                                                                        |                                                                          |                       |  |
| MISC. COM EQP & PWR                                                  | 57C             | 1.0000                  |                                                               |                                                                 | 0.3881                 |                                                            |                                                              |                                                                        |                                                                          |                       |  |
| POLE LINE                                                            | 1C              | 1.0000                  |                                                               | \$ 35                                                           | 0.3807                 |                                                            | \$ 13.19                                                     |                                                                        | \$ 1.10                                                                  |                       |  |
| CONDUIT                                                              | 4C              | 1.0000                  |                                                               | \$ 43                                                           | 0.2521                 |                                                            | \$ 10.83                                                     |                                                                        | \$ 0.90                                                                  |                       |  |
| TOTALS                                                               |                 |                         | \$ 0                                                          | \$ 359                                                          |                        | \$ 131.00                                                  |                                                              | \$ 10.92                                                               |                                                                          |                       |  |

FOOTNOTES  
 NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.  
 NOTE 2: AN INVESTMENT-ONLY STUDY NEGATES ANNUAL COST COMPUTATION, THUS, THIS COLUMN MAY BE PRESENTED FOR CONSISTENCY ONLY.

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATCALC\DIST  
DIST\_PLANT - WORKSHEET B  
Sheet 1 of 3

## LOOP COST ANALYSIS TOOL

### BASIC INVESTMENT WORKSHEET

**Belcore** (R)  
LCAT  
Release: 1.0.4  
1998  
STUDY YR: 1  
TEST CASE:  
RUN DATE: 28-Jan-97  
TIME: 07:57

COMPANY: CINCINNATI BELL TEL.  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIO

FACILITY TYPE: COPPER CABLE  
CIRCUIT SEGMENT: SERVICE ACCESS

SERVICE CLASS: BAND 1 - BUSINESS PBX

| TYPE OF PLANT<br>ITEM | UNIT<br>PLANT<br>INVEST.<br>[A] | PROB.<br>OF<br>OCCURANCE<br>[B] | WEIGHTED<br>TERMINAL<br>INVESTMENT<br>[C=A*B] |
|-----------------------|---------------------------------|---------------------------------|-----------------------------------------------|
| INTRABLDG CABLE       | \$ 0.00                         | 0.0000                          | \$ 0.00                                       |
| BLDG ENTRANCE CABLE   | \$ 75.00                        | 1.0000                          | \$ 75.00                                      |
| AERIAL TERMINAL       | \$ 0.00                         | 0.0000                          | \$ 0.00                                       |
| BURIED TERMINAL       | \$ 0.00                         | 0.0000                          | \$ 0.00                                       |
| AERIAL DROP WIRE      | \$ 0.00                         | 0.0000                          | \$ 0.00                                       |
| BURIED DROP WIRE      | \$ 0.00                         | 0.0000                          | \$ 0.00                                       |
| COAXIAL DROP          | \$ 0.00                         | 0.0000                          | \$ 0.00                                       |

POLE LINE FACTOR (PLF) =

POLE LINE INVESTMENT (UTIL AERIAL INVEST. x PLF) =

CONFIDENTIAL

NOTICE MUST BE GIVEN

BEFORE RELEASE TO PUBLIC

PROVIDED TO PUCO

**FOOTNOTES**

NOTE 1: FOR 4 WIRE SERVICES ONLY, THE ABOVE PLANT INVESTMENTS HAVE BEEN DOUBLED.

NOTE 2: THIS DATA IS USED IN WORKSHEET E FOR CALCULATION OF PAIR GAIN INVESTMENT AND MONTHLY COSTS



| LOOP COST ANALYSIS TOOL              |                 |                     |                                 |                  |                                             |                            |                                             |                          |                            | Bellicore <sup>®</sup> |  |
|--------------------------------------|-----------------|---------------------|---------------------------------|------------------|---------------------------------------------|----------------------------|---------------------------------------------|--------------------------|----------------------------|------------------------|--|
| ACCOUNT INVESTMENT WORKSHEET         |                 |                     |                                 |                  |                                             |                            |                                             |                          |                            | LCAT                   |  |
| COMPANY: CINCINNATI BELL TEL.        |                 |                     |                                 |                  |                                             |                            |                                             |                          |                            | Release: 1.0.4         |  |
| CITY / AREA: CINCINNATI              |                 |                     |                                 |                  |                                             |                            |                                             |                          |                            | STUDY YR: 1996         |  |
| STATE / PROV: OHIO                   |                 |                     |                                 |                  |                                             |                            |                                             |                          |                            | TEST CASE: 1           |  |
| FACILITY TYPE: COPPER CABLE          |                 |                     |                                 |                  |                                             |                            |                                             |                          |                            | RUN DATE: 28-Jan-97    |  |
| CIRCUIT SEGMENT: SERVICE ACCESS      |                 |                     |                                 |                  |                                             |                            |                                             |                          |                            | TIME: 07:57            |  |
| SERVICE CLASS: BAND 1 - BUSINESS PBX |                 |                     |                                 |                  |                                             |                            |                                             |                          |                            |                        |  |
| PLANT ITEM                           | PLANT ACCT CODE | CAT. FIXED RESOURCE | 1996 UNIT INVESTMENT BY ACCOUNT | CIRCUIT QUANTITY | 1996 UNIT LOOP INVESTMENT EXCL. UTILIZATION | ADMIN. UTIL. LINE FILL     | 1996 UNIT LOOP INVESTMENT INCL. UTILIZATION |                          |                            |                        |  |
|                                      |                 | VARI ALLOCATION     | COST EQUATION                   | [F]              | SHARED RESOURCES [H=F*G]                    | DIRECT RESOURCES [H'=F'*G] | [J]                                         | SHARED RESOURCES [K=H/J] | DIRECT RESOURCES [K'=H'/J] |                        |  |
| LAND                                 | 20C             | F SHARED            |                                 |                  |                                             | 1.0000                     |                                             |                          |                            |                        |  |
| BUILDING                             | 10C             | F SHARED            |                                 |                  |                                             | 1.0000                     |                                             |                          |                            |                        |  |
| BLDG ENTRANCE CABLE                  | 12C             | V DIRECT            | 75.00                           | 1                |                                             | \$ 75                      | 1.0000                                      |                          | \$ 75                      |                        |  |
| INTRABLDG CABLE                      | 52C             | V DIRECT            | 0.00                            |                  |                                             | 0.3500                     |                                             |                          |                            |                        |  |
| AERIAL CABLE (COPPER)                | 22C             | V DIRECT            | 0.00                            |                  |                                             | 0.3500                     |                                             |                          |                            |                        |  |
| BURIED CABLE (COPPER)                | 45C             | V DIRECT            | 0.00                            |                  |                                             | 0.3500                     |                                             |                          |                            |                        |  |
| UNDERGROUND (CU) CA.                 | 5C              | V DIRECT            |                                 |                  |                                             | 0.3500                     |                                             |                          |                            |                        |  |
| CO EQPT - P GAIN TERM                | 257C            | F DIRECT            |                                 |                  |                                             | 0.7000                     |                                             |                          |                            |                        |  |
| CO EQPT - P GAIN CHAN                | 257C            | V DIRECT            |                                 |                  |                                             | 0.7000                     |                                             |                          |                            |                        |  |
| CO EQPT - FO MUX TERM                | 857C            | F DIRECT            |                                 |                  |                                             | 1.0000                     |                                             |                          |                            |                        |  |
| CO EQPT - FO MUX CHAN                | 857C            | F DIRECT            |                                 |                  |                                             | 1.0000                     |                                             |                          |                            |                        |  |
| CO EQPT - ANALOG SW                  | 77C             | V DIRECT            |                                 |                  |                                             | 1.0000                     |                                             |                          |                            |                        |  |
| CO EQPT - DIGITAL SW                 | 377C            | V DIRECT            |                                 |                  |                                             | 1.0000                     |                                             |                          |                            |                        |  |
| AERIAL CABLE (FIBER)                 | 822C            | F DIRECT            |                                 |                  |                                             | 0.0000                     |                                             |                          |                            |                        |  |
| BURIED CABLE (FIBER)                 | 845C            | F DIRECT            |                                 |                  |                                             | 0.0000                     |                                             |                          |                            |                        |  |
| UNDERGROUND (FO) CA.                 | 85C             | F DIRECT            |                                 |                  |                                             | 0.0000                     |                                             |                          |                            |                        |  |
| CONNECTORS                           | 57C             | V DIRECT            |                                 |                  |                                             | 1.0000                     |                                             |                          |                            |                        |  |
| MISC. COM EQP & PWR                  | 57C             | V SHARED            |                                 |                  |                                             | 1.0000                     |                                             |                          |                            |                        |  |
| POLE LINE                            | 1C              | F DIRECT            | 0.00                            |                  |                                             | 1.0000                     |                                             |                          |                            |                        |  |
| CONDUIT                              | 4C              | F DIRECT            |                                 |                  |                                             | 1.0000                     |                                             |                          |                            |                        |  |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

FOOTNOTES  
NOTE 1: APPARENT INCONSISTENCIES BETWEEN COLUMNS F(F) AND H(H) ARE CAUSED BY COMPUTER ROUNDING.  
NOTE 2: COLUMN F IS AN ACCOUNT SUMMARY.  
AERIAL CABLE + TERM INV + AIR DRYER + DROP WIRE; BURIED CABLE, ... ETC;  
CO EQPT - ESS = CONNECTORS + MISC. CP&E.

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

CM123R24LCATCALC.DIST  
DIST PLNT - WORKSHEET B  
Sheet 3 of 3

**LOOP COST ANALYSIS TOOL**  
PROSPECTIVE AND ANNUAL COSTS WORKSHEET

Bellicore (R)  
LCAT  
Release: 1.0.4  
STUDY YR: 1996  
TEST CASE: 1  
RUN DATE: 28-Jan-97  
TIME: 07:57

COMPANY: CINCINNATI BELL TEL.  
CITY/AREA: CINCINNATI  
STATE/PROV: OHIO

FACILITY TYPE: COPPER CABLE  
CIRCUIT SEGMENT: SERVICE ACCESS  
SERVICE CLASS: BAND 1 - BUSINESS PBX

| PLANT ITEM               | PLANT ACCT CODE | 1996 TO 1996 TPI [L] | 1996 UNIT LOOP INVESTMENT BY ACCOUNT |                            | ANNUAL COST FACTOR [N] | 1996 UNIT ANNUAL COSTS BY ACCOUNT |                            | 1996 UNIT MONTHLY RECURRING COSTS BY ACCOUNT |                             |
|--------------------------|-----------------|----------------------|--------------------------------------|----------------------------|------------------------|-----------------------------------|----------------------------|----------------------------------------------|-----------------------------|
|                          |                 |                      | SHARED RESOURCES [M=K*L]             | DIRECT RESOURCES [M'=K'*L] |                        | SHARED RESOURCES [P=M*N]          | DIRECT RESOURCES [P'=M'*N] | SHARED RESOURCES [R=P/12]                    | DIRECT RESOURCES [R'=P'/12] |
| 9 LAND                   | 20C             | 1.0000               |                                      |                            | 0.2322                 |                                   |                            |                                              |                             |
| 10 BUILDING              | 10C             | 1.0000               |                                      |                            | 0.2937                 |                                   |                            |                                              |                             |
| 11 BLDG ENTRANCE CABLE   | 12C             | 1.0000               |                                      | \$ 75                      | 0.3922                 |                                   | \$ 29.42                   |                                              | \$ 2.45                     |
| 12 INTRABLDG CABLE       | 52C             | 1.0000               |                                      |                            | 0.3922                 |                                   |                            |                                              |                             |
| 13 AERIAL CABLE (COPPER) | 22C             | 1.0000               |                                      |                            | 0.4033                 |                                   |                            |                                              |                             |
| 14 BURIED CABLE (COPPER) | 45C             | 1.0000               |                                      |                            | 0.3467                 |                                   |                            |                                              |                             |
| 15 UNDERGROUND (CU) CA.  | 5C              | 1.0000               |                                      |                            | 0.3663                 |                                   |                            |                                              |                             |
| 16 CO EQPT - P GAIN TERM | 257C            | 1.0000               |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |
| 17 CO EQPT - P GAIN CHAN | 257C            | 1.0000               |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |
| 18 CO EQPT - FO MUX TERM | 857C            | 1.0000               |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |
| 19 CO EQPT - FO MUX CHAN | 857C            | 1.0000               |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |
| 20 CO EQPT - ANALOG SW   | 77C             | 1.0000               |                                      |                            | 0.0000                 |                                   |                            |                                              |                             |
| 21 CO EQPT - DIGITAL SW  | 377C            | 1.0000               |                                      |                            | 0.3458                 |                                   |                            |                                              |                             |
| 22 AERIAL CABLE (FIBER)  | 822C            | 1.0000               |                                      |                            | 0.2983                 |                                   |                            |                                              |                             |
| 23 BURIED CABLE (FIBER)  | 845C            | 1.0000               |                                      |                            | 0.2724                 |                                   |                            |                                              |                             |
| 24 UNDERGROUND (FO) CA.  | 85C             | 1.0000               |                                      |                            | 0.2689                 |                                   |                            |                                              |                             |
| 25 CONNECTORS            | 57C             | 1.0000               |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |
| 26 MISC. COM EQP & PWR   | 57C             | 1.0000               |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |
| 27 POLE LINE             | 1C              | 1.0000               |                                      |                            | 0.3807                 |                                   |                            |                                              |                             |
| 28 CONDUIT               | 4C              | 1.0000               |                                      |                            | 0.2521                 |                                   |                            |                                              |                             |
| TOTALS                   |                 |                      | bctshrinv bctdirinv                  |                            |                        | bctshrinv bctdirinv               |                            | bctshrinv bctdirinv                          |                             |
|                          |                 |                      | \$ 0 \$ 75                           |                            |                        | \$ 0.00 \$ 29.42                  |                            | \$ 0.00 \$ 2.45                              |                             |
|                          |                 |                      | \$ 75                                |                            |                        | \$ 29.42                          |                            | \$ 2.45                                      |                             |
|                          |                 |                      | bctinvsv                             |                            |                        | bctinvsv                          |                            | bctinvsv                                     |                             |

**CONFIDENTIAL**

NOTICE MUST BE GIVEN PRIOR TO RELEASE TO PUBLIC

PROVIDED TO PUCO

FOOTNOTES  
NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.  
NOTE 2: AN INVESTMENT-ONLY STUDY NEGATES ANNUAL COST COMPUTATION, THUS, THIS COLUMN MAY BE PRESENTED FOR CONSISTENCY ONLY.

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCAT\CALCIDIST  
DIST\_PLNT - WORKSHEET B  
Sheet 1 of 3

**LOOP COST ANALYSIS TOOL**  
BASIC INVESTMENT WORKSHEET

COMPANY: CINCINNATI BELL TEL.  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIO

FACILITY TYPE: COPPER CABLE  
CIRCUIT SEGMENT: SERVICE ACCESS

SERVICE CLASS: BAND 1 - BUSINESS PBX

Release: 1.0.4  
STUDY YR: 1996  
TEST CASE: 1  
RUN DATE: 28-Jan-97  
TIME: 07:58

| TYPE OF PLANT<br>ITEM | UNIT<br>PLANT<br>INVEST.<br>[A] | PROB.<br>OF<br>OCCURANCE<br>[B] | WEIGHTED<br>TERMINAL<br>INVESTMENT<br>[C=A*B] |
|-----------------------|---------------------------------|---------------------------------|-----------------------------------------------|
| INTRABLDG CABLE       | \$ 0.00                         | 0.0000                          | \$ 0.00                                       |
| BLDG ENTRANCE CABLE   | \$ 75.00                        | 1.0000                          | \$ 75.00                                      |
| AERIAL TERMINAL       | \$ 0.00                         | 0.0000                          | \$ 0.00                                       |
| BURIED TERMINAL       | \$ 0.00                         | 0.0000                          | \$ 0.00                                       |
| AERIAL DROP WIRE      | \$ 0.00                         | 0.0000                          | \$ 0.00                                       |
| BURIED DROP WIRE      | \$ 0.00                         | 0.0000                          | \$ 0.00                                       |
| COAXIAL DROP          | \$ 0.00                         | 0.0000                          | \$ 0.00                                       |

POLE LINE FACTOR (PLF) =  $\frac{\text{from length}}{\text{from invest}}$  =  $\frac{0.0000}{0.2530}$

POLE LINE INVESTMENT (UTIL AERIAL INVEST. x PLF) = \$ 0.00

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

**FOOTNOTES**  
NOTE 1: FOR 4 WIRE SERVICES ONLY, THE ABOVE PLANT INVESTMENTS HAVE BEEN DOUBLED.  
NOTE 2: THIS DATA IS USED IN WORKSHEET E FOR CALCULATION OF PAIR GAIN INVESTMENT AND MONTHLY COSTS

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| LOOP COST ANALYSIS TOOL                                                                           |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            | Belcore (R)         |  |
|---------------------------------------------------------------------------------------------------|-----------------|---------------------|---------------------------------------------------|----------------------|----------------------------------------------------------------------|----------------------------|----------------------------|----------------------------------------------------------------------|----------------------------|---------------------|--|
| ACCOUNT INVESTMENT WORKSHEET                                                                      |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            | LCAT                |  |
| C:\123R24\LCATCALC\DIST                                                                           |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            | Release: 1.0.4      |  |
| DIST_PLNT - WORKSHEET B                                                                           |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            | STUDY YR: 1996      |  |
| Sheet 2 of 3                                                                                      |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            | TEST CASE: 1        |  |
| COMPANY: CINCINNATI BELL TEL.                                                                     |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            | RUN DATE: 28-Jan-97 |  |
| CITY / AREA: CINCINNATI                                                                           |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            | TIME: 07:58         |  |
| STATE / PROV: OHIO                                                                                |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            |                     |  |
| FACILITY TYPE: COPPER CABLE                                                                       |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            |                     |  |
| CIRCUIT SEGMENT: SERVICE ACCESS                                                                   |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            |                     |  |
| SERVICE CLASS: BAND 1 - BUSINESS PBX                                                              |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            |                     |  |
| PLANT ITEM                                                                                        | PLANT ACCT CODE | CAT. FIXED RESOURCE | 1996 UNIT INVESTMENT BY ACCOUNT COST EQUATION [F] | CIRCUIT QUANTITY [G] | 1996 UNIT LOOP INVESTMENT EXCL. UTILIZATION SHARED RESOURCES [H=F*G] | DIRECT RESOURCES [H'=F'*G] | ADMIN. UTIL. LINE FILL [J] | 1996 UNIT LOOP INVESTMENT INCL. UTILIZATION SHARED RESOURCES [K=H/J] | DIRECT RESOURCES [K'=H'/J] |                     |  |
| 9 LAND                                                                                            | 20C             | F                   | SHARED                                            |                      |                                                                      |                            | 1.0000                     |                                                                      |                            |                     |  |
| 10 BUILDING                                                                                       | 10C             | F                   | SHARED                                            |                      |                                                                      |                            | 1.0000                     |                                                                      |                            |                     |  |
| 11 BLDG ENTRANCE CABLE                                                                            | 12C             | V                   | DIRECT                                            | 75.00                | 1                                                                    | \$ 75                      | 1.0000                     |                                                                      | \$ 75                      |                     |  |
| 12 INTRABLDG CABLE                                                                                | 52C             | V                   | DIRECT                                            | 0.00                 |                                                                      |                            | 0.3500                     |                                                                      |                            |                     |  |
| 13 AERIAL CABLE (COPPER)                                                                          | 22C             | V                   | DIRECT                                            | 0.00                 |                                                                      |                            | 0.3500                     |                                                                      |                            |                     |  |
| 14 BURIED CABLE (COPPER)                                                                          | 45C             | V                   | DIRECT                                            | 0.00                 |                                                                      |                            | 0.3500                     |                                                                      |                            |                     |  |
| 15 UNDERGROUND (CU) CA.                                                                           | 5C              | V                   | DIRECT                                            |                      |                                                                      |                            | 0.3500                     |                                                                      |                            |                     |  |
| 16 CO EQPT - P GAIN TERM                                                                          | 257C            | F                   | DIRECT                                            |                      |                                                                      |                            | 0.7000                     |                                                                      |                            |                     |  |
| 17 CO EQPT - P GAIN CHAN                                                                          | 257C            | V                   | DIRECT                                            |                      |                                                                      |                            | 0.7000                     |                                                                      |                            |                     |  |
| 18 CO EQPT - FO MUX TERM                                                                          | 857C            | F                   | DIRECT                                            |                      |                                                                      |                            | 1.0000                     |                                                                      |                            |                     |  |
| 19 CO EQPT - FO MUX CHAN                                                                          | 857C            | F                   | DIRECT                                            |                      |                                                                      |                            | 1.0000                     |                                                                      |                            |                     |  |
| 20 CO EQPT - ANALOG SW                                                                            | 77C             | V                   | DIRECT                                            |                      |                                                                      |                            | 1.0000                     |                                                                      |                            |                     |  |
| 21 CO EQPT - DIGITAL SW                                                                           | 377C            | V                   | DIRECT                                            |                      |                                                                      |                            | 1.0000                     |                                                                      |                            |                     |  |
| 22 AERIAL CABLE (FIBER)                                                                           | 822C            | F                   | DIRECT                                            |                      |                                                                      |                            | 0.0000                     |                                                                      |                            |                     |  |
| 23 BURIED CABLE (FIBER)                                                                           | 845C            | F                   | DIRECT                                            |                      |                                                                      |                            | 0.0000                     |                                                                      |                            |                     |  |
| 24 UNDERGROUND (FO) CA.                                                                           | 85C             | F                   | DIRECT                                            |                      |                                                                      |                            | 0.0000                     |                                                                      |                            |                     |  |
| 25 CONNECTORS                                                                                     | 57C             | V                   | DIRECT                                            |                      |                                                                      |                            | 1.0000                     |                                                                      |                            |                     |  |
| 26 MISC. COM EQP & PWR                                                                            | 57C             | V                   | SHARED                                            |                      |                                                                      |                            | 1.0000                     |                                                                      |                            |                     |  |
| 27 POLE LINE                                                                                      | 1C              | F                   | DIRECT                                            | 0.00                 |                                                                      |                            | 1.0000                     |                                                                      |                            |                     |  |
| 28 CONDUIT                                                                                        | 4C              | F                   | DIRECT                                            |                      |                                                                      |                            | 1.0000                     |                                                                      |                            |                     |  |
| CONFIDENTIAL                                                                                      |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            |                     |  |
| NOTICE MUST BE GIVEN                                                                              |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            |                     |  |
| PRIOR TO RELEASE TO PUBLIC                                                                        |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            |                     |  |
| PROVIDED TO PUCO                                                                                  |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            |                     |  |
| FOOTNOTES                                                                                         |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            |                     |  |
| NOTE 1: APPARENT INCONSISTENCIES BETWEEN COLUMNS F(F') AND H(H') ARE CAUSED BY COMPUTER ROUNDING. |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            |                     |  |
| NOTE 2: COLUMN F IS AN ACCOUNT SUMMARY.                                                           |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            |                     |  |
| AERIAL CABLE + TERM INV + AIR DRYER + DROP WIRE; BURIED CABLE, ... ETC;                           |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            |                     |  |
| CO EQPT - ESS = CONNECTORS + MISC. CP&E.                                                          |                 |                     |                                                   |                      |                                                                      |                            |                            |                                                                      |                            |                     |  |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATCALC.DIST<br>DIST_PLNT - WORKSHEET B<br>Sheet 3 of 3         |                 |                      | LOOP COST ANALYSIS TOOL<br>PROSPECTIVE AND ANNUAL COSTS WORKSHEET                                      |                            |                        |                                   |                            |                                              | Bellcore <sup>®</sup><br>LCAT<br>Release: 1.0.4<br>STUDY YR: 1996<br>TEST CASE: 1<br>RUN DATE: 28-Jan-97<br>TIME: 07:58 |  |
|----------------------------------------------------------------------------|-----------------|----------------------|--------------------------------------------------------------------------------------------------------|----------------------------|------------------------|-----------------------------------|----------------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|--|
| COMPANY: CINCINNATI BELL TEL.<br>CITY/AREA: CINCINNATI<br>STATE/PROV: OHIO |                 |                      | FACILITY TYPE: COPPER CABLE<br>CIRCUIT SEGMENT: SERVICE ACCESS<br>SERVICE CLASS: BAND 1 - BUSINESS PBX |                            |                        |                                   |                            |                                              |                                                                                                                         |  |
| PLANT ITEM                                                                 | PLANT ACCT CODE | 1996 TO 1996 TPI [L] | 1996 UNIT LOOP INVESTMENT BY ACCOUNT                                                                   |                            | ANNUAL COST FACTOR [N] | 1996 UNIT ANNUAL COSTS BY ACCOUNT |                            | 1996 UNIT MONTHLY RECURRING COSTS BY ACCOUNT |                                                                                                                         |  |
|                                                                            |                 |                      | SHARED RESOURCES [M=K*L]                                                                               | DIRECT RESOURCES [M'=K'*L] |                        | SHARED RESOURCES [P=M*N]          | DIRECT RESOURCES [P'=M'*N] | SHARED RESOURCES [R=P/12]                    | DIRECT RESOURCES [R'=P'/12]                                                                                             |  |
| LAND                                                                       | 20C             | 1.0000               |                                                                                                        |                            | 0.2322                 |                                   |                            |                                              |                                                                                                                         |  |
| BUILDING                                                                   | 10C             | 1.0000               |                                                                                                        |                            | 0.2937                 |                                   |                            |                                              |                                                                                                                         |  |
| BLDG ENTRANCE CABLE                                                        | 12C             | 1.0000               |                                                                                                        | \$ 75                      | 0.3922                 |                                   | \$ 29.42                   |                                              | \$ 2.45                                                                                                                 |  |
| INTRABLDG CABLE                                                            | 52C             | 1.0000               |                                                                                                        |                            | 0.3922                 |                                   |                            |                                              |                                                                                                                         |  |
| AERIAL CABLE (COPPER)                                                      | 22C             | 1.0000               |                                                                                                        |                            | 0.4033                 |                                   |                            |                                              |                                                                                                                         |  |
| BURIED CABLE (COPPER)                                                      | 45C             | 1.0000               |                                                                                                        |                            | 0.3467                 |                                   |                            |                                              |                                                                                                                         |  |
| UNDERGROUND (CU) CA.                                                       | 5C              | 1.0000               |                                                                                                        |                            | 0.3663                 |                                   |                            |                                              |                                                                                                                         |  |
| CO EQPT - P GAIN TERM                                                      | 257C            | 1.0000               |                                                                                                        |                            | 0.3881                 |                                   |                            |                                              |                                                                                                                         |  |
| CO EQPT - P GAIN CHAN                                                      | 257C            | 1.0000               |                                                                                                        |                            | 0.3881                 |                                   |                            |                                              |                                                                                                                         |  |
| CO EQPT - FO MUX TERM                                                      | 857C            | 1.0000               |                                                                                                        |                            | 0.3881                 |                                   |                            |                                              |                                                                                                                         |  |
| CO EQPT - FO MUX CHAN                                                      | 857C            | 1.0000               |                                                                                                        |                            | 0.3881                 |                                   |                            |                                              |                                                                                                                         |  |
| CO EQPT - ANALOG SW                                                        | 77C             | 1.0000               |                                                                                                        |                            | 0.0000                 |                                   |                            |                                              |                                                                                                                         |  |
| CO EQPT - DIGITAL SW                                                       | 377C            | 1.0000               |                                                                                                        |                            | 0.3458                 |                                   |                            |                                              |                                                                                                                         |  |
| AERIAL CABLE (FIBER)                                                       | 822C            | 1.0000               |                                                                                                        |                            | 0.2983                 |                                   |                            |                                              |                                                                                                                         |  |
| BURIED CABLE (FIBER)                                                       | 845C            | 1.0000               |                                                                                                        |                            | 0.2724                 |                                   |                            |                                              |                                                                                                                         |  |
| UNDERGROUND (FO) CA.                                                       | 85C             | 1.0000               |                                                                                                        |                            | 0.2689                 |                                   |                            |                                              |                                                                                                                         |  |
| CONNECTORS                                                                 | 57C             | 1.0000               |                                                                                                        |                            | 0.3881                 |                                   |                            |                                              |                                                                                                                         |  |
| MISC. COM EQP & PWR                                                        | 57C             | 1.0000               |                                                                                                        |                            | 0.3881                 |                                   |                            |                                              |                                                                                                                         |  |
| POLE LINE                                                                  | 1C              | 1.0000               |                                                                                                        |                            | 0.3807                 |                                   |                            |                                              |                                                                                                                         |  |
| CONDUIT                                                                    | 4C              | 1.0000               |                                                                                                        |                            | 0.2521                 |                                   |                            |                                              |                                                                                                                         |  |
| TOTALS                                                                     |                 |                      | btshrinvs btcdinrv                                                                                     |                            | btshrinvs btcdinrv     |                                   | btshrinvs btcdinrv         |                                              | btshrinvs btcdinrv                                                                                                      |  |
|                                                                            |                 |                      | \$ 0 \$ 75                                                                                             |                            | \$ 29.42 \$ 0.00       |                                   | \$ 29.42 \$ 2.45           |                                              | \$ 29.42 \$ 2.45                                                                                                        |  |
|                                                                            |                 |                      | btinvsy                                                                                                |                            | btinvsy                |                                   | btinvsy                    |                                              | btinvsy                                                                                                                 |  |

**CONFIDENTIAL**

NOTICE MUST BE GIVEN PRIOR TO RELEASE TO PUBLIC

PROVIDED TO PUCO

FOOTNOTES

NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.

NOTE 2: AN INVESTMENT-ONLY STUDY NEGATES ANNUAL COST COMPUTATION. THUS, THIS COLUMN MAY BE PRESENTED FOR CONSISTENCY ONLY.

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| LOOP COST ANALYSIS TOOL                                   |                        |      |          | Bellcore (R)         |          |
|-----------------------------------------------------------|------------------------|------|----------|----------------------|----------|
| PROSPECTIVE INVESTMENT WORKSHEET SUMMARY                  |                        |      |          | LCAT Release : 1.0.4 |          |
| DIST. PLNT - REPORT 14A                                   |                        |      |          | Issue Date : 8/31/95 |          |
| Sheet 1 of 3                                              |                        |      |          | STUDY YR: 1996       |          |
| COMPANY: CINCINNATI BELL TEL                              |                        |      |          | TEST CASE: 1         |          |
| CITY / AREA: CINCINNATI                                   |                        |      |          | RUN DATE: 28-Jan-97  |          |
| STATE / PROV: OHIO                                        |                        |      |          | TIME: 07:58          |          |
| FACILITY TYPE: COPPER CABLE                               |                        |      |          |                      |          |
| CIRCUIT SEGMENT: DISTRIBUTION PLANT (NON-DLC, NON-COLLOC) |                        |      |          |                      |          |
| SERVICE CLASS: BAND 1 - BUSINESS PBX                      |                        |      |          |                      |          |
| 1996 UNIT MONTHLY RECURRING COST BY ACCOUNT               |                        |      |          | (See Note)           |          |
| logic-14a                                                 |                        |      |          | TOTAL                |          |
| BAND MIX                                                  |                        |      |          | AVG. WEIGHTED        |          |
| 1.0000                                                    |                        |      |          | INVESTMENT           |          |
| PLANT ITEM                                                |                        |      |          |                      |          |
| ACCT CODE                                                 |                        |      |          |                      |          |
| LGTH.                                                     |                        |      |          |                      |          |
| SEG. LGTH.                                                |                        |      |          |                      |          |
| 15677                                                     |                        |      |          | 2048                 |          |
| 2046.0                                                    |                        |      |          |                      |          |
| <b>SHARED RESOURCES</b>                                   |                        |      |          |                      |          |
| 7                                                         | LAND                   | 20C  |          |                      | \$ 0.00  |
| 8                                                         | BUILDING               | 10C  |          |                      | \$ 0.00  |
| 9                                                         | BLDG ENTRANCE CABLE    | 12C  |          |                      | \$ 0.00  |
| 10                                                        | INTRABLDG CABLE        | 52C  |          |                      | \$ 0.00  |
| 11                                                        | AERIAL CABLE (COPPER)  | 22C  |          |                      | \$ 0.00  |
| 12                                                        | BURIED CABLE (COPPER)  | 45C  |          |                      | \$ 0.00  |
| 13                                                        | UNDERGROUND (CU) CA.   | 5C   |          |                      | \$ 0.00  |
| 14                                                        | CO EQPT - P GAIN TERM  | 257C |          |                      | \$ 0.00  |
| 15                                                        | CO EQPT - P GAIN CHAN  | 257C |          |                      | \$ 0.00  |
| 16                                                        | CO EQPT - FO MUX TERM  | 857C |          |                      | \$ 0.00  |
| 17                                                        | CO EQPT - FO MUX CHAN  | 857C |          |                      | \$ 0.00  |
| 18                                                        | CO EQPT - ANALOG SW    | 77C  |          |                      | \$ 0.00  |
| 19                                                        | CO EQPT - DIGITAL SW   | 377C |          |                      | \$ 0.00  |
| 20                                                        | AERIAL CABLE (FIBER)   | 822C |          |                      | \$ 0.00  |
| 21                                                        | BURIED CABLE (FIBER)   | 845C |          |                      | \$ 0.00  |
| 22                                                        | UNDERGROUND (FO) CA.   | 85C  |          |                      | \$ 0.00  |
| 23                                                        | CONNECTORS             | 57C  |          |                      | \$ 0.00  |
| 24                                                        | MISC. COM EQP & PWR    | 57C  |          |                      | \$ 0.00  |
| 25                                                        | POLE LINE              | 1C   |          |                      | \$ 0.00  |
| 26                                                        | CONDUIT                | 4C   |          |                      | \$ 0.00  |
| <b>DIRECT RESOURCES</b>                                   |                        |      |          |                      |          |
| 27                                                        | LAND                   | 20C  |          |                      | \$ 0.00  |
| 28                                                        | BUILDING               | 10C  |          |                      | \$ 0.00  |
| 29                                                        | BLDG ENTRANCE CABLE    | 12C  |          |                      | \$ 0.00  |
| 30                                                        | INTRABLDG CABLE        | 52C  |          |                      | \$ 0.00  |
| 31                                                        | AERIAL CABLE (COPPER)  | 22C  | \$ 4.60  |                      | \$ 4.60  |
| 32                                                        | BURIED CABLE (COPPER)  | 45C  | \$ 1.78  |                      | \$ 1.78  |
| 33                                                        | UNDERGROUND (CU) CA.   | 5C   | \$ 2.54  |                      | \$ 2.54  |
| 34                                                        | CO EQPT - P GAIN TERM  | 257C |          |                      | \$ 0.00  |
| 35                                                        | CO EQPT - P GAIN CHAN  | 257C |          |                      | \$ 0.00  |
| 36                                                        | CO EQPT - FO MUX TERM  | 857C |          |                      | \$ 0.00  |
| 37                                                        | CO EQPT - FO MUX CHAN  | 857C |          |                      | \$ 0.00  |
| 38                                                        | CO EQPT - ANALOG SW    | 77C  |          |                      | \$ 0.00  |
| 39                                                        | CO EQPT - DIGITAL SW   | 377C |          |                      | \$ 0.00  |
| 40                                                        | AERIAL CABLE (FIBER)   | 822C |          |                      | \$ 0.00  |
| 41                                                        | BURIED CABLE (FIBER)   | 845C |          |                      | \$ 0.00  |
| 42                                                        | UNDERGROUND (FO) CA.   | 85C  |          |                      | \$ 0.00  |
| 43                                                        | CONNECTORS             | 57C  |          |                      | \$ 0.00  |
| 44                                                        | MISC. COM EQP & PWR    | 57C  |          |                      | \$ 0.00  |
| 45                                                        | POLE LINE              | 1C   | \$ 1.10  |                      | \$ 1.10  |
| 46                                                        | CONDUIT                | 4C   | \$ 0.90  |                      | \$ 0.90  |
| 47                                                        |                        |      |          |                      |          |
| 48                                                        |                        |      |          |                      |          |
| 49                                                        |                        |      |          |                      |          |
| 50                                                        | SPAN SUMMARY           |      | \$ 10.92 | \$ 0.00              | \$ 10.92 |
| 51                                                        | AVG. WTD. SPAN SUMMARY |      | \$ 10.92 | \$ 0.00              | \$ 10.92 |
| 52                                                        |                        |      |          |                      |          |
| 53                                                        |                        |      |          |                      |          |
| 54                                                        |                        |      |          |                      |          |
| 55                                                        |                        |      |          |                      |          |

NOTE:  $\text{sum}(\text{INV}_{\text{ACCT}} \cdot \text{BAND} \cdot \text{MIX} \cdot \text{BAND}_{\text{MIX}})$

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUBLIC

\$ 10.92

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATCALC\DIST  
DIST\_PLNT -- REPORT 14B  
Sheet 1 of 1

**LOOP COST ANALYSIS TOOL**  
PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

COMPANY: CINCINNATI BELL TEL.  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIO

CIRCUIT SEGMENT : SERVICE ACCESS

SERVICE CLASS: BAND 1 - BUSINESS PBX

Release: 1.0.4  
STUDY YR: 1996  
TEST CASE: 1  
RUN DATE: 28-Jan-97  
TIME: 07:58

1996 UNIT MONTHLY RECURRING COST BY ACCOUNT

| PLANT ITEM              | PLANT ACCT CODE | BAND MIX AVG. LGTH. | ALL |
|-------------------------|-----------------|---------------------|-----|
| <b>SHARED RESOURCES</b> |                 |                     |     |
| LAND                    | 20C             |                     |     |
| BUILDING                | 10C             |                     |     |
| BLDG ENTRANCE CABLE     | 12C             |                     |     |
| INTRABLDG CABLE         | 52C             |                     |     |
| AERIAL CABLE (COPPER)   | 22C             |                     |     |
| BURIED CABLE (COPPER)   | 45C             |                     |     |
| UNDERGROUND (CU) CA.    | 5C              |                     |     |
| CO EQPT - P GAIN TERM   | 257C            |                     |     |
| CO EQPT - P GAIN CHAN   | 257C            |                     |     |
| CO EQPT - FO MUX TERM   | 857C            |                     |     |
| CO EQPT - FO MUX CHAN   | 857C            |                     |     |
| CO EQPT - ANALOG SW     | 77C             |                     |     |
| CO EQPT - DIGITAL SW    | 377C            |                     |     |
| AERIAL CABLE (FIBER)    | 822C            |                     |     |
| BURIED CABLE (FIBER)    | 845C            |                     |     |
| UNDERGROUND (FO) CA.    | 85C             |                     |     |
| CONNECTORS              | 57C             |                     |     |
| MISC. COM EQP & PWR     | 57C             |                     |     |
| POLE LINE               | 1C              |                     |     |
| CONDUIT                 | 4C              |                     |     |
| <b>DIRECT RESOURCES</b> |                 |                     |     |
| LAND                    | 20C             |                     |     |
| BUILDING                | 10C             |                     |     |
| BLDG ENTRANCE CABLE     | 12C             | 2.45                |     |
| INTRABLDG CABLE         | 52C             |                     |     |
| AERIAL CABLE (COPPER)   | 22C             |                     |     |
| BURIED CABLE (COPPER)   | 45C             |                     |     |
| UNDERGROUND (CU) CA.    | 5C              |                     |     |
| CO EQPT - P GAIN TERM   | 257C            |                     |     |
| CO EQPT - P GAIN CHAN   | 257C            |                     |     |
| CO EQPT - FO MUX TERM   | 857C            |                     |     |
| CO EQPT - FO MUX CHAN   | 857C            |                     |     |
| CO EQPT - ANALOG SW     | 77C             |                     |     |
| CO EQPT - DIGITAL SW    | 377C            |                     |     |
| AERIAL CABLE (FIBER)    | 822C            |                     |     |
| BURIED CABLE (FIBER)    | 845C            |                     |     |
| UNDERGROUND (FO) CA.    | 85C             |                     |     |
| CONNECTORS              | 57C             |                     |     |
| MISC. COM EQP & PWR     | 57C             |                     |     |
| POLE LINE               | 1C              |                     |     |
| CONDUIT                 | 4C              |                     |     |
| SPAN TOTAL              |                 |                     |     |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATCALC\CUTECH

RUN - SUB PRI

LAST UPDATE

28-Jan-97

07:41

**LOOP COST ANALYSIS TOOL****Belcore** (R)

LCAT

Release: 1.0.4

Issued: 7/31/95

**FEEDER SEGMENT COST MODEL - BASIC COPPER TECHNOLOGY**

STUDY NAME: 1996 BAND 1 (OHIO ONLY) BUSINESS PBX 12001 FEET - INFINITY II

CURRENT TEST PLAN : CURRENT JOB IDENT. CINCINNATI

|           |           |           |          |
|-----------|-----------|-----------|----------|
| BASIS     | NETWORK   | TEST CASE |          |
| FR / DS   | FLAT RATE | #BANDS    | 0        |
| SVC LEVEL | NARBAND   | #CKTS     |          |
| CST METH  | UN INCR   | INV LEVEL | ANN COST |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

PROPRIETARY - NOT FOR USE OR DISCLOSURE OUTSIDE Belcore WITHOUT LICENSED PERMISSION

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**



0.1123R24\LCATCALC\OUTECH  
SUB\_PRI - WORKSHEET  
Sheet 1 of 3

**LOOP COST ANALYSIS TOOL**  
BASIC INVESTMENT WORKSHEET  
CENTRAL OFFICE TO SERVING AREA INVESTMENT CALCULATIONS  
FACILITY TYPE: COPPER CABLE  
CIRCUIT SEGMENT: MELDED GAUGE/S/ SUB-PRIMARY  
SERVICE CLASS: BAND 1 - BUSINESS PBX

Bellicore (R)  
LCAT Release: 1.0.4  
Issue Date: 7/31/95  
STUDY YR: 1995  
TEST CASE: 1  
RUN DATE: 28-Jan-97  
TIME: 07:59

COMPANY: CINCINNATI BELL TEL.  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIO

| SEGMENT LENGTH IN FEET       | TYPE OF CABLE PLANT | FROM TABLE 2<br>RELATIVE MIX OF TYPE OF CA. PLANT [B] | LENGTH SUBSET BY TYPE OF PLANT [C=A*B] | FROM TABLE 4<br>MLD CABLE DESIGN INVEST. PER PAIR FOOT [D] | CABLE INVESTMENT PER PAIR [E=C*D] | WEIGHTED TERMINAL INVESTMENT [UI*DTC] | AIR DRYER INVESTMENT PER PAIR | DROP WIRE ADJUSTMENT PER PAIR [E*fctr] | WEIGHTED DROP WIRE ADJUSTMENT PER PAIR [UI*DTC] |
|------------------------------|---------------------|-------------------------------------------------------|----------------------------------------|------------------------------------------------------------|-----------------------------------|---------------------------------------|-------------------------------|----------------------------------------|-------------------------------------------------|
| 300                          | AERIAL              | 0.120000                                              | 36.00                                  | 0.012100                                                   | 0.44                              |                                       | 0.00                          | 0.00                                   |                                                 |
| MELDED GAUGE/S/ COPPER CABLE | BURIED              | 0.000000                                              | 0.00                                   | 0.016600                                                   | 0.00                              |                                       | 0.00                          | 0.00                                   |                                                 |
|                              | UNDERGRND           | 0.880000                                              | 264.00                                 | 0.010900                                                   | 2.88                              |                                       | 0.00                          | 0.00                                   |                                                 |
| CHECK =                      |                     | 1.000000                                              |                                        |                                                            |                                   |                                       |                               |                                        |                                                 |

ADDITIONAL CALCULATIONS FOR CENTRAL OFFICE INVESTMENTS

INVESTMENT PER CIRCUIT TERMINATION (CO CONN) CONNECTORS (coi77c) = \$ 0.00  
 $\text{inv / unit lgh: inv rtm fctr:}$   
 0.000000 0.253000

POLE LINE FACTOR = 0.000000  
 POLE LINE INVESTMENT = \$ 0.18  
 (UTIL AERIAL INVEST x PLF)

UG CONDUIT FACTOR = 0.000000  
 CONDUIT INVESTMENT = \$ 2.48  
 (UTIL UNDGRND INVEST x UCF)

MISC. COMMON EQPT. & POWER FACTOR = 0.112700  
 MCE&P INVESTMENT (CO CONN x FACTOR) = \$ 8.91

LAND FACTOR = 0.00560  
 LAND NVST (CO CONN + MCE&P) x FACTOR = \$ 0.49  
 BUILDING FACTOR = 0.13188  
 BLDG NVST (CO CONN + MCE&P) x FACTOR = \$ 4.58

PERCENT OF CO CONN AT DIGITAL SWITCHES 100.0000  
 PERCENT OF CO CONN AT ANALOG SWITCHES 0.0000

**CONFIDENTIAL**  
NOTICE: NOT BE RELEASED TO PUBLIC  
PRIOR TO RELEASE TO PUCO  
PROVIDED TO PUCO

**FOOTNOTES**  
 NOTE 1: APPARENT INCONSISTANCIES MAY BE CAUSED BY COMPUTER ROUNDING.  
 NOTE 2: E \* fctr = INVESTMENT x DROP WIRE ADJUSTMENT FACTOR (MISCA or MISCB)  
 NOTE 3: UI \* DTC = UNIT INVESTMENT x PROBABILITY OF OCCURRENCE.  
 NOTE 4: MATRIX 2 & 4 DEVELOPMENT SHOWN ON WORKSHEET C (#5,#6).

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCAT\CALC\BTECH     |                                                                                                |      | LOOP COST ANALYSIS TOOL                                |        |       |                                             |       |        | Belcore (R)                                 |  |       |
|-------------------------------|------------------------------------------------------------------------------------------------|------|--------------------------------------------------------|--------|-------|---------------------------------------------|-------|--------|---------------------------------------------|--|-------|
| SUB PRI - WORKSHEET           |                                                                                                |      | ACCOUNT INVESTMENT WORKSHEET                           |        |       |                                             |       |        | LCAT Release: 1.0.4                         |  |       |
| Sheet 2 of 3                  |                                                                                                |      | CENTRAL OFFICE TO SERVING AREA INVESTMENT CALCULATIONS |        |       |                                             |       |        | Issue Date: 7/31/95                         |  |       |
| COMPANY: CINCINNATI BELL TEL. |                                                                                                |      | FACILITY TYPE: COPPER CABLE                            |        |       |                                             |       |        | STUDY YR: 1996                              |  |       |
| CITY / AREA: CINCINNATI       |                                                                                                |      | CIRCUIT SEGMENT: <u>VELOD GAUGE/S/ SUB-PRIMARY</u>     |        |       |                                             |       |        | TEST CASE: 1                                |  |       |
| STATE / PROV: OHIO            |                                                                                                |      | SERVICE CLASS: BAND 1 - BUSINESS PBX                   |        |       |                                             |       |        | RUN DATE: 28-Jan-97                         |  |       |
|                               |                                                                                                |      |                                                        |        |       |                                             |       |        | TIME: 07:59                                 |  |       |
|                               |                                                                                                |      | 1996 UNIT INVESTMENT BY ACCOUNT                        |        |       | 1996 UNIT LOOP INVESTMENT EXCL. UTILIZATION |       |        | 1996 UNIT LOOP INVESTMENT INCL. UTILIZATION |  |       |
|                               |                                                                                                |      | COST EQUATION [F]                                      |        |       | CIRCUIT QUANTITY [G]                        |       |        | ADMIN. UTIL. LINE FILL [J]                  |  |       |
|                               |                                                                                                |      | RESOURCE ALLOCATION [T]                                |        |       | SHARED RESOURCES [H=F*G]                    |       |        | SHARED RESOURCES [K=H/J]                    |  |       |
|                               |                                                                                                |      | DIRECT RESOURCES [H'=F'*G]                             |        |       | DIRECT RESOURCES [K'=H'/J]                  |       |        |                                             |  |       |
| 8                             | LAND                                                                                           | 20C  | F                                                      | SHARED | 0.49  | 1                                           | \$ 0  | 1.0000 | \$ 0                                        |  |       |
| 9                             | BUILDING                                                                                       | 10C  | F                                                      | SHARED | 11.58 | 1                                           | \$ 12 | 1.0000 | \$ 12                                       |  |       |
| 10                            | BLDG ENTRANCE CABLE                                                                            | 12C  | V                                                      | DIRECT |       |                                             |       | 1.0000 |                                             |  |       |
| 11                            | INTRABLDG CABLE                                                                                | 52C  | V                                                      | DIRECT |       |                                             |       | 0.3500 |                                             |  |       |
| 12                            | AERIAL CABLE (COPPER)                                                                          | 22C  | V                                                      | DIRECT | 0.44  | 1                                           | \$ 0  | 0.6000 |                                             |  | \$ 1  |
| 13                            | BURIED CABLE (COPPER)                                                                          | 45C  | V                                                      | DIRECT | 0.00  |                                             |       | 0.6000 |                                             |  |       |
| 14                            | UNDERGROUND (CU) CA.                                                                           | 5C   | V                                                      | DIRECT | 2.88  | 1                                           | \$ 3  | 0.6000 |                                             |  | \$ 5  |
| 15                            | CO EQPT - LOW CAP TERM                                                                         | 257C | F                                                      | DIRECT |       |                                             |       | 0.7000 |                                             |  |       |
| 16                            | CO EQPT - LOW CAP CHAN                                                                         | 257C | V                                                      | DIRECT |       |                                             |       | 0.7000 |                                             |  |       |
| 17                            | CO EQPT - HI CAP TERM                                                                          | 857C | F                                                      | DIRECT |       |                                             |       | 1.0000 |                                             |  |       |
| 18                            | CO EQPT - HI CAP CHAN                                                                          | 857C | F                                                      | DIRECT |       |                                             |       | 1.0000 |                                             |  |       |
| 19                            | CO EQPT - ANALOG SW                                                                            | 77C  | V                                                      | DIRECT | 0.00  |                                             |       | 1.0000 |                                             |  |       |
| 20                            | CO EQPT - DIGITAL SW                                                                           | 377C | V                                                      | DIRECT | 0.00  |                                             |       | 1.0000 |                                             |  |       |
| 21                            | AERIAL CABLE (FIBER)                                                                           | 822C | F                                                      | DIRECT |       |                                             |       | 0.3300 |                                             |  |       |
| 22                            | BURIED CABLE (FIBER)                                                                           | 845C | F                                                      | DIRECT |       |                                             |       | 0.3300 |                                             |  |       |
| 23                            | UNDERGROUND (FO) CA.                                                                           | 85C  | F                                                      | DIRECT |       |                                             |       | 0.3300 |                                             |  |       |
| 24                            | CONNECTORS                                                                                     | 57C  | V                                                      | DIRECT |       |                                             |       | 1.0000 |                                             |  |       |
| 25                            | MISC. COM EQP & PWR                                                                            | 57C  | V                                                      | SHARED | 8.91  | 1                                           | \$ 9  | 1.0000 |                                             |  | \$ 0  |
| 26                            | POLE LINE                                                                                      | 1C   | F                                                      | DIRECT | 0.18  | 1                                           |       | \$ 0   | 1.0000                                      |  | \$ 0  |
| 27                            | CONDUIT                                                                                        | 4C   | F                                                      | DIRECT | 2.48  | 1                                           |       | \$ 2   | 1.0000                                      |  | \$ 2  |
| 28                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 29                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 30                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 31                            | TOTALS                                                                                         |      |                                                        |        |       |                                             |       |        |                                             |  | \$ 29 |
| 32                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 33                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 34                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 35                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 36                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 37                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 38                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 39                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 40                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 41                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 42                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 43                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 44                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 45                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 46                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 47                            | FOOTNOTES                                                                                      |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 48                            | NOTE 1: APPARENT INCONSISTENCIES BETWEEN COLUMNS F AND H (H') ARE CAUSED BY COMPUTER ROUNDING. |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 49                            | NOTE 2: COLUMN F IS AN ACCOUNT SUMMARY OF CABLE COMPONENTS:                                    |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 50                            | AERIAL CABLE + TERM INV + AIR DRYER + DROP WIRE ADJ; BURIED CABLE, ... ETC;                    |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 51                            | CO EQPT - ESS = CONNECTORS + MISC. CP&E.                                                       |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 52                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 53                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 54                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |
| 55                            |                                                                                                |      |                                                        |        |       |                                             |       |        |                                             |  |       |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATCALC\GUTCH      |                                                                     |                      | LOOP COST ANALYSIS TOOL                                |                            |                        |                                   |                            |                                              | Bellcore®                   |  |
|-------------------------------|---------------------------------------------------------------------|----------------------|--------------------------------------------------------|----------------------------|------------------------|-----------------------------------|----------------------------|----------------------------------------------|-----------------------------|--|
| SUB PRI - WORKSHEET           |                                                                     |                      | PROSPECTIVE AND ANNUAL COSTS WORKSHEET                 |                            |                        |                                   |                            |                                              | LCAT Release: 1.0.4         |  |
| Sheet 1 of 3                  |                                                                     |                      | CENTRAL OFFICE TO SERVING AREA INVESTMENT CALCULATIONS |                            |                        |                                   |                            |                                              | Issue Date: 7/31/95         |  |
| COMPANY: CINCINNATI BELL TEL. |                                                                     |                      | FACILITY TYPE: COPPER CABLE                            |                            |                        |                                   |                            |                                              | STUDY YR: 1996              |  |
| CITY / AREA: CINCINNATI       |                                                                     |                      | CIRCUIT SEGMENT: (MELDED GAUGES) SUB-PRIMARY           |                            |                        |                                   |                            |                                              | TEST CASE: 1                |  |
| STATE / PROV: OHIO            |                                                                     |                      | SERVICE CLASS: BAND 1 - BUSINESS PBX                   |                            |                        |                                   |                            |                                              | RUN DATE: 28-Jan-97         |  |
|                               |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              | TIME: 07:59                 |  |
| PLANT ITEM                    | PLANT ACCT CODE                                                     | 1996 TO 1996 TPI [L] | 1996 UNIT LOOP INVESTMENTS BY ACCOUNT                  |                            | ANNUAL COST FACTOR [N] | 1996 UNIT ANNUAL COSTS BY ACCOUNT |                            | 1996 UNIT MONTHLY RECURRING COSTS BY ACCOUNT |                             |  |
|                               |                                                                     |                      | SHARED RESOURCES [M=K*L]                               | DIRECT RESOURCES [M'=K'*L] |                        | SHARED RESOURCES [P=M*N]          | DIRECT RESOURCES [P'=M'*N] | SHARED RESOURCES [R=P/12]                    | DIRECT RESOURCES [R'=P'/12] |  |
| 8 LAND                        | 20C                                                                 | 1.0000               | \$ 0                                                   |                            | 0.2322                 | \$ 0.11                           |                            | \$ 0.01                                      |                             |  |
| 9 BUILDING                    | 10C                                                                 | 1.0000               | \$ 12                                                  |                            | 0.2937                 | \$ 3.40                           |                            | \$ 0.28                                      |                             |  |
| 10 BLDG ENTRANCE CABLE        | 12C                                                                 | 1.0000               |                                                        |                            | 0.3922                 |                                   |                            |                                              |                             |  |
| 11 INTRABLDG CABLE            | 52C                                                                 | 1.0000               |                                                        |                            | 0.3922                 |                                   |                            |                                              |                             |  |
| 12 AERIAL CABLE (COPPER)      | 22C                                                                 | 1.0000               |                                                        | \$ 1                       | 0.4033                 |                                   | \$ 0.29                    |                                              | \$ 0.02                     |  |
| 13 BURIED CABLE (COPPER)      | 45C                                                                 | 1.0000               |                                                        |                            | 0.3457                 |                                   |                            |                                              |                             |  |
| 14 UNDERGROUND (CU) CA.       | 5C                                                                  | 1.0000               |                                                        | \$ 5                       | 0.3663                 |                                   | \$ 1.76                    |                                              | \$ 0.15                     |  |
| 15 CO EQPT - LOW CAP TERM     | 257C                                                                | 1.0000               |                                                        |                            | 0.3881                 |                                   |                            |                                              |                             |  |
| 16 CO EQPT - LOW CAP CHAN     | 257C                                                                | 1.0000               |                                                        |                            | 0.3881                 |                                   |                            |                                              |                             |  |
| 17 CO EQPT - HI CAP TERM      | 857C                                                                | 1.0000               |                                                        |                            | 0.3881                 |                                   |                            |                                              |                             |  |
| 18 CO EQPT - HI CAP CHAN      | 857C                                                                | 1.0000               |                                                        |                            | 0.3881                 |                                   |                            |                                              |                             |  |
| 19 CO EQPT - ANALOG SW        | 77C                                                                 | 1.0000               |                                                        |                            | 0.0000                 |                                   |                            |                                              |                             |  |
| 20 CO EQPT - DIGITAL SW       | 377C                                                                | 1.0000               |                                                        |                            | 0.3458                 |                                   |                            |                                              |                             |  |
| 21 AERIAL CABLE (FIBER)       | 822C                                                                | 1.0000               |                                                        |                            | 0.2983                 |                                   |                            |                                              |                             |  |
| 22 BURIED CABLE (FIBER)       | 845C                                                                | 1.0000               |                                                        |                            | 0.2724                 |                                   |                            |                                              |                             |  |
| 23 UNDERGROUND (FO) CA.       | 85C                                                                 | 1.0000               |                                                        |                            | 0.2689                 |                                   |                            |                                              |                             |  |
| 24 CONNECTORS                 | 57C                                                                 | 1.0000               |                                                        |                            | 0.3881                 |                                   |                            |                                              |                             |  |
| 25 MISC. COM EQP & PWR        | 57C                                                                 | 1.0000               | \$ 9                                                   |                            | 0.3881                 | \$ 3.46                           |                            | \$ 0.29                                      | \$ 0.01                     |  |
| 26 POLE LINE                  | 1C                                                                  | 1.0000               |                                                        | \$ 0                       | 0.3807                 |                                   | \$ 0.07                    |                                              | \$ 0.05                     |  |
| 27 CONDUIT                    | 4C                                                                  | 1.0000               |                                                        | \$ 2                       | 0.2521                 |                                   | \$ 0.07                    |                                              | \$ 0.05                     |  |
| 28                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 29                            | SUBTOTALS                                                           |                      | \$ 21                                                  | \$ 8                       |                        |                                   |                            |                                              |                             |  |
| 30                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 31                            | TOTALS                                                              |                      |                                                        | \$ 29                      |                        |                                   |                            |                                              | \$ 0.81                     |  |
| 32                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 33                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 34                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 35                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 36                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 37                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 38                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 39                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 40                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 41                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 42                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 43                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 44                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 45                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 46                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 47                            | FOOTNOTES                                                           |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 48                            | NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.       |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 49                            | NOTE 2: AN INVESTMENT - ONLY STUDY NEGATES ANNUAL COST COMPUTATION, |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 50                            | THUS, THIS COLUMN MAY BE PRESENTED FOR CONSISTENCY ONLY.            |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 51                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 52                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 53                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 54                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |
| 55                            |                                                                     |                      |                                                        |                            |                        |                                   |                            |                                              |                             |  |

**CONFIDENTIAL**  
 NOTICE NOT BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUC

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCAT\CALC\CUTECH                                              |                        | LOOP COST ANALYSIS TOOL                  |     |         |         | Bellcore®           |         |
|-------------------------------------------------------------------------|------------------------|------------------------------------------|-----|---------|---------|---------------------|---------|
| SUB PRI - REPORT 14                                                     |                        | PROSPECTIVE INVESTMENT WORKSHEET SUMMARY |     |         |         | LCAT Release: 1.0.4 |         |
| Sheet 1 of 1                                                            |                        | COMPANY: CINCINNATI BELL TEL             |     |         |         | Issue Date: 7/31/95 |         |
| CITY / AREA: CINCINNATI                                                 |                        | FACILITY SEGMENT: SUB-PRIMARY PLANT      |     |         |         | STUDY YR: 1996      |         |
| STATE / PROV: OHIO                                                      |                        | SERVICE CLASS: BAND 1 - BUSINESS PBX     |     |         |         | TEST CASE: 1        |         |
|                                                                         |                        |                                          |     |         |         | RUN DATE: 28-Jan-97 |         |
|                                                                         |                        |                                          |     |         |         | TIME: 07:59         |         |
| 1996 UNIT MONTHLY RECURRING COST BY ACCOUNT                             |                        |                                          |     |         |         |                     |         |
| (SEE NOTE)                                                              |                        |                                          |     |         |         |                     |         |
| TOTAL                                                                   |                        |                                          |     |         |         |                     |         |
| AVG. WEIGHTED                                                           |                        |                                          |     |         |         |                     |         |
| 300                                                                     |                        |                                          |     |         |         |                     |         |
| -----                                                                   |                        |                                          |     |         |         |                     |         |
| SHARED RESOURCES                                                        |                        |                                          |     |         |         |                     |         |
| 1                                                                       | LAND                   | 20C                                      |     | \$ 0.01 |         |                     | \$ 0.01 |
| 2                                                                       | BUILDING               | 10C                                      |     | \$ 0.28 |         |                     | \$ 0.28 |
| 3                                                                       | BLDG ENTRANCE CABLE    | 12C                                      |     |         |         |                     | \$ 0.00 |
| 4                                                                       | INTRABLDG CABLE        | 52C                                      |     |         |         |                     | \$ 0.00 |
| 5                                                                       | AERIAL CABLE (COPPER)  | 22C                                      |     |         |         |                     | \$ 0.00 |
| 6                                                                       | BURIED CABLE (COPPER)  | 45C                                      |     |         |         |                     | \$ 0.00 |
| 7                                                                       | UNDERGROUND (CU) CA.   | 5C                                       |     |         |         |                     | \$ 0.00 |
| 8                                                                       | CO EQPT - P GAIN TERM  | 257C                                     |     |         |         |                     | \$ 0.00 |
| 9                                                                       | CO EQPT - P GAIN CHAN  | 257C                                     |     |         |         |                     | \$ 0.00 |
| 10                                                                      | CO EQPT - FO MUX TERM  | 857C                                     |     |         |         |                     | \$ 0.00 |
| 11                                                                      | CO EQPT - FO MUX CHAN  | 857C                                     |     |         |         |                     | \$ 0.00 |
| 12                                                                      | CO EQPT - ANALOG SW    | 77C                                      |     |         |         |                     | \$ 0.00 |
| 13                                                                      | CO EQPT - DIGITAL SW   | 377C                                     |     |         |         |                     | \$ 0.00 |
| 14                                                                      | AERIAL CABLE (FIBER)   | 822C                                     |     |         |         |                     | \$ 0.00 |
| 15                                                                      | BURIED CABLE (FIBER)   | 845C                                     |     |         |         |                     | \$ 0.00 |
| 16                                                                      | UNDERGROUND (FO) CA.   | 85C                                      |     |         |         |                     | \$ 0.00 |
| 17                                                                      | CONNECTORS             | 57C                                      |     |         |         |                     | \$ 0.00 |
| 18                                                                      | MISC. COM EQP & PWR    | 57C                                      |     | \$ 0.29 |         |                     | \$ 0.29 |
| 19                                                                      | POLE LINE              | 1C                                       |     |         |         |                     | \$ 0.00 |
| 20                                                                      | CONDUIT                | 4C                                       |     |         |         |                     | \$ 0.00 |
| DIRECT RESOURCES                                                        |                        |                                          |     |         |         |                     |         |
| 21                                                                      | LAND                   | 20C                                      |     |         |         |                     | \$ 0.00 |
| 22                                                                      | BUILDING               | 10C                                      |     |         |         |                     | \$ 0.00 |
| 23                                                                      | BLDG ENTRANCE CABLE    | 12C                                      |     |         |         |                     | \$ 0.00 |
| 24                                                                      | INTRABLDG CABLE        | 52C                                      |     |         |         |                     | \$ 0.00 |
| 25                                                                      | AERIAL CABLE (COPPER)  | 22C                                      |     | \$ 0.02 |         |                     | \$ 0.02 |
| 26                                                                      | BURIED CABLE (COPPER)  | 45C                                      |     |         |         |                     | \$ 0.00 |
| 27                                                                      | UNDERGROUND (CU) CA.   | 5C                                       |     | \$ 0.15 |         |                     | \$ 0.15 |
| 28                                                                      | CO EQPT - P GAIN TERM  | 257C                                     |     |         |         |                     | \$ 0.00 |
| 29                                                                      | CO EQPT - P GAIN CHAN  | 257C                                     |     |         |         |                     | \$ 0.00 |
| 30                                                                      | CO EQPT - FO MUX TERM  | 857C                                     |     |         |         |                     | \$ 0.00 |
| 31                                                                      | CO EQPT - FO MUX CHAN  | 857C                                     |     |         |         |                     | \$ 0.00 |
| 32                                                                      | CO EQPT - ANALOG SW    | 77C                                      |     |         |         |                     | \$ 0.00 |
| 33                                                                      | CO EQPT - DIGITAL SW   | 377C                                     |     |         |         |                     | \$ 0.00 |
| 34                                                                      | AERIAL CABLE (FIBER)   | 822C                                     |     |         |         |                     | \$ 0.00 |
| 35                                                                      | BURIED CABLE (FIBER)   | 845C                                     |     |         |         |                     | \$ 0.00 |
| 36                                                                      | UNDERGROUND (FO) CA.   | 85C                                      |     |         |         |                     | \$ 0.00 |
| 37                                                                      | CONNECTORS             | 57C                                      |     |         |         |                     | \$ 0.00 |
| 38                                                                      | MISC. COM EQP & PWR    | 57C                                      |     |         |         |                     | \$ 0.00 |
| 39                                                                      | POLE LINE              | 1C                                       | 0.0 | \$ 0.01 |         |                     | \$ 0.01 |
| 40                                                                      | CONDUIT                | 4C                                       | 0.0 | \$ 0.05 |         |                     | \$ 0.05 |
| 41                                                                      | SPAN SUMMARY           |                                          |     | \$ 0.81 | \$ 0.00 | \$ 0.00             | \$ 0.81 |
| 42                                                                      | AVG. WTD. SPAN SUMMARY |                                          |     | \$ 0.81 | \$ 0.00 | \$ 0.00             | \$ 0.81 |
| NOTE: [sum(INV <sub>ACCT</sub> <sup>BAND</sup> * MIX <sup>BAND</sup> )] |                        |                                          |     |         |         |                     |         |

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCAT\CALC\CUPRGN  
RUN - CDLC PLANT

LAST UPDATE

28-Jan-97

07:42

## LOOP COST ANALYSIS TOOL

Belcore<sup>TM</sup>

LCAT

Release: 1.0.4

Issued: 8/31/95

### FEEDER SEGMENT COST MODEL - COPPER DLC TECHNOLOGY

STUDY NAME: 1996 BAND 1 (OHIO ONLY) BUSINESS PBX 12001 FEET - INFINITY INTRASTATE

CURRENT TEST PLAN :

CURRENT JOB IDENT. CINCINNATI

|           |           |           |
|-----------|-----------|-----------|
| BASIS     | NETWORK   | TEST CASE |
| FR / DS   | FLAT RATE | #BANDS    |
| SVC LEVEL | NABAND    | #CKTS     |
| CST METH  | UNINCR    | INV LEVEL |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

PROPRIETARY - NOT FOR USE OR DISCLOSURE OUTSIDE Belcore WITHOUT LICENSED PERMISSION

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| LOOP COST ANALYSIS TOOL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |               |                               |                                |                              |                           |                              |                              |                              |                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------------------|--------------------------------|------------------------------|---------------------------|------------------------------|------------------------------|------------------------------|---------------------------------------|
| BASIC INVESTMENT WORKSHEET                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |               |                               |                                |                              |                           |                              |                              |                              |                                       |
| CENTRAL OFFICE TO REMOTE TERMINAL (PRIMARY SECTION) WORKSHEET                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |               |                               |                                |                              |                           |                              |                              |                              |                                       |
| FOR DIGITAL LOOP CARRIER IN THE FEEDER SEGMENT ONLY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |               |                               |                                |                              |                           |                              |                              |                              |                                       |
| FACILITY TYPE: COPPER DIG LOOP CXR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |               |                               |                                |                              |                           |                              |                              |                              |                                       |
| CIRCUIT DESIGN: T C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |               |                               |                                |                              |                           |                              |                              |                              |                                       |
| SERVICE CLASS: HAND 1 - BUSINESS PBX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |               |                               |                                |                              |                           |                              |                              |                              |                                       |
| COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: OHIO<br>STATE / PROV.: CINCINNATI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                               |                                |                              |                           |                              |                              |                              |                                       |
| 15677 cur. lgth<br>300 outside lgth<br>I = 0.125 pgfactor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |               |                               |                                |                              |                           |                              |                              |                              |                                       |
| LCAT Release: 1.0.4<br>Issue Date: 8/31/95<br>STUDY YR: 1996<br>TEST CASE: 1<br>DATE: 28-Jan-97<br>TIME: 08:00 AM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |               |                               |                                |                              |                           |                              |                              |                              |                                       |
| SEGMENT LENGTH IN FEET                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | TYPE OF CABLE | RELATIVE MIX OF TYPE OF CABLE | EFFECTIVE LENGTH SUBSE BY TYPE | MELDED INVEST. PER UNIT FOOT | CABLE INVESTMENT PER CHAN | WEIGHTED TERMINAL INVESTMENT | AIR DRYER INVESTMENT PER PAR | DROP WIRE ADJUSTMENT PER PAR | WEIGHTED DROP WIRE INVESTMENT PER PAR |
| [A]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | [B]           | [C=A*B*I]                     | [D]                            | [E=C*D]                      | [U*I*DTC]                 | [E*I*ctr]                    | [E*I*ctr]                    | [E*I*ctr]                    | [U*I*DTC]                             |
| 13331                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | AERIAL        | 0.120000                      | 199.97                         | 0.024200                     | \$ 4.84                   |                              | \$ 0.00                      |                              |                                       |
| CO TO RT LINK ON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | BURIED        | 0.000000                      | 0.00                           | 0.033200                     | \$ 0.00                   |                              | \$ 0.00                      |                              |                                       |
| COPPER CABLE DLC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |               |                               |                                |                              |                           |                              |                              |                              |                                       |
| 24.00 GA. FACILITIES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | UNDERGRND     | 0.880000                      | 1466.41                        | 0.021800                     | \$ 31.97                  |                              | \$ 0.00                      |                              |                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               | 1.000000                      |                                |                              |                           |                              |                              |                              |                                       |
| <b>OUTSIDE PLANT LOADINGS (NOTE 5):</b><br>ADJUST. / LOAD FACTORS TO AERIAL PFI: NA 0.0000<br>ADJUST. / LOAD FACTORS TO BURIED PFI: NA 0.0000<br>ADJUST. / LOAD FACTORS TO UGD PFI: NA 0.0000<br><b>DLC EQUIPMENT INVEST. (NOTE 2):</b><br>INT DLC EQUIP INVEST. (CU COMUX) = intdlcco_ \$ 0.00<br>INT DLC EQUIP INVEST. (CU RTMUX) = intdlcrt_ \$ 51.57<br>UNIV DLC EQUIP INVEST. (CU COMUX) = unvdlico_ \$ 12.14<br>UNIV DLC EQUIP INVEST. (CU RTMUX) = unvdlcrt_ \$ 51.57<br>DLC EQUIP INVEST. (CU LINE) = dlcco_ \$ 0.00                                                                                                                                                                                                                                                   |               |                               |                                |                              |                           |                              |                              |                              |                                       |
| <b>EQUIPMENT INVESTMENT LOADINGS</b><br>INVST. PER CHAN. FOR DLC TERM (co conn) = \$ 0.00<br>MISC. COM. EQPT. & POWER FACTOR FOR DLC (rem) = 0.1127<br>MISC. COM. EQPT. & POWER FACTOR FOR DLC (c.o.) = 0.1127<br>MCE&P INVST. (CU REMMUX x MCEP) = \$ 15.42<br>MCE&P INVST. (CDLCMUX x MCEP) = \$ 11.23<br>MCE&P INVST. (CO CONN x MCEP) = \$ 0.00<br><b>OTHER INVESTMENT</b><br>LAND FACTOR FOR DLC (LANDf_rem) = 0.0056<br>LAND FACTOR FOR DLC (LANDf_c.o.) = 0.0056<br>LAND INVST. (CU COMUX+MCEP) x LANDf = \$ 1.47<br>LAND INVST. ((CO CONN+MCEP) x LANDf) = \$ 0.00<br>BUILDING FACTOR FOR DLC (BLDGf_rem) = 0.1316<br>BUILDING FACTOR FOR DLC (BLDGf_c.o.) = 0.1316<br>BLDG INVST. (CDLCMUX+MCEP) x BLDGf = \$ 34.63<br>BLDG INVST. ((CO CONN+MCEP) x BLDGf) = \$ 0.00 |               |                               |                                |                              |                           |                              |                              |                              |                                       |
| <b>CONDUIT INVEST. FOR DLC CEV FACILITIES = conpgnvt \$ 4.17</b><br><b>OTHER INVESTMENT</b><br>POLE LINE FACTOR (PLf) = 0.0000<br>POLE LINE INVESTMENT (UTIL AERIAL INVEST. x PLf) = \$ 2.04<br>UGD CONDUIT FACTOR (UCf) = 0.0000<br>CONDUIT INVESTMENT (UTIL UNOGRD INVST x UCf) = \$ 27.52                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |                               |                                |                              |                           |                              |                              |                              |                                       |
| <b>LOOP TOPOLOGY</b><br>AVERAGE NUMBER OF MBS: NA<br>ADDITIONAL LENGTH OF RING OSP REQUIRED: NA<br>MIX OF CENT. OFC. ANALOG INTRC: 0.0000<br>MIX OF CENT. OFC. DIGITAL INTRC: 1.0000<br>MIX OF UNIVERSAL DLC INTRC: 1.0000<br>MIX OF INTEGRATED DIGITAL INTRC: 0.0000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |               |                               |                                |                              |                           |                              |                              |                              |                                       |
| <b>FOOTNOTES</b><br>NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.<br>NOTE 2: THE SUBSCRIBER LINE CARRIER EQUIPMENT INVESTMENTS ARE DEVELOPED OUTSIDE OF THE SPREADSHEET WITH APPROPRIATE UTILIZATION FACTORS APPLIED.<br>NOTE 3: TABLE 4 DEVELOPMENT IS SHOWN ON WORKSEET B; FOR 4 WIRE SERVICES, TABLE 4 IS MULT BY 2.<br>NOTE 4: THIS ADJUSTMENT MAY ONLY BE TAKEN AGAINST COPPER PLANT.<br>NOTE 5: ALL DROP WIRE AND PREMISES CONN. INVEST. IS INCLUDED IN THE APPROPRIATE CABLE ACCOUNT ON THE BUILDING CABLE & TERMINATION WORKSHEET AND INCORPORATED INTO WORKSHEET E.                                                                                                                                                                                   |               |                               |                                |                              |                           |                              |                              |                              |                                       |

CONFIDENTIAL  
 NOTICE TO RELEASER  
 PROVIDED TO PUBLIC

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| LOOP COST ANALYSIS TOOL             |                 |                 |                     |                                                               |                      |                          |                           |                                                     |                          |                            |  |
|-------------------------------------|-----------------|-----------------|---------------------|---------------------------------------------------------------|----------------------|--------------------------|---------------------------|-----------------------------------------------------|--------------------------|----------------------------|--|
| ACCOUNT INVESTMENT WORKSHEET        |                 |                 |                     | CENTRAL OFFICE TO REMOTE TERMINAL (PRIMARY SECTION) WORKSHEET |                      |                          |                           | FOR DIGITAL LOOP CARRIER IN THE FEEDER SEGMENT ONLY |                          |                            |  |
| FACILITY TYPE: COPPER DIG LOOP CARR |                 |                 |                     | CIRCUIT DESIGN: T C                                           |                      |                          |                           | SERVICE CLASS: BAND 1 - BUSINESS PBX                |                          |                            |  |
| COMPANY: CINCINNATI BELL TEL        |                 |                 |                     | CITY / AREA: OHIO                                             |                      |                          |                           | STATE / PROV: CINCINNATI                            |                          |                            |  |
| 1996 UNIT INVESTMENTS BY ACCOUNT    |                 |                 |                     | 1996 UNIT LOOP INVESTMENT EXCL UTILIZATION                    |                      |                          |                           | 1996 UNIT LOOP INVESTMENT INCL UTILIZATION          |                          |                            |  |
| PLANT ITEM                          | PLANT ACCT CODE | FIXED VARI SUNK | RESOURCE ALLOCATION | COST EQUATION [F]                                             | CIRCUIT QUANTITY [G] | SHARED RESOURCES [H=F*G] | DIRECT RESOURCES [H'=F*G] | ADMIN. UTIL. LINE FILL [J]                          | SHARED RESOURCES [K=H/J] | DIRECT RESOURCES [K'=H'/J] |  |
| LAND                                | 20C             | F               | SHARED              | 1.47                                                          | 1                    | \$ 1                     |                           | 1.0000                                              | \$ 1                     |                            |  |
| BUILDING                            | 10C             | F               | SHARED              | 34.76                                                         | 1                    | \$ 35                    |                           | 1.0000                                              | \$ 35                    |                            |  |
| BLDG ENTRANCE CABLE                 | 12C             | ----            | ----                |                                                               |                      |                          |                           | 1.0000                                              |                          |                            |  |
| INTRABLDG CABLE                     | 52C             | ----            | ----                |                                                               |                      |                          |                           | 0.3500                                              |                          |                            |  |
| AERIAL CABLE (COPPER)               | 22C             | V               | DIRECT              | 4.84                                                          | 1                    |                          | \$ 5                      | 0.6000                                              |                          | \$ 8                       |  |
| BURIED CABLE (COPPER)               | 45C             | V               | DIRECT              | 0.00                                                          |                      |                          |                           | 0.6000                                              |                          |                            |  |
| UNDERGROUND (CU) CA.                | 5C              | V               | DIRECT              | 36.13                                                         | 1                    |                          | \$ 36                     | 0.6000                                              |                          | \$ 60                      |  |
| CO EQPT - P GAIN TERM               | 257C            | F               | DIRECT              | 79.13                                                         | 1                    |                          | \$ 79                     | 0.7000                                              |                          | \$ 113                     |  |
| CO EQPT - P GAIN CHAN               | 257C            | V               | DIRECT              | 172.79                                                        | 1                    |                          | \$ 173                    | 0.7000                                              |                          | \$ 247                     |  |
| CO EQPT - FO MUX TERM               | 857C            | F               | DIRECT              |                                                               |                      |                          |                           | 1.0000                                              |                          |                            |  |
| CO EQPT - FO MUX CHAN               | 857C            | F               | DIRECT              |                                                               |                      |                          |                           | 1.0000                                              |                          |                            |  |
| CO EQPT - ESS - ANALOG              | 77C             | V               | DIRECT              | 0.00                                                          |                      |                          |                           | 1.0000                                              |                          |                            |  |
| CO EQPT - ESS - DIGITAL             | 377C            | V               | DIRECT              | 0.00                                                          |                      |                          |                           | 1.0000                                              |                          |                            |  |
| AERIAL CABLE (FIBER)                | 822C            | F               | DIRECT              |                                                               |                      |                          |                           | 0.3500                                              |                          |                            |  |
| BURIED CABLE (FIBER)                | 845C            | F               | DIRECT              |                                                               |                      |                          |                           | 0.3300                                              |                          |                            |  |
| UNDERGROUND (FO) CA.                | 85C             | F               | DIRECT              |                                                               |                      |                          |                           | 0.3300                                              |                          |                            |  |
| CONNECTORS                          | 57C             | V               | DIRECT              |                                                               |                      |                          |                           | 1.0000                                              |                          |                            |  |
| MISC. COM EQP & PWR                 | 57C             | V               | SHARED              | 11.23                                                         | 1                    | \$ 11                    |                           | 1.0000                                              | \$ 11                    |                            |  |
| POLE LINE                           | 1C              | F               | DIRECT              | 2.04                                                          | 1                    |                          | \$ 2                      | 1.0000                                              |                          | \$ 2                       |  |
| CONDUIT                             | 4C              | F               | DIRECT              | 27.52                                                         | 1                    |                          | \$ 28                     | 1.0000                                              |                          | \$ 28                      |  |
| TOTALS                              |                 |                 |                     |                                                               |                      |                          |                           |                                                     |                          |                            |  |
|                                     |                 |                 |                     |                                                               |                      |                          |                           |                                                     | \$ 47                    | \$ 458                     |  |
|                                     |                 |                 |                     |                                                               |                      |                          |                           |                                                     |                          | \$ 505                     |  |

CONFIDENTIAL  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

FOOTNOTES  
NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.  
NOTE 2: CO EQPT - CKT PG TERM = PG EQ INV TERM + MC&P INV  
CO EQPT - CKT PG CHAN = PG EQ INV CHAN + ORB INV  
CO EQPT - ANALOG/DIGITAL ESS = C.O. CONN INV + MC&P INV

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| CA123R24/LCATCALC/CUPRGN     |                 | LOOP COST ANALYSIS TOOL                                       |                                      |                            |                        |                                   |                            |                                              | Belcore                     |  |
|------------------------------|-----------------|---------------------------------------------------------------|--------------------------------------|----------------------------|------------------------|-----------------------------------|----------------------------|----------------------------------------------|-----------------------------|--|
| CDLC PLANT - WORKSHEET 1     |                 | PROSPECTIVE AND ANNUAL COSTS WORKSHEET                        |                                      |                            |                        |                                   |                            |                                              | LCAT Release: 1.0.4         |  |
| Sheet 3 of 3                 |                 | CENTRAL OFFICE TO REMOTE TERMINAL (PRIMARY SECTION) WORKSHEET |                                      |                            |                        |                                   |                            |                                              | Issue Date: 6/31/95         |  |
| COMPANY: CINCINNATI BELL TEL |                 | FOR DIGITAL LOOP CARRIER IN THE FEEDER SEGMENT ONLY           |                                      |                            |                        |                                   |                            |                                              | STUDY YR: 1996              |  |
| CITY / AREA: OHIO            |                 | FACILITY TYPE: COPPER DIG LOOP CRR                            |                                      |                            |                        |                                   |                            |                                              | TEST CASE:                  |  |
| STATE / PROV: CINCINNATI     |                 | CIRCUIT DESIGN: T: C                                          |                                      |                            |                        |                                   |                            |                                              | DATE: 28-Jan-97             |  |
|                              |                 | SERVICE CLASS: BAND 1 - BUSINESS PRX                          |                                      |                            |                        |                                   |                            |                                              | TIME: 08:00 AM              |  |
| PLANT ITEM                   | PLANT ACCT CODE | 1996 TO 1996 TPI [L]                                          | 1996 UNIT LOOP INVESTMENT BY ACCOUNT |                            | ANNUAL COST FACTOR [N] | 1996 UNIT ANNUAL COSTS BY ACCOUNT |                            | 1996 UNIT MONTHLY RECURRING COSTS BY ACCOUNT |                             |  |
|                              |                 |                                                               | SHARED RESOURCES [M=K*L]             | DIRECT RESOURCES [M'=K'*L] |                        | SHARED RESOURCES [P=M*N]          | DIRECT RESOURCES [P'=M'*N] | SHARED RESOURCES [R=P/12]                    | DIRECT RESOURCES [R'=P'/12] |  |
| LAND                         | 20C             | 1.0000                                                        |                                      | \$ 1                       | 0.2322                 |                                   | \$ 0.34                    |                                              | \$ 0.03                     |  |
| BUILDING                     | 10C             | 1.0000                                                        |                                      | \$ 35                      | 0.2937                 |                                   | \$ 10.21                   |                                              | \$ 0.85                     |  |
| BLDG ENTRANCE CABLE          | 12C             | 1.0000                                                        |                                      |                            | 0.3922                 |                                   |                            |                                              |                             |  |
| INTRABLDG CABLE              | 52C             | 1.0000                                                        |                                      |                            | 0.3922                 |                                   |                            |                                              |                             |  |
| AERIAL CABLE (COPPER)        | 22C             | 1.0000                                                        |                                      | \$ 8                       | 0.4033                 |                                   | \$ 3.25                    |                                              | \$ 0.27                     |  |
| BURIED CABLE (COPPER)        | 45C             | 1.0000                                                        |                                      |                            | 0.3467                 |                                   |                            |                                              |                             |  |
| UNDERGROUND (CU) CA.         | 5C              | 1.0000                                                        |                                      | \$ 60                      | 0.3663                 |                                   | \$ 22.06                   |                                              | \$ 1.84                     |  |
| CO EQPT - P GAIN TERM        | 257C            | 1.0000                                                        |                                      | \$ 113                     | 0.3881                 |                                   | \$ 43.87                   |                                              | \$ 3.66                     |  |
| CO EQPT - P GAIN CHAN        | 257C            | 1.0000                                                        |                                      | \$ 247                     | 0.3881                 |                                   | \$ 95.80                   |                                              | \$ 7.98                     |  |
| CO EQPT - FO MUX TERM        | 857C            | 1.0000                                                        |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |  |
| CO EQPT - FO MUX CHAN        | 857C            | 1.0000                                                        |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |  |
| CO EQPT - ESS - ANALOG       | 77C             | 1.0000                                                        |                                      |                            | 0.0000                 |                                   |                            |                                              |                             |  |
| CO EQPT - ESS - DIGITAL      | 377C            | 1.0000                                                        |                                      |                            | 0.3458                 |                                   |                            |                                              |                             |  |
| AERIAL CABLE (FIBER)         | 822C            | 1.0000                                                        |                                      |                            | 0.2983                 |                                   |                            |                                              |                             |  |
| BURIED CABLE (FIBER)         | 845C            | 1.0000                                                        |                                      |                            | 0.2724                 |                                   |                            |                                              |                             |  |
| UNDERGROUND (FO) CA.         | 85C             | 1.0000                                                        |                                      |                            | 0.2689                 |                                   |                            |                                              |                             |  |
| CONNECTORS                   | 57C             | 1.0000                                                        |                                      |                            | 0.3881                 |                                   |                            |                                              |                             |  |
| MISC. COM EQP & PWR          | 57C             | 1.0000                                                        |                                      | \$ 11                      | 0.3881                 |                                   | \$ 4.36                    |                                              | \$ 0.36                     |  |
| POLE LINE                    | 1C              | 1.0000                                                        |                                      | \$ 2                       | 0.3807                 |                                   | \$ 0.78                    |                                              | \$ 0.06                     |  |
| CONDUIT                      | 4C              | 1.0000                                                        |                                      | \$ 28                      | 0.2521                 |                                   | \$ 6.94                    |                                              | \$ 0.58                     |  |
| TOTALS                       |                 |                                                               | =====                                | =====                      | =====                  | =====                             | =====                      | =====                                        | =====                       |  |
|                              |                 |                                                               | \$ 47                                | \$ 458                     |                        | \$ 14.91                          | \$ 187.61                  | \$ 1.24                                      | \$ 14.39                    |  |
|                              |                 |                                                               |                                      | \$ 505                     |                        |                                   |                            |                                              | \$ 15.63                    |  |
|                              |                 |                                                               |                                      | FEED1SY                    |                        |                                   | FEED1MRC                   |                                              |                             |  |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

FOOTNOTES  
NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.  
NOTE 2: AN INVESTMENT-ONLY STUDY NEGATES ANNUAL COST COMPUTATION.  
HOWEVER, THIS COLUMN IS PRESENTED FOR CONSISTENCY OF FORMAT ONLY.

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.



**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

C:\123R24\LCATC\LC\FOPRGN

Belcore<sup>(R)</sup>

RUN - FO MUX

LAST UPDATE

28-Jan-97

07:44

## LOOP COST ANALYSIS TOOL

LCAT

Release: 1.0.4

Issued: 7/31/95

FEEDER SEGMENT COST MODEL - FIBER IN THE LOOP TECHNOLOGY

STUDY NAME: 1996 BAND 1 (OHIO ONLY) BUSINESS PBX 12001 FEET - INFINITY INTR

CURRENT TEST PLAN :

|                    |           |            |
|--------------------|-----------|------------|
| CURRENT JOB IDENT. |           | CINCINNATI |
| BASIS              | NETWORK   | TEST CASE  |
| FR / DS            | FLAT RATE | #BANDS     |
| SVC LEVEL          | NARBAND   | #CKTS      |
| CST METH           | UN INCR   | INV LEVEL  |
|                    |           | ANN COST   |

NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO FCC  
.....your work is finished

PROPRIETARY - NOT FOR USE OR DISCLOSURE OUTSIDE Belcore WITHOUT LICENSED PERMISSION

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| LOOP COST ANALYSIS TOOL                                                                                                                                                                  |  |  |  |  |  |  |  |  |  | Bellcore            |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|---------------------|--|
| BASIC INVESTMENT WORKSHEET                                                                                                                                                               |  |  |  |  |  |  |  |  |  | LCAT Rel: 1.0.4     |  |
| FOR PRIMARY FEEDER PLANT                                                                                                                                                                 |  |  |  |  |  |  |  |  |  | ISSUE DATE: 7/31/95 |  |
| FACILITY TYPE: FIBER IN THE LOOP                                                                                                                                                         |  |  |  |  |  |  |  |  |  | STUDY YR: 1995      |  |
| CIRCUIT DESIGN: 31 FOMUX TO HUB / REM.                                                                                                                                                   |  |  |  |  |  |  |  |  |  | TEST CASE: 1        |  |
| SERVICE CLASS: BAND 1 - BUSIN SERVICE LEVEL: NARBAND                                                                                                                                     |  |  |  |  |  |  |  |  |  | LAST RUN: 28-Jan-97 |  |
|                                                                                                                                                                                          |  |  |  |  |  |  |  |  |  | TIME: 05:01         |  |
| Sheet 1 of 3                                                                                                                                                                             |  |  |  |  |  |  |  |  |  |                     |  |
| COMPANY: CINCINNATI BELL TEL                                                                                                                                                             |  |  |  |  |  |  |  |  |  |                     |  |
| CITY / AREA: CINCINNATI                                                                                                                                                                  |  |  |  |  |  |  |  |  |  |                     |  |
| STATE / PROV: OHIO                                                                                                                                                                       |  |  |  |  |  |  |  |  |  |                     |  |
| from strd_tbi: 300 cur_sfrlgh from bw_mix: f = 1979.04 wideqvmn                                                                                                                          |  |  |  |  |  |  |  |  |  |                     |  |
| 7154 cur_prlgh                                                                                                                                                                           |  |  |  |  |  |  |  |  |  |                     |  |
| CABLE COMPONENTS (NOTE 5)                                                                                                                                                                |  |  |  |  |  |  |  |  |  |                     |  |
| EFFECTIVE LENGTH MLD CABLE WEIGHTED EFFECTIVE LGTH WEIGHTED CABLE AIR DRYER INVESTMENT INVESTMENT PER PAIR (NOTE 4) DROP WIRE INVESTMENT PER PAIR (NOTE 6) DROP WIRE INVESTMENT PER PAIR |  |  |  |  |  |  |  |  |  |                     |  |
| SEGMENT LENGTH IN FEET TYPE OF CABLE PLANT RELATIVE MIX OF TYPE OF CA. PLANT BY TYPE OF PLANT PAIR FOOT [E=C*D] [U=DTC] [E*factr] [E*factr] [U*DTC]                                      |  |  |  |  |  |  |  |  |  |                     |  |
| foSpri_segldgh [A] [B] [C=A*B/f] [D]                                                                                                                                                     |  |  |  |  |  |  |  |  |  |                     |  |
| 13331 AERIAL 0.180000 1.21 0.282300 0.34 0.00                                                                                                                                            |  |  |  |  |  |  |  |  |  |                     |  |
| CO TO HUB LINK ON BURIED 0.000000 0.00 0.269400 0.00 0.00                                                                                                                                |  |  |  |  |  |  |  |  |  |                     |  |
| FIBER OPTIC FACILITIES UNDERGRND 0.820000 5.52 0.168600 0.93 0.00                                                                                                                        |  |  |  |  |  |  |  |  |  |                     |  |
| 1.000000                                                                                                                                                                                 |  |  |  |  |  |  |  |  |  |                     |  |
| EQUIPMENT INVESTMENT LOADINGS                                                                                                                                                            |  |  |  |  |  |  |  |  |  |                     |  |
| OUTSIDE PLANT LOADINGS (NOTE 5):                                                                                                                                                         |  |  |  |  |  |  |  |  |  |                     |  |
| ADJUST. / LOAD FACTORS TO AERIAL PFI NA 0.0000                                                                                                                                           |  |  |  |  |  |  |  |  |  |                     |  |
| ADJUST. / LOAD FACTORS TO BURIED PFI NA 0.0000                                                                                                                                           |  |  |  |  |  |  |  |  |  |                     |  |
| ADJUST. / LOAD FACTORS TO UGD PFI NA 0.0000                                                                                                                                              |  |  |  |  |  |  |  |  |  |                     |  |
| DLC EQUIPMENT INVEST. (NOTE 2)                                                                                                                                                           |  |  |  |  |  |  |  |  |  |                     |  |
| INT DLC EQUIP INVEST. (CU COMUX) = intdlcco \$ 0.00 \$ 0.00                                                                                                                              |  |  |  |  |  |  |  |  |  |                     |  |
| INT DLC EQUIP INVEST. (CU RTMUX) = intdlrt \$ 51.57 \$ 85.28                                                                                                                             |  |  |  |  |  |  |  |  |  |                     |  |
| UNIV DLC EQUIP INVEST. (CU COMUX) = unvdlcco \$ 12.14 \$ 87.51                                                                                                                           |  |  |  |  |  |  |  |  |  |                     |  |
| UNIV DLC EQUIP INVEST. (CU RTMUX) = unvdlrt \$ 51.57 \$ 85.28                                                                                                                            |  |  |  |  |  |  |  |  |  |                     |  |
| FIBER MUX EQUIP. INV. (FO COMUX) = hubmxcco \$ 2.35 \$ 18.62                                                                                                                             |  |  |  |  |  |  |  |  |  |                     |  |
| FIBER MUX EQUIP. INV. (FO RTMUX) = hubmxort \$ 2.35 \$ 18.49                                                                                                                             |  |  |  |  |  |  |  |  |  |                     |  |
| OTHER INVESTMENT                                                                                                                                                                         |  |  |  |  |  |  |  |  |  |                     |  |
| inv / unit lgth.: inv rltm factr:                                                                                                                                                        |  |  |  |  |  |  |  |  |  |                     |  |
| POLE LINE FACTOR (PLf) = fplf 0.0000 0.1955                                                                                                                                              |  |  |  |  |  |  |  |  |  |                     |  |
| POLE LINE INVESTMENT (UTIL AERIAL INVEST. x PLf) = \$ 0.20                                                                                                                               |  |  |  |  |  |  |  |  |  |                     |  |
| UNDERGROUND CONDUIT FACTOR (PLf) = fucf 0.0000 0.5232                                                                                                                                    |  |  |  |  |  |  |  |  |  |                     |  |
| CONDUIT INVESTMENT (UTIL UNDGRND INVST x UGf) = \$ 1.48                                                                                                                                  |  |  |  |  |  |  |  |  |  |                     |  |
| LOOP TOPOLOGY                                                                                                                                                                            |  |  |  |  |  |  |  |  |  |                     |  |
| STAR                                                                                                                                                                                     |  |  |  |  |  |  |  |  |  |                     |  |
| AVERAGE NUMBER OF HUBS NA                                                                                                                                                                |  |  |  |  |  |  |  |  |  |                     |  |
| ADDITIONAL LENGTH OF RING OSP REQUIRED NA                                                                                                                                                |  |  |  |  |  |  |  |  |  |                     |  |
| MIX OF CENT. OFC. ANALOG INTFC 0.0000                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                     |  |
| MIX OF CENT. OFC. DIGITAL INTFC 1.0000                                                                                                                                                   |  |  |  |  |  |  |  |  |  |                     |  |
| MIX OF UNIVERSAL DLC INTFC 1.0000                                                                                                                                                        |  |  |  |  |  |  |  |  |  |                     |  |
| MIX OF CENT. OFC. INTEGRATED DLC INTFC 0.0000                                                                                                                                            |  |  |  |  |  |  |  |  |  |                     |  |
| FOOTNOTES                                                                                                                                                                                |  |  |  |  |  |  |  |  |  |                     |  |
| NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.                                                                                                                            |  |  |  |  |  |  |  |  |  |                     |  |
| NOTE 2: THE SUBSCRIBER LINE CARRIER EQUIPMENT INVESTMENTS ARE DEVELOPED OUTSIDE OF THE SPREADSHEET WITH APPROPRIATE UTILIZATION FACTORS APPLIED.                                         |  |  |  |  |  |  |  |  |  |                     |  |
| NOTE 3: TABLE 4 DEVELOPMENT IS SHOWN ON WORKSHEET B; FOR 4 WIRE SERVICES, TABLE 4 IS MULTIPLIED BY 4.                                                                                    |  |  |  |  |  |  |  |  |  |                     |  |
| NOTE 4: THIS ADJUSTMENT MAY ONLY BE TAKEN AGAINST COPPER PLANT.                                                                                                                          |  |  |  |  |  |  |  |  |  |                     |  |
| NOTE 5: ALL DROP WIRE AND PREMISES CONN. INVEST. IS INCLUDED IN THE APPROPRIATE CABLE COUNT ON THE BUILDING CABLE & TERMINATION WORKSHEET AND INCORPORATED INTO WORKSHEET E.             |  |  |  |  |  |  |  |  |  |                     |  |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| LOOP COST ANALYSIS TOOL                                                                                                                                |                        |                 |                 |                     |                                                |                  |                                            |                  |                        | Bellcore                                   |                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------|-----------------|---------------------|------------------------------------------------|------------------|--------------------------------------------|------------------|------------------------|--------------------------------------------|------------------|
| ACCOUNT INVESTMENT WORKSHEET                                                                                                                           |                        |                 |                 |                     |                                                |                  |                                            |                  |                        | LCAT Rel: 1.0.4                            |                  |
| FOR PRIMARY FEEDER PLANT                                                                                                                               |                        |                 |                 |                     |                                                |                  |                                            |                  |                        | ISSUE DATE: 7/31/95                        |                  |
| FACILITY TYPE: FIBER IN THE LOOP                                                                                                                       |                        |                 |                 |                     |                                                |                  |                                            |                  |                        | STUDY YR: 1996                             |                  |
| CIRCUIT DESIGN: 31 FOMUX TO HUB / REM.                                                                                                                 |                        |                 |                 |                     |                                                |                  |                                            |                  |                        | TEST CASE: 1                               |                  |
| SERVICE CLASS: BAND 1 - BUSINSERVICE LEVEL: NARBAND                                                                                                    |                        |                 |                 |                     |                                                |                  |                                            |                  |                        | LAST RUN: 28-Jan-97                        |                  |
|                                                                                                                                                        |                        |                 |                 |                     |                                                |                  |                                            |                  |                        | TIME: 05:01                                |                  |
| C:\123R24\LCATCALC\FOPRGN.WK1<br>FO MUX - WORKSHEET 3<br>Sheet 2 of 3<br>COMPANY: CINCINNATI BELL TEL<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO |                        |                 |                 |                     |                                                |                  |                                            |                  |                        |                                            |                  |
| PLANT ITEM                                                                                                                                             |                        | PLANT ACCT CODE | FIXED VARI SUNK | RESOURCE ALLOCATION | 1996 UNIT INVESTMENTS BY ACCOUNT COST EQUATION | CIRCUIT QUANTITY | 1996 UNIT LOOP INVESTMENT EXCL UTILIZATION |                  | ADMIN. UTIL. LINE FILL | 1996 UNIT LOOP INVESTMENT INCL UTILIZATION |                  |
|                                                                                                                                                        |                        | cmstart         |                 |                     |                                                |                  | SHARED RESOURCES                           | DIRECT RESOURCES | utilstart              | SHARED RESOURCES                           | DIRECT RESOURCES |
|                                                                                                                                                        |                        |                 |                 |                     | [F]                                            | [G]              | [H=F*G]                                    | [H'=F*G]         | [J]                    | [K=H/J]                                    | [K'=H'/J]        |
| 9                                                                                                                                                      | LAND                   | 20C             | F               | SHARED              | 1.74                                           | 1                | \$ 2                                       |                  | 1.0000                 | \$ 2                                       |                  |
| 10                                                                                                                                                     | BUILDING               | 10C             | F               | SHARED              | 40.90                                          | 1                | \$ 41                                      |                  | 1.0000                 | \$ 41                                      |                  |
| 11                                                                                                                                                     | BLDG ENTRANCE CABLE    | 12C             | ---             | ---                 |                                                |                  |                                            |                  | 1.0000                 |                                            |                  |
| 12                                                                                                                                                     | INTRABLDG CABLE        | 52C             | ---             | ---                 |                                                |                  |                                            |                  | 0.3500                 |                                            |                  |
| 13                                                                                                                                                     | AERIAL CABLE (COPPER)  | 22C             | V               | DIRECT              |                                                |                  |                                            |                  | 0.6000                 |                                            |                  |
| 14                                                                                                                                                     | BURIED CABLE (COPPER)  | 45C             | V               | DIRECT              |                                                |                  |                                            |                  | 0.6000                 |                                            |                  |
| 15                                                                                                                                                     | UNDERGROUND (CU) CA.   | 5C              | V               | DIRECT              |                                                |                  |                                            |                  | 0.6000                 |                                            |                  |
| 16                                                                                                                                                     | CO EQPT - LOW CAP TERM | 257C            | F               | DIRECT              | 63.71                                          | 1                |                                            | \$ 64            | 0.7000                 |                                            | \$ 91            |
| 17                                                                                                                                                     | CO EQPT - LOW CAP CHAN | 257C            | V               | DIRECT              | 172.79                                         | 1                |                                            | \$ 173           | 0.7000                 |                                            | \$ 247           |
| 18                                                                                                                                                     | CO EQPT - HI CAP TERM  | 857C            | F               | DIRECT              | 22.47                                          | 1                |                                            | \$ 22            | 1.0000                 |                                            | \$ 22            |
| 19                                                                                                                                                     | CO EQPT - HI CAP CHAN  | 857C            | F               | DIRECT              | 38.11                                          | 1                |                                            | \$ 38            | 1.0000                 |                                            | \$ 38            |
| 20                                                                                                                                                     | CO EQPT - ANALOG SW    | 77C             | V               | DIRECT              | 0.00                                           |                  |                                            |                  | 1.0000                 |                                            |                  |
| 21                                                                                                                                                     | CO EQPT - DIGITAL SW   | 377C            | V               | DIRECT              | 0.00                                           |                  |                                            |                  | 1.0000                 |                                            |                  |
| 22                                                                                                                                                     | AERIAL CABLE (FIBER)   | 822C            | F               | DIRECT              | 0.34                                           | 1                |                                            | \$ 0             | 0.3300                 |                                            | \$ 1             |
| 23                                                                                                                                                     | BURIED CABLE (FIBER)   | 845C            | F               | DIRECT              | 0.00                                           |                  |                                            |                  | 0.3300                 |                                            |                  |
| 24                                                                                                                                                     | UNDERGROUND (FO) CA.   | 85C             | F               | DIRECT              | 0.93                                           | 1                |                                            | \$ 1             | 0.3300                 |                                            | \$ 3             |
| 25                                                                                                                                                     | CONNECTORS             | 57C             | V               | DIRECT              | 0.00                                           |                  |                                            |                  | 1.0000                 |                                            |                  |
| 26                                                                                                                                                     | MISC. COM EQP & PWR    | 57C             | V               | SHARED              | 13.71                                          | 1                | \$ 14                                      |                  | 1.0000                 | \$ 14                                      |                  |
| 27                                                                                                                                                     | POLE LINE              | 1C              | F               | DIRECT              | 0.20                                           | 1                |                                            | \$ 0             | 1.0000                 |                                            | \$ 0             |
| 28                                                                                                                                                     | CONDUIT                | 4C              | F               | DIRECT              | 1.48                                           | 1                |                                            | \$ 1             | 1.0000                 |                                            | \$ 1             |
| TOTALS                                                                                                                                                 |                        |                 |                 |                     |                                                |                  |                                            |                  |                        | \$ 56                                      | \$ 404           |
|                                                                                                                                                        |                        |                 |                 |                     |                                                |                  |                                            |                  |                        |                                            | \$ 480           |
|                                                                                                                                                        |                        |                 |                 |                     |                                                |                  |                                            |                  |                        |                                            | feed3ly          |

CONFIDENTIAL  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

FOOTNOTES  
 NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.  
 NOTE 2: P GAIN CO EQPT = PG EQ INV + HUBMUX INV + MCE&P INV.  
 NOTE 3: ESS CO EQPT = C.O. CONN + MCE&P INV  
 NOTE 3: CABLE INVESTMENT IS THE SUM OF THE CABLE INV [H] + DRYER INV [J] + DROP WIRE ADJUST [K]

| LOOP COST ANALYSIS TOOL                                                                                                   |                 |                  |                             |                             |                             |                  |                  |                             |                             | Bellcore <sup>TM</sup> |         |
|---------------------------------------------------------------------------------------------------------------------------|-----------------|------------------|-----------------------------|-----------------------------|-----------------------------|------------------|------------------|-----------------------------|-----------------------------|------------------------|---------|
| ANNUAL COSTS WORKSHEET                                                                                                    |                 |                  |                             |                             |                             |                  |                  |                             |                             | LCAT Rel: 1.0.4        |         |
| FOR PRIMARY FEEDER PLANT                                                                                                  |                 |                  |                             |                             |                             |                  |                  |                             |                             | ISSUE DATE: 7/31/85    |         |
| FACILITY TYPE: FIBER IN THE LOOP                                                                                          |                 |                  |                             |                             |                             |                  |                  |                             |                             | STUDY YR: 1996         |         |
| CIRCUIT DESIGN: 3 FOMUX TO HUB / REM.                                                                                     |                 |                  |                             |                             |                             |                  |                  |                             |                             | TEST CASE: 1           |         |
| SERVICE CLASS: BAND 1 - BUR SERVICE LEVEL: NARBAND                                                                        |                 |                  |                             |                             |                             |                  |                  |                             |                             | LAST RUN: 28-Jan-97    |         |
|                                                                                                                           |                 |                  |                             |                             |                             |                  |                  |                             |                             | TIME: 08:01            |         |
| COMPANY: CINCINNATI BELL TEL<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO                                             |                 |                  |                             |                             |                             |                  |                  |                             |                             |                        |         |
| 1996 UNIT LOOP INVESTMENT BY ACCOUNT<br>1996 UNIT ANNUAL COSTS BY ACCOUNT<br>1996 UNIT MONTHLY RECURRING COSTS BY ACCOUNT |                 |                  |                             |                             |                             |                  |                  |                             |                             |                        |         |
| PLANT ITEM                                                                                                                | PLANT ACCT CODE | 1996 TO 1996 TPI | SHARED RESOURCES fo3sixaset | DIRECT RESOURCES fo3dixaset | ANNUAL COST FACTOR acfstart | SHARED RESOURCES | DIRECT RESOURCES | SHARED RESOURCES fo3sixaset | DIRECT RESOURCES fo3dixaset |                        |         |
| [PREVIOUS SHEET SUMMARY .....]                                                                                            |                 |                  |                             |                             |                             |                  |                  |                             |                             |                        |         |
| LAND                                                                                                                      | 20C             | 1.0000           |                             | \$ 2                        | 0.2322                      |                  |                  |                             |                             | \$ 0.40                | \$ 0.03 |
| BUILDING                                                                                                                  | 10C             | 1.0000           |                             | \$ 41                       | 0.2937                      |                  |                  |                             |                             | \$ 12.01               | \$ 1.00 |
| BLDG ENTRANCE CABLE                                                                                                       | 12C             | 1.0000           |                             |                             | 0.3922                      |                  |                  |                             |                             |                        |         |
| INTRABLDG CABLE                                                                                                           | 52C             | 1.0000           |                             |                             | 0.3922                      |                  |                  |                             |                             |                        |         |
| AERIAL CABLE (COPPER)                                                                                                     | 22C             | 1.0000           |                             |                             | 0.4033                      |                  |                  |                             |                             |                        |         |
| BURIED CABLE (COPPER)                                                                                                     | 45C             | 1.0000           |                             |                             | 0.3467                      |                  |                  |                             |                             |                        |         |
| UNDERGROUND (CU) CA.                                                                                                      | 5C              | 1.0000           |                             |                             | 0.3663                      |                  |                  |                             |                             |                        |         |
| CO EQPT - LOW CAP TERM                                                                                                    | 257C            | 1.0000           |                             | \$ 91                       | 0.3881                      |                  | \$ 35.32         |                             |                             |                        | \$ 2.94 |
| CO EQPT - LOW CAP CHAN                                                                                                    | 257C            | 1.0000           |                             | \$ 247                      | 0.3881                      |                  | \$ 95.80         |                             |                             |                        | \$ 7.98 |
| CO EQPT - HI CAP TERM                                                                                                     | 857C            | 1.0000           |                             | \$ 22                       | 0.3881                      |                  | \$ 8.72          |                             |                             |                        | \$ 0.73 |
| CO EQPT - HI CAP CHAN                                                                                                     | 857C            | 1.0000           |                             | \$ 38                       | 0.3881                      |                  | \$ 14.79         |                             |                             |                        | \$ 1.23 |
| CO EQPT - ANALOG SW                                                                                                       | 77C             | 1.0000           |                             |                             | 0.0000                      |                  |                  |                             |                             |                        |         |
| CO EQPT - DIGITAL SW                                                                                                      | 377C            | 1.0000           |                             |                             | 0.3458                      |                  |                  |                             |                             |                        |         |
| AERIAL CABLE (FIBER)                                                                                                      | 822C            | 1.0000           |                             | \$ 1                        | 0.2983                      |                  | \$ 0.31          |                             |                             |                        | \$ 0.03 |
| BURIED CABLE (FIBER)                                                                                                      | 845C            | 1.0000           |                             |                             | 0.2724                      |                  |                  |                             |                             |                        |         |
| UNDERGROUND (FO) CA.                                                                                                      | 85C             | 1.0000           |                             | \$ 3                        | 0.2689                      |                  | \$ 0.76          |                             |                             |                        | \$ 0.06 |
| CONNECTORS                                                                                                                | 57C             | 1.0000           |                             |                             | 0.3881                      |                  |                  |                             |                             |                        |         |
| MISC. COM EQP & PWR                                                                                                       | 57C             | 1.0000           | \$ 14                       |                             | 0.3881                      | \$ 5.32          |                  | \$ 0.44                     |                             |                        |         |
| POLE LINE                                                                                                                 | 1C              | 1.0000           |                             | \$ 0                        | 0.3807                      |                  | \$ 0.08          |                             |                             |                        | \$ 0.01 |
| CONDUIT                                                                                                                   | 4C              | 1.0000           |                             | \$ 1                        | 0.2521                      |                  | \$ 0.37          |                             |                             |                        | \$ 0.03 |
| TOTALS                                                                                                                    |                 |                  | \$ 56                       | \$ 404                      |                             | \$ 17.74         | \$ 159.71        | \$ 1.48                     | \$ 13.01                    |                        |         |
|                                                                                                                           |                 |                  |                             | \$ 460                      |                             |                  | \$ 173.89        |                             | \$ 14.49                    |                        |         |
|                                                                                                                           |                 |                  |                             | feed3sy                     |                             |                  | feed3ann         |                             | feed3mrc                    |                        |         |

FOOTNOTES  
 NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.  
 NOTE 2: AN INVESTMENT-ONLY STUDY NEGATES ANNUAL COST COMPUTATION.  
 HOWEVER, THIS COLUMN IS PRESENTED FOR CONSISTENCY OF FORMAT ONLY.

CONFIDENTIAL  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

| A  |  | C:\123R24\LCAT\CALC\FOPRGN.WK1                                          |        | <b>LOOP COST ANALYSIS TOOL</b>           |         | Belcore <sup>®</sup> |          |
|----|--|-------------------------------------------------------------------------|--------|------------------------------------------|---------|----------------------|----------|
| B  |  | FO_MUX - REPORT 14.3                                                    |        | PROSPECTIVE INVESTMENT WORKSHEET SUMMARY |         | LCAT Rel: 1.0.4      |          |
| C  |  | Sheet 1 of 1                                                            |        | FOR PRIMARY FEEDER PLANT                 |         | ISSUE DATE: 7/31/95  |          |
| D  |  | COMPANY: CINCINNATI BELL TEL.                                           |        | FACILITY TYPE: FIBER IN THE LOOP         |         | STUDY YR: 1995       |          |
| E  |  | CITY / AREA: CINCINNATI                                                 |        | CIRCUIT DESIGN: 3 FOMUX TO HUB / REM.    |         | TEST CASE: 1         |          |
| F  |  | STATE / PROV: OHIO                                                      |        | SERVICE CLASS: BAND 1 - BUSIN            |         | LAST RUN: 28-Jan-97  |          |
| G  |  |                                                                         |        | SERVICE LEVEL: NARBAND                   |         | TIME: 08:01          |          |
| 0  |  | data - 14a3 1995 UNIT MONTHLY RECURRING COST BY ACCOUNT (SEE NOTE)      |        |                                          |         |                      |          |
| 1  |  | BAND 0                                                                  |        |                                          |         |                      |          |
| 2  |  | PLANT MIX                                                               | 1.0000 | TOTAL                                    |         |                      |          |
| 3  |  | ACCT AVG.                                                               |        | AVG WEIGHTED                             |         |                      |          |
| 4  |  | CODE LGTH                                                               | 15677  | INVESTMENT                               |         |                      |          |
| 5  |  | SEG LGTH                                                                | 13331  | 13331                                    |         |                      |          |
| 6  |  | <b>SHARED RESOURCES</b>                                                 |        |                                          |         |                      |          |
| 7  |  | LAND                                                                    | 20C    | \$ 0.03                                  | \$ 0.03 |                      |          |
| 8  |  | BUILDING                                                                | 10C    | \$ 1.00                                  | \$ 1.00 |                      |          |
| 9  |  | BLDG ENTRANCE CABLE                                                     | 12C    |                                          | \$ 0.00 |                      |          |
| 10 |  | INTRABLDG CABLE                                                         | 52C    |                                          | \$ 0.00 |                      |          |
| 11 |  | AERIAL CABLE (COPPER)                                                   | 22C    |                                          | \$ 0.00 |                      |          |
| 12 |  | BURIED CABLE (COPPER)                                                   | 45C    |                                          | \$ 0.00 |                      |          |
| 13 |  | UNDERGROUND (CU) CA.                                                    | 5C     |                                          | \$ 0.00 |                      |          |
| 14 |  | CO EQPT - LOW CAP TERM                                                  | 257C   |                                          | \$ 0.00 |                      |          |
| 15 |  | CO EQPT - LOW CAP CHAN                                                  | 257C   |                                          | \$ 0.00 |                      |          |
| 16 |  | CO EQPT - HI CAP TERM                                                   | 857C   |                                          | \$ 0.00 |                      |          |
| 17 |  | CO EQPT - HI CAP CHAN                                                   | 857C   |                                          | \$ 0.00 |                      |          |
| 18 |  | CO EQPT - ANALOG SW                                                     | 77C    |                                          | \$ 0.00 |                      |          |
| 19 |  | CO EQPT - DIGITAL SW                                                    | 377C   |                                          | \$ 0.00 |                      |          |
| 20 |  | AERIAL CABLE (FIBER)                                                    | 822C   |                                          | \$ 0.00 |                      |          |
| 21 |  | BURIED CABLE (FIBER)                                                    | 845C   |                                          | \$ 0.00 |                      |          |
| 22 |  | UNDERGROUND (FO) CA.                                                    | 85C    |                                          | \$ 0.00 |                      |          |
| 23 |  | CONNECTORS                                                              | 57C    |                                          | \$ 0.00 |                      |          |
| 24 |  | MISC. COM EQP & PWR                                                     | 57C    | \$ 0.44                                  | \$ 0.44 |                      |          |
| 25 |  | POLE LINE                                                               | 1C     |                                          | \$ 0.00 |                      |          |
| 26 |  | CONDUIT                                                                 | 4C     |                                          | \$ 0.00 |                      |          |
| 27 |  | <b>DIRECT RESOURCES</b>                                                 |        |                                          |         |                      |          |
| 28 |  | LAND                                                                    | 20C    |                                          | \$ 0.00 |                      |          |
| 29 |  | BUILDING                                                                | 10C    |                                          | \$ 0.00 |                      |          |
| 30 |  | BLDG ENTRANCE CABLE                                                     | 12C    |                                          | \$ 0.00 |                      |          |
| 31 |  | INTRABLDG CABLE                                                         | 52C    |                                          | \$ 0.00 |                      |          |
| 32 |  | AERIAL CABLE (COPPER)                                                   | 22C    |                                          | \$ 0.00 |                      |          |
| 33 |  | BURIED CABLE (COPPER)                                                   | 45C    |                                          | \$ 0.00 |                      |          |
| 34 |  | UNDERGROUND (CU) CA.                                                    | 5C     |                                          | \$ 0.00 |                      |          |
| 35 |  | CO EQPT - LOW CAP TERM                                                  | 257C   | \$ 2.94                                  | \$ 2.94 |                      |          |
| 36 |  | CO EQPT - LOW CAP CHAN                                                  | 257C   | \$ 7.98                                  | \$ 7.98 |                      |          |
| 37 |  | CO EQPT - HI CAP TERM                                                   | 857C   | \$ 0.73                                  | \$ 0.73 |                      |          |
| 38 |  | CO EQPT - HI CAP CHAN                                                   | 857C   | \$ 1.23                                  | \$ 1.23 |                      |          |
| 39 |  | CO EQPT - ANALOG SW                                                     | 77C    |                                          | \$ 0.00 |                      |          |
| 40 |  | CO EQPT - DIGITAL SW                                                    | 377C   |                                          | \$ 0.00 |                      |          |
| 41 |  | AERIAL CABLE (FIBER)                                                    | 822C   | \$ 0.03                                  | \$ 0.03 |                      |          |
| 42 |  | BURIED CABLE (FIBER)                                                    | 845C   |                                          | \$ 0.00 |                      |          |
| 43 |  | UNDERGROUND (FO) CA.                                                    | 85C    | \$ 0.06                                  | \$ 0.06 |                      |          |
| 44 |  | CONNECTORS                                                              | 57C    |                                          | \$ 0.00 |                      |          |
| 45 |  | MISC. COM EQP & PWR                                                     | 57C    |                                          | \$ 0.00 |                      |          |
| 46 |  | POLE LINE                                                               | 1C     | \$ 0.01                                  | \$ 0.01 |                      |          |
| 47 |  | CONDUIT                                                                 | 4C     | \$ 0.03                                  | \$ 0.03 |                      |          |
| 48 |  |                                                                         |        |                                          |         |                      |          |
| 49 |  |                                                                         |        |                                          |         |                      |          |
| 50 |  | SPAN SUMMARY                                                            | 14.49  | 0.00                                     | 0.00    | 0.00                 | \$ 14.49 |
| 51 |  | AVG. WTD. SPAN SUMMARY                                                  | 14.49  | 0.00                                     | 0.00    | 0.00                 |          |
| 52 |  |                                                                         |        |                                          |         |                      |          |
| 53 |  |                                                                         |        |                                          |         |                      |          |
| 54 |  | NOTE: [sum(INV <sub>ACCT</sub> <sup>BAND</sup> * MIX <sup>BAND</sup> )] |        |                                          |         |                      |          |
| 55 |  |                                                                         |        |                                          |         |                      |          |

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

CA123R24\LCATR028\COSTMETH

## LOOP COST ANALYSIS TOOL

Bellcore (R)

TABLE - COST METH

SHEET 2 of 2

COST METHODS ASSIGNMENT TABLE  
FEEDER SEGMENTCOMPANY: CINCINNATI BELL TEL.  
STATE: OHIO

SWITCHED SERVICES

LCAT Rel: 1.0.4

Issued: 07/31/95

STUDY YR: 1996

TEST CASE: 1

LAST UPDATE: 28-Oct-96

TIME: 09:29

| PLANT ITEM              | PLANT CODE | WHEN BANDWIDTH DELIVERY IS |            |          |            |           |            |
|-------------------------|------------|----------------------------|------------|----------|------------|-----------|------------|
|                         |            | NARROWBAND                 |            | WIDEBAND |            | BROADBAND |            |
|                         |            | CATEGORY                   | RESOURCE   | CATEGORY | RESOURCE   | CATEGORY  | RESOURCE   |
|                         |            | INDEX                      | ASSIGNMENT | INDEX    | ASSIGNMENT | INDEX     | ASSIGNMENT |
| LAND                    | 20C        | F                          | SHARED     | F        | SHARED     | F         | SHARED     |
| BUILDING                | 10C        | F                          | SHARED     | F        | SHARED     | F         | SHARED     |
| BLDG ENTRANCE CABLE     |            |                            |            |          |            |           |            |
| INTRABLDG CABLE         |            |                            |            |          |            |           |            |
| AERIAL CABLE (COPPER) ① | 22C        | V                          | DIRECT     | V        | DIRECT     | V         | DIRECT     |
| BURIED CABLE (COPPER) ① | 45C        | V                          | DIRECT     | V        | DIRECT     | V         | DIRECT     |
| UNDERGROUND (CU) CA. ①  | 5C         | V                          | DIRECT     | V        | DIRECT     | V         | DIRECT     |
| CO EQPT - LOW CAP TERM  | 257C       | F                          | DIRECT     | V        | DIRECT     | V         | DIRECT     |
| CO EQPT - LOW CAP CHAN  | 257C       | V                          | DIRECT     | V        | DIRECT     | V         | DIRECT     |
| CO EQPT - HI CAP TERM   | 857C       | F                          | DIRECT     | F        | DIRECT     | F         | DIRECT     |
| CO EQPT - HI CAP CHAN   | 857C       | F                          | DIRECT     | F        | DIRECT     | V         | DIRECT     |
| CO EQPT - ANALOG SW     | 77C        | V                          | DIRECT     | V        | DIRECT     | V         | DIRECT     |
| CO EQPT - DIGITAL SW    | 377C       | V                          | DIRECT     | V        | DIRECT     | V         | DIRECT     |
| AERIAL CABLE (FIBER)    | 822C       | F                          | DIRECT     | F        | DIRECT     | F         | DIRECT     |
| BURIED CABLE (FIBER)    | 845C       | F                          | DIRECT     | F        | DIRECT     | F         | DIRECT     |
| UNDERGROUND (FO) CA.    | 85C        | F                          | DIRECT     | F        | DIRECT     | F         | DIRECT     |
| CONNECTORS              | 57C        | V                          | DIRECT     | V        | DIRECT     | V         | DIRECT     |
| MISC. COM EQP & PWR     | 57C        | V                          | SHARED     | V        | SHARED     | V         | SHARED     |
| POLE LINE               | 1C         | F                          | DIRECT     | F        | DIRECT     | F         | DIRECT     |
| CONDUIT                 | 4C         | F                          | DIRECT     | F        | DIRECT     | F         | DIRECT     |

## FOOTNOTES

- ① THESE ASSIGNMENTS APPLY TO MULTIPLEXED COPPER FEEDER PAIRS ONLY.  
 BY DEFINITION: ITEMS LABELED F(fixed) OR SHARED ARE EXCLUDED IN A MARGINAL COST STUDY.  
 ITEMS LABELED F(fixed) ARE EXCLUDED FROM ADDITIONS IN INCREMENTAL STUDIES.  
 ALL ITEMS ARE INCLUDED IN A PROSPECTIVE, REPLACEMENT OR NEW INSTALLATION.

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

CA\123R24\LCATR028\COSTMETH  
TABLE - COST\_METH  
Sheet 2 of 2

HELP SCREEN**Belcore** (R)

LCAT Rel : 1.0.4

Issued : 07/31/95

| <u>Field / Group Title</u> | <u>Valid Inputs</u> | <u>This field or grouping defines -</u>                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SERVICES                   | (none)              | The system matrix for FEEDER cost methodology for -<br>The User selected Service Category - SWITCHED or PRIVATE LINE.                                                                                                                                                                                                               |
| LCAT CODE                  | (none)              | The system key code for this cost component                                                                                                                                                                                                                                                                                         |
| PLANT CODE                 | (none)              | The User nominated cross-reference code for the cost component or component group from the previous screen.                                                                                                                                                                                                                         |
| DELIVERY                   | (none)              | The Service Delivery Bandwidth Capacity for each group of methodology categories. The system defines 3 -<br>Narrowband - denotes voice grade and sub-voice grade band width.<br>Wideband - denotes bandwidths of the first level of digital hierarchy.<br>Broadband - denotes bandwidths of the higher levels of digital hierarchy. |
| CATEGORY                   | (none)              | The group of Methodology Categories                                                                                                                                                                                                                                                                                                 |
| SENSITIVITY INDEX          | F, V                | The Volatility Index to Distance or Demand Sensitivity -<br>F for Fixed Value, Low sensitivity to Distance or Demand.<br>V for Variable Usage, Cost Sensitive to Distance or Demand.<br>S for Sunk Investment which only has an Annual Component.                                                                                   |
| RESOURCE ASSIGNMENT        | SHARED, DIRECT      | The Assigned Category of Circuit Function -<br>DIRECT for Dedicated or Circuit Specific Investment.<br>SHARED - for Multi-Circuit or Non-Specific Investment.                                                                                                                                                                       |

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*  
\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION \*\*\*\*\*

PRESS <ENTER> TO RETURN TO THE MAIN MENU

**CONFIDENTIAL**  
NOT TO BE GIVEN  
TO RELATIVES TO PUBLIC  
PROVIDED TO TUG

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.



| CA1123R24\LCATR028\CRITERIA                            |  | LOOP COST ANALYSIS TOOL                                               |  | Bellcore <sup>®</sup>                       |  |
|--------------------------------------------------------|--|-----------------------------------------------------------------------|--|---------------------------------------------|--|
| INPUT - STUDY SETUP                                    |  | GENERAL STUDY REQUIREMENTS                                            |  | TODAY IS: 28-Jan-97                         |  |
| LCAT Rel.: 1.0.4                                       |  |                                                                       |  | LAST UPDATE:                                |  |
| Issue Date: 3/31/95                                    |  |                                                                       |  | 28-Oct-96 09:30 AM                          |  |
| STUDY NAME                                             |  | 1996 BAND 1 (OHIO ONLY) BUSINESS PBX 12001 FEET - INFINITY INTRASTATE |  |                                             |  |
| COMMENTS                                               |  |                                                                       |  |                                             |  |
| SERVICE CLASS                                          |  | BAND 1 - BUSINESS PBX                                                 |  | STUDY BASIS                                 |  |
|                                                        |  |                                                                       |  | <input checked="" type="checkbox"/> NETWORK |  |
|                                                        |  |                                                                       |  | <input type="checkbox"/> INDIVIDUAL         |  |
| COMPANY                                                |  | CINCINNATI BELL TEL.                                                  |  | INVESTMENT YEAR                             |  |
|                                                        |  |                                                                       |  | 1996                                        |  |
| STATE / PROVINCE                                       |  | OHIO                                                                  |  | LOOP CHAR. STUDY YEAR                       |  |
|                                                        |  |                                                                       |  | 1996                                        |  |
| CITY / AREA                                            |  | CINCINNATI                                                            |  | STUDY YEAR                                  |  |
|                                                        |  |                                                                       |  | 1996                                        |  |
| DENSITY CELL MIX                                       |  | 0   100   0   0                                                       |  | TEST CASE                                   |  |
|                                                        |  | VH HI MED LO                                                          |  |                                             |  |
| DIGITAL LOOP CARRIER FACILITIES INCLUDED IN THE STUDY: |  |                                                                       |  |                                             |  |
| Type Percent Mix:                                      |  |                                                                       |  |                                             |  |
| 100 FIBER IN THE LOOP                                  |  |                                                                       |  |                                             |  |
| 0 COPPER DIG LOOP CXR                                  |  |                                                                       |  |                                             |  |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATR025\CRITERIA

INPUT - STUDY SETUP

Sheet 1 of 2

HELP SCREEN

Belcore®

LCAT Rel. 1.0.4

ISSUED: 3/31/95

**THIS DISPLAY**

This display's data and the data on the subsequent display are a record of this study's criteria and the system's parameters and is the TITLE PAGE of this study. Printouts should accompany the input, worksheets, and results.

**STUDY NAME**

Enter in Free Form up to 35 Characters for a Study Title. This data will be inserted in the title box of the title display of each run module.

**COMMENTS**

Enter in Free Form (as in a Word Processor) FOUR lines (Word Wrap is active) of Commentary that will help Explain the study criteria and rationale. The space will allow approximately 72 proportionately spaced characters per line, 288 total. To begin just start typing in the data after <Enter>ing the previous item. The character guide will appear after the first character is entered. Data can be edited in the normal WP manner, using the <BS>, <Del>, <Up>, <Dn>, etc... keys. PRESS THE < Enter > KEY TO STOP INPUTTING DATA.

**STUDY BASIS**

Select with an 'X' either an average NETWORK study or an INDIVIDUAL CASE study.

**FACILITY TYPE**

Select by entering the percent of technology mix, the Facility types in the loop network that support the service/s; under study or enter an 'X' to denote inclusion.

**CELL DENSITY**

Select by entering the percent of cell density mix, based upon the scope of the jurisdiction and the definitions of the cell layers: C1, C2, C3, C4; which represent the VERY HIGH, HIGH, MEDIUM, LOW qualifiers, such as, METRO, URBAN, SUBURBAN, and RURAL.

\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR INFORMATION  
\*\*\*\*\* CONCERNING ANY OTHER DATA INPUT ITEMS ON THIS DISPLAY \*\*\*\*\*  
PRESS < Enter > KEY TO RETURN TO THE MAIN MENU

**CONFIDENTIAL**  
**NOTICE MUST BE GIVEN**  
**RELEASE TO PUBLIC**  
**PROVIDED TO PUCO**

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR028\CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>LOOP COST ANALYSIS TOOL</b>                                                                                                                               |  | <b>Bellcore (R)</b>                                                                                                |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------|--|----------------|--|-----|--|--------|-----|--------|----------|-----------|---------|--------|---|----------|-----|----------|---|----------|--|-------------|------------|-------|-----------|---------|--|----------|--|--------|--|------|--|------------|------------|
| <b>INPUT - STUDY SETUP</b><br>SHEET 2 / 2<br><br>COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>GENERAL STUDY REQUIREMENTS</b><br><b>STUDY QUESTIONS</b><br>FOR<br>INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 1 - BUSINESS PBX |  | LCAT Rpt. 1.0.4<br>ISSUED: 3/31/95<br>STUDY YEAR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 25-Oct-95<br>TIME: 09:30 AM |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| <b>SELECTED QUESTIONS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| <b>CONCERNING - SERVICE SPEC.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1. Is this Study for a NEW Installation or an ADDITION ? .....<br>2. Is this Study for a SWITCHED or PRIVATE LINE Service ? .....<br>3. Is this Study for Narrow, Wide, or Broadband Services .....<br>4. Is this Study for 2 Wire or 4 Wire Transmission ? .....                                                                                                                                                                                                                                                                     |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| <b>OFFICE CHAR.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 5. What Percent of the C.O. Switch Installations are DIGITAL Switches? .....<br>6. What Percent of Loop Carrier Installations are INTEGRATED DLC's? .....<br>7. What Percent of Loop Carrier Cross-connects are Electronic DCS's? .....<br>8. Deploy Digital Loop Carrier (loop pair gain) exclusively at ? .....                                                                                                                                                                                                                     |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| <b>RESULTS SPEC.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 9. Do you want FLAT RATE or DISTANCE SENSITIVE parameters ? .....<br>9a. If Distance Sensitive, what band increment do you want ? .....<br>10. How many Cost Bands in this study ? .....<br>11. Should this Study result in Investment, Cost, or All values ? .....<br>12. Is this study for Total Incremental or Marginal Costs ? .....<br>13. How many circuits (loops) in this Study ? .....<br>14. The study classification is ..... (e.g., RATES PLAN, TEST DATA, NEW SERVICE)<br>Required for the "Footer" of each Report page. |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">VALID RESPONSE</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">SET</td> <td></td> </tr> <tr> <td style="text-align: center;">N or A</td> <td style="text-align: center;">NEW</td> </tr> <tr> <td style="text-align: center;">S or P</td> <td style="text-align: center;">SWITCHED</td> </tr> <tr> <td style="text-align: center;">N, W or B</td> <td style="text-align: center;">NARBAND</td> </tr> <tr> <td style="text-align: center;">2 or 4</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="text-align: center;">0 -&gt; 100</td> <td style="text-align: center;">100</td> </tr> <tr> <td style="text-align: center;">0 -&gt; 100</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: center;">0 -&gt; 100</td> <td></td> </tr> <tr> <td style="text-align: center;">e.g., 12000</td> <td style="text-align: center;">12000 Feet</td> </tr> <tr> <td style="text-align: center;">For D</td> <td style="text-align: center;">FLAT RATE</td> </tr> <tr> <td style="text-align: center;">1,2,3,4</td> <td></td> </tr> <tr> <td style="text-align: center;">0,1 or A</td> <td></td> </tr> <tr> <td style="text-align: center;">T or M</td> <td></td> </tr> <tr> <td style="text-align: center;">1996</td> <td></td> </tr> <tr> <td style="text-align: center;">RATES PLAN</td> <td style="text-align: center;">RATES PLAN</td> </tr> </tbody> </table> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |  |                                                                                                                    |  | VALID RESPONSE |  | SET |  | N or A | NEW | S or P | SWITCHED | N, W or B | NARBAND | 2 or 4 | 2 | 0 -> 100 | 100 | 0 -> 100 | 0 | 0 -> 100 |  | e.g., 12000 | 12000 Feet | For D | FLAT RATE | 1,2,3,4 |  | 0,1 or A |  | T or M |  | 1996 |  | RATES PLAN | RATES PLAN |
| VALID RESPONSE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| SET                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| N or A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | NEW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| S or P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SWITCHED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| N, W or B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | NARBAND                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| 2 or 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| 0 -> 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| 0 -> 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| 0 -> 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| e.g., 12000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 12000 Feet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| For D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | FLAT RATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| 1,2,3,4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| 0,1 or A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| T or M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| 1996                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |
| RATES PLAN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | RATES PLAN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                              |  |                                                                                                                    |  |                |  |     |  |        |     |        |          |           |         |        |   |          |     |          |   |          |  |             |            |       |           |         |  |          |  |        |  |      |  |            |            |

CONFIDENTIAL  
 NOTICE MUST BE  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO FUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\23R24\LCATR028\CRITERIA

HELP SCREENBellcore<sup>(R)</sup>

INPUT - STUDY SETUP

LCAT Rel. 1.0.4  
ISSUED: 3/31/95

1. Specify **N** for New Installations or **A** for Addition to existing installations are being studied.
2. Specify **S** for the Switched Services or **P** for the Private Line (Special) Service category.
3. Specify **N** for Narrowband (DS0), **W** for Wideband (DS1), or **B** for Broadband Services category.
4. Specify as **2** for 2-wire or **4** for 4-wire, the circuit transmission paths used by the service/s/ being studied.
5. Specify Digital Switch Mix as a Percentage of Installations over Analog in the Jurisdiction.
6. & 7. Specify Integrated DLC Mix as a Percentage of the DLC equipment requirements,  
Using **6.** for Switched Services or Using **7.** for Special (Private Line) Services.
8. Enter in feet, the loop length beyond which only Digital Loop Carrier Technology will be considered
9. Specify **F** for Flat Rate Loop or **D** for Distance Sensitive Bands, for the Cost Structure of the study
- 9A. Enter **1, 2, 3, or 4** to specify either 1/4, 1/2, 3/4, or 1 mile, respectively, band increments in a Distance Sensitive Study
10. Specify the quantity of Cost Bands of Loop Lengths will be studied, for upto a maximum of 5 bands.  
Enter **0** for Network Averaged (non-Banded) Input or Individual Circuit Flat Rate Cost Studies.
11. Specify **I** for Investment Only results or **C** for resultant Annual and Monthly Recurring Costs or **A** for All values.
12. Specify **T** for Total Incremental or **M** for Marginal (Direct Incremental) Average Weighted Costs Study.
13. Enter the quantity of loop circuits that will be the demand basis of this cost study.  
Nominally, entering **1** provides a "UNIT" cost and any other value, a "TOTAL" cost.

PRESS &lt; Enter &gt; KEY TO RETURN TO THE MAIN MENU

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

|                                    |                                                       |                                     |
|------------------------------------|-------------------------------------------------------|-------------------------------------|
| C:\123R24\LCATR028\DESIGN          | <b>LOOP COST ANALYSIS TOOL</b>                        | <b>Bellcore</b>                     |
| INPUT - LOOP_DESIGN<br>Sheet 1 / 1 | CIRCUIT DESIGN REQUIREMENTS<br>CHARACTERISTICS<br>FOR | LCAT Rel: 1.0.4<br>Issued: 07/31/95 |
| COMPANY: CINCINNATI BELL TEL.      | INVESTMENT YEAR: 1996                                 | STUDY YR: 1996                      |
| CITY / AREA: CINCINNATI            | LOOP STUDY YEAR: 1996                                 | TEST CASE: 1                        |
| STATE / PROV: OHIO                 | SERVICE CLASS: BAND 1 - BUSINESS PBX                  | LAST UPDATE: 28-Oct-96              |
|                                    |                                                       | TIME: 09:31                         |

**CIRCUIT DESIGN****Study Parameters**

Study Basis: NETWORK STUDY

Service Level: NARBAND

Loop Topology: STAR

**CIRCUIT LAYOUT REQUIREMENTS -  
FOR FIBER HUBS & FEEDER EXTENSIONS**

(FIBER HUB TO REMOTE TERMINAL LINK)

**FACILITY INTERFACE SITES :**

Proportion of Fiber Circuits

WITHOUT Fiber Hubs

**FACILITY TECHNOLOGIES:**

Of the Hubbed Circuits -

Proportion of links on Fiber Tech.

Proportion of links on CDLC / MAR

**FOR SERVICE ACCESS NETWORK**

(REMOTE TERMINAL TO CUSTOMER LINK)

**FACILITY INTERFACE SITES :**

Proportion of Remote terminals

colocated at Customer Premises

**CIRCUIT DESIGN REQUIREMENTS -  
SELECTION & DISTRIBUTION:**Note**FOR FIBER DLC DESIGNS:**

Weighting of Design #1

Weighting of Design #2

Weighting of Design #3

Weighting of Design #4

NA 

Weighting of Design #5

NA 

Weighting of Design #6

NA 

ChkSum

**FOR COPPER DLC DESIGNS:**

Weighting of Design #1

Weighting of Design #2

NA 

ChkSum

'NA' DENOTES THAT THE CIRCUIT DESIGN  
PROBABLY DOES NOT APPLY TO THIS  
SET OF STUDY PARAMETERS.

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

C:\123R24\LCATR028\DESIGN  
 INPUT - LOOP DESIGN  
 Sheet 1 of 1

HELP SCREEN

Belcore

LCAT Rel :1.0.4  
 Issued :07/31/95

### DIGITAL LOOP CARRIER DESIGNS

Each Loop's circuit layout is broken down into potentially the FEEDER, the DISTRIBUTION, and the DROP segment. The FEEDER segment can have THREE Spans, the PRIMARY and EXTENSION are realtime, but, the SUBFEEDER is a "filler" for spans or distances under PAIR GAIN Deployment and will be employed using engineering rules and network characteristics. The potential Fiber Optic DLC and Copper DLC circuit layouts have been categorized into several generic designs for purposes of narrowing down the complexity of the network contribution. The *DESIGN*s represent unique combinations of layers (COLLOCATION) and the transport media. There is a chart of these *DESIGN*s included in the DATA CATALOG and the METHODOLOGY sections of the User Guide.

### COLLOCATIONS

To be defined as the combining of Loop functions at the same location, excluding the need for translation of the transport function (eliminating the OSP and termination equipment). Note that the sum of the probabilities do not have to equal total universe, therefore, the proportions are a function of the total serving universe (total loop network).

### FIBER HUBS & FEEDER EXTENSIONS

These values represent the proportion of each technology used in the layouts which DO NOT have collocated FIBER HUB and REMOTE TERMINAL functions.

### WARNING

→ This function must be in place for "RING" topologies as 100% FIBER, therefore, the *DESIGN* choices are limited for RING to *DESIGN*s 1 and 5. All other *DESIGN* are to be avoided.

### SERVICE SPECIFIC

To avoid circuit layout conflict with certain service levels, the input choices will be limited for BROADBAND service levels to those which currently support DS3 Xconn at both ends. Currently, only is, *DESIGN* 4, 5, & 6.

\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR INFORMATION  
 \*\*\*\*\* CONCERNING ANY OTHER DATA INPUT ITEMS ON THIS DISPLAY \*\*\*\*\*  
 PRESS < Enter > KEY TO RETURN TO THE MAIN MENU

**CONFIDENTIAL**  
 NOTICE MUST BE GIVEN  
 BEFORE RELEASE TO PUBLIC  
 PROVIDED TO PUCO

C:\123R24\LCATR028\FACILITY

## LOOP COST ANALYSIS TOOL

Bellcore

TABLE - SPAN INV  
SHEET 1 / 4LOOP FACILITY INPUT  
FIBER CABLE DATA

LCAT Rel: 1.0.4

Issued: 07/31/95

STUDY YR: 1996

TEST CASE: 1

LAST UPDATE: 28-Oct-96

TIME: 09:35

COMPANY: CINCINNATI BELL TEL.  
CITY/AREA: CINCINNATI  
STATE/PROV: OHIOINVESTMENT YEAR: 1996  
LOOP STUDY YEAR: 1996  
SERVICE CLASS: BAND 1 - BUSINESS PBX

## FIBER CABLE INVESTMENT AND CHARACTERISTICS

## CABLE TYPE MIX (DISTRIBUTION TO CODE):

Proportion of FIBER cable installations that are ....

|        | FOR<br>FEEDER<br>SEGMENTS |
|--------|---------------------------|
| AERIAL | 0.1800                    |
| BURIED | 0.0000                    |
| UNDGRD | 0.8200                    |

FOR  
DISTRIBUTION  
SEGMENTS

|        |         |
|--------|---------|
| 0.0000 | factors |
| 0.0000 | factors |
| 0.0000 | factors |

## INVESTMENT PER CABLE PAIR FOOT

## BY CABLE TYPE:

Update Cable Sheath Prices on the FULL SET Input SHEET ? (Y/N)

N

(Required with INDIVIDUAL Mode)

If not, Update Unit Averages as Follows:

## PRIMARY SEGMENT

Average Unit Investment for FIBER cable,  
Installed as ....

|        |           |
|--------|-----------|
| AERIAL | \$ 0.2823 |
| BURIED | \$ 0.2694 |
| UNDGRD | \$ 0.1686 |

(to Fiber Hub)

per fiber pair Foot  
per fiber pair Foot  
per fiber pair Foot

## FEEDER - EXTENSION SEGMENT AND DISTRIBUTION SEGMENT

Average Unit Investment for FIBER cable,  
Installed as ....

|        |           |
|--------|-----------|
| AERIAL | \$ 0.2823 |
| BURIED | \$ 0.2694 |
| UNDGRD | \$ 0.1686 |

(Fiber Hub to Remote Terminal)

per fiber pair Foot  
per fiber pair Foot  
per fiber pair Foot

CONFIDENTIAL  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

|                                                                                |  |                                                                                        |  |                                                                         |
|--------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------|
| C:\123R24\LCATRC28\FACILITY                                                    |  | <b>LOOP COST ANALYSIS TOOL</b>                                                         |  | <b>Bellcore</b>                                                         |
| TABLE = SPAN INV<br>SHEET 1A / 4                                               |  | LOOP FACILITY INPUT<br>FIBER CABLE DATA - BY CABLE SHEATH DETAIL<br>FOR                |  | LCAT Ref: 1.0.4<br>Issued: 07/31/95                                     |
| COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO |  | INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 1 - BUSINESS PBX |  | STUDY YR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 28-Oct-96<br>TIME: 09:35 |

### FIBER OPTIC CABLE INVESTMENT REFERENCE TABLE

| Cable Sheath Sizes |             |          | Unit Investment per Cable Pair Foot, by Cable Type, by Cable Size |        |        |             |
|--------------------|-------------|----------|-------------------------------------------------------------------|--------|--------|-------------|
|                    |             | CAPACITY | INDEX                                                             | AERIAL | BURIED | UNDERGROUND |
| 4                  | Fiber Cable | 2 pr     |                                                                   | \$     | \$     | \$          |
| 6                  | Fiber Cable | 3 pr     |                                                                   | \$     | \$     | \$          |
| 12                 | Fiber Cable | 6 pr     |                                                                   | \$     | \$     | \$          |
| 18                 | Fiber Cable | 9 pr     |                                                                   | \$     | \$     | \$          |
| 24                 | Fiber Cable | 12 pr    |                                                                   | \$     | \$     | \$          |
| 36                 | Fiber Cable | 18 pr    |                                                                   | \$     | \$     | \$          |
| 48                 | Fiber Cable | 24 pr    |                                                                   | \$     | \$     | \$          |
| 60                 | Fiber Cable | 30 pr    |                                                                   | \$     | \$     | \$          |
| 72                 | Fiber Cable | 36 pr    |                                                                   | \$     | \$     | \$          |
| 84                 | Fiber Cable | 42 pr    |                                                                   | \$     | \$     | \$          |
| 96                 | Fiber Cable | 48 pr    |                                                                   | \$     | \$     | \$          |
| 144                | Fiber Cable | 72 pr    |                                                                   | \$     | \$     | \$          |
| 192                | Fiber Cable | 96 pr    |                                                                   | \$     | \$     | \$          |
| 216                | Fiber Cable | 108 pr   |                                                                   | \$     | \$     | \$          |

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO



C:\123R24\LCATRC28.FACILITY  
TABLE - SPAN\_INV  
SHEET 1 / 4

HELP SCREEN

**Belcore**  
LCAT Rel: 1.0.4  
Issued: 07/31/95

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*  
\*\*\*\*\* PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION \*\*\*\*\*  
**PROVIDED TO PUCO**

PRESS 'ENTER' TO RETURN TO THE MAIN MENU

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

C:\123R24\LCATR028\FACILITY

TABLE - SPAN\_INV  
SHEET 2 / 4

COMPANY: CINCINNATI BELL TEL.

CITY / AREA: CINCINNATI

STATE/PROV: OHIO

LOOP COST ANALYSIS TOOL

LOOP FACILITY INPUT

COPPER CABLE DATA

FOR

INVESTMENT YEAR: 1996

LOOP STUDY YEAR: 1996

SERVICE CLASS: BAND 1 - BUSINESS PBX

LCAT Rel: 1.04

Issued: 07/31/95

STUDY YR: 1996

TEST CASE: 1

LAST UPDATE: 28-Oct-96

TIME: 09:35

COPPER CABLE CHARACTERISTICS AND INVESTMENTS

Cable Gauge Mix:

GUAGE

The Proportion of

26 GA.

Copper Cable that is ....

24 GA.

22 GA.

FEEDER SEGMENT

DISTRIBUTION SEGMENT

0.1500

0.1500

0.8500

0.8500

0.0000

0.0000

Unit Investment per Cable Pair Foot

By Cable Type, By Cable Gauge:

Update Cable Sheath Prices

[Required with INDIVIDUAL Mode]

on the FULL SET Input SHEET ? ( Y / N )

N

If not, Update

Cable Type Mix, By Gauge:

The Proportion of

Copper Cable that is ....

26 GA.

24 GA.

22 GA.

AERIAL

BURIED

UNDGRND

AERIAL

BURIED

UNDGRND

AERIAL

BURIED

UNDGRND

0.1200

0.0000

0.8800

0.1200

0.0000

0.8800

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

0.5900

0.1600

0.2500

0.5900

0.1600

0.2500

0.0000

0.0000

0.0000

Average Unit Investment for Copper Cable Installed as ....

GUAGE

FEEDER SEGMENT

DISTRIBUTION SEGMENT

26 GA.

24 GA.

22 GA.

AERIAL

BURIED

UNDGRND

AERIAL

BURIED

UNDGRND

AERIAL

BURIED

UNDGRND

\$ 0.0121

\$ 0.0166

\$ 0.0109

\$ 0.0121

\$ 0.0166

\$ 0.0109

\$ 0.0000

\$ 0.0000

\$ 0.0000

\$ 0.0397

\$ 0.0657

\$ 0.0569

\$ 0.0397

\$ 0.0657

\$ 0.0569

\$ 0.0000

\$ 0.0000

\$ 0.0000

NOTE: If the DROP WIRE resource investment is average values, it may be backed out through input of the Drop Wire Unit Investment (Sheet 5) and the flagging of the Adjustment either there or on the ADJUST input file worksheet.

| C:\123R24\LCATR028\FACILITY                                                       |              | LOOP COST ANALYSIS TOOL                                                                |        |        |        |        |        | Bellcore                                                                |        |        |        |
|-----------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------------------|--------|--------|--------|--------|--------|-------------------------------------------------------------------------|--------|--------|--------|
| TABLE - SPAN INV<br>SHEET 2A / 4                                                  |              | LOOP FACILITY INPUT<br>COPPER CABLE DATA - BY CABLE SHEATH DETAIL<br>FOR               |        |        |        |        |        | LCAT Rpt: 1.0.4<br>Issued: 07/31/95                                     |        |        |        |
| COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO    |              | INVESTMENT YEAR: 1996<br>LOOP STUDY YEAR: 1996<br>SERVICE CLASS: BAND 1 - BUSINESS PBX |        |        |        |        |        | STUDY YR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 28-Oct-96<br>TIME: 09:35 |        |        |        |
| COPPER CABLE INVESTMENT REFERENCE TABLE                                           |              |                                                                                        |        |        |        |        |        |                                                                         |        |        |        |
| Unit Investment Per Cable Pair Foot. By Cable Gauge, By Cable Type, By Cable Size |              |                                                                                        |        |        |        |        |        |                                                                         |        |        |        |
| Cable Sheath Sizes                                                                | Capacity     | Gauge: =>                                                                              | 26 GA. |        |        | 24 GA. |        |                                                                         | 22 GA. |        |        |
|                                                                                   |              | INDEX                                                                                  | AERIAL | BURIED | UNDGRD | AERIAL | BURIED | UNDGRD                                                                  | AERIAL | BURIED | UNDGRD |
| 40                                                                                | Copper Cable | 20 pr                                                                                  | \$     |        |        |        |        |                                                                         |        |        |        |
| 50                                                                                | Copper Cable | 25 pr                                                                                  | \$     |        |        |        |        |                                                                         |        |        |        |
| 80                                                                                | Copper Cable | 40 pr                                                                                  | \$     |        |        |        |        |                                                                         |        |        |        |
| 100                                                                               | Copper Cable | 50 pr                                                                                  | \$     |        |        |        |        |                                                                         |        |        |        |
| 140                                                                               | Copper Cable | 70 pr                                                                                  | \$     |        |        |        |        |                                                                         |        |        |        |
| 200                                                                               | Copper Cable | 100 pr                                                                                 | \$     |        |        |        |        |                                                                         |        |        |        |
| 400                                                                               | Copper Cable | 200 pr                                                                                 | \$     |        |        |        |        |                                                                         |        |        |        |
| 600                                                                               | Copper Cable | 300 pr                                                                                 | \$     |        |        |        |        |                                                                         |        |        |        |
| 800                                                                               | Copper Cable | 400 pr                                                                                 | \$     |        |        |        |        |                                                                         |        |        |        |
| 1200                                                                              | Copper Cable | 600 pr                                                                                 | \$     |        |        |        |        |                                                                         |        |        |        |
| 1800                                                                              | Copper Cable | 900 pr                                                                                 | \$     |        |        |        |        |                                                                         |        |        |        |
| 2400                                                                              | Copper Cable | 1200 pr                                                                                | \$     |        |        |        |        |                                                                         |        |        |        |
| 3000                                                                              | Copper Cable | 1500 pr                                                                                | \$     |        |        |        |        |                                                                         |        |        |        |
| 3600                                                                              | Copper Cable | 1800 pr                                                                                | \$     |        |        |        |        |                                                                         |        |        |        |
| 4200                                                                              | Copper Cable | 2100 pr                                                                                | \$     |        |        |        |        |                                                                         |        |        |        |
| 4800                                                                              | Copper Cable | 2400 pr                                                                                | \$     |        |        |        |        |                                                                         |        |        |        |
| 5400                                                                              | Copper Cable | 2700 pr                                                                                | \$     |        |        |        |        |                                                                         |        |        |        |
| 6000                                                                              | Copper Cable | 3000 pr                                                                                | \$     |        |        |        |        |                                                                         |        |        |        |
| 7200                                                                              | Copper Cable | 3600 pr                                                                                | \$     |        |        |        |        |                                                                         |        |        |        |
| 8400                                                                              | Copper Cable | 4200 pr                                                                                | \$     |        |        |        |        |                                                                         |        |        |        |

CONFIDENTIAL  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATR028\FACILITY  
TABLE - SPAN\_INV  
SHEET 2 / 4

HELP SCREEN

**Bellcore**  
LCAT Rel : 1.0.4  
Issued : 07/31/96

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*

\*\*\*\*\*PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION\*\*\*\*\*

PRESS 'ENTER' TO RETURN TO THE MAIN MENU

**CONFIDENTIAL**  
**NOTICE--MUST BE GIVEN**  
**PRIOR TO RELEASE TO PUBLIC**  
**PROVIDED TO PUCO**

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

**LCAT**

## INPUT SCREEN

**Page -1-**

**CONFIDENTIAL**  
**NOTICE MUST BE GIVEN**  
**PRIOR TO RELEASE TO PUBLIC**  
**PROVIDED TO PUCO**

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

CONFIDENTIAL  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

C:\123R24\LCATR028\FACILITY.WK1

## LOOP COST ANALYSIS TOOL

Bellcore<sup>®</sup>SPAN INV - WORKSHEET  
Sheet 1/3COPPER CABLE DISTRIBUTIONS MELDING  
WORKSHEET ALCAT Ver: 1.0.4  
Issue Date: 07/31/95  
STUDY YR: 1996  
TEST CASE: 1996  
DATE: 1  
LAST UPDATE: 28-Oct-96  
TIME: 09:35COMPANY: CINCINNATI BELL TEL  
CITY / AREA: CINCINNATI  
STATE / PROV: OHIOFACILITY TYPE: COPPER CABLE  
DESIGN TYPE: DISTRIBUTION SEGMENT

SERVICE CLASS: BAND 1 - BUSINESS PBX

| DATA<br>DESC.         | (DISTRIBUTION<br>TO CODE)<br>CABLE TYPE V.X<br>(p...dst) | PER FOOT<br>INVESTMENT<br>(pfi..ds) | CABLE<br>GAUGE MIX<br>(copper..dst) | ADJUSTED<br>CABLE TYPE | ADJUSTED<br>PFI |
|-----------------------|----------------------------------------------------------|-------------------------------------|-------------------------------------|------------------------|-----------------|
| CHARACTERISTICS FOR : | [A]                                                      | [B]                                 | [C]                                 | [D=A*C]                | [E=B*C]         |
| AERIAL @ 26 GA.       | 0.590000                                                 | \$ 0.039700                         | 0.1500                              | 0.088500               | \$ 0.005955     |
| BURIED @ 26 GA.       | 0.160000                                                 | \$ 0.065700                         | 0.1500                              | 0.024000               | \$ 0.008855     |
| UNDGRND @ 26 GA.      | 0.250000                                                 | \$ 0.056900                         | 0.1500                              | 0.037500               | \$ 0.008535     |
| AERIAL @ 24 GA.       | 0.590000                                                 | \$ 0.039700                         | 0.8500                              | 0.501500               | \$ 0.033745     |
| BURIED @ 24 GA.       | 0.160000                                                 | \$ 0.065700                         | 0.8500                              | 0.136000               | \$ 0.055845     |
| UNDGRND @ 24 GA.      | 0.250000                                                 | \$ 0.056900                         | 0.8500                              | 0.212500               | \$ 0.048365     |
| AERIAL @ 22 GA.       | 0.000000                                                 | \$ 0.000000                         | 0.0000                              | 0.000000               | \$ 0.000000     |
| BURIED @ 22 GA.       | 0.000000                                                 | \$ 0.000000                         | 0.0000                              | 0.000000               | \$ 0.000000     |
| UNDGRND @ 22 GA.      | 0.000000                                                 | \$ 0.000000                         | 0.0000                              | 0.000000               | \$ 0.000000     |

--- TABLE 2 ---

--- TABLE 4 ---

Check = 1.00 --- TABLE 6 ---

| DATA<br>DESC.         | CABLE TYPE MIX<br>RANGE<br>NAME | MELDED<br>GAUGES |
|-----------------------|---------------------------------|------------------|
| CHARACTERISTICS FOR : | [F=sum(D*Type)]                 |                  |
| AERIAL                | 0.590000                        |                  |
| BURIED                | 0.160000                        |                  |
| UNDERGRND             | 0.250000                        |                  |

Check = 1.000000

| PAIR / FOOT INVESTMENT<br>RANGE<br>NAME | MELDED<br>GAUGES |
|-----------------------------------------|------------------|
| [G=sum(E*Type)]                         |                  |
| \$ 0.039700                             |                  |
| \$ 0.065700                             |                  |
| \$ 0.056900                             |                  |

PAIR / FOOT INVESTMENT  
RENORMALIZED  
AERIAL BURIED

NOTICE MUST BE GIVEN  
PRIOR TO RELEASE OF THIS  
PROVIDED TO FCC

## FOOTNOTES

LCAT

INPUT SCREEN

Page -4-

**CONFIDENTIAL**  
NOTICE MUST BE GIVEN  
PRIOR TO RELEASE TO PUBLIC  
PROVIDED TO PUCO

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**



| C:\1123R24\LCATR028\FACILITY.WK1                                                                                                                                                                              |                                                          | <b>LOOP COST ANALYSIS TOOL</b>                                       |                                         |                        | <i>Bellcore</i> (P)                                                                   |                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------|------------------------|---------------------------------------------------------------------------------------|------------------|
| SPAN INV - WORKSHEET<br>Sheet 2 / 3                                                                                                                                                                           |                                                          | COPPER CABLE DISTRIBUTIONS MELDING<br>WORKSHEET A                    |                                         |                        | LCAT Ver: 1.0.4<br>Issue Date: 07/31/95                                               |                  |
| COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE / PROV: OHIO                                                                                                                                |                                                          | FOR<br>FACILITY TYPE: COPPER CABLE<br>DESIGN TYPE: SUBFEEDER SEGMENT |                                         |                        | STUDY YR: 1998<br>TEST CASE: 1998<br>DATE: 1<br>LAST UPDATE: 28-Oct-96<br>TIME: 09:35 |                  |
|                                                                                                                                                                                                               |                                                          | SERVICE CLASS: BAND 1 - BUSINESS PBX                                 |                                         |                        |                                                                                       |                  |
| <b>MELDED CABLE INVESTMENT PER PAIR FOOT</b>                                                                                                                                                                  |                                                          |                                                                      |                                         |                        |                                                                                       |                  |
| DATA<br>DESC.                                                                                                                                                                                                 | (DISTRIBUTION<br>TO CODE)<br>CABLE TYPE MIX<br>(p...fdr) | PER FOOT<br>INVESTMENT<br>(pfr...fdr)                                | CABLE<br>GAUGE MIX<br>(copper...fdr)    | ADJUSTED<br>CABLE TYPE | ADJUSTED<br>PFI                                                                       |                  |
| CHARACTERISTICS FOR:                                                                                                                                                                                          | [A]                                                      | [B]                                                                  | [C]                                     | [D=A*C]                | [E=B*C]                                                                               |                  |
| AERIAL @ 26 GA.                                                                                                                                                                                               | 0.120000                                                 | \$ 0.012100                                                          | 0.1500                                  | 0.018000               | \$ 0.001815                                                                           |                  |
| BURIED @ 26 GA.                                                                                                                                                                                               | 0.000000                                                 | \$ 0.016600                                                          | 0.1500                                  | 0.000000               | \$ 0.002490                                                                           |                  |
| UNDGRND @ 26 GA.                                                                                                                                                                                              | 0.880000                                                 | \$ 0.010900                                                          | 0.1500                                  | 0.132000               | \$ 0.001835                                                                           |                  |
| AERIAL @ 24 GA.                                                                                                                                                                                               | 0.120000                                                 | \$ 0.012100                                                          | 0.8500                                  | 0.102000               | \$ 0.010285                                                                           |                  |
| BURIED @ 24 GA.                                                                                                                                                                                               | 0.000000                                                 | \$ 0.016600                                                          | 0.8500                                  | 0.000000               | \$ 0.014110                                                                           |                  |
| UNDGRND @ 24 GA.                                                                                                                                                                                              | 0.880000                                                 | \$ 0.010900                                                          | 0.8500                                  | 0.748000               | \$ 0.009265                                                                           |                  |
| AERIAL @ 22 GA.                                                                                                                                                                                               | 0.000000                                                 | \$ 0.000000                                                          | 0.0000                                  | 0.000000               | \$ 0.000000                                                                           |                  |
| BURIED @ 22 GA.                                                                                                                                                                                               | 0.000000                                                 | \$ 0.000000                                                          | 0.0000                                  | 0.000000               | \$ 0.000000                                                                           |                  |
| UNDGRND @ 22 GA.                                                                                                                                                                                              | 0.000000                                                 | \$ 0.000000                                                          | 0.0000                                  | 0.000000               | \$ 0.000000                                                                           |                  |
|                                                                                                                                                                                                               |                                                          |                                                                      |                                         | Check = 1.00           |                                                                                       |                  |
| --- TABLE 2 ---                                                                                                                                                                                               |                                                          | --- TABLE 4 ---                                                      |                                         | --- TABLE 6 ---        |                                                                                       |                  |
| DATA<br>DESC.                                                                                                                                                                                                 | CABLE TYPE MIX<br>RANGE<br>NAME                          | MELDED<br>GAUGES                                                     | PAIR / FOOT INVESTMENT<br>RANGE<br>NAME | MELDED<br>GAUGES       | PAIR / FOOT INVESTMENT<br>RENORMALIZED<br>AERIAL/BURIED                               | MELDED<br>GAUGES |
| CHARACTERISTICS FOR:                                                                                                                                                                                          | [F=sum(D*Type)]                                          |                                                                      | [G=sum(E*Type)]                         |                        | [H=F*Type / sum(F*Type)]                                                              |                  |
| AERIAL                                                                                                                                                                                                        | 0.120000                                                 |                                                                      | \$ 0.012100                             |                        | \$ 0.000000                                                                           |                  |
| BURIED                                                                                                                                                                                                        | 0.000000                                                 |                                                                      | \$ 0.016600                             |                        | \$ 0.000000                                                                           |                  |
| UNDERGRND                                                                                                                                                                                                     | 0.880000                                                 |                                                                      | \$ 0.010900                             |                        | \$ 0.000000                                                                           |                  |
| Check = 1.000000                                                                                                                                                                                              |                                                          |                                                                      |                                         | Check = 1.000000       |                                                                                       |                  |
| <div style="display: flex; justify-content: space-between;"> <span>FOOTNOTES</span> <span> <b>CONFIDENTIAL</b><br/> OFFICE MUST BE GIVEN<br/> PRIOR TO RELEASE TO PUBLIC<br/> PROVIDED TO PUCO </span> </div> |                                                          |                                                                      |                                         |                        |                                                                                       |                  |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| CA123R24\LCATR028\FACILITY                                                                                                                                                                                                                                                                                                                                                                                           |                                                                       | <b>LOOP COST ANALYSIS TOOL</b>                                                                                                                        |  | Bellcore (R)                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------|
| TABLE - SPAN_INV<br>SHEET 3 / 4<br><br>COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: CINCINNATI<br>STATE/PCV: OHIO                                                                                                                                                                                                                                                                                                   |                                                                       | LOOP FACILITY INPUT<br>COPPER PAIRGAIN CABLE DATA<br>FOR<br>INVESTMENT YEAR : 1996<br>LOOP STUDY YEAR : 1996<br>SERVICE CLASS : BAND 1 - BUSINESS PBX |  | LCAT Rel: 1.0.4<br>Issued: 07/31/95<br>STUDY YR: 1996<br>TEST CASE: 1<br>LAST UPDATE: 28-Oct-95<br>TIME: 09:35 |
| <b>COPPER CABLE CHARACTERISTICS FOR CDLC SYSTEMS</b>                                                                                                                                                                                                                                                                                                                                                                 |                                                                       |                                                                                                                                                       |  |                                                                                                                |
| <b>FOR DLC SYSTEMS ON COPPER LOOPS</b>                                                                                                                                                                                                                                                                                                                                                                               |                                                                       |                                                                                                                                                       |  |                                                                                                                |
| Cable Gauge :                                                                                                                                                                                                                                                                                                                                                                                                        | Please Enter the NUMBER for 22 GA., 24 GA., or 26 GA. :               |                                                                                                                                                       |  | 24                                                                                                             |
| Pair Gain Factor :                                                                                                                                                                                                                                                                                                                                                                                                   | (When Investment Utilities or Band Width Mix are NOT Used)            |                                                                                                                                                       |  |                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                      | The Average Number Of Voice Grade Circuit Equivalents Per System :    |                                                                                                                                                       |  | 96                                                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                      | The Average Number Of Transmission Pairs Plus Protection Per System : |                                                                                                                                                       |  | 10                                                                                                             |
|                                                                                                                                                                                                                                                                                                                                                                                                                      | The Average Number Of Support (Power, Alarm, Etc) Pairs Per System :  |                                                                                                                                                       |  | 2                                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                      | Ratio Of Required Pairs To Derived Pairs [ Pair Gain Factor ] :       |                                                                                                                                                       |  | 0.1250                                                                                                         |
| <b>NOTE:</b><br>① The value represents the extent to which copper pairs are gained. For example, A 96 Channel System uses 4 Transmit Pairs, 4 Receive Pairs, 2 Protection Pairs and 2 Support Pairs (Test and Order Wire). Then the Derived Pair would be the Sum of the Pairs divided by the Working Channels Or $(10 + 2) / 96 = 0.125$ . When applied to segment length it becomes the Effective Length per Pair. |                                                                       |                                                                                                                                                       |  |                                                                                                                |

CONFIDENTIAL  
 NOT TO BE GIVEN  
 PRIOR TO SALE OF PUBLIC  
 PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

C:\123R24\LCATR028\FACILITY  
TABLE - SPAN\_INV  
SHEET 3 / 4

HELP SCREEN

**Belcore** (R)  
LCAT Rel : 07/31/95  
Issued : 07/31/95

|          |                                                                                                                                                                      |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| pggauge  | In CSA rules, a single gauge is preferred for CDLC                                                                                                                   |
| vgcheqv  | Each CDLC has a voice grade equivalent, usually referred to as a ____ Channel System. Domestic systems are basic 96 Channel, whereas, International are 120 Channel  |
| xmsnpr   | CDLC uses a Transmit/Receive Pair for each direction (unidirectional), therefore, the basic structure is four sets of two pairs plus one protection set ( 10 pairs ) |
| suptpr   | CDLC is customarily supported by a power pair and an alarm pair ( 2 pair)                                                                                            |
| pgfactor | Where : pgfactor = ( # of xmsnpr + # of suptpr ) / vgcheqv                                                                                                           |

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS--REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*

\*\*\*\*\*PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION\*\*\*\*\*

PRESS "ENTER" TO RETURN TO THE MAIN MENU

**CONFIDENTIAL**  
**NOTICE MUST BE GIVEN**  
**BEFORE RELEASE TO PUBLIC**  
**PROVIDED TO PUCO**

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| CA123R24\LCATR028\FACILITY.WK1                                                                    |                                                                   | <b>LOOP COST ANALYSIS TOOL</b>                                                                                    |                                                              | Belcore <sup>®</sup>                                                                  |
|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------------|
| SPAN INV - WORKSHEET<br>Sheet 3 / 3                                                               |                                                                   | COPPER CABLE DISTRIBUTIONS WELDING<br>WORKSHEET B                                                                 |                                                              | LCAT Ref: 1.0.4<br>Issue Date: 07/31/95                                               |
| COMPANY: CINCINNATI BELL TEL.<br>CITY / AREA: OHIO<br>STATE / PROV: CINCINNATI                    |                                                                   | FOR<br>FACILITY TYPE: COPPER CABLE for DLC<br>DESIGN TYPE: FEEDER SEGMENT<br>SERVICE CLASS: BAND 1 - BUSINESS PBX |                                                              | STUDY YR: 1996<br>TEST CASE: 1996<br>DATE: 1<br>LAST UPDATE: 28-Oct-96<br>TIME: 09:35 |
| INVESTMENT DEVELOPMENT FOR:                                                                       |                                                                   | MELDED CABLE INVESTMENT PER PAIR FOOT<br>LINE REPEATER EQUIPMENT                                                  |                                                              |                                                                                       |
| DESCRIPTION                                                                                       | REPEATER<br>SPACING<br>[A]                                        | UNIT<br>REPEATER<br>INVESTMENT<br>[B]                                                                             | REPEATER<br>INVEST.<br>PER FOOT<br>[C=B/A]                   |                                                                                       |
| LINE REPEATER AT 26 GA.                                                                           | 3500                                                              | \$ 0                                                                                                              | \$ 0.000000                                                  |                                                                                       |
| LINE REPEATER AT 24 GA.                                                                           | 4500                                                              | \$ 0                                                                                                              | \$ 0.000000                                                  |                                                                                       |
| LINE REPEATER AT 22 GA.                                                                           | 5500                                                              | \$ 0                                                                                                              | \$ 0.000000                                                  |                                                                                       |
| TABLE 4 DEVELOPMENT FOR:                                                                          |                                                                   | COPPER CABLE UNIT INVESTMENT                                                                                      |                                                              | FOR DLC Gauge : 24.00<br>- TABLE 4 -                                                  |
| ADJUSTED<br>PAIR / FOOT INVESTMENT<br>DESCRIPTION                                                 | PAIR / FOOT INVESTMENT<br>BY CODE<br>BY GAUGE<br>2 * (PF1cgg) [D] | REPEATER<br>BY GAUGE<br>[E=C]                                                                                     | WORKING CHANNEL<br>INVESTMENT / FOOT<br>(ADLCPF1cgg) [F=D+E] | WORKING CHANNEL<br>INVESTMENT / FOOT<br>(ADLCPF1c) [G=D+E]                            |
| AERIAL @ 26 GA.                                                                                   | \$ 0.024200                                                       | \$ 0.000000                                                                                                       | \$ 0.024200                                                  | \$ 0.024200                                                                           |
| BURIED @ 26 GA.                                                                                   | \$ 0.033200                                                       | \$ 0.000000                                                                                                       | \$ 0.033200                                                  | \$ 0.033200                                                                           |
| UNDGRND @ 26 GA.                                                                                  | \$ 0.021800                                                       | \$ 0.000000                                                                                                       | \$ 0.021800                                                  | \$ 0.021800                                                                           |
| AERIAL @ 24 GA.                                                                                   | \$ 0.024200                                                       | \$ 0.000000                                                                                                       | \$ 0.024200                                                  | \$ 0.024200                                                                           |
| BURIED @ 24 GA.                                                                                   | \$ 0.033200                                                       | \$ 0.000000                                                                                                       | \$ 0.033200                                                  | \$ 0.033200                                                                           |
| UNDGRND @ 24 GA.                                                                                  | \$ 0.021800                                                       | \$ 0.000000                                                                                                       | \$ 0.021800                                                  | \$ 0.021800                                                                           |
| AERIAL @ 22 GA.                                                                                   | \$ 0.000000                                                       | \$ 0.000000                                                                                                       | \$ 0.000000                                                  | \$ 0.000000                                                                           |
| BURIED @ 22 GA.                                                                                   | \$ 0.000000                                                       | \$ 0.000000                                                                                                       | \$ 0.000000                                                  | \$ 0.000000                                                                           |
| UNDGRND @ 22 GA.                                                                                  | \$ 0.000000                                                       | \$ 0.000000                                                                                                       | \$ 0.000000                                                  | \$ 0.000000                                                                           |
| NOTES :<br>① The Facility Table Investments are for each Cable Pair Foot, DLC Systems are 4 wire. |                                                                   |                                                                                                                   |                                                              |                                                                                       |

CONFIDENTIAL  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

| C:\123R24\LCATR025\FACILITY                                                      |                                                                                                                                                                                                                                                                                 | <b>LOOP COST ANALYSIS TOOL</b>                       |         | Bellcore (R)                          |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|---------|---------------------------------------|--------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------|----------------------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------|-------------------|---------|---------------------|----------|------------------------|---------|
| TABLE - SPAN_INV<br>SHEET 4 4                                                    |                                                                                                                                                                                                                                                                                 | LOOP FACILITY INPUT<br>SERVICE ACCESS SEGMENT<br>FOR |         | LCAT Rel: 1.0.4<br>Issued: 07/31/95   |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| CCM COMPANY: CINCINNATI BELL TEL.                                                |                                                                                                                                                                                                                                                                                 | INVESTMENT YEAR: 1996                                |         | STUDY YR: 1996                        |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| CITY / AREA: CINCINNATI                                                          |                                                                                                                                                                                                                                                                                 | LOOP STUDY YEAR: 1996                                |         | TEST CASE: 1                          |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| STATE/PROV: OHIO                                                                 |                                                                                                                                                                                                                                                                                 | SERVICE CLASS: BAND 1 - BUSINESS PBX                 |         | LAST UPDATE: 28-Oct-96<br>TIME: 09:35 |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| <b><u>SERVICE ACCESS CHARACTERISTICS AND INVESTMENTS</u></b>                     |                                                                                                                                                                                                                                                                                 |                                                      |         |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| <b>AVERAGE UNIT MIX :</b>                                                        |                                                                                                                                                                                                                                                                                 | <b>AVERAGE UNIT INVESTMENT :</b>                     |         |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| <b>The Average Number of Terminals in the Service Access Segment of a Loop -</b> |                                                                                                                                                                                                                                                                                 |                                                      |         |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| Proportion of Loops that use.....                                                | <table border="1" style="width: 100%;"> <tr> <td>Aerial</td> <td>0.00</td> </tr> <tr> <td>Buried</td> <td>0.00</td> </tr> </table>                                                                                                                                              | Aerial                                               | 0.00    | Buried                                | 0.00   | Per Unit Installation..... | <table border="1" style="width: 100%;"> <tr> <td>Aerial Termination</td> <td>0</td> </tr> <tr> <td>Buried Termination</td> <td>0</td> </tr> </table> | Aerial Termination     | 0      | Buried Termination                                       | 0 |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| Aerial                                                                           | 0.00                                                                                                                                                                                                                                                                            |                                                      |         |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| Buried                                                                           | 0.00                                                                                                                                                                                                                                                                            |                                                      |         |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| Aerial Termination                                                               | 0                                                                                                                                                                                                                                                                               |                                                      |         |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| Buried Termination                                                               | 0                                                                                                                                                                                                                                                                               |                                                      |         |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| <b>The Average Drop Wire &amp; Building Entrance Cable Installation -</b>        |                                                                                                                                                                                                                                                                                 |                                                      |         |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| Proportion of Loops that use..                                                   | <table border="1" style="width: 100%;"> <tr> <td>Aerial Wire Drops</td> <td>0.0000</td> </tr> <tr> <td>Buried Wire Drops</td> <td>0.0000</td> </tr> <tr> <td>Bldg Entrance Cable</td> <td>1.0000</td> </tr> <tr> <td>Aerial Coax/Wire Drops</td> <td>0.0000</td> </tr> </table> | Aerial Wire Drops                                    | 0.0000  | Buried Wire Drops                     | 0.0000 | Bldg Entrance Cable        | 1.0000                                                                                                                                               | Aerial Coax/Wire Drops | 0.0000 | Adjust Cable Pair Foot Invest. for DW Investment ? (Y/N) | N | <table border="1" style="width: 100%;"> <tr> <td>Aerial Wire Drops</td> <td>\$ 0.00</td> </tr> <tr> <td>Buried Wire Drops</td> <td>\$ 0.00</td> </tr> <tr> <td>Bldg Entrance Cable</td> <td>\$ 75.00</td> </tr> <tr> <td>Aerial Coax/Wire Drops</td> <td>\$ 0.00</td> </tr> </table> | Aerial Wire Drops | \$ 0.00 | Buried Wire Drops | \$ 0.00 | Bldg Entrance Cable | \$ 75.00 | Aerial Coax/Wire Drops | \$ 0.00 |
| Aerial Wire Drops                                                                | 0.0000                                                                                                                                                                                                                                                                          |                                                      |         |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| Buried Wire Drops                                                                | 0.0000                                                                                                                                                                                                                                                                          |                                                      |         |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| Bldg Entrance Cable                                                              | 1.0000                                                                                                                                                                                                                                                                          |                                                      |         |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| Aerial Coax/Wire Drops                                                           | 0.0000                                                                                                                                                                                                                                                                          |                                                      |         |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| Aerial Wire Drops                                                                | \$ 0.00                                                                                                                                                                                                                                                                         |                                                      |         |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| Buried Wire Drops                                                                | \$ 0.00                                                                                                                                                                                                                                                                         |                                                      |         |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| Bldg Entrance Cable                                                              | \$ 75.00                                                                                                                                                                                                                                                                        |                                                      |         |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| Aerial Coax/Wire Drops                                                           | \$ 0.00                                                                                                                                                                                                                                                                         |                                                      |         |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| <b>The Average Intrabuilding Cable Installation -</b>                            |                                                                                                                                                                                                                                                                                 |                                                      |         |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |
| Proportion of Installations with Intrabuilding Cable                             | 0.0000                                                                                                                                                                                                                                                                          | Per Instn for a Intrabuilding Network Cable Pair     | \$ 0.00 |                                       |        |                            |                                                                                                                                                      |                        |        |                                                          |   |                                                                                                                                                                                                                                                                                      |                   |         |                   |         |                     |          |                        |         |

CONFIDENTIAL  
 NOTICE MUST BE GIVEN  
 PRIOR TO RELEASE TO PUBLIC  
 PROVIDED TO PUCO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

#\LCATR028\FACILITY  
SPAN\_INV  
/4

HELP SCREEN

**Bellcore**®  
LCAT Rel : 1.0.4  
Issued : 07/31/95

terna These terminals may include the Serving Area Interface Cross Box, Drop Wire Block, and/or the Network  
termo interface Block summary per circuit pair installation investment.

adropinv These facility investments may also include Drop Wire Block and/or Network Interface summary per circuit  
bdropinv pair installation investment.

bec  
coaxinv

ibc This facility investment should include ALL the internal cross-connects and terminations for this type of  
installation as a circuit pair installation investment.

\*\*\*\*\* THE INPUT DATA NAMES IN RED CROSS-REFERENCE TO THEIR DATA CATALOG NAMES \*\*\*\*\*  
\*\*\*\*\*PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION\*\*\*\*\*  
PRESS 'ENTER' TO RETURN TO THE MAIN MENU

**CONFIDENTIAL**  
**NOTICE MUST BE GIVEN**  
**BEFORE RELEASE TO PUBLIC**  
**PROVIDED TO PUCO**

**This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.**

C:\123R24\LCATR028\FACTORS

## LOOP COST ANALYSIS TOOL

Bellcore

TABLE - FACTORS  
SHEET 1 / 1INVESTMENT RELATED FACTOR TABLES  
FOR

ANNUALIZATION FACTORS

INVESTMENT YEAR : 1996

STUDY YEAR : 1996

LCAT Rel : 1.0.4

Issued : 3/31/95

STUDY YR : 1996

TEST CASE : 1

LAST UPDATE : 17-Jan-97

TIME : 15:22

COMPANY : CINCINNATI BELL TEL.  
CITY / AREA : CINCINNATI  
STATE / PROV : OHIO

SERVICE CLASS: BAND 1 - BUSINESS PBX

plant list

LAND

BUILDING

BLDG ENTRANCE CABLE

INTRABLDG CABLE

AERIAL CABLE (COPPER)

BURIED CABLE (COPPER)

UNDERGROUND (CU) CA.

CO EQPT - LOW CAP TERM

CO EQPT - LOW CAP CHAN

CO EQPT - HI CAP TERM

CO EQPT - HI CAP CHAN

CO EQPT - ANALOG SW

CO EQPT - DIGITAL SW

AERIAL CABLE (FIBER)

BURIED CABLE (FIBER)

UNDERGROUND (FO) CA.

CONNECTORS

MISC. COM EQP &amp; PWR

POLE LINE

CONDUIT

PRICE  
INDEXANNUAL  
COST

|        |        |
|--------|--------|
| 1.0000 | 0.2322 |
| 1.0000 | 0.2937 |
| 1.0000 | 0.3922 |
| 1.0000 | 0.3922 |
| 1.0000 | 0.4033 |
| 1.0000 | 0.3467 |
| 1.0000 | 0.3663 |
| 1.0000 | 0.3881 |
| 1.0000 | 0.3881 |
| 1.0000 | 0.3881 |
| 1.0000 | 0.3881 |
| 1.0000 | 0.0000 |
| 1.0000 | 0.0000 |
| 1.0000 | 0.2983 |
| 1.0000 | 0.2724 |
| 1.0000 | 0.2688 |
| 1.0000 | 0.3881 |
| 1.0000 | 0.3881 |
| 1.0000 | 0.3881 |
| 1.0000 | 0.2521 |

CONFIDENTIAL  
NOTICE MUST BE RELEASED TO PUBLIC  
PRIOR TO RELEASE  
PROVIDED TO

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.

| C:\123R24\LCATR028\INVEST                                                                           |  | LOOP COST ANALYSIS TOOL                                      |          |          | Bellcore (R)                        |          |
|-----------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------|----------|----------|-------------------------------------|----------|
| TABLE - EQUIP_INV<br>Sheet 1 of 1                                                                   |  | DATA REFERENCE TABLE<br>EQUIPMENT & OTHER INVESTMENTS<br>FOR |          |          | LCAT Rel: 1.0.4<br>Issued: 07/31/95 |          |
| COMPANY: CINCINNATI BELL TEL                                                                        |  | INVESTMENT YEAR: 1996                                        |          |          | STUDY YR: 1996                      |          |
| CITY / AREA: CINCINNATI                                                                             |  | SERVICE LEVEL: NARBAND                                       |          |          | TEST CASE: 1                        |          |
| STATE / PROV: OHIO                                                                                  |  | SERVICE CLASS: BAND 1 - BUSINESS PBX                         |          |          | LAST UPDATE: 28-Oct-96<br>09:38     |          |
| EQUIPMENT INVESTMENT (Including Engineer, Furnish, & Install Costs)                                 |  |                                                              |          |          |                                     |          |
|                                                                                                     |  | CENTRAL OFFICE                                               |          |          | REMOTE LOCATION                     |          |
|                                                                                                     |  | LINE                                                         | CHANNEL  | TERMINAL | CHANNEL                             | TERMINAL |
| <b>AIR DRYERS INVESTMENT:</b>                                                                       |  |                                                              |          |          |                                     |          |
| For an AERIAL Installed Cable Pair                                                                  |  |                                                              |          | \$ 0.00  |                                     |          |
| For a BURIED Installed Cable Pair                                                                   |  |                                                              |          | \$ 0.00  |                                     |          |
| For an UNDERGROUND Installed Cable Pair                                                             |  |                                                              |          | \$ 0.00  |                                     |          |
| <b>CENTRAL OFFICE TERMINATION INVESTMENT:</b>                                                       |  |                                                              |          |          |                                     |          |
| For each cable pair associated with twisted pair copper cable                                       |  |                                                              |          | \$ 79.08 |                                     |          |
| For each per cable pair associated with digital loop carrier technology                             |  |                                                              |          | \$ 0.00  |                                     |          |
| <b>COPPER LOOP CARRIER UNIT CIRCUIT INVESTMENT by SERVICE LEVEL:</b>                                |  |                                                              |          |          |                                     |          |
| For each line repeater for one copper digroup (not svc lev)                                         |  |                                                              | \$ 0.00  |          |                                     |          |
| For an Office Repeater Bay for a T1 Line                                                            |  |                                                              | \$ 0.00  |          |                                     |          |
| For a Universal DLC Equipment Arrangement                                                           |  |                                                              | \$ 0.00  | \$ 87.51 | \$ 85.28                            | \$ 51.57 |
| For an Integrated DLC Equipment Arrangement                                                         |  |                                                              | \$ 0.00  | \$ 0.00  | \$ 85.28                            | \$ 51.57 |
| <b>FIBER OPTIC MULTIPLEXERS UNIT CIRCUIT INVESTMENT by SERVICE LEVEL:</b>                           |  |                                                              |          |          |                                     |          |
| 1. For a Hub with nonFiber Extensions or nonHub Arrangement                                         |  |                                                              | \$ 19.62 | \$ 2.35  | \$ 18.49                            | \$ 2.35  |
| 2. For a Hub with Fiber Extensions or a Fiber Ended Arrangement                                     |  |                                                              | \$ 0.00  | \$ 0.00  | \$ 0.00                             | \$ 0.00  |
| 3. For a Fiber HUB and Fiber Remote Terminal Arrangement                                            |  |                                                              |          |          | \$ 0.00                             | \$ 0.00  |
| 4. For Fiber Ring Hub Arrangements (Extensions)                                                     |  |                                                              |          |          | \$ 0.00                             | \$ 0.00  |
| <b>CEV HOUSING per CIRCUIT by SERVICE LEVEL:</b>                                                    |  |                                                              |          |          |                                     |          |
| For CEV's used as fiber hubs for FO Multiplexer equipment                                           |  |                                                              |          |          |                                     | \$ 0.00  |
| For CEV's used as remote terminals for CDLC equipment                                               |  |                                                              |          |          |                                     | \$ 8.33  |
| [Unit Investment denotes average weighted unit E.F.I Investment at DS0, DS1, or DS3 service equiv.] |  |                                                              |          |          |                                     |          |

This Page Contains Competitively Sensitive and/or Trade Secret Information of Bell Communications Research, Inc.