Confidential Release

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Part III Exhibit #3 & part of Exhibit #4

MCI Exhibits
1-48

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LOOP COST ANALYSIS TOOL

Bellcore

TABLE - SPAN_INV
SHEET 1A / 4

LOOP FACILITY INPUT
FIBER CABLE DATA - BY CABLE SHEATH DETAIL
FOR

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 1 - BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 28-Oct-96
TIME : 15:21

FIBER OPTIC CABLE INVESTMENT REFERENCE TABLE

Cable Sheath Sizes		CAPACITY INDEX	Unit Investment per Cable Pair Foot, by Cable Type, by Cable Size 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	$	$	$

C:\123R24\LCATR034\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 *****

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C:\123R24\LCATR034\FACILITY

LOOP COST ANALYSIS TOOL

Bellcore (R)

TABLE – SPAN_INV
SHEET 2 / 4

LOOP FACILITY INPUT
COPPER CABLE DATA
FOR

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 1 – BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 28–Oct–96
TIME : 15:21

COPPER CABLE CHARACTERISTICS AND INVESTMENTS

Cable Gauge Mix :

GUAGE	FEEDER SEGMENT	DISTRIBUTION SEGMENT
26 GA.	0.1500	0.1500
24 GA.	0.8500	0.8500
22 GA.	0.0000	0.0000

The Proportion of Copper Cable that is ....

Cable Type Mix, By Gauge :

		FEEDER SEGMENT	DISTRIBUTION SEGMENT
26 GA.	AERIAL	0.1200	0.5900
	BURIED	0.0000	0.1600
	UNDGRND	0.8800	0.2500
24 GA.	AERIAL	0.1200	0.5900
	BURIED	0.0000	0.1600
	UNDGRND	0.8800	0.2500
22 GA.	AERIAL	0.0000	0.0000
	BURIED	0.0000	0.0000
	UNDGRND	0.0000	0.0000

Unit Investment per Cable Pair Foot By Cable Type, By Cable Gauge :

Update Cable Sheath Prices on the FULL SET Input SHEET ? (Y / N) [Required with INDIVIDUAL Mode] N

If not, Update

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

GUAGE		FEEDER SEGMENT	DISTRIBUTION SEGMENT
26 GA.	AERIAL	$ 0.0121	$ 0.0397
	BURIED	$ 0.0186	$ 0.0657
	UNDGRND	$ 0.0109	$ 0.0569
24 GA.	AERIAL	$ 0.0121	$ 0.0397
	BURIED	$ 0.0186	$ 0.0657
	UNDGRND	$ 0.0109	$ 0.0569
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 averavalues, 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.

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LOOP COST ANALYSIS TOOL

Bellcore

TABLE – SPAN_INV
SHEET 2A / 4

LOOP FACILITY INPUT
COPPER CABLE DATA – BY CABLE SHEATH DETAIL
FOR

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 1 – BUSINESS ISDN

LCAT Rel: 1.0.4
Issued: 07/31/96
STUDY YR: 1996
TEST CASE: 1
LAST UPDATE: 28–Oct–96
TIME: 15:21

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 : => INDEX	26 GA. AERIAL	26 GA. BURIED	26 GA. UNDGRD	24 GA. AERIAL	24 GA. BURIED	24 GA. UNDGRD	22 GA. AERIAL	22 GA. BURIED	22 GA. 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	$									

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TABLE – SPAN_INV
SHEET 2 / 4

HELP SCREEN

Bellcore™
LCAT Rel : 1.0.4
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***** THE INPUT DATA NAMES IN RED CROSS–REFERENCE TO THEIR DATA CATALOG NAMES *****

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SPAN INV – WORKSHEET
Sheet 1 / 3

COPPER CABLE DISTRIBUTIONS MELDING
WORKSHEET A
FOR
FACILITY TYPE: COPPER CABLE
DESIGN TYPE : DISTRIBUTION SEGMENT
SERVICE CLASS : BAND 1 – BUSINESS ISDN

LCAT Rel : 1.0.4
Issue Date: 07/31/95
STUDY YR : 1996
TEST CASE : 1996
DATE : 1
LAST UPDATE : 28–Oct–96
TIME : 15:21

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

MELDED CABLE INVESTMENT PER PAIR FOOT

DATA DESC.	(DISTRIBUTION TO CODE) CABLE TYPE MIX (p...dst)	PER FOOT INVESTMENT (pfi..ds)	CABLE GAUGE MIX (copper..dst)	ADJUSTED CABLE TYPE	ADJUSTED 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	$ 0.009855
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	$ 0.048365
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
				Check = 1.00	

--- TABLE 2 ---

DATA DESC.	CABLE TYPE MIX RANGE NAME	MELDED GAUGES
CHARACTERISTICS FOR :		[F=sum(D_{TYPE})]
AERIAL		0.590000
BURIED		0.160000
UNDERGRND		0.250000
	Check =	1.000000

--- TABLE 4 ---

DATA DESC.	PAIR / FOOT INVESTMENT RANGE NAME	MELDED GAUGES
CHARACTERISTICS FOR :		[G=sum(E_{TYPE})]
AERIAL		$ 0.039700
BURIED		$ 0.065700
UNDERGRND		$ 0.056900

--- TABLE 6 ---

DATA DESC.	PAIR / FOOT INVESTMENT RENORMALIZED AERIAL / BURIED	MELDED GAUGES
CHARACTERISTICS FOR :		[H=F_{TYPE} / sum(F_{TYPE})]
AERIAL		$ 0.786667
BURIED		$ 0.213333
	Check =	1.000000

FOOTNOTES

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SPAN INV – WORKSHEET
Sheet 2 / 3

COPPER CABLE DISTRIBUTIONS MELDING
WORKSHEET A
FOR
FACILITY TYPE: COPPER CABLE
DESIGN TYPE: SUBFEEDER SEGMENT
SERVICE CLASS: BAND 1 – BUSINESS ISDN

LCAT Rel: 1.0.4
Issue Date: 07/31/95
STUDY YR: 1996
TEST CASE: 1996
DATE: 1
LAST UPDATE: 28–Oct–96
TIME: 15:21

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

MELDED CABLE INVESTMENT PER PAIR FOOT

DATA DESC.	(DISTRIBUTION TO CODE) CABLE TYPE MIX (p...fdr)	PER FOOT INVESTMENT (pfi..fd)	CABLE GAUGE MIX (copper..fdr)	ADJUSTED CABLE TYPE	ADJUSTED 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	$ 0.001635
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 ---

DATA DESC.	CABLE TYPE MIX RANGE NAME	CABLE TYPE MIX MELDED GAUGES
CHARACTERISTICS FOR:		[F=sum(D_{TYPE})]
AERIAL		0.120000
BURIED		0.000000
UNDERGRND		0.880000
	Check =	1.000000

--- TABLE 4 ---

DATA DESC.	PAIR / FOOT INVESTMENT RANGE NAME	PAIR / FOOT INVESTMENT MELDED GAUGES
CHARACTERISTICS FOR:		[G=sum(E_{TYPE})]
AERIAL		$ 0.012100
BURIED		$ 0.016600
UNDERGRND		$ 0.010900
	Check =	$ 0.000000

--- TABLE 6 ---

DATA DESC.	PAIR / FOOT INVESTMENT RENORMALIZED AERIAL & BURIED	PAIR / FOOT INVESTMENT MELDED GAUGES
CHARACTERISTICS FOR:		[H=F_{TYPE} / sum(F_{TYPE})]
AERIAL		1.000000
BURIED		0.000000
UNDERGRND		
	Check =	1.000000

FOOTNOTES

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LOOP COST ANALYSIS TOOL

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TABLE - SPAN_INV
SHEET 3 / 4

LOOP FACILITY INPUT
COPPER PAIRGAIN CABLE DATA
FOR

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

INVESTMENT YEAR : 1996
LOOP STUDY YEAR : 1996
SERVICE CLASS : BAND 1 - BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 28-Oct-96
TIME : 15:21

COPPER CABLE CHARACTERISTICS FOR CDLC SYSTEMS

FOR DLC SYSTEMS ON COPPER LOOPS

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

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NOTE:

● 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.

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TABLE – SPAN_INV
SHEET 3 / 4

HELP SCREEN

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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 xmmsnpr + # of suptpr) / vgcheqv

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

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SPAN INV - WORKSHEET
Sheet 3 / 3

COPPER CABLE DISTRIBUTIONS MELDING
WORKSHEET B
FOR
FACILITY TYPE: COPPER CABLE for DLC
DESIGN TYPE : FEEDER SEGMENT
SERVICE CLASS : BAND 1 - BUSINESS ISDN

LCAT Rel : 1.0.4
Issue Date: 07/31/95
STUDY YR : 1996
TEST CASE : 1996
DATE : 1
LAST UPDATE : 28-Oct-96
TIME : 15:21

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

MELDED CABLE INVESTMENT PER PAIR FOOT

INVESTMENT DEVELOPMENT FOR: LINE REPEATER EQUIPMENT

DESCRIPTION	REPEATER SPACING [A]	UNIT REPEATER INVESTMENT [B]	REPEATER INVEST. PER FOOT [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

DESCRIPTION	ADJUSTED PAIR / FOOT INVESTMENT BY CODE BY GAUGE 2 * (PFI$_{ggg}$)[1] [D]	PAIR / FOOT INVESTMENT REPEATER BY GAUGE (RPTR$_{gg}$) [E=C]	WORKING CHANNEL INVESTMENT / FOOT (AOI$_{CPFIggg}$) [F=D+E]	- TABLE 4 - WORKING CHANNEL INVESTMENT / FOOT (AOI$_{CPFIc}$)
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	
BURIED @ 24 GA.	$ 0.033200	$ 0.000000	$ 0.033200	
UNDGRND @ 24 GA.	$ 0.021800	$ 0.000000	$ 0.021800	
AERIAL @ 22 GA.	$ 0.000000	$ 0.000000	$ 0.000000	
BURIED @ 22 GA.	$ 0.000000	$ 0.000000	$ 0.000000	
UNDGRND @ 22 GA.	$ 0.000000	$ 0.000000	$ 0.000000	

NOTES :
① The Facility Table Investments are for each Cable Pair Foot, DLC Systems are 4 wire.

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LOOP COST ANALYSIS TOOL

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TABLE – SPAN_INV
SHEET 4 / 4

LOOP FACILITY INPUT
SERVICE ACCESS SEGMENT
FOR

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 1 – BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 28–Oct–96
TIME : 15:21

SERVICE ACCESS CHARACTERISTICS AND INVESTMENTS

AVERAGE UNIT MIX :

AVERAGE UNIT INVESTMENT :

The Average Number of Terminals in the Service Access Segment of a Loop –

Proportion of Loops that use.....			Per Unit Installation.....		
	Aerial	0.00		Aerial Termination	0.
	Buried	0.00		Buried Termination	0.

The Average Drop Wire & Building Entrance Cable Installation –

Proportion of Loops that use..			Adjust Cable Pair Foot Invest. for DW Investment ? (Y/N)		N
	Aerial Wire Drops	0.0000	Per Unit Installation.....	Aerial Wire Drops	$ 0.00
	Buried Wire Drops	0.0000		Buried Wire Drops	$ 0.00
	Bldg Entrance Cable	1.0000		Bldg Entrance Cable	$ 75.00
	Aerial Coax/Wire Drops	0.0000		Aerial Coax/Wire Drops	$ 0.00

The Average Intrabuilding Cable Installation –

Proportion of Installations with Intrabuilding Cable	0.0000	Per Instln for a Intrabuilding Network Cable Pair	$ 0.00

\\LCATR034\FACILITY
SPAN_INV
'4

HELP SCREEN

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

terma termb	These terminals may include the Serving Area Interface Cross Box, Drop Wire Block, and/or the Network interface Block summary per circuit pair installation investment.
adropinv bdropinv bec coaxinv	These facility investments may also include Drop Wire Block and/or Network Interface summary per circuit pair installation inveatment.
ibc	This facility investment should include ALL the internal cross–connects and terminations for this type of installation as a circuit pair istallation investment.

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TABLE – FACTORS
SHEET 1 / 1

INVESTMENT 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 ISDN

plant list	PRICE INDEX	ANNUAL 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	0.3456
AERIAL CABLE (FIBER)	1.0000	0.2959
BURIED CABLE (FIBER)	1.0000	0.2724
UNDERGROUND (FO) CA.	1.0000	0.2869
CONNECTORS	1.0000	0.3881
MISC. COM EQP & PWR	1.0000	0.3881
POLE LINE	1.0000	0.3807
CONDUIT	1.0000	0.2521

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TABLE – EQUIP_INV
Sheet 1 of 1

DATA REFERENCE TABLE
EQUIPMENT & OTHER INVESTMENTS
FOR
INVESTMENT YEAR: 1996
SERVICE LEVEL: NARBAND
SERVICE CLASS: BAND 1 – BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE: 28–Oct–96 15:23

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

EQUIPMENT INVESTMENT (Including Engineer, Furnish, & Install Costs)

	CENTRAL OFFICE			REMOTE LOCATION	
	LINE	CHANNEL	TERMINAL	CHANNEL	TERMINAL
AIR DRYERS INVESTMENT:					
For an AERIAL Installed Cable Pair			$ 0.00		
For a BURIED Installed Cable Pair			$ 0.00		
For an UNDERGROUND Installed Cable Pair			$ 0.00		
CENTRAL OFFICE TERMINATION INVESTMENT :					
For each cable pair associated with twisted pair copper cable			$ 0.00		
For each per cable pair associated with digital loop carrier technolog			$ 0.00		
COPPER LOOP CARRIER UNIT CIRCUIT INVESTMENT by SERVICE LEVEL :					
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	$ 361.90	$ 39.17	$ 348.82	$ 141.70
For an Integrated DLC Equipment Arrangement	$ 0.00	$ 0.00	$ 0.00	$ 348.82	$ 141.70
FIBER OPTIC MULTIPLEXERS UNIT CIRCUIT INVESTMENT by SERVICE LEVEL :					
1. For a Hub with nonFiber Extensions or nonHub Arrangement		$ 49.18	$ 3.88	$ 53.79	$ 2.01
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
CEV HOUSING per CIRCUIT by SERVICE LEVEL :					
For CEV's used as fiber hubs for FO Muliplexer 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,or DS3 service equiv.]

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TABLE – EQUIP_INV HELP INFORMATION 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 <ENTER> KEY TO RETURN TO THE MAIN MENU

C:\123R24\LCATR034\LOADING

LOOP COST ANALYSIS TOOL

Bellcore (R)

TABLE – ADDNL_INV
Sheet 1 of 2

INVESTMENT RELATED FACTOR TABLES
ADJUSTMENT AND LOADING FACTORS
FOR

LCAT Rel : 1.0.4
Issued : 3/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 28–Oct–96
TIME : 15:24

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 1 – BUSINESS ISDN

PLANT UTILIZATION FACTORS:

Land	1.0000
Building	1.0000
ALL Copper Cables, or	
Copper Feeder Cable	0.6000
Copper Distribution Cable	0.3500
Copper Entrance Cable	1.0000
Copper Building Cable	0.3500
Copper Building Terminal	0.3500
ALL Fiber Cables, or	
Fiber Feeder Cable	0.3300
Fiber Distribution Cable	
Fiber Entrance Cable	
Fiber Building Cable	
Fiber Building Terminal	
Poles	1.0000
Conduit	1.0000

ALL Non–Traffic Sensitive Equipment	1.0000
ALL Digital Loop Carrier Equip., or	0.7000
CO DLC Channel Unit	0.7000
REM DLC Channel Unit	0.7000
CO DLC Multiplex System	0.7000
REM DLC Multiplex System	0.7000
CO Digital Signal Crossconnect Bay	0.7000
REM Digital Signal Crossconnect Bay	0.7000
ALL Fiber Optic Multiplex Equip., or	1.0000
CO Fiber Optic Channel Unit	1.0000
REM Fiber Optic Channel Unit	1.0000
CO Fiber Optic Multiplex System	1.0000
REM Fiber Optic Multiplex System	1.0000
CO Lightguide Terminating Equipment	1.0000
REM Lightguide Terminating Equipment	1.0000
Remote Housing: CEV	1.0000
PC Hut	1.0000
Comm. Sys. Cab.	1.0000

TABLE – ADDNL_INV
Sheet 1 of 2

HELP SCREEN

Bellcore (R)
LCAT Rel : 1.0.4
Issued : 3/31/95

NOTE :

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

❷ 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.

❸ THE DESIGNATION "CO" DENOTES CENTRAL OFFICE LOCATED.
THE DESIGNATION "REM" DENOTES REMOTE SITE LOCATED.

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

PRESS < Enter > KEY TO RETURN TO THE MAIN MENU

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LOOP COST ANALYSIS TOOL

Bellcore®

TABLE – ADDNL_INV
Sheet 2 of 2

INVESTMENT RELATED FACTOR TABLES
ADJUSTMENT AND LOADING FACTORS
FOR
INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 1 – BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 3/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 28–Oct–96
TIME : 15:24

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

	SEGMENT ..... DISTRIBUTION ❷	FEEDER use *DEFAULT*
POLE LOADINGS:		
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		
CONDUIT LOADINGS:		
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		

DROP WIRE (DW) INVESTMENT ADJUSTMENT:

The Cable PFI is being Adjusted for DW ?	NO
Aerial Cable	
Buried Cable	
Underground Cable	

	use *DEFAULT* for: CENT. OFC. ❶	REMOTE SITE ❷
LAND LOADING FACTORS:		
Other or *ALL* ❶	0.0056	0.0056
Digital Loop Carrier	0.0056	0.0056
Fiber Optic Mux	0.0056	0.0056
BUILDING LOADING FACTORS:		
Other or *ALL* ❶	0.1316	0.1316
Digital Loop Carrier	0.1316	0.1316
Fiber Optic Mux	0.1316	0.1316
MISC. EQUIPMENT & POWER LOADING FACTORS:		
Other or *ALL* ❶	0.1127	0.1127
Digital Loop Carrier	0.1127	0.1127
Fiber Optic Mux	0.1127	0.1127

TABLE – ADDNL_INV HELP SCREEN **Bellcore** (R)
Sheet 2 of 2 LCAT Rel : 1.0.4
Issued : 3/31/95

Copper Cable Pole Investment Factor	cplff	__dst	__fdr	Based on aerial copper cable investment relationship to pole
Copper Cable Pole Unit Investment	cplfi	__dst	__fdr	Per unit length of aerial copper cable effective pair feet placed.
Fiber Cable Pole Investment Factor	fplff	__dst	__fdr	Based on aerial fiber cable investment relationship to pole
Fiber Cable Pole Unit Investment	fplfi	__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

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

❷ 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

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LOOP COST ANALYSIS TOOL

Belcore

INPUT – PLANT_CHAR.
Sheet 1 / 5

LOOP FACILITY INPUT
LOOP LENGTH CRITERIA AND NETWORK CHARACTERISTICS
FOR

LCAT Rel : 1.0.4
Issued : 07/31/95

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

INVESTMENT YEAR : 1996
LOOP STUDY YEAR : 1996
SERVICE CLASS : BAND 1 – BUSINESS ISDN

STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 28–Oct–96
TIME : 15:27

FLAT RATE BASIS DATA WITHOUT COST BANDS
FOR A NETWORK CIRCUIT CASE STUDY

LOOP TOPOLOGY

Loop FEEDER Network Configuration Is (S)tar Or (R)ing
Average Number Of Hubs In Each Ring
Loop DISTRIBUTION Network *Configuration Is* (S)tar or (B)us

ACTION SEGMENT	
PRIMARY	STAR
PRIMARY	NA
DISTRIBUTION	STAR

SPAN LENGTHS

❶	Average Distance From the Central Office to the Service Access Point	TOTAL LOOP	21320.0
❷	Average Distance From the Serving Area Interface to the Service Access Point	DISTRIBUTION	2119.0
❸	Average Distance From the Remote Terminal to the Serving Area Interface	SUB–PRIMARY	300.0
❹	Average Distance From the Central Office to the Fiber Hub or S.A.I.	PRIMARY	18901.0
❺	Average Distance From the Fiber Hub to the Remote Terminal	PRIMARY–EXTENSION	

LOOP LENGTH AT EACH COST BAND

BAND 1	
BAND 2	
BAND 3	
BAND 4	
BAND 5	
LAST	21320.0

DISTRIBUTION OF COST BANDS IN THE NETWORK

BAND 1	
BAND 2	
BAND 3	
BAND 4	
BAND 5	
LAST	1.0000

1.0000 Hint

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PROVIDED TO PUCO

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LOOP COST ANALYSIS TOOL

Bellcore (R)

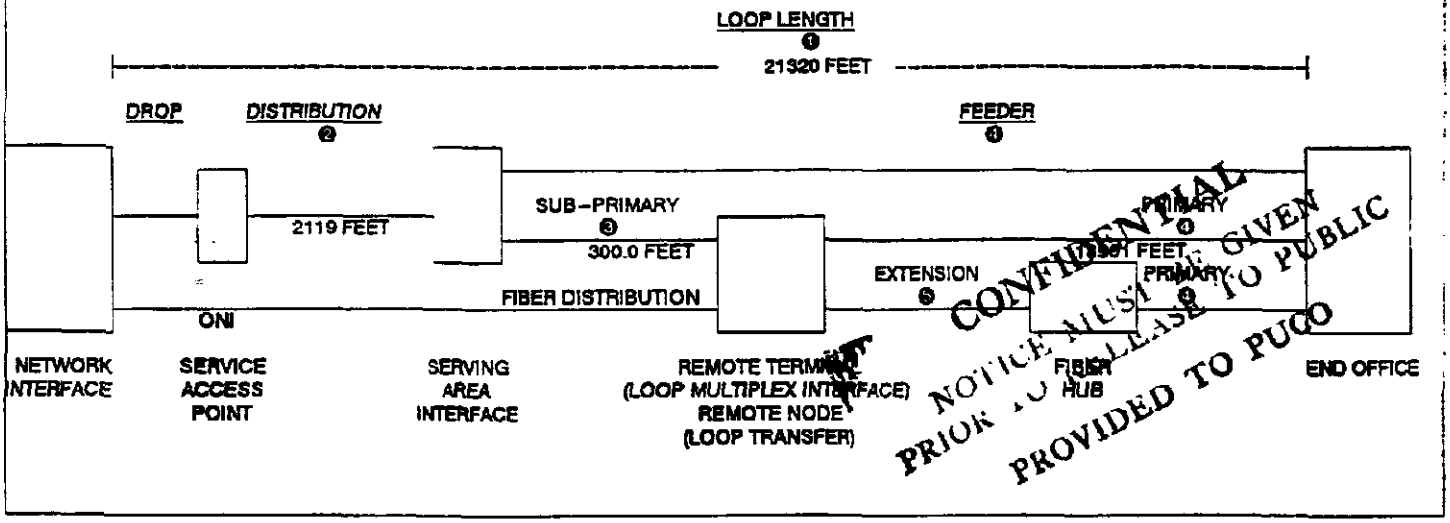
INPUT – PLANT_CHAR.
Sheet 1 / 1

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

LOOP FACILITY INPUT
LOOP LENGTH CRITERIA AND NETWORK CHARACTERISTICS
FOR
INVESTMENT YEAR : 1996
LOOP STUDY YEAR : 1996
SERVICE CLASS : BAND 1 – BUSINESS ISDN

LCAT Rel :1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 28–Oct–96
TIME : 15:27

FLAT RATE BASIS DATA WITHOUT COST BANDS
FOR A NETWORK CIRCUIT CASE STUDY



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INPUT – PLANT_CHAR. LOOP FACILITY INPUT LCAT Rel :1.0.4
Sheet 1 of 2 HELP SCREEN Issued : 07/31/95

AVERAGE NETWORK STUDY –

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.

INDIVIDUAL CIRCUIT STUDY – 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.

DATA SAMPLE NETWORK STUDY –

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.

BANDWIDTH AVERAGING –

This feature of LCAT permits study level weighting of fiber multiplexer cost within transport. The range of multiplexers goes from 1.5 Mbps through 1.7 Gbps and designates the mix of usage developing a more precise unit investment to the feeder calculations.

***** 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

C:\123R24\LCATR034\SPAN
INPUT – PLANT CHAR.
Sheet 2 of 2

LOOP COST ANALYSIS TOOL

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

HELP SCREEN

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 delimeters 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-DATALOG NAMES.
*****PLEASE REFER TO THE USER MANUAL FOR SPECIFIC INFORMATION*****

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LOOP COST ANALYSIS TOOL

Belcore (R)

INPUT – PLANT_CHAR.
Sheet 2a / 5

LOOP FACILITY INPUT
FIBER OPTIC CABLE SPAN CHARACTERISTICS FOR THE FEEDER LAYER
FOR

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 28–Oct–96
TIME : 15:27

COMPANY: 0
CITY / AREA: 0
STATE / PROV: 0

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 1 – BUSINESS ISDN

NETWORK CIRCUIT LAYOUT STUDIES

WORKSHEET A

		CAPACITY		AERIAL FIBER CUMULATIVE FEEDER LENGTH	AERIAL FIBER EFFECTIVE LENGTH BY PAIR FOOT	BURIED FIBER CUMULATIVE FEEDER LENGTH	BURIED FIBER EFFECTIVE LENGTH BY PAIR FOOT	UNDERGROUND FIBER CUMULATIVE FEEDER LENGTH	UNDERGROUND FIBER EFFECTIVE LENGTH BY PAIR FOOT
		[C]	idx	[D_A]	[E_A]	[D_B]	[E_B]	[D_U]	[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:	
AERIAL FIBER SUBTOTAL	0
BURIED FIBER SUBTOTAL	0
UNDGRD FIBER SUBTOTAL	0
FIBER SUBTOTAL	0

EFFECTIVE CABLE LENGTHS BY CABLE PAIR FOOT:	
AERIAL FIBER SUBTOTAL	0.0
BURIED FIBER SUBTOTAL	0.0
UNDGRD FIBER SUBTOTAL	0.0
FIBER SUBTOTAL	0.0

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PLANT CHAR – WORKSHEET 2B
Sheet 2b / 5

LOOP FACILITY INPUT
FIBER OPTIC CABLE SPAN INVESTMENT FOR THE FEEDER LAYER
FOR
INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996

LCAT Rel : 1.0.4
Issued : 07/31/96

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

STUDY YR : 1996
TEST CASE : 1
LAST UPDATE: 28–Oct–96
TIME : 15:27

SERVICE CLASS: BAND 1 – BUSINESS ISDN

NETWORK CIRCUIT LAYOUT STUDIES WORKSHEET B

EFFECTIVE CHANNEL LENGTH BY CABLE PAIR FOOT [A] = [E]WKSH A / [F]WKSH C
CUMULATIVE INVESTMENT BY CABLE CHANNEL FOOT [B] = [A] * [C] + UNIT INV FACILITY WKSH B

For these sizes ...		CAPACITY [C]	idx	AERIAL FIBER [A]	AERIAL FIBER [B]	BURIED FIBER [A]	BURIED FIBER [B]	UNDERGROUND FIBER [A]	UNDERGROUND FIBER [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 forum		$ 0.00 forum		$ 0.00 forum

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INPUT - PLANT_CHAR.
Sheet 3a / 5

LOOP FACILITY INPUT
COPPER CABLE SPAN CHARACTERISTICS FOR THE FEEDER LAYER
FOR

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 1 - BUSINESS

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE: 28-Oct-96
TIME : 15:27

NETWORK CIRCUIT LAYOUT STUDIES

WORKSHEET A
CUMULATIVE LENGTHS BY CABLE PAIR FOOT

CABLE SHEATH SIZES	CAPACITY 10X	26 GA. AERIAL	26 GA. BURIED	26 GA. UNDGRD	24 GA. AERIAL	24 GA. BURIED	24 GA. UNDGRD	22 GA. AERIAL	22 GA. BURIED	22 GA. 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										0.0 fdracprf
5400 COPPER CABLE	2700 pr										0.0 fdrbcprf
6000 COPPER CABLE	3000 pr										0.0 fdrucprf
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	0.0 fdrcprf

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LOOP COST ANALYSIS TOOL

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PLANT CHAR – WORKSHEET 3B
Sheet 3b / 5

LOOP FACILITY INPUT
COPPER CABLE SPAN INVESTMENT FOR THE FEEDER LAYER
FOR
INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996

LCAT Rel :1.0.4
Issued : 07/31/95

STUDY YR : 1996
TEST CASE : 1
LAST UPDATE: 28–Oct–96
TIME : 15:27

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

SERVICE CLASS:BAND 1 – BUSINESS

NETWORK CIRCUIT LAYOUT STUDIES

WORKSHEET B

CUMMULATIVE INVESTMENTS BY CABLE PAIR FOOT

CABLE SHEATH SIZES	CAPACITY	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	fdractfi
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	farbatfi
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	farucfri
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	

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LOOP COST ANALYSIS TOOL

Bellcore

INPUT – PLANT_CHAR.
Sheet 4a / 5

LOOP 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 : 15:27

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

INVESTMENT 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 IDX	26 GA. AERIAL	26 GA. BURIED	26 GA. UNDGRD	24 GA. AERIAL	24 GA. BURIED	24 GA. UNDGRD	22 GA. AERIAL	22 GA. BURIED	22 GA. 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										0.0
5400 COPPER CABLE	2700 pr										dldcprf
6000 COPPER CABLE	3000 pr										0.0
7200 COPPER CABLE	3600 pr										dldbcprf
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	0.0	dlducprf
	TOTALS			0.0			0.0			0.0	0.0

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LOOP COST ANALYSIS TOOL

Bellcore

PLANT_CHAR – WORKSHEET 4B
Sheet 4b / 5

LOOP FACILITY INPUT
COPPER CABLE SPAN INVESTMENT FOR THE DISTRIBUTION LAYER
FOR
INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996

LCAT Rel :1.0.4
Issued : 07/31/95

STUDY YR : 1996
TEST CASE : 1
LAST UPDATE: 28–Oct–96
TIME : 15:27

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

SERVICE CLASS:BAND 1 – BUSINESS

NETWORK CIRCUIT LAYOUT STUDIES

WORKSHEET B

CUMMULATIVE INVESTMENTS BY CABLE PAIR FOOT

CABLE SHEATH SIZES	CAPACITY (dx)		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 GABLE	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	distrcfi
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	distbctfi
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	distdcfi
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	

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LOOP COST ANALYSIS TOOL

Bellcore®

INPUT – PLANT_CHAR.
Sheet 5 / 5

LOOP FACILITY INPUT
DIGITAL LOOP CARRIER CABLE PAIR EQUIVALENTS AND MIX
FOR

LCAT Rel : 1.0.4
Issued : 07/31/95

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

INVESTMENT YEAR : 1996
LOOP STUDY YEAR : 1996
SERVICE CLASS : BAND 1 – BUSINESS ISDN

STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 28–Oct–96
TIME : 1527

FIBER BANDWIDTH
TRANSMISSION FLOW IS : [X] UNIDIRECTIONAL
[ ] BIDIRECTIONAL

LEVEL OF SERVICE : NARBAND

BITRATE INDEX	1	2	3	4	5	6	7			WEIGHTED
FIBER BANDWIDTH	45 Mbps	90 Mbps	155 Mbps	180 Mbps	0	0	0	SERVICE	PROTECTION	EQUIVALENT
MUX DS3 MULTIPLIER	1	2	3	4	0	0	0	LEVEL		CHANNELS
VOICE GRADE CHANNELS	672	1344	2016	2688	0	0	0	MULTIPLE [SLM]	n : 1 [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

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 1 OVER PROT ___ [E]}

PLANT CHAR. – WORKSHEET DS
Sheet 1 / 1

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

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 28–Oct–96
TIME : 15:27

WORKSHEET DS

DIGITAL SIGNAL TABLE (digsig_tbl)

	SELECT	MODE	HIERARCY	BNDWDT	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			VT1.5	1.5 Mbps	1	0.04	24	UNDIR,FIBER
4			VT2	2 Mbps	1	0		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	60	
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	1	480	
15	X		DS3	45 Mbps	28	1	672	BIDIR,2WCU CA
16		STS1	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			T4M	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	466 Mbps		9	6048	UNDIR,FIBER
29			OC12	550 Mbps		12	7680	UNDIR,FIBER
30				585 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	5	6	7
	OFFSET							

PLANT_CHAR. – WORKSHEET F
Sheet 1 of 1

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

LOOP LENGTH DEVELOPMENT WORKSHEET
FOR
INVESTMENT YEAR : 1996
LOOP STUDY YEAR : 1996
SERVICE CLASS : BAND 1 – BUSINESS
WORKSHEET F

LCAT Rel : 1.0.4
Issued : 07/31/96
STUDY YR. : 1996
TEST CASE : 1
LAST UPDATE : 28–Oct–96
TIME : 15:27

[A] DISTANCE INCREMENTS : 0 / 4 MILE BETWEEN BANDS
[B] NUMBER OF BANDS : 0 TO BE CARRIED INTO THE STUDY

[R] ROUTE TO AIR RATIO : 1.539947 rtaratio
[K] UNIT MILE / FEET CONSTANT : 1320

BAND NUMBER [C]	TOTAL WORKING FEET [D=input]	TOTAL WORKING FEET [E=(B*D)]	TOTAL AIR FEET [F=A*C*K]	LOOP LENGTH @ MIDPOINT [G (see note)]	WORKING FEET @ MIDPOINT [H=G*R]
1		0		0	0
2		0		0	0
3		0		0	0
4		0		0	0
5		0		0	0

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

ERROR MESSAG 0

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C:\123R24\LCATR034\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 Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 28–Oct–96
TIME : 15:27

WORKSHEET SA

Sub Feeder Allocation Table

OFFSET

0	1	2	3	4	5	6	7	8	9	10

Sub Feeder Allocation Table — Section allocation

cur_prigth 21320

datdepl =	16000	NO COLOCATI dstopo = BUS				COLOCATED Fdstopo = BUS				
[B] distspa	2119	dstopo = STAF	dstopo = BUS			dstopo = STAF	dstopo = BUS			
nom_rang	cur–dissu	bfeedcr	feedes	subfeed	prifeeder	subfeedcr	nfeedes	subfeed	prifeeder	dif
[C]	[D=C–I	[E]	[F=D–E	[G]	[H=D–G]	[I]	[J=C–I	[K]	[L=C–K]	[M=A–C]
0	0	0	0	0	0	0	0	0	0	21320
500	0	0	0	0	0	500	0	500	0	20820
1000	0	0	0	0	0	1000	0	1000	0	20320
2000	0	0	0	0	0	2000	0	2000	0	19320
3000	881	881	0	881	0	3000	0	3000	0	18320
4000	1881	1881	0	1881	0	4000	0	4000	0	17320
5000	2881	2881	0	2881	0	5000	0	5000	0	16320
6000	3881	3881	0	3881	0	6000	0	6000	0	15320
7000	4881	4881	0	4881	0	7000	0	7000	0	14320
8000	5881	5881	0	5881	0	8000	0	8000	0	13320
9000	6881	6881	0	6881	0	9000	0	9000	0	12320
10000	7881	7881	0	7881	0	10000	0	10000	0	11320
11000	8881	8881	0	8881	0	11000	0	11000	0	10320
12000	9881	9881	0	9881	0	12000	0	12000	0	9320
13000	10881	10881	0	10881	0	13000	0	13000	0	8320
14000	11881	11881	0	11881	0	14000	0	14000	0	7320
15000	12881	12881	0	12881	0	15000	0	15000	0	6320
16000	13881	13881	0	13881	0	16000	0	16000	0	5320
17000	14881	14881	0	14881	0	17000	0	17000	0	4320
18000	15881	7940.5	7940.5	0	15881	9000	9000	0	18000	3320
19000	16881	8440.5	8440.5	0	16881	9500	9500	0	19000	2320
20000	17881	8940.5	8940.5	0	17881	10000	10000	0	20000	1320
80000	77881	15881	62000	1000	76881	15881	64119	1000	79000	–58680

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^{cst} Equals CUR_LPLGTH – NOM_RANGE difference

> DISTSPAN and < DLCDEPL, then CUR_SEGLGTH^{strgr} Equals CUR_LPLGTH – NOM_RANGE difference

= > DLCDEPL, then CUR_SEGLGTH^{prgr} 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.

OHIO ONLY
3 Geographic Areas
ISDN

10/10/96 Revised

		Residence			Business		
		Average F1 Length	Average F2 Length	Average Loop	Average F1 Length	Average F2 Length	Average Loop
		A	B	C	D	E	F
	Band 1						
1	0-18,000	8,298	1,390	9,688	7,007	971	7,977
2	# Of Entries	144			285		
3	18,001-INFINITY	17,880	2,925	20,805	19,201	2,119	21,320
4	# Of Entries	16			8		
5	Ratio						
6	0-18,000	0.8369			0.9378		
7	18,001-INFINITY	0.1631			0.0622		
		1.0000			1.0000		
	Band 2						
8	0-18,000	8,444	2,097	10,541	7,015	1,136	8,151
9	# Of Entries	95			107		
10	18,001-INFINITY	23,425	2,646	26,071	24,110	2,049	26,159
11	# Of Entries	44			57		
12	Ratio	0.6835			0.6524		
13	0-18,000	0.3165			0.3476		
14	18,001-INFINITY	1.0000			1.0000		
	Band 3						
15	0-18,000	4,845	1,981	6,825	4,512	1,096	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			30		
19	Ratio	0.4510			0.5775		
20	0-18,000	0.5490			0.4225		
21	18,001-INFINITY	1.0000			1.0000		

00-0507

OHIO ONLY
REVISED JAN 1997 VERSION
BAND 2
BUSINESS ISDN

INDEX

BAND 2

Business ISDN

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OUTPUT – REPORT D
SHEET 1 of 1

LOOP COST ANALYSIS TOOL

PROSPECTIVE INVESTMENT SUMMARY REPORT

Bellcore (R)
LCAT Rel : 1.0.4
Issued : 7/31/95

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

CIRCUIT DESIGN : TOTAL TECHNOLOGIES
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 8151 FEET

STUDY YR : 1996
TEST CASE : 1
RUN DATE : 23–Jan–97
TIME : 10:43

Loop Span Set Weighting : 1

UNIT WEIGHTED MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

PLANT ITEM DESCRIPTION	PLANT SEG. NAME EQPT CODE SEG.LGTH.	FEEDER PRIMARY	FEEDER EXTENSION	DISTRIBUTION SUB–	NETWORK INTERFACE		WEIGHTED TOTAL LOOP
SHARED 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	$ 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	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.0000
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	$ 1.36	$ 2.88	$ 0.00	$ 4.2400
BURIED CABLE (COPPER)	45C	$ 0.00	$ 0.00	$ 0.14	$ 2.07	$ 0.00	$ 2.2100
UNDERGROUND (CU) CA.	5C	$ 0.00	$ 0.00	$ 2.71	$ 0.29	$ 0.00	$ 3.0000
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	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.0000
POLE LINE	1C	$ 0.00	$ 0.00	$ 0.32	$ 0.69	$ 0.00	$ 1.0100
CONDUIT	4C	$ 0.00	$ 0.00	$ 0.95	$ 0.10	$ 0.00	$ 1.0600
SPAN SUMMARY		$ 0.00	$ 0.00	$ 5.49	$ 6.03	$ 2.45	$ 13.97
							$ 13.97

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OUTPUT – COST_REPORTS

Bellcore (R)
LCAT
Release: 1.0.4
Issued: 7/31/95

LOOP COST ANALYSIS TOOL

COST MODEL – INVESTMENT BY ACCOUNT REPORTS

STUDY NAME: **1996 BAND 2 (OHIO ONLY) BUSINESS ISDN 0 – 18000 FEET INTRASTATE**

CURRENT TEST PLAN :

CURRENT JOB IDENT. CINCINNATI

BASIS	NETWORK	TEST CASE	1	LAST SAVE
FR / DS	FLAT RATE	#BANDS	0	17-Jan-97
SVC LEVEL	NARBAND	#CKTS	1	17:00
CST METH	UN INCR	INV LEVEL	ANNCOST	TIME

....your report is ready for viewing

C:\123R24\LCATR035\RESULTS1
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

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

CIRCUIT DESIGN : 1 CDLC
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 8151 FEET

STUDY YR : 1996
TEST CASE : 1
RUN DATE : 23–Jan–97
TIME : 10:43

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

PLANT ITEM DESCRIPTION	PLANT NAME SEG. NAME EQPT CODE	FEEDER PRIMARY	FEEDER EXTENSION	DISTRIBUTION SUB–	NETWORK INTERFACE		TOTAL LOOP	WEIGHTED TOTAL LOOP
SHARED 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		$ 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	$ 0.00		$ 0.00	$ 0.00		$ 0.00	$ 0.00
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	$ 0.00		$ 1.36	$ 2.88		$ 4.24	$ 4.24
BURIED CABLE (COPPER)	45C	$ 0.00		$ 0.14	$ 2.07		$ 2.21	$ 2.21
UNDERGROUND (CU) CA.	5C	$ 0.00		$ 2.71	$ 0.29		$ 3.00	$ 3.00
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	$ 0.00		$ 0.00	$ 0.00		$ 0.00	$ 0.00
POLE LINE	1C	$ 0.00		$ 0.32	$ 0.69		$ 1.01	$ 1.01
CONDUIT	4C	$ 0.00		$ 0.96	$ 0.10		$ 1.06	$ 1.06
SPAN SUMMARY		$ 0.00	$ 0.00	$ 5.49	$ 6.03	$ 2.45	$ 13.97	$ 13.97
CIRCUIT DESIGN SUMMARY							$ 13.97	

C:\123R24\LCATR035\RESULTS1
OUTPUT – WORKSHEET D
SHEET 2 of 10

LOOP COST ANALYSIS TOOL

PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore®
LCAT Rel : 1.0.4
Issued : 7/31/95

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

CIRCUIT DESIGN : 2 CDLC
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 8151 FEET

STUDY YR : 1996
TEST CASE : 1
DATE : 23–Jan–97
TIME : 10:43

Circuit Design Mix : 0.0000 UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

PLANT ITEM DESCRIPTION	PLANT SEG. NAME / EQPT CODE	FEEDER PRIMARY	FEEDER EXTENSION	DISTRIBUTION SUB–	NETWORK INTERFACE	TOTAL LOOP	WEIGHTED TOTAL LOOP
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 – 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	

C:\123R24\LCATR035\RESULTS1
OUTPUT – WORKSHEET D
SHEET 3 of 10

LOOP COST ANALYSIS TOOL
PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore®
LCAT Rel : 1.0.4
Issued : 7/31/95

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

CIRCUIT DESIGN : MELDED CDLC
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 8151 FEET

STUDY YR : 1996
TEST CASE : 1
RUN DATE : 23–Jan–97
TIME : 10:43

Technology Type Mix : 0.0000

UNIT WEIGHTED MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

PLANT ITEM DESCRIPTION	PLANT SEG. NAME EQPT CODE	FEEDER PRIMARY	FEEDER EXTENSION	DISTRIBUTION SUB–	NETWORK INTERFACE		TOTAL LOOP	TECHNOLOGY WEIGHTED TOTAL LOOP
SHARED 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	$ 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	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 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	$ 1.36	$ 2.88	$ 0.00	$ 4.24	$ 0.0000
BURIED CABLE (COPPER)	45C	$ 0.00	$ 0.00	$ 0.14	$ 2.07	$ 0.00	$ 2.21	$ 0.0000
UNDERGROUND (CU) CA.	5C	$ 0.00	$ 0.00	$ 2.71	$ 0.29	$ 0.00	$ 3.00	$ 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	$ 0.32	$ 0.69	$ 0.00	$ 1.01	$ 0.0000
CONDUIT	4C	$ 0.00	$ 0.00	$ 0.96	$ 0.10	$ 0.00	$ 1.06	$ 0.0000
SPAN SUMMARY		$ 0.00	$ 0.00	$ 5.49	$ 6.03	$ 2.45	$ 13.97	$ 0.00
TECHNOLOGY DESIGN SUMMARY							$ 13.97	

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C:\123R24\LCATR035\RESULTS1
OUTPUT – WORKSHEET D
SHEET 4 of 10

LOOP COST ANALYSIS TOOL
PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore®
LCAT Rel : 1.0.4
Issued : 7/31/95

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

CIRCUIT DESIGN : 1 FOMUX
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 8151 FEET

STUDY YR : 1996
TEST CASE : 1
RUN DATE : 23–Jan–97
TIME : 10:43

Circuit Design Mix : 0.0000 — UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

PLANT ITEM DESCRIPTION	PLANT SEG. NAME EQPT CODE	FEEDER PRIMARY	FEEDER EXTENSION	FEEDER SUB–	DISTRIBUTION	NETWORK INTERFACE	TOTAL LOOP	WEIGHTED TOTAL LOOP
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 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	

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C:\123R24\LCATR035: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
CITY / AREA: CINCINNATI	LOOP SPAN DIVISION :	ALL LOOP SPANS	TEST CASE : 1
STATE / PROV : OHIO	SERVICE CLASS :	BAND 2 - BUSINESS ISDN	RUN DATE : 23-Jan-97
JOB IDENT. : CINCINNATI	TOTAL LOOP LENGTH :	8151 FEET	TIME : 10:43

Circuit Design Mix : 0.0000 — UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

PLANT ITEM DESCRIPTION	PLANT SEG. NAME EQPT CODE	FEEDER PRIMARY	FEEDER EXTENSION	FEEDER SUB-	DISTRIBUTION	NETWORK INTERFACE	TOTAL LOOP	WEIGHTED TOTAL LOOP
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 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	

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C:\123R24\LCATR035\RESULTS1
OUTPUT – WORKSHEET D
SHEET 7 of 10

LOOP COST ANALYSIS TOOL

PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore®
LCAT Rel : 1.0.4
Issued : 7/31/95

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

CIRCUIT DESIGN : 4 FOMUX
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 8151 FEET

STUDY YR : 1996
TEST CASE : 1
RUN DATE : 23–Jan–97
TIME : 10:43

Circuit Design Mix : 0.0000

UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

PLANT ITEM DESCRIPTION	PLANT SEG. NAME EQPT CODE	FEEDER PRIMARY	FEEDER EXTENSION	FEEDER SUB–	DISTRIBUTION	NETWORK INTERFACE	TOTAL LOOP	WEIGHTED TOTAL LOOP
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 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	

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C:\123R24\LCATR035\RESULTS1
OUTPUT – WORKSHEET D
SHEET 8 of 10

LOOP COST ANALYSIS TOOL

PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore

LCAT Rel : 1.0.4
Issued : 7/31/95

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

CIRCUIT DESIGN : 5 FOMUX
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 8151 FEET

STUDY YR : 1996
TEST CASE : 1
RUN DATE : 23–Jan–97
TIME : 10:49

Circuit Design Mix : 0.0000

UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

PLANT ITEM DESCRIPTION	PLANT NAME SEG. NAME EQPT CODE	FEEDER PRIMARY	FEEDER EXTENSION	FEEDER SUB–	DISTRIBUTION NETWORK INTERFACE		TOTAL LOOP	WEIGHTED TOTAL LOOP
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 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	

C:\123R24\LCATR035\RESULTS1
OUTPUT – WORKSHEET D
SHEET 9 of 10

LOOP COST ANALYSIS TOOL

PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore®
LCAT Rel : 1.0.4
Issued : 7/31/95

COMPANY: CINCINNATI BELL TEL
CITY / AREA: CINCINNATI
STATE / PROV : OHIO
JOB IDENT : CINCINNATI

CIRCUIT DESIGN : 6 FOMUX
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 8151 FEET

STUDY YR : 1996
TEST CASE : 1
RUN DATE : 23–Jan–97
TIME : 10:43

Circuit Design Mix : 0.0000 UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 6 BAND STUDY

PLANT ITEM DESCRIPTION	PLANT NAME SEG. NAME EQPT CODE	FEEDER PRIMARY	FEEDER EXTENSION	FEEDER SUB–	DISTRIBUTION	NETWORK INTERFACE	TOTAL LOOP	WEIGHTED TOTAL LOOP
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 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	

C:\123R24\LCATR035\RESULTS1
OUTPUT – WORKSHEET D
SHEET 10 of 10

LOOP COST ANALYSIS TOOL

PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore®
LCAT Rel : 1.0.4
Issued : 7/31/95

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

CIRCUIT DESIGN : MELDED FOMUX
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 8151 FEET

STUDY YR : 1996
TEST CASE : 1
RUN DATE : 23–Jan–97
TIME : 10:43

Technology Type Mix : 1.0000 UNIT WEIGHTED MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

PLANT ITEM DESCRIPTION	PLANT NAME SEG. NAME EQPT CODE	FEEDER PRIMARY	FEEDER EXTENSION	DISTRIBUTION SUB–	NETWORK INTERFACE		TOTAL LOOP	TECHNOLOGY WEIGHTED TOTAL LOOP
SHARED 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	$ 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	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 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	$ 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	$ 1.36	$ 2.88	$ 0.00	$ 4.24	$ 4.2400
BURIED CABLE (COPPER)	45C	$ 0.00	$ 0.00	$ 0.14	$ 2.07	$ 0.00	$ 2.21	$ 2.2100
UNDERGROUND (CU) CA.	5C	$ 0.00	$ 0.00	$ 2.71	$ 0.29	$ 0.00	$ 3.00	$ 3.0000
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	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.0000
POLE LINE	1C	$ 0.00	$ 0.00	$ 0.32	$ 0.69	$ 0.00	$ 1.01	$ 1.0100
CONDUIT	4C	$ 0.00	$ 0.00	$ 0.96	$ 0.10	$ 0.00	$ 1.06	$ 1.0600
SPAN SUMMARY		$ 0.00	$ 0.00	$ 5.49	$ 6.03	$ 2.45	$ 13.97	$ 13.97
							$ 13.97	

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Bellcore (R)

RUN – DIST PLNT

LAST UPDATE
23-Jan-97
09:15

LOOP COST ANALYSIS TOOL

LCAT
Release: 1.0.4
Issued: 8/31/95

DISTRIBUTION SEGMENT COST MODEL – BASIC COPPER TECHNOLOGY

STUDY NAME: 1996 BAND 2 (OHIO ONLY) BUSINESS ISDN 0 – 18000 FEET INTRA

CURRENT TEST PLAN :

CURRENT JOB IDENT:	CINCINNATI	
BASIS	NETWORK	TEST CASE 1
FR / DS	FLAT RATE	#BANDS 0
SVC LEVEL	NARBAND	#CKTS
CST METH	UN INCR	INV LEVEL ANN COST

your run is finished

C:\123R24\LCATCALC\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

Bellcore (R)
LCAT Release : 1.0.4
Issue Date : 8/31/95
STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23–Jan–97
TIME : 10:33

CODE
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 2 – BUSINESS ISDN

SEGMENT LENGTH IN FEET [A]	TYPE OF CABLE PLANT	FROM – TABLE 2 – RELATIVE MIX OF TYPE OF CA. PLANT [B]	LENGTH SUBSET BY TYPE OF PLANT [C=A*B]	FROM – TABLE 4 – CABLE INVESTMENT PER FAIR FOOT [D]	CABLE COMPONENTS: CABLE INVESTMENT PER PAIR [E=C*D]	(NOTE 4) WEIGHTED TERMINAL INVESTMENT	AIR DRYER INVESTMENT PER PAIR [F=E*fctr]	DROP WIRE ADJUSTMENT PER PAIR [F=E*fctr]	(NOTE 4) WEIGHTED DROP WIRE INVESTMENT
1136.0	AERIAL	0.620000	704.3	0.042600	30.00		0.00	0.00	
CONSIDERS:	BURIED	0.330000	374.9	0.066800	25.04		0.00	0.00	
MELDED COPPER CABLE	UNDERGRND	0.050000	56.8	0.058000	3.29		0.00	0.00	
	Check =	1.000000	1136.0						

OUTSIDE PLANT LOADINGS (NOTE 4)

DROP WIRE ADJUSTMENT:
AERIAL CA. = 0.0000
BURIED CA = 0.0000
UNDERGRND = 0.0000

AIR DRYER LOADINGS:
AERIAL CA. = 0.0000
BURIED CA = 0.0000
UNDERGRND = 0.0000

OTHER INVESTMENT

	inv / unit lgth:	inv rtn fctr :
POLE LINE FACTOR (PLF) =	0.0000	0.2530
POLE LINE INVESTMENT (UTIL AERIAL INVEST. x PLF) =	$ 21.69	
UG CONDUIT FACTOR (UCF) =	0.0000	0.5165
CONDUIT INVESTMENT (UTIL UNDGRND INVST x UCF) =	$ 4.86	

FOOTNOTES
NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.
NOTE 2: TABLE 4 & 5 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 (SEE BUILDING AND TERMINATING INVESTMENT WORKSHEET)

C:\123R24\LCATCALC\DIST
DIST_PLNT – WORKSHEET A
Sheet 2 of 3

LOOP COST ANALYSIS TOOL

ACCOUNT INVESTMENT WORKSHEET

SERVING AREA INTERFACE TO SERVICE ACCESS POINT INVESTMENT COST MODEL

Bellcore (R)
LCAT Release : 1.0.4
Issue Date : 8/31/95

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 2 – BUSINESS ISDN

STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23-Jan-97
TIME : 10:33

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]	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					1.0000		
INTRABLDG CABLE	52C	V	DIRECT					0.3500		
AERIAL CABLE (COPPER)	22C	V	DIRECT	30.00	1		$ 30	0.3500		$ 86
BURIED CABLE (COPPER)	45C	V	DIRECT	25.04	1		$ 25	0.3500		$ 72
UNDERGROUND (CU) CA.	5C	V	DIRECT	3.29	1		$ 3	0.3500		$ 9
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	21.69	1		$ 22	1.0000		$ 22
CONDUIT	4C	F	DIRECT	4.86	1		$ 5	1.0000		$ 5
									$ 0	$ 193
										$ 193

distrivty

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.

C:\123R24\LCAT\CALC\DIST
DIST_PLNT – WORKSHEET A
Sheet 3 of 3

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

LOOP COST ANALYSIS TOOL

PROSPECTIVE AND ANNUAL COSTS WORKSHEET

SERVING AREA INTERFACE TO SERVICE ACCESS POINT INVESTMENT COST MODEL
FACILITY TYPE: COPPER CABLE
CIRCUIT SEGMENT: DISTRIBUTION PLANT (NON-DLC,NON-COLLOC
SERVICE CLASS: BAND 2 – BUSINESS ISDN

Bellcore®
LCAT Release: 1.0.4
Issue Date: 8/31/96
STUDY YR: 1996
TEST CASE: 1
RUN DATE: 23-Jan-97
TIME: 10:33

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		$ 86	0.4033		$ 34.57		$ 2.88
BURIED CABLE (COPPER)	45C	1.0000		$ 72	0.3467		$ 24.81		$ 2.07
UNDERGROUND (CU) CA.	5C	1.0000		$ 9	0.3863		$ 3.45		$ 0.29
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		$ 22	0.3807		$ 8.26		$ 0.69
CONDUIT	4C	1.0000		$ 5	0.2521		$ 1.23		$ 0.10
			dstshrinv	dstdirinv					
TOTALS			$ 0	$ 193		$ 0.00	$ 72.31	$ 0.00	$ 6.03
				$ 193			$ 72.31		$ 6.03
				distinvsy			distann		distmrc

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.

C:\123R24\LCATCALC\DIST
DIST_PLNT – WORKSHEET B
Sheet 1 of 3

LOOP COST ANALYSIS TOOL
BASIC INVESTMENT WORKSHEET

Bellcore®
LCAT
Release : 1.0.4

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

FACILITY TYPE : COPPER CABLE
CIRCUIT SEGMENT : SERVICE ACCESS
SERVICE CLASS : BAND 2 – BUSINESS ISDN

STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23–Jan–97
TIME : 10:33

TYPE OF PLANT ITEM	UNIT PLANT INVEST. [A]	PROB. OF OCCURANCE [B]	WEIGHTED TERMINAL INVESTMENT [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

		from length :	from invest. :
POLE LINE FACTOR (PLF) =		0.2530	0.2530
POLE LINE INVESTMENT (UTIL AERIAL INVEST. x PLF) =		$ 0.00	

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

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C:\123R24\LCATCALC\DIST
DIST_PLNT – WORKSHEET B
Sheet 3 of 3

LOOP COST ANALYSIS TOOL
PROSPECTIVE AND ANNUAL COSTS WORKSHEET

Bellcore®
LCAT
Release : 1.0.4

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

FACILITY TYPE : COPPER CABLE
CIRCUIT SEGMENT : SERVICE ACCESS
SERVICE CLASS : BAND 2 – BUSINESS ISDN

STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23–Jan–97
TIME : 10:33

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		$ 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			0.3563				
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 (FG) CA.	85C	1.0000			0.2659				
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				
			bctshrinv	bctdirinv					
TOTALS			$ 0	$ 75		$ 0.00	$ 29.42	$ 0.00	$ 2.45
				$ 75			$ 29.42		$ 2.45
				bctinvsy			bctann		bctmrc

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.

C:\123R24\LCATCALC\DIST
DIST_PLNT – WORKSHEET B
Sheet 1 of 3

LOOP COST ANALYSIS TOOL
BASIC INVESTMENT WORKSHEET

Bellcore (R)
LCAT
Release : 1.0.4

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

FACILITY TYPE : COPPER CABLE
CIRCUIT SEGMENT : SERVICE ACCESS
SERVICE CLASS : BAND 2 – BUSINESS ISDN

STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23-Jan-97
TIME : 10:33

TYPE OF PLANT ITEM	UNIT PLANT INVEST. [A]	PROB. OF OCCURANCE [B]	WEIGHTED TERMINAL INVESTMENT [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) =	0.0000	from invest. : 0.2530
POLE LINE INVESTMENT (UTIL AERIAL INVEST. x PLF) =	$ 0.00	

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

C:\123R24\LCATCALC\DIST
DIST_PLNT – WORKSHEET 8
Sheet 2 of 3

LOOP COST ANALYSIS TOOL

ACCOUNT INVESTMENT WORKSHEET

Bellcore (R)
LCAT
Release : 1.0.4

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

FACILITY TYPE : COPPER CABLE
CIRCUIT SEGMENT : SERVICE ACCESS
SERVICE CLASS : BAND 2 – BUSINESS ISDN

STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23-Jan-97
TIME : 10:33

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	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		
									$ 0	$ 75
										$ 75

bcalnvly

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.

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C:\123R24\LCATCALC\D ST
DIST_PLNT – WORKSHEET B
Sheet 3 of 3

LOOP COST ANALYSIS TOOL
PROSPECTIVE AND ANNUAL COSTS WORKSHEET

Bellcore (R)
LCAT
Release : 1.0.4

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

FACILITY TYPE : COPPER CABLE
CIRCUIT SEGMENT : SERVICE ACCESS
SERVICE CLASS : BAND 2 – BUSINESS ISDN

STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23–Jan–97
TIME : 10:33

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		$ 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			0.3863				
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				
			bctshrinv	bctdirinv					
TOTALS			$ 0	$ 75		$ 0.00	$ 29.42	$ 0.00	$ 2.45
				$ 75			$ 29.42		$ 2.45
				bctinvsy			bctann		bctmrc

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.

C:\123R24\LCATCALC\DIST
DIST_PLNT – REPORT 14A
Sheet 1 of 3

LOOP COST ANALYSIS TOOL

PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore®

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

FACILITY TYPE : COPPER CABLE
CIRCUIT SEGMENT : DISTRIBUTION PLANT (NON-DLC,NON-COIL,OC
SERVICE CLASS:BAND 2 – BUSINESS ISDN

LCAT Release : 1.0.4
Issue Date : 8/31/95
STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23-Jan-97
TIME : 10:33

CMDG

logic-14a 1996 UNIT MONTHLY RECURRING COST BY ACCOUNT

	PLANT ACCT CODE	BAND MIX AVG. LGTH.	0 1.0000					(See Note) TOTAL AVG. WEIGHTED INVESTMENT
PLANT ITEM		SEG. LGTH.	8151 1136.0					1136
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		$ 2.88					$ 2.88
BURIED CABLE (COPPER)	45C		$ 2.07					$ 2.07
UNDERGROUND (CU) CA.	5C		$ 0.29					$ 0.29
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		$ 0.69					$ 0.69
CONDUIT	4C		$ 0.10					$ 0.10
SPAN SUMMARY			$ 6.03	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00
AVG. WTD. SPAN SUMMARY			$ 6.03	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00
NOTE:			[sum(INV$_{ACCT}^{BAND}$ * MIX^{BAND})]					$ 6.03

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DIST_PLNT – REPORT 14B
Sheet 1 of 1

LOOP COST ANALYSIS TOOL

PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore(R)
LCAT
Release : 1.0.4

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

CIRCUIT SEGMENT : SERVICE ACCESS
SERVICE CLASS:BAND 2 – BUSINESS ISDN

STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23–Jan–97
TIME : 10:33

1996 UNIT MONTHLY RECURRING COST BY ACCOUNT

PLANT ITEM	PLANT ACCT CODE	BAND MIX AVG. LGTH.	ALL
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			$ 2.45

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J:\123R24\LCATCALC\CUTECH
RUN – SUB PRI

LAST UPDATE
23–Jan–97
09:17

Bellcore (R)
LCAT
Release: 1.0.4
Issued: 7/31/95

LOOP COST ANALYSIS TOOL

FEEDER SEGMENT COST MODEL – BASIC COPPER TECHNOLOGY

STUDY NAME: 1996 BAND 2 (OHIO ONLY) BUSINESS ISDN 0 – 18000 FEET INTRAS

CURRENT TEST PLAN :

CURRENT JOB IDENT.	CINCINNATI		
BASIS	NETWORK	TEST CASE	
FR / DS	FLAT RATE	#BANDS	0
SVC LEVEL	NARBAND	#CKTS	1
CST METH	UN INCR	INV LEVEL	ANN COST

C:\123R24\LCAT\CALCOLTECH
SUB_PRI – WORKSHEET
Sheet 1 of 3

LOOP COST ANALYSIS TOOL

BASIC INVESTMENT WORKSHEET
CENTRAL OFFICE TO SERVING AREA INVESTMENT CALCULATIONS

Bellcore (R)
LCAT Release : 1.0.4
Issue Date : 7/31/95

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

FACILITY TYPE: COPPER CABLE
CIRCUIT SEGMENT: MELDED GAUGE/S/ SUB–PRIMARY
SERVICE CLASS: BAND 2 – BUSINESS ISDN

STUDY YR : 1996
TEST CASE: 1
RUN DATE : 23–Jan–97
TIME : 10:35

DLOOP

	SEGMENT LENGTH IN FEET	TYPE OF CABLE PLANT	FROM TABLE 2 – RELATIVE MIX OF TYPE OF CA. PLANT	LENGTH SUBSET BY TYPE OF PLANT	FROM TABLE 4 – VLD CABLE DESIGN INVEST. PER PAIR FOOT	CABLE COMPONENTS – CABLE INVESTMENT PER PAIR	WEIGHTED TERMINAL INVESTMENT	AIR DRYER INVESTMENT PER PAIR	DROP WIRE ADJUSTMENT PER PAIR	WEIGHTED DROP WIRE ADJUSTMENT PER PAIR
	[A]		[B]	[C=A*B]	[D]	[E=C*D]	[UI*DTC]		[E*fctr]	[UI*DTC]
	7015	AERIAL	0.290000	2034.35	0.011900	24.21		0.00	0.00	
	MELDED GAUGE/S/ COPPER CABLE	BURIED	0.020000	140.30	0.020500	2.88		0.00	0.00	
		UNDERGRND	0.690000	4840.35	0.011000	53.24		0.00	0.00	
		CHECK = :	1.000000							

ADDITIONAL CALCULATIONS FOR CENTRAL OFFICE INVESTMENTS

INVESTMENT PER CIRCUIT TERMINATION
(CO CONN) CONNECTORS (coi77c) = $ 0.00

	inv / unit lgth:	inv rtn fctr :
POLE LINE FACTOR =	0.000000	0.253000
POLE LINE INVESTMENT = (UTIL AERIAL INVEST x PLF)	$ 10.21	
UG CONDUIT FACTOR =	0.000000	0.516500
CONDUIT INVESTMENT = (UTIL UNDGRND INVEST x UCF)	$ 45.83	

MISC. COMMON EQPT. & POWER FACTOR =	0.112700
MCE&P INVESTMENT (CO CONN x FACTOR) =	$ 0.00
LAND FACTOR =	0.00560
LAND NVST (CO CONN + MCE&P) x FACTOR =	$ 0.00
BUILDING FACTOR =	0.13150
BLDG NVST (CO CONN + MCEP) x FACTOR =	$ 0.00
PERCENT OF CO CONN AT DIGITAL SWITCHES	100.0000
PERCENT OF CO CONN AT ANALOG SWITCHES	0.0000

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 OCCURANCE.
NOTE 4: MATRIX 2 & 4 DEVELOPMENT SHOWN ON WORKSHEET C (#5,#6).

C:\123R24\LCATCALC\CUTECH
SUB_PRI – WORKSHEET
Sheet 2 of 3

LOOP COST ANALYSIS TOOL

ACCOUNT INVESTMENT WORKSHEET
CENTRAL OFFICE TO SERVING AREA INVESTMENT CALCULATIONS

Bellcore (R)
LCAT Release : 1.0.4
Issue Date : 7/31/95

COMPANY: CINCINNATI BELL TEL.
CITY / AREA: CINCINNATI
STATE / PROV : OHIO
FACILITY TYPE: COPPER CABLE
CIRCUIT SEGMENT: MELDED GAUGE/S/ SUB-PRIMARY
SERVICE CLASS: BAND 2 – BUSINESS ISDN

STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23-Jan-97
TIME : 10:35

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]	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	0.00				1.0000		
BUILDING	10C	F	SHARED	0.00				1.0000		
BLDG ENTRANCE CABLE	12C	V	DIRECT					1.0000		
INTRABLDG CABLE	52C	V	DIRECT					0.3500		
AERIAL CABLE (COPPER)	22C	V	DIRECT	24.21	1		$ 24	0.6000		$ 40
BURIED CABLE (COPPER)	45C	V	DIRECT	2.88	1		$ 3	0.6000		$ 5
UNDERGROUND (CU) CA.	5C	V	DIRECT	53.24	1		$ 53	0.6000		$ 89
CO EQPT – LOW CAP TERM	257C	F	DIRECT					0.7000		
CO EQPT – LOW CAP CHAN	257C	V	DIRECT					0.7000		
CO EQPT – HI CAP TERM	857C	F	DIRECT					1.0000		
CO EQPT – HI CAP CHAN	857C	F	DIRECT					1.0000		
CO EQPT – ANALOG SW	77C	V	DIRECT	0.00				1.0000		
CO EQPT – DIGITAL SW	377C	V	DIRECT	0.00				1.0000		
AERIAL CABLE (FIBER)	822C	F	DIRECT					0.3300		
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	0.00				1.0000		
POLE LINE	1C	F	DIRECT	10.21	1		$ 10	1.0000		$ 10
CONDUIT	4C	F	DIRECT	45.83	1		$ 46	1.0000		$ 46
TOTALS							$0			$ 190
										$ 190

culpinvly

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.

C:\123R24\LCATCALC\CUTECH
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 2 – BUSINESS ISDN

Bellcore (R)
LCAT Release : 1.0.4
Issue Date : 7/31/95
STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23-Jan-97
TIME : 10:35

PLANT ITEM	PLANT ACCT CODE	1996 TO 1996 TPI [L]	1996 UNIT LOOP INVESTMENTS BY ACCOUNT: SHARED RESOURCES [M=K*L]	1996 UNIT LOOP INVESTMENTS 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	82C	1.0000			0.3922				
AERIAL CABLE (COPPER)	22C	1.0000		$ 40	0.4033		$ 16.27		$ 1.36
BURIED CABLE (COPPER)	45C	1.0000		$ 5	0.3457		$ 1.66		$ 0.14
UNDERGROUND (CU) CA.	5C	1.0000		$ 89	0.3663		$ 32.51		$ 2.71
CO EQPT – LOW CAP TERM	257C	1.0000			0.3881				
CO EQPT – LOW CAP CHAN	257C	1.0000			0.3881				
CO EQPT – HI CAP TERM	857C	1.0000			0.3881				
CO EQPT – HI CAP 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		$ 10	0.3807		$ 3.80		$ 0.32
CONDUIT	4C	1.0000		$ 46	0.2521		$ 11.55		$ 0.96
SUBTOTALS			$ 0	$ 190		$ 0.00	$ 65.88	$ 0.00	$ 5.49
TOTALS				$ 190			$ 65.88		$ 5.49
				culpinvsy			culpnio		culpmrc

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.

C:\123R24\LCATCALC\CUTECH
SUB_PR – REPORT 14
Sheet 1 of 1

LOOP COST ANALYSIS TOOL
PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore®
LCAT Release : 1.0.4
Issue Date : 7/31/95

COMPANY: CINCINNATI BELL TEL
CITY / AREA: CINCINNATI
STATE / PROV : OHIO
FACILITY SEGMENT : SUB–PRIMARY PLANT
SERVICE CLASS:BAND 2 – BUSINESS ISDN

STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23–Jan–97
TIME : 10:35

logic–14a 1996 UNIT MONTHLY RECURRING COST BY ACCOUNT (SEE NOTE)

PLANT ITEM	PLANT ACCT CODE	BAND MIX AVG. LGTH SEG.LGTH.	C 1.0000 8151 7015						TOTAL AVG. WEIGHTED 7015
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		$ 1.36						$ 1.36
BURIED CABLE (COPPER)	45C		$ 0.14						$ 0.14
UNDERGROUND (CU) CA.	5C		$ 2.71						$ 2.71
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	0.3	$ 0.32						$ 0.32
CONDUIT	4C	0.9	$ 0.96						$ 0.96
SPAN SUMMARY			$ 5.49	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 5.49
AVG. WTD. SPAN SUMMARY			$ 5.49	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00	

NOTE: $[\text{sum}(INV_{ACCT}^{BAND} * MIX^{BAND})]$

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

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CDLC_PLANT – WORKSHEET 1
Sheet 2 of 3

LOOP COST ANALYSIS TOOL

ACCOUNT INVESTMENT WORKSHEET

CENTRAL OFFICE TO REMOTE TERMINAL (PRIMARY SECTION) WORKSHEET
FOR DIGITAL LOOP CARRIER IN THE FEEDER SEGMENT ONLY

Belicore

LCAT Release : 1.0.4
Issue Date : 8/31/95
STUDY YR : 1996
TEST CASE : 1
DATE : 23–Jan–97
TIME : 10:37 AM

COMPANY: CINCINNATI BELL TEL
CITY / AREA : OHIO
STATE / PROV : CINCINNATI
FACILITY TYPE : COPPER DIG LOOP CXR
CIRCUIT DESIGN : 11C
SERVICE CLASS : BAND 2 – BUSINESS ISDN

PLANT ITEM	PLANT ACCT CODE	FIXED VARI SUNK	RESOURCE ALLOCATION	1996 UNIT INVESTMENTS 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	3.16	0			1.0000		
BUILDING	10C	F	SHARED	74.31	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	0.00	0			0.6000		
CO EQPT – P GAIN TERM	257C	F	DIRECT	198.55	0			0.7000		
CO EQPT – P GAIN CHAN	257C	V	DIRECT	363.30	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	1.81	0			1.0000		
POLE LINE	1C	F	DIRECT	0.00	0			1.0000		
CONDUIT	4C	F	DIRECT	0.00	0			1.0000		
TOTALS										

$0

$0

FEED1IY

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

C:\123R24\LCATCALC\CLPFGN
CDLC_PLANT – WORKSHEET 1
Sheet 1 of 3

LOOP COST ANALYSIS TOOL

Bellcore

BASIC INVESTMENT WORKSHEET
CENTRAL OFFICE TO REMOTE TERMINAL (PRIMARY SECTION) WORKSHEET
FOR DIGITAL LOOP CARRIER IN THE FEEDER SEGMENT ONLY

LCAT Release : 1.0.4
Issue Date : 6/31/95
STUDY YR : 1996
TEST CASE : 1
DATE : 23–Jan–97
TIME : 10:37 AM

COMPANY: CINCINNATI BELL TEL
CITY / AREA : OHIO
STATE / PROV : CINCINNATI
FACILITY TYPE : COPPER DLC LOOP CXR
CIRCUIT DESIGN : 11C
SERVICE CLASS : BAND 2 – BUSINESS ISDN

8151 cur_lpign = 0.125 pgfactor
7015 cumldr–lgth

SEGMENT LENGTH IN FEET	TYPE OF CABLE PLANT	RELATIVE MIX OF TYPE OF CA. PLANT	EFFECTIVE LENGTH SUBSET BY TYPE OF PLANT	MELDED INVEST. PER UNIT FOOT	CABLE COMPONENTS (NOTE 5) CABLE INVESTMENT PER CHAN	WEIGHTED TERMINAL INVESTMENT	AIR DRYER INVESTMENT PER PAIR	(NOTE 4) DROP WIRE ADJUSTMENT PER PAIR	(NOTE 5) WEIGHTED DROP WIRE INVESTMENT PER PAIR
[A]		[B]	[C=A*B*f]	[D]	[E=C*D]	[UI*DTC]	[E*fctr]	[E*fctr]	[UI*DTC]
0	AERIAL	0.290000	0.00	0.023800	$ 0.00		$ 0.00		
CO TO RT LINK ON COPPER CABLE DLC 24.00 GA. FACILITIES	BURIED	0.020000	0.00	0.041000	$ 0.00		$ 0.00		
	UNDERGRND	0.690000	0.00	0.022000	$ 0.00		$ 0.00		
		1.000000							

OUTSIDE PLANT LOADINGS (NOTE 5) :

		DROP WIRE	AIR DRYER
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) :		TERM	CHAN
INT DLC EQUIP INVEST. (CU COMUX) =	intdlcco_	$ 0.00	$ 0.00
INT DLC EQUIP INVEST. (CU RTMUX) =	intdlcrt_	$ 141.70	$ 348.82
UNIV DLC EQUIP INVEST. (CU COMUX) =	univdlcco_	$ 39.17	$ 361.90
UNIV DLC EQUIP INVEST. (CU RTMUX) =	univdlcrt_	$ 141.70	$ 348.82
DLC EQUIP INVEST. (CU LINE) =	___dlccol		$ 0.00
CONDUIT INVEST. FOR DLC CEV FACILITIES =	conpgnvst	$ 0.00	
OTHER INVESTMENT		inv / unit lgth	inv rtn 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 INVST x UCf) =		$ 0.00	

EQUIPMENT INVESTMENT LOADINGS

INVST. PER CHAN. FOR DLC TERM (co conn) =	$ 0.00
MISC. COM. EQPT. & POWER FACTOR FOR DLC (rem) =	0.1127
MISC. COM. EQPT. & POWER FACTOR FOR DLC (c.o.) =	0.1127
MCE&P INVST. (CU REMMUX x MCEPf) =	$ 55.28
MCE&P INVST. (CDLCMUX x MCEPf) =	$ 1.81
MCE&P INVST. (CO CONN x MCEPf) =	$ 0.00
OTHER INVESTMENT	
LAND FACTOR FOR DLC (LANDf_rem) =	0.0056
LAND FACTOR FOR DLC (LANDf_c.o.) =	0.0056
LAND INVST.(CU COMUX+MCEP) x LANDf =	$ 3.16
LAND INVST. ((CO CONN+MCEP) x LANDf) =	$ 0.00
BUILDING FACTOR FOR DLC (BLDGf_rem.) =	0.1316
BUILDING FACTOR FOR DLC (BLDGf_c.o.) =	0.1316
BLDG INVST.(CDLCMUX+MCEP) x BLDGf =	$ 74.18
BLDG INVST. ((CO CONN+MCEP) x BLDGf) =	$ 0.00

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	0.0400
MIX OF INTEGRATED DIGITAL INTFC	0.9600

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 ARRIVED.
NOTE 3: TABLE 4 DEVELOPMENT IS SHOWN ON WORKSEET 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.

C:\123R24\LCATCALC\CUPRGN
RUN – CDLC PLANT

LAST UPDATE
23–Jan–97
09:19

LOOP COST ANALYSIS TOOL

Bellcore (R)
LCAT
Release: 1.0.4
Issued: 8/31/95

FEEDER SEGMENT COST MODEL – COPPER DLC TECHNOLOGY

STUDY NAME: 1996 BAND 2 (OHIO ONLY) BUSINESS ISDN 0 – 18000 FEET INTRASTATE

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

C:\...\23R24\LCATCALC\CUPRGN — LOOP COST ANALYSIS TOOL — Bellcore

CDLC_PLANT – REPORT 14.1 — PROSPECTIVE INVESTMENT WORKSHEET SUMMARY — LCAT Release : 1.0.4

Sheet 1 of 3 — Issue Date : 8/31/95

COMPANY: CINCINNATI BELL TEL. — FACILITY SEGMENT : PRIMARY FEEDER SEGMENT — STUDY YR : 1996

CITY / AREA : CINCINNATI — CIRCUIT DESIGN: 1 COPPER DIG LOOP CXR — TEST CASE : 1

STATE / PROV : OHIO — SERVICE CLASS : BAND 2 – BUSINESS ISDN — DATE : 23–Jan–97

TIME : 10:36 AM

logic=14a — 1996 UNIT MONTHLY RECURRING COST BY ACCOUNT

PLANT ITEM	PLANT ACCT CODE	BAND MIX AVG LGTH	0 1.0000 8151	(SEE NOTE) TOTAL AVG. WEIGHTED INVESTMENT
		SEG.LGTH.	0	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			$ 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
SPAN SUMMARY		0.00	0.00 0.00 0.00 0.00 0.00	0.00
AVG. WTD. SPAN SUMMARY		0.00	0.00 0.00 0.00 0.00 0.00	

NOTE: [sum(INV_{ACCT}^{BAND} * MIX^{BAND})]

C:\123R24\LCATCALC\CLPRGN
CDLC_PLANT – WORKSHEET :
Sheet 3 of 3

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

LOOP COST ANALYSIS TOOL

PROSPECTIVE AND ANNUAL COSTS 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 : 1 C
SERVICE CLASS : BAND 2 – BUSINESS ISDN

Bellcore

LCAT Release : 1.0.4
Issue Date : 8/31/95
STUDY YR : 1996
TEST CASE : 1
DATE : 23-Jan-97
TIME : 10:37 AM

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			0.4033				
BURIED CABLE (COPPER)	45C	1.0000			0.3467				
UNDERGROUND (CU) CA.	5C	1.0000			0.3863				
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			0.3456				
AERIAL CABLE (FIBER)	822C	1.0000			0.2983				
BURIED CABLE (FIBER)	845C	1.0000			0.2724				
UNDERGROUND (FO) CA.	85C	1.0000			0.2669				
CONNECTORS	57C	1.0000			0.3881				
MISC. COM EQP & PWR	57C	1.0000			0.3881				
POLE LINE	1C	1.0000			0.3607				
CONDUIT	4C	1.0000			0.2521				
TOTALS			$ 0	$ 0		$ 0.00	$ 0.00	$ 0.00	$ 0.00
				$ 0 FEED1SY			$ 0.00 FEED1ANN		$ 0.00 FEED1MRC

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\DIST
DIST_PLNT – WORKSHEET 3
Sheet 2 of 3

LOOP COST ANALYSIS TOOL
ACCOUNT INVESTMENT WORKSHEET

Bellcore (R)
LCAT
Release : 1.0.4
STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23–Jan–97
TIME : 10:39

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

FACILITY TYPE : COPPER_CABLE
CIRCUIT SEGMENT : SERVICE ACCESS
SERVICE CLASS : BAND 2 – BUSINESS ISDN

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	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					0.0000		
							$ 0			$ 75
										$ 75
										botinvty

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.

C:\123R24\LCATCALC\FOPRGN

Bellcore (R)

RUN – FO MUX

LAST UPDATE
23–Jan–97
09:22

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 2 (OHIO ONLY) BUSINESS ISDN 0 – 18000 FEET INTRASTAT

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

....your run is finished

C:\123R24\LCATCALC\FOPRGN.WK1
FO_MUX – WORKSHEET 3
Sheet 1 of 3
COMPANY: CINCINNATI BELL TEL
CITY / AREA : CINCINNATI
STATE / PROV : OHIO

LOOP COST ANALYSIS TOOL

BASIC INVESTMENT WORKSHEET

FOR PRIMARY FEEDER PLANT
FACILITY TYPE : FIBER IN THE LOOP
CIRCUIT DESIGN : 3 FOMUX TO HUB / REM.
SERVICE CLASS : BAND 2 – BUSIN SERVICE LEVEL: NARBAND

Bellcore®
LCAT Rel : 1.0.4
ISSUE DATE : 7/31/95
STUDY YR : 1996
TEST CASE : 1
LAST RUN : 23–Jan–97
TIME : 10:40

from sfdr_tbl : 7015 cur_sfdrlgth 0 cur_pnlgth
from bw_mix : f = 1979.04 wtdeqvmn

fo3pri_seglgth	SEGMENT LENGTH IN FEET [A]	TYPE OF CABLE PLANT	RELATIVE MIX OF TYPE OF CA. PLANT [B]	EFFECTIVE LENGTH SUBSET BY TYPE OF PLANT [C=A*B/f]	MLD CABLE DESIGN INVEST. PER PAIR FOOT [D]	CABLE COMPONENTS (NOTE 5) WEIGHTED EFFECTIVE LGTH CABLE INVESTMENT [E=C*D]	WEIGHTED TERMINAL INVESTMENT [UI*DTC]	AIR DRYER INVESTMENT PER PAIR [E*fctr]	(NOTE 4) DROP WIRE ADJUSTMENT PER PAIR [E*fctr]	(NOTE 6) WEIGHTED DROP WIRE INVESTMENT PER PAIR [UI*DTC]
	0	AERIAL	0.480000	0.00	0.193000	0.00		0.00		
CO TO HUB LINK ON FIBER OPTIC FACILITIES		BURIED	0.000000	0.00	0.269400	0.00		0.00		
		UNDERGRND	0.520000	0.00	0.182700	0.00		0.00		
			1.000000							

OUTSIDE PLANT LOADINGS (NOTE 5) :

		DROP WIRE	AIR DRYER
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)

		TERM	CHAN
INT DLC EQUIP INVEST. (CU COMUX) =	intdlcco_	$ 0.00	$ 0.00
INT DLC EQUIP INVEST. (CU RTMUX) =	intdlcrt_	$ 141.70	$ 348.82
UNIV DLC EQUIP INVEST. (CU COMUX) =	univdlcco_	$ 39.17	$ 361.90
UNIV DLC EQUIP INVEST. (CU RTMUX) =	univdlcrt_	$ 141.70	$ 348.82
FIBER MUX EQUIP. INV. (FO COMUX) =	hubmx0co_	$ 3.88	$ 49.18
FIBER MUX EQUIP. INV. (FO RTMUX) =	hubmx0rt_	$ 2.01	$ 53.79

OTHER INVESTMENT

		inv / unit lgth.:	inv rtn fctr :
POLE LINE FACTOR (PLF) =	fplf_	0.0000	0.1965
POLE LINE INVESTMENT (UTIL AERIAL INVEST. x PLF) =		$ 0.00	
UNDERGROUND CONDUIT FACTOR (PLF) =	fucf_	0.0000	0.5232
CONDUIT INVESTMENT (UTIL UNDGRND INVST x UCF) =		$ 0.00	

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	0.0400
MIX OF CENT. OFC. INTEGRATED DLC INTFC	0.9600

EQUIPMENT INVESTMENT LOADINGS

INVST. PER CHAN. FOR CA TERM (CA CONN) =	$ 0.00
MISC. COM. EQPT. & POWER FACTOR (DLCrem) =	0.1127
MISC. COM. EQPT. & POWER FACTOR (MUXrem) =	0.1127
MISC. COM. EQPT. & POWER FACTOR (OTHrem) =	0.1127
MISC. COM. EQPT. & POWER FACTOR (MUXc.o.) =	0.1127
MISC. COM. EQPT. & POWER FACTOR (DLCo.o.) =	0.1127
MISC. COM. EQPT. & POWER FACTOR (OTHc.o.) =	0.1127
MCE&P INVST. (MUXc.o.+DLCc.o.) x MCEPfc.o.) =	$ 7.79
MCE&P INVST. (MUXrem+DLCrem) x MCEPfrem) =	$ 61.57
MCE&P INVST. (CA CONN x MCEPfc.o.) =	$ 0.00
MCE&P INVST. (CA CONN x MCEPfrem) =	$ 0.00
LAND FACTOR FOR MUX EQP (LANDfrem) =	0.0056
LAND FACTOR FOR MUX EQP (LANDfrem) =	0.0056
LAND FACTOR FOR OTH (LANDfrem) =	0.0056
LAND FACTOR FOR DLC EQP (LANDfc.o.) =	0.0056
LAND FACTOR FOR MUX EQP (LANDfc.o.) =	0.0056
LAND FACTOR FOR OTH (LANDfc.o.) =	0.0056
LAND INVST.(DLC+MUX+MCEP) x LANDfc.o. =	$ 0.43
LAND INVST. (MUX+DLC+MCEP) x LANDfrem =	$ 3.40
BUILDING FACTOR FOR DLC EQP (BLDGfrem) =	0.1316
BUILDING FACTOR FOR MUX EQP (BLDGfrem) =	0.1316
BUILDING FACTOR FOR OTH (BLDGfrem) =	0.1316
BUILDING FACTOR FOR DLC EQP (BLDGfc.o.) =	0.1316
BUILDING FACTOR FOR MUX EQP (BLDGfc.o.) =	0.1316
BUILDING FACTOR FOR OTH (BLDGfc.o.) =	0.1316
BLDG INVST. (DLC+MUX+MCEP) x BLDGfc.o. =	$ 10.12
BLDG INVST. (MUX+DLC+MCEP) x BLDGfrem) =	$ 80.00

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 WORKSEET 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.

C:\123R24\LCATCALC\FOPRGN.WK1
FO_MUX – WORKSHEET 3
Sheet 2 of 3

LOOP COST ANALYSIS TOOL

ACCOUNT INVESTMENT WORKSHEET

Bellcore

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

FOR PRIMARY FEEDER PLANT
FACILITY TYPE : FIBER IN THE LOOP
CIRCUIT DESIGN : 3 FOMUX TO HUB / REM.
SERVICE CLASS : BAND 2 – BUSINSERVICE LEVEL: NARBAND

LCAT Rel : 1.0.4
ISSUE DATE : 7/31/95
STUDY YR : 1996
TEST CASE : 1
LAST RUN : 23–Jan–97
TIME : 10:40

PLANT ITEM	PLANT ACCT CODE cmstart	FIXED VARI SUNK	RESOURCE ALLOCATION	1996 UNIT INVESTMENTS BY ACCOUNT COST EQUATION	CIRCUIT QUANTITY	1996 UNIT LOOP INVESTMENT EXCL UTILIZATION SHARED RESOURCES	1996 UNIT LOOP INVESTMENT EXCL UTILIZATION DIRECT RESOURCES	ADMIN. UTIL LINE FILL utilstart	1996 UNIT LOOP INVESTMENT INCL UTILIZATION SHARED RESOURCES	1996 UNIT LOOP INVESTMENT INCL UTILIZATION DIRECT RESOURCES
				[F]	[G]	[H=F*G]	[H'=F*G]	[J]	[K=H/J]	[K'=H'/J]
LAND	20C	F	SHARED	3.83	0			1.0000		
BUILDING	10C	F	SHARED	90.12	0			1.0000		
BLDG ENTRANCE CABLE	12C	---	---					1.0000		
INTRABLDG CABLE	52C	---	---					0.3500		
AERIAL CABLE (COPPER)	22C	V	DIRECT					0.6000		
BURIED CABLE (COPPER)	45C	V	DIRECT					0.6000		
UNDERGROUND (CU) CA.	5C	V	DIRECT					0.6000		
CO EQPT – LOW CAP TERM	257C	F	DIRECT	143.27	0			0.7000		
CO EQPT – LOW CAP CHAN	257C	V	DIRECT	363.30	0			0.7000		
CO EQPT – HI CAP TERM	857C	F	DIRECT	67.46	0			1.0000		
CO EQPT – HI CAP CHAN	857C	F	DIRECT	102.97	0			1.0000		
CO EQPT – ANALOG SW	77C	V	DIRECT	0.00	0			1.0000		
CO EQPT – DIGITAL SW	377C	V	DIRECT	0.00	0			1.0000		
AERIAL CABLE (FIBER)	822C	F	DIRECT	0.00	0			0.3300		
BURIED CABLE (FIBER)	845C	F	DIRECT	0.00	0			0.3300		
UNDERGROUND (FO) CA.	85C	F	DIRECT	0.00	0			0.3300		
CONNECTORS	57C	V	DIRECT	0.00	0			1.0000		
MISC. COM EQP & PWR	57C	V	SHARED	7.79	0			1.0000		
POLE LINE	1C	F	DIRECT	0.00	0			1.0000		
CONDUIT	4C	F	DIRECT	0.00	0			1.0000		
TOTALS										$ 0
										$ 0
										feed3iy

FOOTNOTES
NOTE 1: APPARENT INCONSISTANCIES CAUSED BY COMPUTER ROUNDING.
NOTE 2: P GAIN CO EQPT = P.G 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]

C:\123R24\LCATCALC\FOPRGN.WK1
FO_MUX – WORKSHEET 3
Sheet 3 of 3

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

LOOP COST ANALYSIS TOOL
ANNUAL COSTS WORKSHEET
FOR PRIMARY FEEDER PLANT
FACILITY TYPE : FIBER IN THE LOOP
CIRCUIT DESIGN : 3 | FOMUX TO HUB / REM.
SERVICE CLASS : BAND 2 – BU: SERVICE LEVEL: NARBAND

Bellcore
LCAT Rel : 1.0.4
ISSUE DATE : 7/31/95
STUDY YR : 1996
TEST CASE : 1
LAST RUN : 23–Jan–97
TIME : 10:40

PLANT ITEM	PLANT ACCT CODE	1996 TO 1996 TPI	1996 UNIT LOOP INVESTMENT BY ACCOUNT: SHARED RESOURCES	1996 UNIT LOOP INVESTMENT BY ACCOUNT: DIRECT RESOURCES	ANNUAL COST FACTOR	1996 UNIT ANNUAL COSTS BY ACCOUNT: SHARED RESOURCES	1996 UNIT ANNUAL COSTS BY ACCOUNT: DIRECT RESOURCES	1996 UNIT MONTHLY RECURRING COSTS BY ACCOUNT: SHARED RESOURCES	1996 UNIT MONTHLY RECURRING COSTS BY ACCOUNT: DIRECT RESOURCES
		tpistart	fo3sixaset	fo3dixaset	acfstart			fo3scxaset	fo3dcxaset
[PREVIOUS SHEET SUMMARY		[L]	[M=K*L]	[M'=K'*L]	[N]	[P=M*N]	[P'=M'*N]	[Q=P/12]	[Q'=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			0.3563				
CO EQPT – LOW CAP TERM	257C	1.0000			0.3881				
CO EQPT – LOW CAP CHAN	257C	1.0000			0.3881				
CO EQPT – HI CAP TERM	557C	1.0000			0.3881				
CO EQPT – HI CAP CHAN	557C	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			0.3507				
CONDUIT	4C	1.0000			0.2521				
TOTALS			$ 0	$ 0		$ 0.00	$ 0.00	$ 0.00	$ 0.00
				$ 0			$ 0.00		$ 0.00
				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.

C:\123R24\LCATR035\COSTMETH **LOOP COST ANALYSIS TOOL** **Bellcore**(R)

TABLE – COST_METH
SHEET 1 of 2

COST METHODS ASSIGNMENT TABLE
DISTRIBUTION SEGMENT

COMPANY: CINCINNATI BELL TEL
STATE: OHIO
SWITCHED SERVICES

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR: 1996
TEST CASE : 1
LAST UPDATE : 29-Oct-96
TIME : 08:43

PLANT ITEM	LCAT CODE	PLANT CODE	WHEN BANDWIDTH DELIVERY IS NARBAND CATEGORY SENS. INDEX	NARBAND RESOURCE ASSIGNMENT	WIDEBAND CATEGORY SENS. INDEX	WIDEBAND RESOURCE ASSIGNMENT	BROADBAND CATEGORY SENS. INDEX	BROADBAND 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) ❶	ACU	22C	V	DIRECT	V	DIRECT	V	DIRECT
BURIED CABLE (COPPER) ❶	BCU	45C	V	DIRECT	V	DIRECT	V	DIRECT
UNDERGROUND (CU) CA. ❶	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

❶ THESE ASSIGNMENTS APPLY TO DEDICATED COPPER – PAIRS (NON-MULTIPLEXED) FEEDER & DISTRIBUTION

BY DEFINITION : ITEMS LABELED F(ixed) OR SHARED ARE EXCLUDED IN A MARGINAL COST STUDY
ITEMS LABELD F(ixed) ARE EXCLUDED FROM ADDITIONS IN INCREMENTAL STUDIES
ALL ITEMS ARE INCLUDED IN A PROSPECTIVE, REPLACEMENT OR NEW INSTALLATION.

C:\123R24\LCATR035\COSTMETH HELP SCREEN Bellcore (R)
TABLE - COST_METH LCAT Rel : 1.0.4
Sheet 1 of 2 Issued : 07/31/95

Field / Group Title	Valid Inputs	This field or grouping defines –
		The system matrix for DISTRIBUTION cost methodolgy for –
SERVICES	(none)	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 – Narrowband – denotes voice grade and sub–voice grade band width. Wideband – denotes bandwidths of the first level of digital hierarchy. Broadband – denotes bandwidths of the higher levels of digital hierarchy.
CATEGORY	(none)	The group of Methodology Categories
SENSITIVITY INDEX	F, V	The Volitility Index to Distance or Demand Sensitivity – F for Fixed Value, Low sensitivity to Distance or Demand. V for Variable Usage, Cost Sensitive to Distance or Demand. S for Sunk Investment which only has an Annual Component.
RESOURCE ASSIGNMENT	SHARED, DIRECT	The Assigned Category of Circuit Function – DIRECT for Dedicated or Circuit Specific Investemnt. 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

C:\123R24\LCATR035\COSTMETH **LOOP COST ANALYSIS TOOL** Bellcore (R)

TABLE – COST_METH
SHEET 2 of 2

COST METHODS ASSIGNMENT TABLE
FEEDER SEGMENT

COMPANY: CINCINNATI BELL TEL.
STATE: OHIO

SWITCHED SERVICES

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR: 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 08:43

PLANT ITEM	PLANT CODE	WHEN BANDWIDTH DELIVERY IS NARBAND CATEGORY ..... SENS. INDEX	NARBAND CATEGORY ..... RESOURCE ASSIGNMENT	WIDEBAND CATEGORY ..... SENS. INDEX	WIDEBAND CATEGORY ..... RESOURCE ASSIGNMENT	BROADBAND CATEGORY ..... SENS. INDEX	BROADBAND CATEGORY ..... RESOURCE 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) ❶	22C	V	DIRECT	V	DIRECT	V	DIRECT
BURIED CABLE (COPPER) ❶	45C	V	DIRECT	V	DIRECT	V	DIRECT
UNDERGROUND (CU) CA. ❶	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

❶ 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 LABELD F(ixed) ARE EXCLUDED FROM ADDITIONS IN INCREMENTAL STUDIES
ALL ITEMS ARE INCLUDED IN A PROSPECTIVE, REPLACEMENT OR NEW INSTALLATION.

NO ... PUCO

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C:\123R24\LCATR035\COSTMETH
TABLE – COST_METH
Sheet 2 of 2

HELP SCREEN

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

Field / Group Title	Valid Inputs	This field or grouping defines –
		The system matrix for FEEDER cost methodolgy for –
SERVICES	(none)	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 – Narrowband – denotes voice grade and sub–voice grade band width. Wideband – denotes bandwidths of the first level of digital hierarchy. Broadband – denotes bandwidths of the higher levels of digital hierarchy.
CATEGORY	(none)	The group of Methodology Categories
SENSITIVITY INDEX	F, V	The Volitility Index to Distance or Demand Sensitivity – F for Fixed Value, Low sensitivity to Distance or Demand. V for Variable Usage, Cost Sensitive to Distance or Demand. S for Sunk Investment which only has an Annual Component.
RESOURCE ASSIGNMENT	SHARED, DIRECT	The Assigned Category of Circuit Function – DIRECT for Dedicated or Circuit Specific Investemnt. 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

C:\123R24\LCAT\C35\CRITERIA

LOOP COST ANALYSIS TOOL

Bellcore

INPUT – STUDY SETUP
LCAT Rel. : 1.0.4
Issue Date : 3/31/95

GENERAL STUDY REQUIREMENTS

TODAY IS : 15–Jan–97
LAST UPDATE:
29–Oct–96 08:46 AM

STUDY NAME 1995 BAND 2 (OHIO ONLY) BUSINESS ISDN 0 – 18000 FEET INTRASTATE

COMMENTS

SERVICE CLASS BAND 2 – BUSINESS ISDN

COMPANY CINCINNATI BELL TEL

STATE / PROVINCE OHIO

CITY / AREA CINCINNATI

DENSITY CELL MIX 0 100 0 0
VH HI MED LO

STUDY BASIS x NETWORK / INDIVIDUAL

INVESTMENT YEAR 1996

LOOP CHAR. STUDY YEAR 1996

STUDY YEAR 1996

TEST CASE 1

PROVIDED

DIGITAL LOOP CARRIER FACILITIES INCLUDED IN THE STUDY:

Type Percent Mix :

100 FIBER IN THE LOOP

0 COPPER DIG LOOP CXR

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C:\123R24\LCATR035\CRITERIA
INPUT – STUDY SETUP
Sheet 1 of 2

HELP SCREEN

Bellcore ®
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 *****
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PRESS < Enter > KEY TO RETURN TO THE MAIN MENU

C:\123R24\LCATR235\CRITERIA

LOOP COST ANALYSIS TOOL

Bellcore (R)

INPUT – STUDY SETUP
SHEET 2 / 2

GENERAL STUDY REQUIREMENTS
STUDY QUESTIONS
FOR

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 2 – BUSINESS ISDN

LCAT Rel. 1.0.4
ISSUED: 3/31/95
STUDY YEAR: 1996
TEST CASE: 1
LAST UPDATE : 29–Oct–96
TIME : 08:46 AM

CONCERNING –	SELECTED QUESTIONS	VALID RESPONSE SET		
SERVICE SPEC.	1. Is this Study for a NEW Installation or an ADDITION ?	N or A	NEW	
	2. Is this Study for a SWITCHED or PRIVATE LINE Service ?	S or P	SWITCHED	
	3. Is this Study for Narrow, Wide, or Broadband Services	N, W or B	NARBAND	
	4. Is this Study for 2 Wire or 4 Wire Transmission ?	2 or 4	2	
OFFICE CHAR.	5. What Percent of the C.O. Switch Installations are DIGITAL Switches?	0 → 100	100	
	6. What Percent of Loop Carrier Installations are INTEGRATED DLC's?	0 → 100	98	
	7. What Percent of Loop Carrier Cross–connects are Electronic DCS's?	0 → 100		
	8. Deploy Digital Loop Carrier (loop pair gain) exclusively at ?	e.g., 12000	18000	Feet
RESULTS SPEC.	9. Do you want FLAT RATE or DISTANCE SENSITIVE parameters ?	F or D	FLAT RATE	
	9a. If Distance Sensitive, what band increment do you want ?	1,2,3,4	1	
	10. How many Cost Bands in this study ?	0 → 5	1	
	11. Should this Study result in Investment, Cost, or All values ?	I,C or A	COST	
	12. Is this study for Total Incremental or Marginal Costs ?	T or M	TOT INCR	
	13. How many circuits (loops) in this Study ?	0 → 999	1	
	14. The study classification is .....(e.g.: RATES PLAN, TEST DATA, NEW SERVICE.) Required for the "Footer" of each Report page.		RATES PLAN	

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C:\123R24\LCATR035\CRITERIA HELP SCREEN Bellcore (R)
INPUT – STUDY SETUP LCAT Rel. 1.0.4
ISSUED: 3/31/96

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 < Enter > KEY TO RETURN TO THE MAIN MENU

C:\123R24\LCATR035\DESIGN **LOOP COST ANALYSIS TOOL** Bellcore

INPUT – LOOP_DESIGN
Sheet 1 / 1

CIRCUIT DESIGN REQUIREMENTS CHARACTERISTICS FOR
INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 2 – BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 08:47

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

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.

C:\123R24\LCATR035\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 Xconn 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

C:\123R24\LCATR035\FACILITY

LOOP COST ANALYSIS TOOL

Bellcore

TABLE - SPAN_INV
SHEET 1 / 4

LOOP FACILITY INPUT
FIBER CABLE DATA
FOR
INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 2 - BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29-Oct-96
TIME : 08:49

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

FIBER CABLE INVESTMENT AND CHARACTERISTICS

		FOR FEEDER SEGMENTS	FOR DISTRIBUTION SEGMENTS	
CABLE TYPE MIX (DISTRIBUTION TO CODE) :				
Proportion of FIBER cable installations that are	AERIAL	0.4800	0.0000	factors
	BURIED	0.0000	0.0000	factors
	UNDGRD	0.5200	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	$ 0.1930	per fiber pair Foot
	BURIED	$ 0.2694	per fiber pair Foot
	UNDGRD	$ 0.1827	per fiber pair Foot

(Fiber Hub to Remote Terminal)

FEEDER - EXTENSION SEGMENT AND DISTRIBUTION SEGMENT

Average Unit Investment for FIBER cable, Installed as	AERIAL	$ 0.1930	$ 0.0000	per fiber pair Foot
	BURIED	$ 0.2694	$ 0.0000	per fiber pair Foot
	UNDGRD	$ 0.1827	$ 0.0000	per fiber pair Foot
		(Fiber Hub to Remote Terminal)	(Remote Terminal to Service Point)	

C:\123R24\LCATR035\FACILITY

LOOP COST ANALYSIS TOOL

Bellcore

TABLE – SPAN INV
SHEET 1A / 4

LOOP FACILITY INPUT
FIBER CABLE DATA – BY CABLE SHEATH DETAIL
FOR

LCAT Rel: 1.0.4
Issued: 07/31/95
STUDY YR: 1996
TEST CASE: 1
LAST UPDATE: 29–Oct–96
TIME: 06:49

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 2 – BUSINESS ISDN

FIBER OPTIC CABLE INVESTMENT REFERENCE TABLE

Unit Investment per Cable Pair Foot, by Cable Type, by Cable Size

Cable Sheath Sizes		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	$	$	$

C:\123R24\LCATR035\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*****

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PRESS "ENTER" TO RETURN TO THE MAIN MENU

C:\123R24\LCATR035\FACILITY

LOOP COST ANALYSIS TOOL

Bellcore®

TABLE - SPAN_INV
SHEET 2 / 4

LOOP FACILITY INPUT
COPPER CABLE DATA
FOR
INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 2 - BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29-Oct-96
TIME : 08:49

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

COPPER CABLE CHARACTERISTICS AND INVESTMENTS

Cable Gauge Mix :

GUAGE	FEEDER SEGMENT	DISTRIBUTION SEGMENT
26 GA.	0.1500	0.1500
24 GA.	0.8500	0.8500
22 GA.	0.0000	0.0000

The Proportion of Copper Cable that is ....

Unit Investment per Cable Pair Foot By Cable Type, By Cable Gauge :

Update Cable Sheath Prices on the FULL SET Input SHEET ? (Y / N) [Required with INDIVIDUAL Mode] N

If not, Update

Cable Type Mix, By Gauge :

The Proportion of Copper Cable that is ....

		FEEDER SEGMENT	DISTRIBUTION SEGMENT
26 GA.	AERIAL	0.2900	0.6200
	BURIED	0.0200	0.3300
	UNDGRND	0.5900	0.0500
24 GA.	AERIAL	0.2900	0.6200
	BURIED	0.0200	0.3300
	UNDGRND	0.6900	0.0500
22 GA.	AERIAL	0.0000	0.0000
	BURIED	0.0000	0.0000
	UNDGRND	0.0000	0.0000

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

GUAGE		FEEDER SEGMENT	DISTRIBUTION SEGMENT
26 GA.	AERIAL	$ 0.0119	$ 0.0426
	BURIED	$ 0.0205	$ 0.0668
	UNDGRND	$ 0.0110	$ 0.0580
24 GA.	AERIAL	$ 0.0119	$ 0.0426
	BURIED	$ 0.0205	$ 0.0668
	UNDGRND	$ 0.0110	$ 0.0580
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 averavalues, 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\LCATR03S\FACILITY

LOOP COST ANALYSIS TOOL

Bellcore

TABLE - SPAN_INV
SHEET 2A / 4

LOOP FACILITY INPUT
COPPER CABLE DATA - BY CABLE SHEATH DETAIL
FOR

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 2 - BUSINESS ISDN

LCAT Rel: 1.0.4
Issued: 07/31/95
STUDY YR: 1996
TEST CASE: 1
LAST UPDATE: 29-Oct-96
TIME: 08:49

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 : => INDEX		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	$										
6000	Copper Cable	3000 pr	$										
7200	Copper Cable	3600 pr	$										
8400	Copper Cable	4200 pr	$										

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C:\123R24\LCATR035\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 *****

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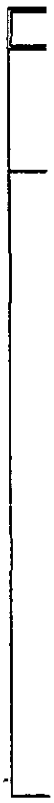
PRESS "ENTER" TO RETURN TO THE MAIN MENU



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C:\123R24\LCATR035\FACILITY.WK1 **LOOP COST ANALYSIS TOOL** Bellcore (R)

SPAN_INV – WORKSHEET
Sheet 1 / 3

COPPER CABLE DISTRIBUTIONS MELDING
WORKSHEET A
FOR
FACILITY TYPE: COPPER CABLE
DESIGN TYPE: DISTRIBUTION SEGMENT
SERVICE CLASS: BAND 2 – BUSINESS ISDN

LCAT Rel: 1.0.4
Issue Date: 07/31/95
STUDY YR: 1996
TEST CASE: 1996
DATE: 1
LAST UPDATE: 29–Oct–96
TIME: 08:49

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

MELDED CABLE INVESTMENT PER PAIR FOOT

DATA DESC.	(DISTRIBUTION TO CODE) CABLE TYPE MIX (p..dst)	PER FOOT INVESTMENT (pfi..ds)	CABLE GAUGE MIX (copper..dst)	ADJUSTED CABLE TYPE	ADJUSTED PFI
CHARACTERISTICS FOR :	[A]	[B]	[C]	[D=A*C]	[E=B*C]
AERIAL @ 26 GA.	0.620000	$ 0.042500	0.1500	0.093000	$ 0.003390
BURIED @ 26 GA.	0.330000	$ 0.066800	0.1500	0.049500	$ 0.010020
UNDGRND @ 26 GA.	0.050000	$ 0.058000	0.1500	0.007500	$ 0.008700
AERIAL @ 24 GA.	0.620000	$ 0.042500	0.8500	0.527000	$ 0.036210
BURIED @ 24 GA.	0.330000	$ 0.066800	0.8500	0.280500	$ 0.056780
UNDGRND @ 24 GA.	0.050000	$ 0.058000	0.8500	0.042500	$ 0.049300
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 ---

DATA DESC.	CABLE TYPE MIX RANGE NAME	MELDED GAUGES
CHARACTERISTICS FOR :		[F=sum(D_{TYPE})]
AERIAL		0.620000
BURIED		0.330000
UNDERGRND		0.050000
	Check =	1.000000

--- TABLE 4 ---

DATA DESC.	PAIR / FOOT INVESTMENT RANGE NAME	MELDED GAUGES
CHARACTERISTICS FOR :		[G=sum(E_{TYPE})]
AERIAL		$ 0.042500
BURIED		$ 0.066800
UNDERGRND		$ 0.058000

--- TABLE 6 ---

DATA DESC.	PAIR / FOOT INVESTMENT RENORMALIZED AERIAL / BURIED	MELDED GAUGES
CHARACTERISTICS FOR :		[H=F_{TYPE}/sum(F_{TYPE})]
AERIAL		$ 0.652632
BURIED		$ 0.347368
	Check =	1.000000

FOOTNOTES

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C:\123R24\LCATR035\FACILITY.WK1 **LOOP COST ANALYSIS TOOL** Bellcore®

SPAN INV - WORKSHEET
Sheet 2 / 3

COPPER CABLE DISTRIBUTIONS MELDING
WORKSHEET A
FOR
FACILITY TYPE: COPPER CABLE
DESIGN TYPE : SUBFEEDER SEGMENT
SERVICE CLASS : BAND 2 - BUSINESS ISDN

LCAT Rel : 1.0.4
Issue Date: 07/31/96
STUDY YR : 1996
TEST CASE : 1996
DATE : 1
LAST UPDATE : 29-Oct-96
TIME : 08:49

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

MELDED CABLE INVESTMENT PER PAIR FOOT

DATA DESC.	(DISTRIBUTION TO CODE) CABLE TYPE MIX (p...fdr)	PER FOOT INVESTMENT (pfi..fd)	CABLE GAUGE MIX (copper..fdr)	ADJUSTED CABLE TYPE	ADJUSTED PFI
CHARACTERISTICS FOR :	[A]	[B]	[C]	[D=A*C]	[E=B*C]
AERIAL @ 26 GA.	0.290000	$ 0.011900	0.1500	0.043500	$ 0.001785
BURIED @ 26 GA.	0.020000	$ 0.020500	0.1500	0.003000	$ 0.003075
UNDGRND @ 26 GA.	0.690000	$ 0.011000	0.1500	0.103500	$ 0.001650
AERIAL @ 24 GA.	0.290000	$ 0.011900	0.8500	0.246500	$ 0.010115
BURIED @ 24 GA.	0.020000	$ 0.020500	0.8500	0.017000	$ 0.017425
UNDGRND @ 24 GA.	0.690000	$ 0.011000	0.8500	0.586500	$ 0.009350
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 ---

DATA DESC.	CABLE TYPE MIX RANGE NAME	CABLE TYPE MIX MELDED GAUGES
CHARACTERISTICS FOR :		[F=sum(D_{TYPE})]
AERIAL		0.290000
BURIED		0.020000
UNDERGRND		0.690000
	Check =	1.000000

--- TABLE 4 ---

DATA DESC.	PAIR /FOOT INVESTMENT RANGE NAME	PAIR /FOOT INVESTMENT MELDED GAUGES
CHARACTERISTICS FOR :		[G=sum(E_{TYPE})]
AERIAL		$ 0.011900
BURIED		$ 0.020500
UNDERGRND		$ 0.011000

--- TABLE 6 ---

DATA DESC.	PAIR /FOOT INVESTMENT RENORMALIZED AERIAL/BURIED	PAIR /FOOT INVESTMENT MELDED GAUGES
CHARACTERISTICS FOR :		[H=E_{TYPE} / sum(F_{TYPE})]
AERIAL		$ 0.935484
BURIED		$ 0.064516
	Check =	1.000000

FOOTNOTES

C:\123R24\LCATR035\FACILITY

LOOP COST ANALYSIS TOOL

Bellcore

TABLE - SPAN_INV
SHEET 3 / 4

LOOP FACILITY INPUT
COPPER PAIRGAIN CABLE DATA
FOR

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

INVESTMENT YEAR : 1996
LOOP STUDY YEAR : 1996
SERVICE CLASS : BAND 2 - BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29-Oct-96
TIME : 08:49

COPPER CABLE CHARACTERISTICS FOR CDLC SYSTEMS

FOR DLC SYSTEMS ON COPPER LOOPS

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

NOTE:

- 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.

C:\123R24\LCATR035\FACILITY
TABLE – SPAN_INV
SHEET 3 / 4

HELP SCREEN

Bellcore (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 xmmsnpr + # 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

C:\123R24\LCATR035\FACILITY.WK1 **LOOP COST ANALYSIS TOOL** Bellcore®

SPAN INV – WORKSHEET
Sheet 3 / 3

COPPER CABLE DISTRIBUTIONS MELDING
WORKSHEET B
FOR
FACILITY TYPE: COPPER CABLE for DLC
DESIGN TYPE : FEEDER SEGMENT
SERVICE CLASS : BAND 2 – BUSINESS ISDN

LCAT Rel : 1.0.4
Issue Date: 07/31/95
STUDY YR : 1995
TEST CASE : 1995
DATE : 1
LAST UPDATE : 29–Oct–96
TIME : 08:49

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

MELDED CABLE INVESTMENT PER PAIR FOOT

INVESTMENT DEVELOPMENT FOR: LINE REPEATER EQUIPMENT

DESCRIPTION	REPEATER SPACING [A]	UNIT REPEATER INVESTMENT [B]	REPEATER INVEST. PER FOOT [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

DESCRIPTION	ADJUSTED PAIR / FOOT INVESTMENT BY CODE BY GAUGE 2 * (PFlegg) ① [D]	PAIR / FOOT INVESTMENT REPEATER BY GAUGE (RPTR gg) [E=C]	WORKING CHANNEL INVESTMENT / FOOT (ADLCPFlegg) [F=D+E]	– TABLE 4 – WORKING CHANNEL INVESTMENT / FOOT (ADLCPFlc)
AERIAL @ 26 GA.	$ 0.023800	$ 0.000000	$ 0.023800	$ 0.023800
BURIED @ 26 GA.	$ 0.041000	$ 0.000000	$ 0.041000	$ 0.041000
UNDGRND @ 26 GA.	$ 0.022000	$ 0.000000	$ 0.022000	$ 0.022000
AERIAL @ 24 GA.	$ 0.023800	$ 0.000000	$ 0.023800	
BURIED @ 24 GA.	$ 0.041000	$ 0.000000	$ 0.041000	
UNDGRND @ 24 GA.	$ 0.022000	$ 0.000000	$ 0.022000	
AERIAL @ 22 GA.	$ 0.000000	$ 0.000000	$ 0.000000	
BURIED @ 22 GA.	$ 0.000000	$ 0.000000	$ 0.000000	
UNDGRND @ 22 GA.	$ 0.000000	$ 0.000000	$ 0.000000	

NOTES :
① The Facility Table investments are for each Cable Pair Foot, DLC Systems use 4 wire.

C:\123R24\LCATR035\FACILITY

LOOP COST ANALYSIS TOOL

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TABLE – SPAN_INV
SHEET 4 / 4

LOOP FACILITY INPUT
SERVICE ACCESS SEGMENT
FOR

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 2 – BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 06:49

SERVICE ACCESS CHARACTERISTICS AND INVESTMENTS

AVERAGE UNIT MIX : **AVERAGE UNIT INVESTMENT :**

The Average Number of Terminals in the Service Access Segment of a Loop –

Proportion of Loops that use.....			Per Unit Installation.....		
	Aerial	0.00		Aerial Termination	0
	Buried	0.00		Buried Termination	0

The Average Drop Wire & Building Entrance Cable Installation –

Proportion of Loops that use..			Adjust Cable Pair Foot Invest. for DW Investment ? (Y/N)		N
	Aerial Wire Drops	0.0000	Per Unit Installation.....	Aerial Wire Drops	$ 0.00
	Buried Wire Drops	0.0000		Buried Wire Drops	$ 0.00
	Bldg Entrance Cable	1.0000		Bldg Entrance Cable	$ 75.00
	Aerial Coax/Wire Drops	0.0000		Aerial Coax/Wire Drops	$ 0.00

The Average Intrabuilding Cable Installation –

Proportion of Installations with Intrabuilding Cable	0.0000	Per Instln for a Intrabuilding Network Cable Pair	$ 0.00

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\\LCATR035\FACILITY
SPAN_INV
'4

HELP SCREEN

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

terma termb	These terminals may include the Serving Area Interface Cross Box, Drop Wire Block, and/or the Network Interface Block summary per circuit pair installation investment.
adropinv bdropinv bec coexinv	These facility investments may also include Drop Wire Block and/or Network Interface summary per circuit pair installation inveatment.
ibc	This facility investment should include ALL the internal cross–connects and terminations for this type of installation as a circuit pair istallation 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

C:\123R24\LCATR035\FACTORS **LOOP COST ANALYSIS TOOL** **Bellcore**

TABLE – FACTORS
SHEET 1 / 1

INVESTMENT 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 2 – BUSINESS ISDN

plant list	PRICE INDEX	ANNUAL 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	0.3458
AERIAL CABLE (FIBER)	1.0000	0.2983
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

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LOOP COST ANALYSIS TOOL

Bellcore (R)

TABLE – EQUIP_INV
Sheet 1 of 1

DATA REFERENCE TABLE
EQUIPMENT & OTHER INVESTMENTS
FOR

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

INVESTMENT YEAR: 1996
SERVICE LEVEL: NARBAND
SERVICE CLASS: BAND 2 – BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE: 29–Oct–96 08:51

EQUIPMENT INVESTMENT (Including Engineer, Furnish, & Install Costs)

	CENTRAL OFFICE			REMOTE LOCATION	
	LINE	CHANNEL	TERMINAL	CHANNEL	TERMINAL
AIR DRYERS INVESTMENT:					
For an AERIAL Installed Cable Pair			$ 0.00		
For a BURIED Installed Cable Pair			$ 0.00		
For an UNDERGROUND Installed Cable Pair			$ 0.00		
CENTRAL OFFICE TERMINATION INVESTMENT :					
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		
COPPER LOOP CARRIER UNIT CIRCUIT INVESTMENT by SERVICE LEVEL :					
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	$ 361.90	$ 39.17	$ 348.82	$ 141.70
For an Integrated DLC Equipment Arrangement	$ 0.00	$ 0.00	$ 0.00	$ 348.82	$ 141.70
FIBER OPTIC MULTIPLEXERS UNIT CIRCUIT INVESTMENT by SERVICE LEVEL :					
1. For a Hub with nonFiber Extensions or nonHub Arrangement		$ 49.18	$ 3.88	$ 53.79	$ 2.01
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
CEV HOUSING per CIRCUIT by SERVICE LEVEL :					
For CEV's used as fiber hubs for FO Muliplexer 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,or DS3 service equiv.]

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TABLE – EQUIP_INV

HELP INFORMATION

Bellcore (R)
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 Banc width from Digital Line Cards or DSX Term for DS1.	
Universal DLC	The DLC Class for Source Banc width 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.	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 <ENTER> KEY TO RETURN TO THE MAIN MENU

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LOOP COST ANALYSIS TOOL

Bellcore (R)

TABLE – ADDNL_INV
Sheet 1 of 2

INVESTMENT RELATED FACTOR TABLES
ADJUSTMENT AND LOADING FACTORS
FOR

LCAT Rel : 1.0.4
Issued : 3/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 08:52

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 2 – BUSINESS ISDN

PLANT UTILIZATION FACTORS:

Land	1.0000
Building	1.0000
ALL Copper Cables, or	
Copper Feeder Cable	0.6000
Copper Distribution Cable	0.3500
Copper Entrance Cable	1.0000
Copper Building Cable	0.3500
Copper Building Terminal	0.3500
ALL Fiber Cables, or	
Fiber Feeder Cable	0.3300
Fiber Distribution Cable	
Fiber Entrance Cable	
Fiber Building Cable	
Fiber Building Terminal	
Poles	1.0000
Conduit	1.0000

ALL Non–Traffic Sensitive Equipment	1.0000
ALL Digital Loop Carrier Equip., or	0.7000
CO DLC Channel Unit	0.7000
REM DLC Channel Unit	0.7000
CO DLC Multiplex System	0.7000
REM DLC Multiplex System	0.7000
CO Digital Signal Crossconnect Bay	0.7000
REM Digital Signal Crossconnect Bay	0.7000
ALL Fiber Optic Multiplex Equip., or	1.0000
CO Fiber Optic Channel Unit	1.0000
REM Fiber Optic Channel Unit	1.0000
CO Fiber Optic Multiplex System	1.0000
REM Fiber Optic Multiplex System	1.0000
CO Lightguide Terminating Equipment	1.0000
REM Lightguide Terminating Equipment	1.0000
Remote Housing: CEV	1.0000
PC Hut	1.0000
Comm. Svc. Cab.	1.0000

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TABLE – ADDNL_INV
Sheet 1 of 2

HELP SCREEN

Bellcore (R)
LCAT Rel : 1.0.4
Issued : 3/31/95

NOTE :

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

❷ 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.

❸ 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

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LOOP COST ANALYSIS TOOL

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TABLE – ADDNL_INV
Sheet 2 of 2

INVESTMENT RELATED FACTOR TABLES
ADJUSTMENT AND LOADING FACTORS
FOR
INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 2 – BUSINESS ISDN

LCAT Rel: 1.0.4
Issued: 3/31/95
STUDY YR: 1996
TEST CASE: 1
LAST UPDATE: 29–Oct–96
TIME: 08:52

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

	SEGMENT ..... DISTRIBUTION ❷	FEEDER use *DEFAULT*
POLE LOADINGS:		
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		
CONDUIT LOADINGS:		
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		

DROP WIRE (DW) INVESTMENT ADJUSTMENT:

The Cable PR is being Adjusted for DW?	NO
Aerial Cable	
Buried Cable	
Underground Cable	

	use *DEFAULT* for: CENT. OFC. ❶	❷ REMOTE SITE
LAND LOADING FACTORS:		
Other or *ALL* ❶	0.0056	0.0056
Digital Loop Carrier	0.0056	0.0056
Fiber Optic Mux	0.0056	0.0056
BUILDING LOADING FACTORS:		
Other or *ALL* ❶	0.1316	0.1316
Digital Loop Carrier	0.1316	0.1316
Fiber Optic Mux	0.1316	0.1316
MISC. EQUIPMENT & POWER LOADING FACTORS:		
Other or *ALL* ❶	0.1127	0.1127
Digital Loop Carrier	0.1127	0.1127
Fiber Optic Mux	0.1127	0.1127

TABLE – ADDNL_INV
Sheet 2 of 2

HELP SCREEN

Bellcore (R)
LCAT Rel : 1.0.4
Issued : 3/31/95

Copper Cable Pole Investment Factor	cplff	__dst	__fdr	Based on aerial copper cable investment relationship to pole
Copper Cable Pole Unit Investment	cplfi	__dst	__fdr	Per unit length of aerial copper cable effective pair feet placed.
Fiber Cable Pole Investment Factor	fplff	__dst	__fdr	Based on aerial fiber cable investment relationship to pole
Fiber Cable Pole Unit Investment	fplfi	__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

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

❷ 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 *****

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LOOP COST ANALYSIS TOOL

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INPUT – PLANT_CHAR.
Sheet 1 / 5

LOOP FACILITY INPUT
LOOP LENGTH CRITERIA AND NETWORK CHARACTERISTICS
FOR

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

INVESTMENT YEAR : 1996
LOOP STUDY YEAR : 1996
SERVICE CLASS : BAND 2 – BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 08:58

FLAT RATE BASIS DATA WITHOUT COST BANDS
FOR A NETWORK CIRCUIT CASE STUDY

LOOP TOPOLOGY

Loop FEEDER Network Configuration Is (S)tar Or (R)ing
Average Number Of Hubs In Each Ring
Loop DISTRIBUTION Network Configuration Is (S)tar or (B)us

ACTION SEGMENT	
PRIMARY	STAR
PRIMARY	NA
DISTRIBUTION	STAR

SPAN LENGTHS

❶ Average Distance From the Central Office to the Service Access Point
❷ Average Distance From the Serving Area Interface to the Service Access Point
❸ Average Distance From the Remote Terminal to the Serving Area Interface
❹ Average Distance From the Central Office to the Fiber Hub or S.A.I.
❺ Average Distance From the Fiber Hub to the Remote Terminal

TOTAL LOOP	8151.0
DISTRIBUTION	1136.0
SUB–PRIMARY	300.0
PRIMARY	6715.0
PRIMARY–EXTENSION	

LOOP LENGTH AT EACH COST BAND

BAND 1	
BAND 2	
BAND 3	
BAND 4	
BAND 5	
LAST	8151.0

DISTRIBUTION OF COST BANDS IN THE NETWORK

BAND 1	
BAND 2	
BAND 3	
BAND 4	
BAND 5	
LAST	1.0000

1.0000 Hint

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LOOP COST ANALYSIS TOOL

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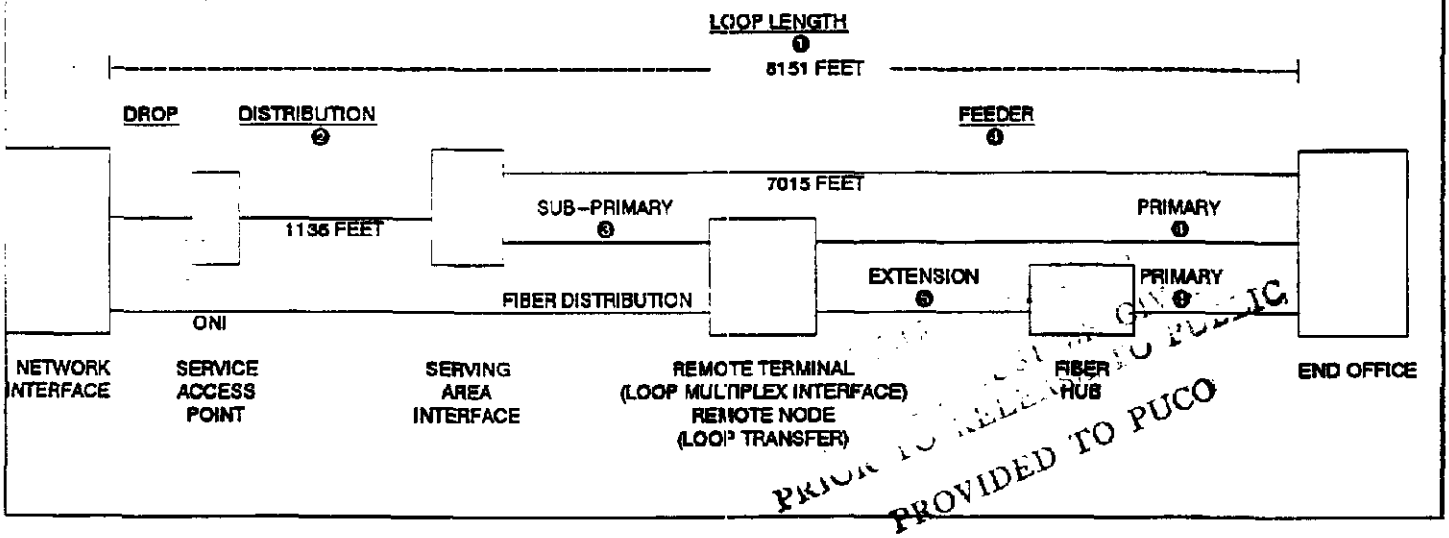
INPUT – PLANT_CHAR.
Sheet 1 / 1

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

LOOP FACILITY INPUT
LOOP LENGTH CRITERIA AND NETWORK CHARACTERISTICS
FOR
INVESTMENT YEAR : 1996
LOOP STUDY YEAR : 1996
SERVICE CLASS : BAND 2 – BUSINESS ISDN

LCAT Rel :1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 08:58

FLAT RATE BASIS DATA WITHOUT COST BANDS
FOR A NETWORK CIRCUIT CASE STUDY



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LOOP COST ANALYSIS TOOL

Bellcore (R)

INPUT – PLANT_CHAR.
Sheet 1 of 2

LOOP FACILITY INPUT
HELP SCREEN

LCAT Rel :1.0.4
Issued : 07/31/95

AVERAGE NETWORK STUDY –

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.

INDIVIDUAL CIRCUIT STUDY – 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.

DATA SAMPLE NETWORK STUDY –

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.

BANDWIDTH AVERAGING –

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

PRESS "ENTER" TO RETURN TO THE MAIN MENU

C:\123R24\LCATR035\SPAN **LOOP COST ANALYSIS TOOL** Bellcore (R)

INPUT - PLANT_CHAR. LCAT Rel :1.0.4

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 delimeters 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*****

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LOOP COST ANALYSIS TOOL

Bellcore®

INPUT – PLANT_CHAR.
Sheet 2a / 5

LOOP FACILITY INPUT
FIBER OPTIC CABLE SPAN CHARACTERISTICS FOR THE FEEDER LAYER
FOR

LCAT Rel :1.0.4
Issued : 07/31/95

COMPANY:	0	INVESTMENT YEAR:	1996
CITY / AREA:	0	LOOP STUDY YEAR:	1995
STATE / PROV:	0	SERVICE CLASS:	BAND 2 – BUSINESS ISDN

STUDY YR :	1996
TEST CASE :	1
LAST UPDATE :	29–Oct–96
TIME :	06:58

NETWORK CIRCUIT LAYOUT STUDIES — WORKSHEET A

		CAPACITY [C]	idx	AERIAL FIBER CUMULATIVE FEEDER LENGTH [D_A]	AERIAL FIBER EFFECTIVE LENGTH BY PAIR FOOT [E_A]	BURIED FIBER CUMULATIVE FEEDER LENGTH [D_B]	BURIED FIBER EFFECTIVE LENGTH BY PAIR FOOT [E_B]	UNDERGROUND FIBER CUMULATIVE FEEDER LENGTH [D_U]	UNDERGROUND FIBER EFFECTIVE LENGTH BY PAIR FOOT [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

C:\123R24\LCATR035\SPAN **LOOP COST ANALYSIS TOOL** Bellcore®

PLANT CHAR – WORKSHEET 2B
Sheet 2b / 5

LOOP FACILITY INPUT
FIBER OPTIC CABLE SPAN INVESTMENT FOR THE FEEDER LAYER
FOR
INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996

LCAT Rel : 1.0.4
Issued : 07/31/95

STUDY YR : 1996
TEST CASE : 1
LAST UPDATE: 29–Oct–96
TIME : 08:58

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

SERVICE CLASS: BAND 2 – BUSINESS ISDN

NETWORK CIRCUIT LAYOUT STUDIES

WORKSHEET B

EFFECTIVE CHANNEL LENGTH BY CABLE PAIR FOOT [A] = [E]WKSH A / [F]WKSH C
CUMULATIVE INVESTMENT BY CABLE CHANNEL FOOT [B] = [A] * [C] * UNIT INV FACILITY WKSH B

For these sizes ...		CAPACITY [C]	Idx	AERIAL FIBER [A]	AERIAL FIBER [B]	BURIED FIBER [A]	BURIED FIBER [B]	UNDERGROUND FIBER [A]	UNDERGROUND FIBER [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

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LOOP COST ANALYSIS TOOL

Bellcore

INPUT – PLANT_CHAR
Sheet 3a / 5

LOOP FACILITY INPUT

COPPER CABLE SPAN CHARACTERISTICS FOR THE FEEDER LAYER

FOR

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS:BAND 2 – BUSINESS

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE: 29–Oct–96
TIME : 08:56

NETWORK CIRCUIT LAYOUT STUDIES

WORKSHEET A

CUMULATIVE LENGTHS BY CABLE PAIR FOOT

CABLE SHEATH SIZES	CAPACITY idx	26 GA. AERIAL	26 GA. BURIED	26 GA. UNDGRD	24 GA. AERIAL	24 GA. BURIED	24 GA. UNDGRD	22 GA. AERIAL	22 GA. BURIED	22 GA. 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										0.0
5400 COPPER CABLE	2700 pr										fdruaprf
6000 COPPER CABLE	3000 pr										0.0
7200 COPPER CABLE	3600 pr										fdrbcprf
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	0.0	fdrucprf
	TOTALS			0.0			0.0			0.0	0.0
											fdrcprf

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LOOP COST ANALYSIS TOOL

Bellcore

PLANT CHAR – WORKSHEET 3B
Sheet 3b / 5

LOOP FACILITY INPUT
COPPER CABLE SPAN INVESTMENT FOR THE FEEDER LAYER
FOR
INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996

LCAT Rel : 1.0.4
Issued : 07/31/95

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

STUDY YR : 1996
TEST CASE : 1
LAST UPDATE: 29–Oct–96
TIME : 08:58

SERVICE CLASS:BAND 2 – BUSINESS

NETWORK CIRCUIT LAYOUT STUDIES

WORKSHEET B

CUMMULATIVE INVESTMENTS BY CABLE PAIR FOOT

CABLE SHEATH SIZES	CAPACITY	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	fdractfi
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	fdrbctfi
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	fdrusfri
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	

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LOOP COST ANALYSIS TOOL

Bellcore

INPUT – PLANT_CHAR.
Sheet 4a / 5

LOOP 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: 29–Oct–96
TIME : 08:56

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS:BAND 2 – BUSINESS

NETWORK CIRCUIT LAYOUT STUDIES

WORKSHEET A

CUMULATIVE LENGTHS BY CABLE PAIR FOOT

CABLE SHEATH SIZES	CAPACITY IDX	26 GA. AERIAL	26 GA. BURIED	26 GA. UNDGRD	24 GA. AERIAL	24 GA. BURIED	24 GA. UNDGRD	22 GA. AERIAL	22 GA. BURIED	22 GA. 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										0.0
5400 COPPER CABLE	2700 pr										dstacpri
6000 COPPER CABLE	3000 pr										0.0
7200 COPPER CABLE	3600 pr										dstbcpri
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	0.0	dstucpri
	TOTALS			0.0			0.0			0.0	0.0

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LOOP COST ANALYSIS TOOL

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PLANT_CHAR – WORKSHEET 4B
Sheet 4b / 5

LOOP FACILITY INPUT
COPPER CABLE SPAN INVESTMENT FOR THE DISTRIBUTION LAYER
FOR
INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996

LCAT Rel :1.0.4
Issued : 07/31/95

STUDY YR : 1996
TEST CASE : 1
LAST UPDATE: 29–Oct–96
TIME : 06:58

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

SERVICE CLASS:BAND 2 – BUSINESS

NETWORK CIRCUIT LAYOUT STUDIES

WORKSHEET 8

CUMMULATIVE INVESTMENTS BY CABLE PAIR FOOT

CABLE SHEATH SIZES	CAPACITY	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	distactl
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	distactl
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	distactl
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	

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LOOP COST ANALYSIS TOOL

Bellcore®

INPUT – PLANT_CHAR.
Sheet 5 / 5

LOOP FACILITY INPUT
DIGITAL LOOP CARRIER CABLE PAIR EQUIVALENTS AND MIX
FOR

LCAT Rel : 1.0.4
Issued : 07/31/95

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

INVESTMENT YEAR : 1996
LOOP STUDY YEAR : 1996
SERVICE CLASS : BAND 2 – BUSINESS ISDN

STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 09:58

FIBER BANDWIDTH
TRANSMISSION FLOW IS : [X] UNIDIRECTIONAL
[ ] BIDIRECTIONAL

LEVEL OF SERVICE : NARBAND

BITRATE INDEX	1	2	3	4	5	6	7			WEIGHTED
FIBER BANDWIDTH	45 Mbps	90 Mbps	155 Mbps	180 Mbps	0	0	0	SERVICE	PROTECTION	EQUIVALENT
MUX DS3 MULTIPLIER	1	2	3	4	0	0	0	LEVEL		CHANNELS
VOICE GRADE CHANNELS	672	1344	2016	2688	0	0	0	MULTIPLE [SLM]	n : 1 [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

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 1 OVER PROT___[E]}

0

PLANT CHAR. – WORKSHEET DS
Sheet 1 / 1

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

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 08:58

WORKSHEET DS

DIGITAL SIGNAL TABLE (digsig tbl)

	SELECT	MODE	HIERARCY	BNDWDTH	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			VT1.5	1.5 Mbps	1	0.04	24	UNDIR,FIBER
4			VT2	2 Mbps	1	0		UNDIR,FIBER
5			E1	2 Mbps	1	0.06	30	BIDIR,2WCU CA
6		MODE1	DSTC	3.2 Mbps	NA		48	BIDIR,2WCU CA
7		MODE2	DSTC	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	1	480	
15	X		DS3	45 Mbps	28	1	672	BIDIR,2WCU CA
16		STS1	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			T4M	139 Mbps		6	4032	BIDIR,COAX
24			FT40	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	466 Mbps		9	6048	UNDIR,FIBER
29			OC12	560 Mbps		12	7560	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	5	6	7
	OFFSET							

PLANT_CHAR. – WORKSHEET F
Sheet 1 of 1

LOOP LENGTH DEVELOPMENT WORKSHEET
FOR
INVESTMENT YEAR : 1996
LOOP STUDY YEAR : 1996
SERVICE CLASS : BAND 2 – BUSINESS
WORKSHEET F

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR. : 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 08:58

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

[A] DISTANCE INCREMENTS : 0 / 4 MILE BETWEEN BANDS
[B] NUMBER OF BANDS : 0 TO BE CARRIED INTO THE STUDY

[R] ROUTE TO AIR RATIO : 1.539947 rtaratio
[K] UNIT MILE / FEET CONSTANT : 1320

BAND NUMBER [C]	TOTAL WORKING FEET [D=input]	TOTAL WORKING FEET [E=(B*D)]	TOTAL AIR FEET [F=A*C*K]	LOOP LENGTH @ MIDPOINT [G (see note)]	WORKING FEET @ MIDPOINT [H=G*R]
1		0		0	0
2		0		0	0
3		0		0	0
4		0		0	0
5		0		0	0

ERROR MESSAG 0

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

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SUB_PRI - REPORT 14
Sheet 1 of 1

LOOP COST ANALYSIS TOOL
PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore(R)
LCAT Release : 1.0.4
Issue Date : 7/31/95

COMPANY: CINCINNATI BELL TEL
CITY / AREA: CINCINNATI
STATE / PROV : OHIO
FACILITY SEGMENT : SUB--PRIMARY PLANT
SERVICE CLASS:BAND 2 - BUSINESS ISDN

STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23-Jan-97
TIME : 13:48

logic-14a 1996 UNIT MONTHLY RECURRING COST BY ACCOUNT

PLANT ITEM	PLANT ACCT CODE	BAND MIX AVG. LGTH SEG.LGTH.	(SEE NOTE) TOTAL AVG. WEIGHTED
		BAND 0	
		MIX 1.0000	
		AVG. LGTH 26159	
		SEG.LGTH. 300	300
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	$ 0.06	$ 0.06
BURIED CABLE (COPPER)	45C	$ 0.01	$ 0.01
UNDERGROUND (CU) CA.	5C	$ 0.12	$ 0.12
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	0.0 $ 0.01	$ 0.01
CONDUIT	4C	0.0 $ 0.04	$ 0.04
SPAN SUMMARY		$ 0.24 $ 0.00 $ 0.00 $ 0.00 $ 0.00 $ 0.00	$ 0.24
AVG. WTD. SPAN SUMMARY		$ 0.24 $ 0.00 $ 0.00 $ 0.00 $ 0.00 $ 0.00	

NOTE: [sum($INV_{ACCT}^{BAND} * MIX^{BAND}$)]

C:\123R24\LCATCALC\CUPR3N
CDLC_PLANT – WORKSHEET 1
Sheet 1 of 3

LOOP COST ANALYSIS TOOL

BASIC INVESTMENT WORKSHEET

CENTRAL OFFICE TO REMOTE TERMINAL (PRIMARY SECTION) WORKSHEET
FOR DIGITAL LOOP CARRIER IN THE FEEDER SEGMENT ONLY

Bellcore

LCAT Release : 1.0.4
Issue Date : 8/31/95
STUDY YR : 1996
TEST CASE : 1
DATE : 23–Jan–97
TIME : 01:49 PM

COMPANY: CINCINNATI BELL TEL
CITY / AREA : OHIO
STATE / PROV : CINCINNATI
FACILITY TYPE : COPPER DIG LOOP CXR
CIRCUIT DESIGN : C
SERVICE CLASS : BAND 2 – BUSINESS ISDN

26139 cur_lplgth
300 cumulcr–lgth
f = 0.125 pgfactor

SEGMENT LENGTH IN FEET	TYPE OF CABLE PLANT	RELATIVE MIX OF TYPE OF CA. PLANT	EFFECTIVE LENGTH SUBSET BY TYPE OF PLANT	MELDED INVEST. PER UNIT FOOT	CABLE COMPONENTS (NOTE 5) CABLE INVESTMENT PER CHAN	WEIGHTED TERMINAL INVESTMENT	AIR DRYER INVESTMENT PER PAIR	(NOTE 4) DROP WIRE ADJUSTMENT PER PAIR	(NOTE 5) WEIGHTED DROP WIRE INVESTMENT PER PAIR
[A]		[B]	[C=A*B*f]	[D]	[E=C*D]	[UI*DTC]	[E*fctr]	[E*fctr]	[UI*DTC]
23610	AERIAL	0.290000	863.11	0.023800	$ 20.54		$ 0.00		
CO TO RT LINK ON COPPER CABLE DLC 24.00 GA. FACILITIES	BURIED	0.020000	59.53	0.041000	$ 2.44		$ 0.00		
	UNDERGRND	0.690000	2053.61	0.022000	$ 45.18		$ 0.00		
		1.000000							

OUTSIDE PLANT LOADINGS (NOTE 5) :

		DROP WIRE	AIR DRYER
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) :		TERM	CHAN
INT DLC EQUIP INVEST. (CU COMUX) =	intdlcco_	$ 0.00	$ 0.00
INT DLC EQUIP INVEST. (CU RTMUX) =	intdlcrt_	$ 141.70	$ 348.82
UNIV DLC EQUIP INVEST. (CU COMUX) =	unvdlcco_	$ 39.17	$ 361.90
UNIV DLC EQUIP INVEST. (CU RTMUX) =	unvdlcrt_	$ 141.70	$ 348.82
DLC EQUIP INVEST. (CU LINE) =	___dlccol		$ 0.00

CONDUIT INVEST. FOR DLC CEV FACILITIES = conpgnvst $ 0.00

OTHER INVESTMENT

		inv / unit lgth	inv rtn fctr
POLE LINE FACTOR (PLF) =		0.0000	0.2530
POLE LINE INVESTMENT (UTIL AERIAL INVEST. x PLF) =		$ 8.66	
UGD CONDUIT FACTOR (UCF) =		0.0000	0.5165
CONDUIT INVESTMENT (UTIL UNDGRD INVST x UCF) =		$ 38.89	

EQUIPMENT INVESTMENT LOADINGS

INVST. PER CHAN. FOR DLC TERM (co conn) =	$ 0.00
MISC. COM. EQPT. & POWER FACTOR FOR DLC (rem) =	0.1127
MISC. COM. EQPT. & POWER FACTOR FOR DLC (c.o.) =	0.1127
MCE&P INVST. (CU REMMUX x MCEPf) =	$ 55.25
MCE&P INVST. (CDLCMUX x MCEPf) =	$ 1.81
MCE&P INVST. (CO CONN x MCEPf) =	$ 0.00

OTHER INVESTMENT

LAND FACTOR FOR DLC (LANDf_rem) =	0.0056
LAND FACTOR FOR DLC (LANDf_c.o.) =	0.0056
LAND INVST.(CU COMUX+MCEP) x LANDf =	$ 3.16
LAND INVST. ((CO CONN+MCEP) x LANDf) =	$ 0.00
BUILDING FACTOR FOR DLC (BLDGf_rem.) =	0.1316
BUILDING FACTOR FOR DLC (BLDGf_c.o.) =	0.1316
BLDG INVST.(CDLCMUX+MCEP) x BLDGf =	$ 74.16
BLDG INVST. ((CO CONN+MCEP) x BLDGf) =	$ 0.00

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	0.0400
MIX OF INTEGRATED DIGITAL INTFC	0.9600

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.

C:\123R24\LCATCALC\CUPRGN
CDLC_PLANT – WORKSHEET 1
Sheet 2 of 3

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

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 CXR
CIRCUIT DESIGN : 1 TIC
SERVICE CLASS : BAND 2 – BUSINESS ISDN

Bellcore®
LCAT Release : 1.0.4
Issue Date : 8/31/95
STUDY YR : 1996
TEST CASE : 1
DATE : 23–Jan–97
TIME : 01:49 PM

PLANT ITEM	PLANT ACCT CODE	FIXED VARI SLNK	RESOURCE ALLOCATION	1996 UNIT INVESTMENTS 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	3.16	1	$ 3		1.0000	$ 3	
BUILDING	10C	F	SHARED	74.31	1	$ 74		1.0000	$ 74	
BLDG ENTRANCE CABLE	12C	---	---					1.0000		
INTRABLDG CABLE	52C	---	---					0.3500		
AERIAL CABLE (COPPER)	22C	V	DIRECT	20.54	1		$ 21	0.6000		$ 34
BURIED CABLE (COPPER)	45C	V	DIRECT	2.44	1		$ 2	0.6000		$ 4
UNDERGROUND (CU) CA.	5C	V	DIRECT	45.18	1		$ 45	0.6000		$ 75
CO EQPT – P GAIN TERM	257C	F	DIRECT	198.55	1		$ 199	0.7000		$ 284
CO EQPT – P GAIN CHAN	257C	V	DIRECT	363.30	1		$ 363	0.7000		$ 519
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					0.3300		
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	1.81	1	$ 2		1.0000	$ 2	
POLE LINE	1C	F	DIRECT	8.66	1		$ 9	1.0000		$ 9
CONDUIT	4C	F	DIRECT	38.89	1		$ 39	1.0000		$ 39
TOTALS									$ 79	$ 964
										$ 1,043

FEED1IY

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

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CDLC_PLANT – WORKSHEET 1
Sheet 3 of 3

LOOP COST ANALYSIS TOOL

PROSPECTIVE AND ANNUAL COSTS WORKSHEET

CENTRAL OFFICE TO REMOTE TERMINAL (PRIMARY SECTION) WORKSHEET
FOR DIGITAL LOOP CARRIER IN THE FEEDER SEGMENT ONLY

Bellcore®
LCAT Release : 1.0.4
Issue Date : 5/31/95

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

FACILITY TYPE : COPPER DIG LOOP CXR
CIRCUIT DESIGN : [1] C
SERVICE CLASS : BAND 2 – BUSINESS ISDN

STUDY YR : 1996
TEST CASE : 1
DATE : 23–Jan–97
TIME : 01:49 PM

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	$ 3		0.2322	$ 0.73		$ 0.06	
BUILDING	10C	1.0000	$ 74		0.2937	$ 21.82		$ 1.82	
BLDG ENTRANCE CABLE	12C	1.0000			0.3922				
INTRABLDG CABLE	52C	1.0000			0.3922				
AERIAL CABLE (COPPER)	22C	1.0000		$ 34	0.4033		$ 13.81		$ 1.15
BURIED CABLE (COPPER)	45C	1.0000		$ 4	0.3467		$ 1.41		$ 0.12
UNDERGROUND (CU) CA.	5C	1.0000		$ 75	0.3663		$ 27.58		$ 2.30
CO EQPT – P GAIN TERM	257C	1.0000		$ 284	0.3881		$ 110.08		$ 9.17
CO EQPT – P GAIN CHAN	257C	1.0000		$ 519	0.3881		$ 201.42		$ 16.79
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	$ 2		0.3881	$ 0.70		$ 0.06	
POLE LINE	1C	1.0000		$ 9	0.3607		$ 3.30		$ 0.27
CONDUIT	4C	1.0000		$ 39	0.2521		$ 9.80		$ 0.82
TOTALS			$ 79	$ 964		$ 23.26	$ 367.40	$ 1.94	$ 30.62
				$ 1,043			$ 390.66		$ 32.56
				FEED1SY			FEED1ANN		FEED1MRC

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.

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CDLC_PLANT – REPORT 14.1
Sheet 1 of 3

LOOP COST ANALYSIS TOOL
PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore (R)

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

FACILITY SEGMENT : PRIMARY FEEDER SEGMENT
CIRCUIT DESIGN. [redacted] COPPER DIG LOOP CXR
SERVICE CLASS : BAND 2 – BUSINESS ISDN

LCAT Release : 1.0.4
Issue Date : 8/31/95
STUDY YR : 1996
TEST CASE : 1
DATE : 23–Jan–97
TIME : 01:50 PM

logic–14a 1996 UNIT MONTHLY RECURRING COST BY ACCOUNT

PLANT ITEM	PLANT ACCT CODE	BAND MIX AVG LGTH	0 1.0000 26159					(SEE NOTE) TOTAL AVG. WEIGHTED INVESTMENT
		SEG.LGTH.	23810					23810
SHARED RESOURCES								
LAND	20C		$ 0.06					$ 0.06
BUILDING	10C		$ 1.82					$ 1.82
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		$ 0.06					$ 0.06
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		$ 1.15					$ 1.15
BURIED CABLE (COPPER)	45C		$ 0.12					$ 0.12
UNDERGROUND (CU) CA.	5C		$ 2.30					$ 2.30
CO EQPT – P GAIN TERM	257C		$ 9.17					$ 9.17
CO EQPT – P GAIN CHAN	257C		$ 16.79					$ 16.79
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		$ 0.27					$ 0.27
CONDUIT	4C	*****	$ 0.82					$ 0.82
SPAN SUMMARY			32.56	0.00	0.00	0.00	0.00	32.56
AVG. WTD. SPAN SUMMARY			32.56	0.00	0.00	0.00	0.00	

NOTE: $[\text{sum}(INV_{ACCT}^{BAND} * MIX^{BAND})]$

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Bellcore (R)

RUN – FO MUX
LAST UPDATE
23--Jan--97
10:42

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 2 (OHIO ONLY) BUSINESS ISDN 18001 FEET – INFINITY INTR

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

....your run is finished

PROVIDED TO PUCO

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

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C:\123R24\LCATCALC\FOPRGN.WK1 — FO_MUX – WORKSHEET 3 — Sheet 1 of 3

LOOP COST ANALYSIS TOOL

BASIC INVESTMENT WORKSHEET

Bellcore®

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

FOR PRIMARY FEEDER PLANT
FACILITY TYPE : FIBER IN THE LOOP
CIRCUIT DESIGN : 3 | FOMUX TO HUB / REM.
SERVICE CLASS : BAND 2 – BUSIN SERVICE LEVEL: NARBAND

LCAT Rel : 1.0.4
ISSUE DATE : 7/31/95
STUDY YR : 1996
TEST CASE : 1
LAST RUN : 23–Jan–97
TIME : 13:52

from sfdr_tbl : from bw_mix :

300 cur_sfc:ngth — f = 1979.04 wtdeqvmn
15134.5 cur_pr:gth

SEGMENT LENGTH IN FEET	TYPE OF CABLE PLANT	RELATIVE MIX OF TYPE OF CA. PLANT	EFFECTIVE LENGTH SUBSET BY TYPE OF PLANT	MLD CABLE DESIGN INVEST. PER PAIR FOOT	CABLE COMPONENTS (NOTE 5) WEIGHTED EFFECTIVE LGTH CABLE INVESTMENT	WEIGHTED TERMINAL INVESTMENT	AIR DRYER INVESTMENT PER PAIR	(NOTE 4) DROP WIRE ADJUSTMENT PER PAIR	(NOTE 5) WEIGHTED DROP WIRE INVESTMENT PER PAIR
fo3pri_seglgth [A]		[B]	[C=A*B/f]	[D]	[E=C*D]	[UI*DTC]	[E*fctr]	[E*fctr]	[UI*DTC]
23610	AERIAL	0.480000	5.77	0.193000	1.11		0.00		
CO TO HUB LINK ON FIBER OPTIC FACILITIES	BURIED	0.000000	0.00	0.269400	0.00		0.00		
	UNDERGRND	0.520000	6.26	0.182700	1.14		0.00		
		1.000000							

OUTSIDE PLANT LOADINGS (NOTE 5) :		DROP WIRE	AIR DRYER
ADJUST. / LOAD FACTORS TO AERIAL PPI		NA	0.0000
ADJUST. /LOAD FACTORS TO BURIED PPI		NA	0.0000
ADJUST. / LOAD FACTORS TO UGD PPI		NA	0.0000
DLC EQUIPMENT INVEST. (NOTE 2)		**TERM**	**CHAN**
INT DLC EQUIP INVEST. (CU COMUX) =	intdlcco_	$ 0.00	$ 0.00
INT DLC EQUIP INVEST. (CU RTMUX) =	intdlcrt_	$ 141.70	$ 348.82
UNIV DLC EQUIP INVEST. (CU COMUX) =	univdlcco_	$ 39.17	$ 361.90
UNIV DLC EQUIP INVEST. (CU RTMUX) =	univdlcrt_	$ 141.70	$ 348.82
FIBER MUX EQUIP. INV. (FO COMUX) =	hubmx0co_	$ 3.88	$ 49.18
FIBER MUX EQUIP. INV. (FO RTMUX) =	hubmx0rt_	$ 2.01	$ 53.79

OTHER INVESTMENT		inv / unit lgth.:	inv rtn fctr :
POLE LINE FACTOR (PLF) =	tplf_	0.0000	0.1985
POLE LINE INVESTMENT (UTIL AERIAL INVEST. x PLF) =		$ 0.66	
UNDERGROUND CONDUIT FACTOR (PLF) =	tucf_	0.0000	0.5232
CONDUIT INVESTMENT (UTIL UNDGRND INVST x UCF) =		$ 1.81	

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	0.0400
MIX OF CENT. OFC. INTEGRATED DLC INTFC	0.9600

EQUIPMENT INVESTMENT LOADINGS	
INVST. PER CHAN. FOR CA TERM (CA CONN) =	$ 0.00
MISC. COM. EQPT. & POWER FACTOR (DLCrem) =	0.1127
MISC. COM. EQPT. & POWER FACTOR (MUXrem) =	0.1127
MISC. COM. EQPT. & POWER FACTOR (OTHrem) =	0.1127
MISC. COM. EQPT. & POWER FACTOR (MUXc.o.) =	0.1127
MISC. COM. EQPT. & POWER FACTOR (DLCc.o.) =	0.1127
MISC. COM. EQPT. & POWER FACTOR (OTHc.o.) =	0.1127
MCE&P INVST. (MUXc.o.+DLCc.o.) x MCEPfc.o.) =	$ 7.79
MCE&P INVST. (MUXrem+DLCrem) x MCEPfrem) =	$ 61.57
MCE&P INVST. (CA CONN x MCEPfc.o.) =	$ 0.00
MCE&P INVST. (CA CONN x MCEPfrem) =	$ 0.00
LAND FACTOR FOR MUX EQP (LANDfrem) =	0.0056
LAND FACTOR FOR MUX EQP (LANDfrem) =	0.0056
LAND FACTOR FOR OTH (LANDfrem) =	0.0056
LAND FACTOR FOR DLC EQP (LANDfc.o.) =	0.0056
LAND FACTOR FOR MUX EQP (LANDfc.o.) =	0.0056
LAND FACTOR FOR OTH (LANDfc.o.) =	0.0056
LAND INVST. (DLC+MUX+MCEP) x LANDfc.o. =	$ 0.43
LAND INVST. (MUX+DLC+MCEP) x LANDfrem =	$ 3.40
BUILDING FACTOR FOR DLC EQP (BLDGfrem) =	0.1316
BUILDING FACTOR FOR MUX EQP (BLDGfrem) =	0.1316
BUILDING FACTOR FOR OTH (BLDGfrem) =	0.1316
BUILDING FACTOR FOR DLC EQP (BLDGfc.o.) =	0.1316
BUILDING FACTOR FOR MUX EQP (BLDGfc.o.) =	0.1316
BUILDING FACTOR FOR OTH (BLDGfc.o.) =	0.1316
BLDG INVST. (DLC+MUX+MCEP) x BLDGfc.o. =	$ 10.12
BLDG INVST. (MUX+DLC+MCEP) x BLDGfrem) =	$ 80.00

FOOTNOTES

NOTE 1: APPARENT INCONSISTANCES 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 WORKSEET 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.

C:\123R24\LCAT\CALC\FOPRGN.WK1
FO_MUX -- WORKSHEET 3
Sheet 2 of 3

LOOP COST ANALYSIS TOOL

ACCOUNT INVESTMENT WORKSHEET

FOR PRIMARY FEEDER PLANT
FACILITY TYPE : FIBER IN THE LOOP
CIRCUIT DESIGN : 3 | FOMUX TO HUB / REM.
SERVICE CLASS : BAND 2 – BUSINSERVICE LEVEL NARBAND

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

Bellcore®
LCAT Rel : 1.0.4
ISSUE DATE : 7/31/95
STUDY YR : 1996
TEST CASE : 1
LAST RUN : 23–Jan–97
TIME : 13:52

PLANT ITEM	PLANT ACCT CODE cmstart	FIXED VARI SUNK	RESOURCE ALLOCATION	1996 UNIT INVESTMENTS BY ACCOUNT COST EQUATION	CIRCUIT QUANTITY	1996 UNIT LOOP INVESTMENT EXCL. UTILIZATION SHARED RESOURCES	DIRECT RESOURCES	ADMIN. UTIL LINE FILL utilstart	1996 UNIT LOOP INVESTMENT INCL. UTILIZATION SHARED RESOURCES	DIRECT RESOURCES
				[F]	[G]	[H=F*G]	[H'=F*G]	[J]	[K=H/J]	[K'=H'/J]
LAND	20C	F	SHARED	3.83	1	$ 4		1.0000	$ 4	
BUILDING	10C	F	SHARED	90.12	1	$ 90		1.0000	$ 90	
BLDG ENTRANCE CABLE	12C	---	---					1.0000		
INTRABLDG CABLE	52C	---	---					0.3500		
AERIAL CABLE (COPPER)	22C	V	DIRECT					0.6000		
BURIED CABLE (COPPER)	45C	V	DIRECT					0.6000		
UNDERGROUND (CU) CA.	5C	V	DIRECT					0.6000		
CO EQPT – LOW CAP TERM	257C	F	DIRECT	143.27	1		$ 143	0.7000		$ 205
CO EQPT – LOW CAP CHAN	257C	V	DIRECT	383.30	1		$ 383	0.7000		$ 519
CO EQPT – HI CAP TERM	857C	F	DIRECT	67.46	1		$ 67	1.0000		$ 67
CO EQPT – HI CAP CHAN	857C	F	DIRECT	102.97	1		$ 103	1.0000		$ 103
CO EQPT – ANALOG SW	77C	V	DIRECT	0.00				1.0000		
CO EQPT – DIGITAL SW	377C	V	DIRECT	0.00				1.0000		
AERIAL CABLE (FIBER)	822C	F	DIRECT	1.11	1		$ 1	0.3300		$ 3
BURIED CABLE (FIBER)	845C	F	DIRECT	0.00				0.3300		
UNDERGROUND (FO) CA.	85C	F	DIRECT	1.14	1		$ 1	0.3300		$ 3
CONNECTORS	57C	V	DIRECT	0.00				1.0000		
MISC. COM EQP & PWR	57C	V	SHARED	7.79	1	$ 8		1.0000	$ 8	
POLE LINE	1C	F	DIRECT	0.66	1		$ 1	1.0000		$ 1
CONDUIT	4C	F	DIRECT	1.81	1		$ 2	1.0000		$ 2
TOTALS									$ 103	$ 903
										$ 1,005

feed3iy

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]

C:\123R24\LCATCALC\FOPRGN.WK1
FO_MUX – WORKSHEET 3
Sheet 3 of 3

LOOP COST ANALYSIS TOOL
ANNUAL COSTS WORKSHEET

Bellcore®

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

FOR PRIMARY FEEDER PLANT
FACILITY TYPE : FIBER IN THE LOOP
CIRCUIT DESIGN : 3 FOMUX TO HUB / REM.
SERVICE CLASS : BAND 2 – BUS SERVICE LEVEL: NARBAND

LCAT Rel : 1.0.4
ISSUE DATE : 7/31/96
STUDY YR : 1996
TEST CASE : 1
LAST RUN : 23–Jan–97
TIME : 13:52

PLANT ITEM	PLANT ACCT CODE	1996 TO 1996 TPI tpistart	1996 UNIT LOOP INVESTMENT BY ACCOUNT: SHARED RESOURCES fo3sixaset	1996 UNIT LOOP INVESTMENT BY ACCOUNT: DIRECT RESOURCES fo3dixaset	ANNUAL COST FACTOR acfstart	1996 UNIT ANNUAL COSTS BY ACCOUNT: SHARED RESOURCES	1996 UNIT ANNUAL COSTS BY ACCOUNT: DIRECT RESOURCES	1996 UNIT MONTHLY RECURRING COSTS BY ACCOUNT: SHARED RESOURCES fo3scxaset	1996 UNIT MONTHLY RECURRING COSTS BY ACCOUNT: DIRECT RESOURCES fo3dcxaset
[PREVIOUS SHEET SUMMARY		[L]	[M=K*L]	[M'=K'*L]	[N]	[P=M*N]	[P'=M'*N]	[Q=P/12]	[Q'=P'/12]
LAND	20C	1.0000	$ 4		0.2322	$ 0.89		$ 0.07	
BUILDING	10C	1.0000	$ 90		0.2937	$ 26.47		$ 2.21	
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		$ 205	0.3881		$ 79.48		$ 6.62
CO EQPT – LOW CAP CHAN	257C	1.0000		$ 519	0.3881		$ 201.42		$ 16.79
CO EQPT – HI CAP TERM	857C	1.0000		$ 67	0.3881		$ 26.18		$ 2.18
CO EQPT – HI CAP CHAN	857C	1.0000		$ 103	0.3881		$ 39.96		$ 3.33
CO EQPT – ANALOG SW	77C	1.0000			0.0000				
CO EQPT – DIGITAL SW	377C	1.0000			0.3458				
AERIAL CABLE (FIBER)	822C	1.0000		$ 3	0.2963		$ 1.01		$ 0.08
BURIED CABLE (FIBER)	845C	1.0000			0.2724				
UNDERGROUND (FO) CA.	85C	1.0000		$ 3	0.2689		$ 0.93		$ 0.08
CONNECTORS	57C	1.0000			0.3881				
MISC. COM EQP & PWR	57C	1.0000	$ 8		0.3881	$ 3.02		$ 0.25	
POLE LINE	1C	1.0000		$ 1	0.3807		$ 0.25		$ 0.02
CONDUIT	4C	1.0000		$ 2	0.2521		$ 0.46		$ 0.04
TOTALS			$ 102	$ 903		$ 30.36	$ 349.65	$ 2.53	$ 29.14
				$ 1,005			$ 380.03		$ 31.67
				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.

C:\123R24\LCAT\CALCFOPRGN.WK1
FO_MUX – REPORT 14.3
Sheet 1 of 1

LOOP COST ANALYSIS TOOL

PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore (R)

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

FOR PRIMARY FEEDER PLANT
FACILITY TYPE : FIBER IN THE LOOP
CIRCUIT DESIGN : 3 FOMUX TO HUB / REM.
SERVICE CLASS : BAND 2 – BUSIN SERVICE LEVEL: NARBAND

LCAT Rel : 1.0.4
ISSUE DATE : 7/31/95
STUDY YR : 1996
TEST CASE : 1
LAST RUN : 23–Jan–97
TIME : 13:52

data – 14a3 — 1996 UNIT MONTHLY RECURRING COST BY ACCOUNT

PLANT DEV	ACCT CODE	AVG. LGTH	BAND 0				(SEE NOTE) TOTAL AVG WEIGHTED INVESTMENT
	PLANT MIX		1.0000				
	SEG LGTH.		26159				
			23810				23810
SHARED RESOURCES							
LAND	20C		$ 0.07				$ 0.07
BUILDING	10C		$ 2.21				$ 2.21
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 – LOW CAP TERM	257C						$ 0.00
CO EQPT – LOW CAP CHAN	257C						$ 0.00
CO EQPT – HI CAP TERM	857C						$ 0.00
CO EQPT – HI CAP 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		$ 0.25				$ 0.25
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						$ 0.00
BURIED CABLE (COPPER)	45C						$ 0.00
UNDERGROUND (CU) CA.	5C						$ 0.00
CO EQPT – LOW CAP TERM	257C		$ 6.62				$ 6.62
CO EQPT – LOW CAP CHAN	257C		$ 16.79				$ 16.79
CO EQPT – HI CAP TERM	857C		$ 2.18				$ 2.18
CO EQPT – HI CAP CHAN	857C		$ 3.33				$ 3.33
CO EQPT – ANALOG SW	77C						$ 0.00
CO EQPT – DIGITAL SW	377C						$ 0.00
AERIAL CABLE (FIBER)	822C		$ 0.06				$ 0.06
BURIED CABLE (FIBER)	845C						$ 0.00
UNDERGROUND (FO) CA.	85C		$ 0.06				$ 0.06
CONNECTORS	57C						$ 0.00
MISC. COM EQP & PWR	57C						$ 0.00
POLE LINE	1C		$ 0.02				$ 0.02
CONDUIT	4C		$ 0.04				$ 0.04
SPAN SUMMARY			31.67	0.00	0.00	0.00	$ 31.67
AVG. WTD. SPAN SUMMARY			31.67	0.00	0.00	0.00	0.00

NOTE: $[\text{sum}(INV_{ACCT}^{BAND} * MIX^{BAND})]$

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C:\123R24\LCATR036\COSTMETH **LOOP COST ANALYSIS TOOL** Bellcore®

TABLE – COST_METH
SHEET 1 of 2

COST METHODS ASSIGNMENT TABLE
DISTRIBUTION SEGMENT

COMPANY: CINCINNATI BELL TEL
STATE: OHIO

SWITCHED SERVICES

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR: 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 09:12

PLANT ITEM	LCAT CODE	PLANT CODE	WHEN BANDWIDTH DELIVERY IS NARBAND CATEGORY SENS. INDEX	NARBAND RESOURCE ASSIGNMENT	WIDEBAND CATEGORY SENS. INDEX	WIDEBAND RESOURCE ASSIGNMENT	BROADBAND CATEGORY SENS. INDEX	BROADBAND 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) ❶	ACU	22C	V	DIRECT	V	DIRECT	V	DIRECT
BURIED CABLE (COPPER) ❶	BCU	45C	V	DIRECT	V	DIRECT	V	DIRECT
UNDERGROUND (CU) CA. ❶	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

❶ THESE ASSIGNMENTS APPLY TO DEDICATED COPPER – PAIRS (NON–MULTIPLEXED) FEEDER & DISTRIBUTION

BY DEFINITION : ITEMS LABELED F(ixed) OR SHARED ARE EXCLUDED IN A MARGINAL COST STUDY.
ITEMS LABELD F(ixed) ARE EXCLUDED FROM ADDITIONS IN INCREMENTAL STUDIES.
ALL ITEMS ARE INCLUDED IN A PROSPECTIVE REPLACEMENT OR NEW INSTALLATION.

C:\123R24\LCATR036\COSTMETH
TABLE – COST_METH
Sheet 1 of 2

HELP SCREEN

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

Field / Group Title	Valid Inputs	This field or grouping defines –
		The system matrix for DISTRIBUTION cost methodolgy for –
SERVICES	(none)	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 – Narrowband – denotes voice grade and sub–voice grade band width. Wideband – denotes bandwidths of the first level of digital hierarchy. Broadband – denotes bandwidths of the higher levels of digital hierarchy.
CATEGORY	(none)	The group of Methodology Categories
SENSITIVITY INDEX	F, V	The Volitility Index to Distance or Demand Sensitivity – F for Fixed Value, Low sensitivity to Distance or Demand. V for Variable Usage, Cost Sensitive to Distance or Demand. S for Sunk Investment which only has an Annual Component.
RESOURCE ASSIGNMENT	SHARED, DIRECT	The Assigned Category of Circuit Function – DIRECT for Dedicated or Circuit Specific Investemnt. 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

C:\123R24\LCATR036\COSTMETH

LOOP COST ANALYSIS TOOL

Bellcore (R)

TABLE – COST_METH
SHEET 2 of 2

COST METHODS ASSIGNMENT TABLE
FEEDER SEGMENT

COMPANY: CINCINNATI BELL TEL.
STATE: OHIO

SWITCHED SERVICES

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR: 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 09:12

PLANT ITEM	PLANT CODE	WHEN BANDWIDTH DELIVERY IS ... NARBAND CATEGORY ... SENS. INDEX	NARBAND RESOURCE ASSIGNMENT	WIDEBAND CATEGORY ... SENS. INDEX	WIDEBAND RESOURCE ASSIGNMENT	BROADBAND CATEGORY ... SENS. INDEX	BROADBAND RESOURCE 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) ❶	22C	V	DIRECT	V	DIRECT	V	DIRECT
BURIED CABLE (COPPER) ❶	45C	V	DIRECT	V	DIRECT	V	DIRECT
UNDERGROUND (CU) CA. ❶	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

❶ 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.

C:\123R24\LCATR036\COSTMETH
TABLE – COST_METH
Sheet 2 of 2

HELP SCREEN

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

Field / Group Title	Valid Inputs	This field or grouping defines –
		The system matrix for FEEDER cost methodolgy for –
SERVICES	(none)	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 – Narrowband – denotes voice grade and sub–voice grade band width. Wideband – denotes bandwidths of the first level of digital hierarchy. Broadband – denotes bandwidths of the higher levels of digital hierarchy.
CATEGORY	(none)	The group of Methodology Categories
SENSITIVITY INDEX	F, V	The Volitility Index to Distance or Demand Sensitivity – F for Fixed Value, Low sensitivity to Distance or Demand. V for Variable Usage, Cost Sensitive to Distance or Demanc. S for Sunk Investment which only has an Annual Component.
RESOURCE ASSIGNMENT	SHARED, DIRECT	The Assigned Category of Circuit Function – DIRECT for Dedicated or Circuit Specific Investemnt. 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

C:\123F24\LCATR036\CRITERIA **LOOP COST ANALYSIS TOOL** Belcore (R)

INPUT - STUDY SETUP
LCAT Rel. : 1.0.4
Issue Date : 3/31/95

GENERAL STUDY REQUIREMENTS

TODAY IS : 7-Jan-97
LAST UPDATE: 29-Oct-96 09:15 AM

STUDY NAME	1996 BAND 2 (OHIO ONLY) BUSINESS ISDN 18001 FEET – INFINITY INTRASTATE		
COMMENTS			
		STUDY BASIS	x NETWORK / INDIVIDUAL
SERVICE CLASS	BAND 2 – BUSINESS ISDN		
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 (VH HI MED LO)	**TEST CASE**	17

DIGITAL LOOP CARRIER FACILITIES INCLUDED IN THE STUDY:

Type Percent Mix :	
100	FIBER IN THE LOOP
0	COPPER DIG LOOP CXR

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C:\123R24\LCATR036\CRITERIA
INPUT – STUDY SETUP
Sheet 1 of 2

HELP SCREEN

Bellcore ™
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

C:\123R24\LCATR035\CRITERIA

LOOP COST ANALYSIS TOOL

Bellcore (R)

INPUT – STUDY SETUP
SHEET 2 / 2

GENERAL STUDY REQUIREMENTS
STUDY QUESTIONS
FOR

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 2 – BUSINESS ISDN

LCAT Rel. 1.0.4
ISSUED: 1/31/96
STUDY YEAR: 1996
TEST CASE: 1
LAST UPDATE: 29–Oct–96
TIME: 09:15 AM

CONCERNING –	SELECTED QUESTIONS	VALID RESPONSE SET		
SERVICE SPEC.	1. Is this Study for a NEW Installation or an ADDITION ?	N or A	NEW	
	2. Is this Study for a SWITCHED or PRIVATE LINE Service ?	S or P	SWITCHED	
	3. Is this Study for Narrow, Wide, or Broadband Services	N, W or B	NARBAND	
	4. Is this Study for 2 Wire or 4 Wire Transmission ?	2 or 4	2	
OFFICE CHAR.	5. What Percent of the C.O. Switch Installations are DIGITAL Switches?	0 → 100	100	
	6. What Percent of Loop Carrier Installations are INTEGRATED DLC's?	0 → 100	98	
	7. What Percent of Loop Carrier Cross–connects are Electronic DCS's?	0 → 100		
	8. Deploy Digital Loop Carrier (loop pair gain) exclusively at ?	e.g., 12000	18000	Feet
RESULTS SPEC.	9. Do you want FLAT RATE or DISTANCE SENSITIVE parameters ?	F or D	FLAT RATE	
	9a. If Distance Sensitive, what band increment do you want ?	1,2,3,4		
	10. How many Cost Bands in this study ?	0 → 5	0	
	11. Should this Study result in Investment, Cost, or All values ?	I,C or A	COST	
	12. Is this study for Total Incremental or Marginal Costs ?	T or M	TOT INCR	
	13. How many circuits (loops) in this Study ?	0 → 999	1	
	14. The study classification is .....(e.g.; RATES PLAN, TEST DATA, NEW SERVICE) Required for the "Footer" of each Report page.		RATES PLAN	

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C:\123R24\LCATR036\CRITERIA HELP SCREEN Bellcore®
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 < Enter > KEY TO RETURN TO THE MAIN MENU

C:\123R24\LCATR036\DESIGN **LOOP COST ANALYSIS TOOL** Bellcore

INPUT – LOOP_DESIGN	CIRCUIT DESIGN REQUIREMENTS	LCAT Rel	1.0.4
Sheet 1 / 1	CHARACTERISTICS	Issued	07/31/95
	FOR	STUDY YR	1996
COMPANY :CINCINNATI BELL TEL	INVESTMENT YEAR: 1996	TEST CASE	1
CITY / AREA :CINCINNATI	LOOP STUDY YEAR: 1996	LAST UPDATE	29–Oct–96
STATE / PROV :OHIO	SERVICE CLASS:BAND 2 – BUSINESS ISDN	TIME	09:16

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.

C:\123R24\LCATR036\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 DS3 Xconn 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

C:\123R24\LCATR036\FACILITY **LOOP COST ANALYSIS TOOL** Bellcore

TABLE – SPAN_INV	LOOP FACILITY INPUT	LCAT Rel :	1.0.4
SHEET 1 / 4	FIBER CABLE DATA	Issued :	07/31/95
	FOR	STUDY YR :	1995
COMPANY: CINCINNATI BELL TEL.	INVESTMENT YEAR: 1995	TEST CASE :	1
CITY / AREA: CINCINNATI	LOOP STUDY YEAR: 1995	LAST UPDATE :	29-Oct-96
STATE/PROV: OHIO	SERVICE CLASS: BAND 2 – BUSINESS ISDN	TIME :	09:17

FIBER CABLE INVESTMENT AND CHARACTERISTICS

			FOR FEEDER SEGMENTS		FOR DISTRIBUTION SEGMENTS	
CABLE TYPE MIX (DISTRIBUTION TO CODE) :						
Proportion of FIBER cable installations that are	AERIAL		0.4800		0.0000	factor:
	BURIED		0.0000		0.0000	factor:
	UNDGRD		0.5200		0.0000	factor:
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	$	0.1930			per fiber pair Foot
	BURIED	$	0.2694			per fiber pair Foot
	UNDGRD	$	0.1827			per fiber pair Foot
			...e to Fiber Hub)			
FEEDER – EXTENSION SEGMENT AND DISTRIBUTION SEGMENT						
Average Unit Investment for FIBER cable, Installed as	AERIAL	$	0.1930	$	0.0000	per fiber pair Foot
	BURIED	$	0.2694	$	0.0000	per fiber pair Foot
	UNDGRD	$	0.1827	$	0.0000	per fiber pair Foot
			(Fiber Hub to Remote Terminal)		(Remote Terminal to Service Point)	

C:\123R24\LCATR036\FACILITY

LOOP COST ANALYSIS TOOL

Bellcore

TABLE – SPAN INV
SHEET 1A / 4

LOOP FACILITY INPUT
FIBER CABLE DATA – BY CABLE SHEATH DETAIL
FOR

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 2 – BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 09:17

FIBER OPTIC CABLE INVESTMENT REFERENCE TABLE

Unit Investment per Cable Pair Foot, by Cable Type, by Cable Size

Cable Sheath Sizes		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	$	$	$

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TABLE – SPAN_INV
SHEET 1 / 4

HELP SCREEN

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

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

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C:\123R24\LCATR035\FACILITY

LOOP COST ANALYSIS TOOL

Bellcore (R)

TABLE – SPAN_INV
SHEET 2 / 4

LOOP FACILITY INPUT
COPPER CABLE DATA
FOR

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 2 – BUSINESS ISDN

LCAT Rel: 1.0.4
Issued: 07/31/95
STUDY YR: 1996
TEST CASE: 1
LAST UPDATE: 29–Oct–96
TIME: 09:17

COPPER CABLE CHARACTERISTICS AND INVESTMENTS

Cable Gauge Mix :

GUAGE	FEEDER SEGMENT	DISTRIBUTION SEGMENT
26 GA.	0.1500	0.1500
24 GA.	0.8500	0.8500
22 GA.	0.0000	0.0000

The Proportion of Copper Cable that is ....

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 ....

		FEEDER SEGMENT	DISTRIBUTION SEGMENT
26 GA.	AERIAL	0.2900	0.6200
	BURIED	0.0200	0.3300
	UNDGRND	0.6900	0.0500
24 GA.	AERIAL	0.2900	0.6200
	BURIED	0.0200	0.3300
	UNDGRND	0.6900	0.0500
22 GA.	AERIAL	0.0000	0.0000
	BURIED	0.0000	0.0000
	UNDGRND	0.0000	0.0000

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

GUAGE		FEEDER SEGMENT	DISTRIBUTION SEGMENT
26 GA.	AERIAL	$ 0.0119	$ 0.0426
	BURIED	$ 0.0205	$ 0.0665
	UNDGRND	$ 0.0110	$ 0.0580
24 GA.	AERIAL	$ 0.0119	$ 0.0426
	BURIED	$ 0.0205	$ 0.0665
	UNDGRND	$ 0.0110	$ 0.0580
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 averavalues, 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\LCATR036\FACILITY — LOOP COST ANALYSIS TOOL — Bellcore®

TABLE – SPAN_INV
SHEET 2A / 4

LOOP FACILITY INPUT
COPPER CABLE DATA – BY CABLE SHEATH DETAIL
FOR

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 2 – BUSINESS ISDN

LCAT Rel: 1.0.4
Issued: 07/31/95
STUDY YR: 1996
TEST CASE: 1
LAST UPDATE: 29–Oct–96
TIME: 09:17

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 : => INDEX		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	$										
6000	Copper Cable	3000 pr	$										
7200	Copper Cable	3600 pr	$										
8400	Copper Cable	4200 pr	$										

C:\123R24\LCATR036\FACILITY
TABLE – SPAN_INV
SHEET 2 / 4

HELP SCREEN

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LCAT Rel 1.0.4
Issued 07/31/95

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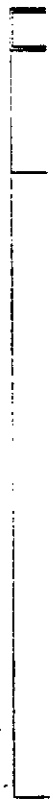

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C:\123R24\LCATR036\FACILITY.WK1 **LOOP COST ANALYSIS TOOL** Bellcore (R)

SPAN INV – WORKSHEET
Sheet 1 / 3

COPPER CABLE DISTRIBUTIONS MELDING
WORKSHEET A
FOR
FACILITY TYPE: COPPER CABLE
DESIGN TYPE: DISTRIBUTION SEGMENT
SERVICE CLASS: BAND 2 – BUSINESS ISDN

LCAT Rel: 1.0.4
Issue Date: 07/31/95
STUDY YR: 1996
TEST CASE: 1996
DATE: 1
LAST UPDATE: 29–Oct–96
TIME: 09:17

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

MELDED CABLE INVESTMENT PER PAIR FOOT

DATA DESC.	(DISTRIBUTION TO CODE) CABLE TYPE MIX (p...dst)	PER FOOT INVESTMENT (pfi..ds)	CABLE GAUGE MIX (copper..dst)	ADJUSTED CABLE TYPE	ADJUSTED PFI
CHARACTERISTICS FOR :	[A]	[B]	[C]	[D=A*C]	[E=B*C]
AERIAL @ 26 GA.	0.620000	$ 0.042600	0.1500	0.093000	$ 0.006390
BURIED @ 26 GA.	0.330000	$ 0.066800	0.1500	0.049500	$ 0.010020
UNDGRND @ 26 GA.	0.050000	$ 0.058000	0.1500	0.007500	$ 0.008700
AERIAL @ 24 GA.	0.620000	$ 0.042600	0.8500	0.527000	$ 0.036210
BURIED @ 24 GA.	0.330000	$ 0.066800	0.8500	0.280500	$ 0.056780
UNDGRND @ 24 GA.	0.050000	$ 0.058000	0.8500	0.042500	$ 0.049300
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 ---

DATA DESC.	CABLE TYPE MIX RANGE NAME	MELDED GAUGES
CHARACTERISTICS FOR :		[F=sum(D_{TYPE})]
AERIAL		0.620000
BURIED		0.330000
UNDERGRND		0.050000
	Check =	1.000000

--- TABLE 4 ---

DATA DESC.	PAIR / FOOT INVESTMENT RANGE NAME	MELDED GAUGES
CHARACTERISTICS FOR :		[G=sum(E_{TYPE})]
AERIAL		$ 0.042600
BURIED		$ 0.066800
UNDERGRND		$ 0.058000

--- TABLE 6 ---

DATA DESC.	PAIR / FOOT INVESTMENT RENORMALIZED AERIAL / BURIED	MELDED GAUGES
CHARACTERISTICS FOR :		[H=F_{TYPE} / sum(F_{TYPE})]
AERIAL		$ 0.652632
BURIED		$ 0.347368
	Check =	1.000000

FOOTNOTES

C:\123R24\LCATR036\FACILITY.WK1 **LOOP COST ANALYSIS TOOL** Bellcore®

SPAN INV – WORKSHEET
Sheet 2 / 3

COPPER CABLE DISTRIBUTIONS MELDING
WORKSHEET A
FOR
FACILITY TYPE: COPPER CABLE
DESIGN TYPE : SUBFEEDER SEGMENT
SERVICE CLASS : BAND 2 – BUSINESS ISDN

LCAT Rel : 10.4
Issue Date: 07/31/95
STUDY YR : 1996
TEST CASE : 1996
DATE : 1
LAST UPDATE : 29–Oct–96
TIME : 09:17

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

MELDED CABLE INVESTMENT PER PAIR FOOT

DATA DESC.	(DISTRIBUTION TO CODE) CABLE TYPE MIX (p...fdr)	PER FOOT INVESTMENT (pfi_fd)	CABLE GAUGE MIX (copper..fdr)	ADJUSTED CABLE TYPE	ADJUSTED PFI
CHARACTERISTICS FOR :	[A]	[B]	[C]	[D=A*C]	[E=B*C]
AERIAL @ 26 GA.	0.290000	$ 0.011900	0.1500	0.043500	$ 0.001785
BURIED @ 26 GA.	0.020000	$ 0.020500	0.1500	0.003000	$ 0.003075
UNDGRND @ 26 GA.	0.690000	$ 0.011000	0.1500	0.103500	$ 0.001650
AERIAL @ 24 GA.	0.290000	$ 0.011900	0.8500	0.246500	$ 0.010115
BURIED @ 24 GA.	0.020000	$ 0.020500	0.8500	0.017000	$ 0.017425
UNDGRND @ 24 GA.	0.690000	$ 0.011000	0.8500	0.586500	$ 0.009350
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 ---

DATA DESC.	CABLE TYPE MIX RANGE NAME	MELDED GAUGES
CHARACTERISTICS FOR :		[F=sum(D_{TYPE})]
AERIAL		0.290000
BURIED		0.020000
UNDERGRND		0.690000
	Check =	1.000000

--- TABLE 4 ---

DATA DESC.	PAIR / FOOT INVESTMENT RANGE NAME	MELDED GAUGES
CHARACTERISTICS FOR :		[G=sum(E_{TYPE})]
AERIAL		$ 0.011900
BURIED		$ 0.020500
UNDERGRND		$ 0.011000

--- TABLE 6 ---

DATA DESC.	PAIR / FOOT INVESTMENT RENORMALIZED AERIAL / BURIED	MELDED GAUGES
CHARACTERISTICS FOR :		[H=F_{TYPE} / sum(F_{TYPE})]
AERIAL		$ 0.935484
BURIED		$ 0.064516
	Check =	1.000000

FOOTNOTES

C:\123R24\LCATR036\FACILITY — LOOP COST ANALYSIS TOOL — Bellcore®

TABLE – SPAN_INV
SHEET 3 / 4

LOOP FACILITY INPUT
COPPER PAIRGAIN CABLE DATA
FOR

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

INVESTMENT YEAR : 1996
LOOP STUDY YEAR : 1996
SERVICE CLASS : BAND 2 – BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 07/31/96
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 09:17

COPPER CABLE CHARACTERISTICS FOR CDLC SYSTEMS

FOR DLC SYSTEMS ON COPPER LOOPS

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] : ❶ 0.1250

NOTE:

❶ *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.

C:\123R24\LCATRC36\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. 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 xmmsnpr + # 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.

C:\123R24\LCATR036\FACILITY.WK1 **LOOP COST ANALYSIS TOOL** Bellcore (R)

SPAN INV – WORKSHEET
Sheet 3 / 3

COPPER CABLE DISTRIBUTION'S WELDING
WORKSHEET B
FOR
FACILITY TYPE: COPPER CABLE for DLC
DESIGN TYPE : FEEDER SEGMENT
SERVICE CLASS : BAND 2 – BUSINESS ISDN

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

LCAT Rel : 1.0.4
Issue Date: 07/31/95
STUDY YR : 1996
TEST CASE : 1996
DATE : 1
LAST UPDATE : 29-Oct-96
TIME : 09:17

MELDED CABLE INVESTMENT PER PAIR FOOT

INVESTMENT DEVELOPMENT FOR: LINE REPEATER EQUIPMENT

DESCRIPTION	REPEATER SPACING [A]	UNIT REPEATER INVESTMENT [B]	REPEATER INVEST. PER FOOT [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 PAIR / FOOT INVESTMENT DESCRIPTION	PAIR / FOOT INVESTMENT BY CODE BY GAUGE 2 * (PFIgg) ① [D]	REPEATER BY GAUGE (RPTR gg G) [E=C]	WORKING CHANNEL INVESTMENT / FOOT (ADLCPFIgg) [F=D+E]	– TABLE 4 – WORKING CHANNEL INVESTMENT / FOOT (ADLCPFIc)
AERIAL @ 26 GA.	$ 0.023800	$ 0.000000	$ 0.023800	$ 0.023800
BURIED @ 26 GA.	$ 0.041000	$ 0.000000	$ 0.041000	$ 0.041000
UNDGRND @ 26 GA.	$ 0.022000	$ 0.000000	$ 0.022000	$ 0.022000
AERIAL @ 24 GA.	$ 0.023800	$ 0.000000	$ 0.023800	
BURIED @ 24 GA.	$ 0.041000	$ 0.000000	$ 0.041000	
UNDGRND @ 24 GA.	$ 0.022000	$ 0.000000	$ 0.022000	
AERIAL @ 22 GA.	$ 0.000000	$ 0.000000	$ 0.000000	
BURIED @ 22 GA.	$ 0.000000	$ 0.000000	$ 0.000000	
UNDGRND @ 22 GA.	$ 0.000000	$ 0.000000	$ 0.000000	

NOTES :
① The Facility Table Investments are for each Cable Pair Foot. DLC Systems are 4 wire.

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C:\123R24\LCATR036\FACILITY

LOOP COST ANALYSIS TOOL

Bellcore®

TABLE - SPAN_INV
SHEET 4 / 4

LOOP FACILITY INPUT
SERVICE ACCESS SEGMENT
FOR

LCAT Rel : 1.0.4
Issued : 07/31/95

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 2 - BUSINESS ISDN

STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29-Oct-96
TIME : 09:17

SERVICE ACCESS CHARACTERISTICS AND INVESTMENTS

AVERAGE UNIT MIX :

AVERAGE UNIT INVESTMENT :

The Average Number of Terminals in the Service Access Segment of a Loop -

Proportion of Loops that use.....

Aerial	0.00
Buried	0.00

Per Unit Installation.....

Aerial Termination	0
Buried Termination	0

The Average Drop Wire & Building Entrance Cable Installation -

Proportion of Loops that use..

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

Per Unit Installation.....

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

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I\LCATR036\FACILITY SPAN_INV /4

HELP SCREEN

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

terma termb	These terminals may include the Serving Area Interface Cross Box, Drop Wire Block, and/or the Network Interface Block summary per circuit pair installation investment.
adropinv bdropinv bec coaxinv	These facility investments may also include Drop Wire Block and/or Network Interface summary per circuit pair installation inveatment.
ibc	This facility investment should include ALL the internal cross–connects and terminations for this type of installation as a circuit pair istallation 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

C:\123R24\LCATR036\FACTORS

LOOP COST ANALYSIS TOOL

Bellcore

TABLE – FACTORS
SHEET 1 / 1

INVESTMENT 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 2 – BUSINESS ISDN

plant list	PRICE INDEX	ANNUAL 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	0.3861
CO EQPT – LOW CAP CHAN	1.0000	0.3861
CO EQPT – HI CAP TERM	1.0000	0.3861
CO EQPT – HI CAP CHAN	1.0000	0.3861
CO EQPT – ANALOG SW	1.0000	0.0000
CO EQPT – DIGITAL SW	1.0000	0.3458
AERIAL CABLE (FIBER)	1.0000	0.2983
BURIED CABLE (FIBER)	1.0000	0.2724
UNDERGROUND (FO) CA.	1.0000	0.2689
CONNECTORS	1.0000	0.3661
MISC. COM EQP & PWR	1.0000	0.3661
POLE LINE	1.0000	0.3607
CONDUIT	1.0000	0.2521

C:\123R24\LCATR036\INVEST

LOOP COST ANALYSIS TOOL

Bellcore (R)

TABLE - EQUIP_INV
Sheet 1 of 1

DATA REFERENCE TABLE
EQUIPMENT & OTHER INVESTMENTS
FOR
INVESTMENT YEAR: 1996
SERVICE LEVEL: NARBAND
SERVICE CLASS: BAND 2 - BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE: 29-Oct-96 09:19

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

EQUIPMENT INVESTMENT (Including Engineer, Furnish, & Install Costs)

	CENTRAL OFFICE			REMOTE LOCATION	
	LINE	CHANNEL	TERMINAL	CHANNEL	TERMINAL
AIR DRYERS INVESTMENT:					
For an AERIAL Installed Cable Pair			$ 0.00		
For a BURIED Installed Cable Pair			$ 0.00		
For an UNDERGROUND Installed Cable Pair			$ 0.00		
CENTRAL OFFICE TERMINATION INVESTMENT :					
For each cable pair associated with twisted pair copper cable			$ 0.00		
For each per cable pair associated with digital loop carrier technolog			$ 0.00		
COPPER LOOP CARRIER UNIT CIRCUIT INVESTMENT by SERVICE LEVEL :					
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	$ 361.90	$ 39.17	$ 348.82	$ 141.70
For an Integrated DLC Equipment Arrangement	$ 0.00	$ 0.00	$ 0.00	$ 348.82	$ 141.70
FIBER OPTIC MULTIPLEXERS UNIT CIRCUIT INVESTMENT by SERVICE LEVEL :					
1. For a Hub with nonFiber Extensions or nonHub Arrangement		$ 49.18	$ 3.88	$ 53.79	$ 2.01
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
CEV HOUSING per CIRCUIT by SERVICE LEVEL :					
For CEV's used as fiber hubs for FO Muliplexer 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,or DS3 service equiv.]

PROVIDED TO

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C:\123R24\LCATR036\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	See Circuit Designs :
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.	
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 <ENTER> KEY TO RETURN TO THE MAIN MENU

C:\123R24\LCATR036\LOADING

LOOP COST ANALYSIS TOOL

Bellcore (R)

TABLE – ADDNL_INV
Sheet 1 of 2

INVESTMENT RELATED FACTOR TABLES
ADJUSTMENT AND LOADING FACTORS
FOR
INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 2 – BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 3/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 09:20

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

PLANT UTILIZATION FACTORS:

Land	1.0000
Building	1.0000
ALL Copper Cables, or	
Copper Feeder Cable	0.6000
Copper Distribution Cable	0.3500
Copper Entrance Cable	1.0000
Copper Building Cable	0.3500
Copper Building Terminal	0.3500
ALL Fiber Cables, or	
Fiber Feeder Cable	0.3300
Fiber Distribution Cable	
Fiber Entrance Cable	
Fiber Building Cable	
Fiber Building Terminal	
Poles	1.0000
Conduit	1.0000

ALL Non–Traffic Sensitive Equipment	1.0000
ALL Digital Loop Carrier Equip., or	0.7000
CO DLC Channel Unit	0.7000
REM DLC Channel Unit	0.7000
CO DLC Multiplex System	0.7000
REM DLC Multiplex System	0.7000
CO Digital Signal Crossconnect Bay	0.7000
REM Digital Signal Crossconnect Bay	0.7000
ALL Fiber Optic Multiplex Equip., or	1.0000
CO Fiber Optic Channel Unit	1.0000
REM Fiber Optic Channel Unit	1.0000
CO Fiber Optic Multiplex System	1.0000
REM Fiber Optic Multiplex System	1.0000
CO Lightguide Terminating Equipment	1.0000
REM Lightguide Terminating Equipment	1.0000
Remote Housing: CEV	1.0000
PC Hut	1.0000
Comm. Svc. Cab.	1.0000

TABLE – ADDNL_INV
Sheet 1 of 2

HELP SCREEN

Bellcore ®
LCAT Rel : 1.0.4
Issued : 3/31/95

NOTE :

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

❷ 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.

❸ 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

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C:\123R24\LCATR036:LOADING

LOOP COST ANALYSIS TOOL

Bellcore®

TABLE – ADDNL_INV
Sheet 2 of 2

INVESTMENT RELATED FACTOR TABLES
ADJUSTMENT AND LOADING FACTORS
FOR
INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 2 – BUSINESS ISDN

LCAT Rel: 1.0.4
Issued: 3/31/95
STUDY YR: 1996
TEST CASE: 1
LAST UPDATE: 29–Oct–96
TIME: 09:20

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

POLE LOADINGS:	SEGMENT ..... DISTRIBUTION ❷	FEEDER use *DEFAULT*
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		

CONDUIT LOADINGS:		
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		

DROP WIRE (DW) INVESTMENT ADJUSTMENT:

The Cable PFI is being Adjusted for DW ?	NO
Aerial Cable	
Buried Cable	
Underground Cable	

LAND LOADING FACTORS: use *DEFAULT* for:	❶ CENT. OFC.	❷ REMOTE SITE
Other or *ALL* ❶	0.0056	0.0056
Digital Loop Carrier	0.0056	0.0056
Fiber Optic Mux	0.0056	0.0056

BUILDING LOADING FACTORS:		
Other or *ALL* ❶	0.1316	0.1316
Digital Loop Carrier	0.1316	0.1316
Fiber Optic Mux	0.1316	0.1316

MISC. EQUIPMENT & POWER LOADING FACTORS:		
Other or *ALL* ❶	0.1127	0.1127
Digital Loop Carrier	0.1127	0.1127
Fiber Optic Mux	0.1127	0.1127

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TABLE – ADDNL_INV HELP SCREEN Bellcore®
Sheet 2 of 2 LCAT Rel : 1.0.4
Issued : 3/31/95

Copper Cable Pole Investment Factor	cplff	__dst	__fdr	Based on aerial copper cable investment relationship to pole
Copper Cable Pole Unit Investment	cplfi	__dst	__fdr	Per unit length of aerial copper cable effective pair feet placed.
Fiber Cable Pole Investment Factor	fplff	__dst	__fdr	Based on aerial fiber cable investment relationship to pole
Fiber Cable Pole Unit Investment	fplfi	__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

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

❷ 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

C:\123R24\LCATR036\SPAN — LOOP COST ANALYSIS TOOL — Bellcore (R)

INPUT – PLANT CHAR. — LOOP FACILITY INPUT — LCAT Rel : 1.0.4
Sheet 1 / 5 — LOOP LENGTH CRITERIA AND NETWORK CHARACTERISTICS — Issued : 07/31/95
FOR — STUDY YR : 1996
COMPANY: CINCINNATI BELL TEL — INVESTMENT YEAR : 1996 — TEST CASE : 1
CITY / AREA: CINCINNATI — LOOP STUDY YEAR : 1996 — LAST UPDATE : 29–Oct–96
STATE / PROV: OHIO — SERVICE CLASS : BAND 2 – BUSINESS ISDN — TIME : 09:22

FLAT RATE BASIS DATA WITHOUT COST BANDS
FOR A NETWORK CIRCUIT CASE STUDY

LOOP TOPOLOGY

Loop FEEDER Network Configuration is (S)tar Or (R)ing
Average Number Of Hubs In Each Ring
Loop DISTRIBUTION Network Configuration is (S)tar or (B)us

ACTION SEGMENT	
PRIMARY	STAR
PRIMARY	NA
DISTRIBUTION	STAR

SPAN LENGTHS

❶ Average Distance From the Central Office to the Service Access Point
❷ Average Distance From the Serving Area Interface to the Service Access Point
❸ Average Distance From the Remote Terminal to the Serving Area Interface
❹ Average Distance From the Central Office to the Fiber Hub or S.A.I.
❺ Average Distance From the Fiber Hub to the Remote Terminal

TOTAL LOOP	26159.0
DISTRIBUTION	2049.0
SUB–PRIMARY	300.0
PRIMARY	23810.0
PRIMARY–EXTENSION	

LOOP LENGTH AT EACH COST BAND

BAND 1	
BAND 2	
BAND 3	
BAND 4	
BAND 5	

DISTRIBUTION OF COST BANDS IN THE NETWORK

BAND 1	
BAND 2	
BAND 3	
BAND 4	
BAND 5	

LAST 26159.0 — LAST 1.0000 — 1.0000 Hint

C:\123R24\LCATR036\SPAN — LOOP COST ANALYSIS TOOL — Bellcore (R)

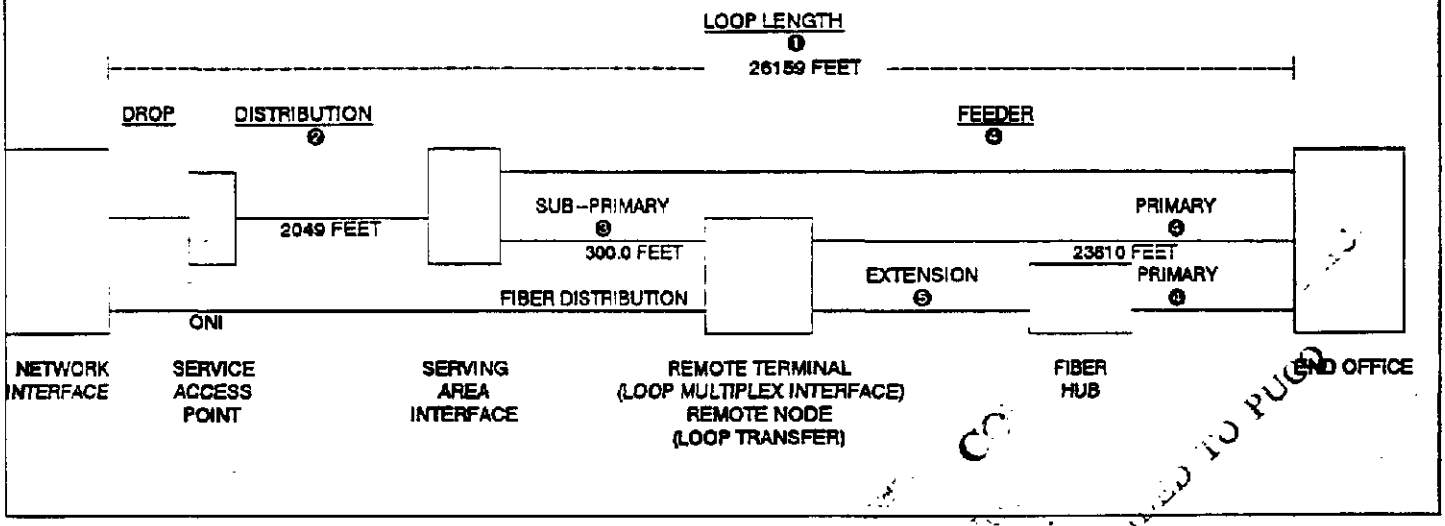
INPUT – PLANT_CHAR.
Sheet 1 / 1

LOOP FACILITY INPUT
LOOP LENGTH CRITERIA AND NETWORK CHARACTERISTICS
FOR
INVESTMENT YEAR : 1996
LOOP STUDY YEAR : 1996
SERVICE CLASS : BAND 2 – BUSINESS ISDN

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

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 09:22

FLAT RATE BASIS DATA WITHOUT COST BANDS
FOR A NETWORK CIRCUIT CASE STUDY



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C:\123R24\LCATR036\SPAN **LOOP COST ANALYSIS TOOL** Bellcore (R)

INPUT – PLANT_CHAR. LOOP FACILITY INPUT LCAT Rel : 1.0.4
Sheet 1 of 2 HELP SCREEN Issued : 07/31/95

AVERAGE NETWORK STUDY –

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.

INDIVIDUAL CIRCUIT STUDY – 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.

DATA SAMPLE NETWORK STUDY –

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.

BANDWIDTH AVERAGING –

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

PRESS "ENTER" TO RETURN TO THE MAIN MENU

C:\123R24\LCATR036\SPAN **LOOP COST ANALYSIS TOOL** **Bellcore**(R)

INPUT - PLANT_SPAR. LCAT Rel :1.0.4

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 delimeters 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

C:\123R24\LCATR036\SPAN

LOOP COST ANALYSIS TOOL

Bellcore (R)

INPUT – PLANT_CHAR.
Sheet 2a / 5

LOOP FACILITY INPUT
FIBER OPTIC CABLE SPAN CHARACTERISTICS FOR THE FEEDER LAYER
FOR
NETWORK CIRCUIT LAYOUT STUDIES
WORKSHEET A

LCAT Rel :1.0.4
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 2 – BUSINESS ISDN		LAST UPDATE :	29–Oct–96
						TIME :	09:22

		CAPACITY [C]	idx	AERIAL FIBER CUMULATIVE FEEDER LENGTH [D_A]	AERIAL FIBER EFFECTIVE LENGTH BY PAIR FOOT [E_A]	BURIED FIBER CUMULATIVE FEEDER LENGTH [D_B]	BURIED FIBER EFFECTIVE LENGTH BY PAIR FOOT [E_B]	UNDERGROUND FIBER CUMULATIVE FEEDER LENGTH [D_U]	UNDERGROUND FIBER EFFECTIVE LENGTH BY PAIR FOOT [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

C:\123R24\LCATR036\SPAN

LOOP COST ANALYSIS TOOL

Bellcore

PLANT C-AR – WORKSHEET 2B
Sheet 2b / 5

LOOP FACILITY INPUT
FIBER OPTIC CABLE SPAN INVESTMENT FOR THE FEEDER LAYER

LCAT Rel : 1.0.4
Issued : 07/31/95

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

FOR
INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996

SERVICE CLASS: BAND 2 -- BUSINESS ISDN

STUDY YR : 1996
TEST CASE : 1
LAST UPDATE: 29-Oct-96
TIME : 09:22

NETWORK CIRCUIT LAYOUT STUDIES

WORKSHEET B

EFFECTIVE CHANNEL LENGTH BY CABLE PAIR FOOT [A] = [E]WKSH A / [F]WKSH C
CUMULATIVE INVESTMENT BY CABLE CHANNEL FOOT [B] = [A] * [C] * UNIT INVFACILITY WKSH B

For these sizes ...		CAPACITY [C]	idx	AERIAL FIBER [A]	AERIAL FIBER [B]	BURIED FIBER [A]	BURIED FIBER [B]	UNDERGROUND FIBER [A]	UNDERGROUND FIBER [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 forum		$ 0.00 forum		$ 0.00 forum

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C:\123R24\LCATR036\SPAN

LOOP COST ANALYSIS TOOL

Bellcore

INPUT – PLANT_CHAR.
Sheet 3a / 5

LOOP FACILITY INPUT

COPPER CABLE SPAN CHARACTERISTICS FOR THE FEEDER LAYER

FOR

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS:BAND 2 – BUSINESS

LCAT Rel :1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE: 29–Oct–96
TIME : 09:22

NETWORK CIRCUIT LAYOUT STUDIES

WORKSHEET A

CUMULATIVE LENGTHS BY CABLE PAIR FOOT

CABLE SHEATH SIZES	CAPACITY (dx)	26 GA. AERIAL	26 GA. BURIED	26 GA. UNDGRD	24 GA. AERIAL	24 GA. BURIED	24 GA. UNDGRD	22 GA. AERIAL	22 GA. BURIED	22 GA. 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										0.0 fdracprf
5400 COPPER CABLE	2700 pr										0.0 fdrbcprf
6000 COPPER CABLE	3000 pr										0.0 fdrucprf
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	0.0 fdrcprf

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LOOP COST ANALYSIS TOOL

Bellcore

PLANT CHAR – WORKSHEET 3B
Sheet 3b / 5

LOOP FACILITY INPUT
COPPER CABLE SPAN INVESTMENT FOR THE FEEDER LAYER
FOR
INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996

LCAT Rel : 1.0.4
Issued : 07/31/95

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

STUDY YR : 1996
TEST CASE : 1
LAST UPDATE: 29–Oct–96
TIME : 09:22

SERVICE CLASS: BAND 2 – BUSINESS

NETWORK CIRCUIT LAYOUT STUDIES

WORKSHEET B

CUMMULATIVE INVESTMENTS BY CABLE PAIR FOOT

CABLE SHEATH SIZES	CAPACITY idx		26 GA. AERIAL	26 GA. BURIED	26 GA. UNDGRD	24 GA. AERIAL	24 GA. BURIED	24 GA. UNDGRD	22 GA. AERIAL	22 GA. BURIED	22 GA. 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	fdrcctl
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	fdrcctl
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	fdrcctl
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	

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LOOP COST ANALYSIS TOOL

Belcore

INPUT – PLANT_CHAR.
Sheet 4a / 5

LOOP FACILITY INPUT
COPPER CABLE SPAN CHARACTERISTICS FOR THE DISTRIBUTION LAYER
FOR

LCAT Rel : 1.0.4
Issued : 07/31/96
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE: 29–Oct–96
TIME: 09:22

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

INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996
SERVICE CLASS: BAND 2 – BUSINESS

NETWORK CIRCUIT LAYOUT STUDIES

WORKSHEET A

CUMULATIVE LENGTHS BY CABLE PAIR FOOT

CABLE SHEATH SIZES	CAPACITY (dx)	26 GA. AERIAL	26 GA. BURIED	26 GA. UNDGRD	24 GA. AERIAL	24 GA. BURIED	24 GA. UNDGRD	22 GA. AERIAL	22 GA. BURIED	22 GA. 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										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	0.0	dstucprf
	TOTALS			0.0			0.0			0.0	0.0

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LOOP COST ANALYSIS TOOL

Bellcore®

PLANT CHAR – WORKSHEET 4B
Sheet 4b / 5

LOOP FACILITY INPUT
COPPER CABLE SPAN INVESTMENT FOR THE DISTRIBUTION LAYER
FOR
INVESTMENT YEAR: 1996
LOOP STUDY YEAR: 1996

LCAT Rel : 1.0.4
Issued : 07/31/95

STUDY YR : 1996
TEST CASE : 1
LAST UPDATE: 29–Oct–96
TIME: 09:22

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

SERVICE CLASS:BAND 2 – BUSINESS

NETWORK CIRCUIT LAYOUT STUDIES

WORKSHEET 5

CUMMULATIVE INVESTMENTS BY CABLE PAIR FOOT

CABLE SHEATH SIZES	CAPACITY idx		26 GA. AERIAL	26 GA. BURIED	26 GA. UNDGRD	24 GA. AERIAL	24 GA. BURIED	24 GA. UNDGRD	22 GA. AERIAL	22 GA. BURIED	22 GA. 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	$ 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	$ 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
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	$ 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	

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LOOP COST ANALYSIS TOOL

Bellcore (R)

INPUT – PLANT_CHAR.
Sheet 5 / 5

LOOP FACILITY INPUT
DIGITAL LOOP CARRIER CABLE PAIR EQUIVALENTS AND MIX
FOR

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

INVESTMENT YEAR : 1996
LOOP STUDY YEAR : 1996
SERVICE CLASS : BAND 2 – BUSINESS ISDN

LCAT Rel : 1.0.4
Issued : 07/31/96
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 09:22

FIBER BANDWIDTH
TRANSMISSION FLOW IS : [X] UNIDIRECTIONAL
[ ] BIDIRECTIONAL

LEVEL OF SERVICE : NARBAND

BITRATE INDEX	1	2	3	4	5	6	7			WEIGHTED
FIBER BANDWIDTH	45 Mbps	90 Mbps	155 Mbps	180 Mbps	0	0	0	SERVICE	PROTECTION	EQUIVALENT
MUX DS3 MULTIPLIER	1	2	3	4	0	0	0	LEVEL		CHANNELS
VOICE GRADE CHANNELS	672	1344	2016	2688	0	0	0	MULTIPLE [SLM]	0 : 1 [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

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 1 OVER PROT [E]}

0

PLANT_CHAR. – WORKSHEET DS
Sheet 1 / 1

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

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 09:22

WORKSHEET DS

DIGITAL SIGNAL TABLE (digsig_tbl)

	SELECT	MODE	HIERARCY	BNDWDTH	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			VT1.5	1.5 Mbps	1	0.04	24	UNDIR,FIBER
4			VT2	2 Mbps	1	0		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	60	
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	1	480	
15	X		DS3	45 Mbps	25	1	672	BIDIR,2WCU CA
16		STST	OC1	50 Mbps	25	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	466 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	5	6	7
	OFFSET							

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PLANT_CHAR. – WORKSHEET F
Sheet 1 of 1

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

LOOP LENGTH DEVELOPMENT WORKSHEET
FOR
INVESTMENT YEAR : 1996
LOOP STUDY YEAR : 1996
SERVICE CLASS : BAND 2 – BUSINESS
WORKSHEET F

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR. : 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 09:22

[A] DISTANCE INCREMENTS : 0.4 MILE BETWEEN BANDS
[B] NUMBER OF BANDS : 0 TO BE CARRIED INTO THE STUDY

[R] ROUTE TO AIR RATIO : 1.539947 r/a ratio
[K] UNIT MILE / FEET CONSTANT : 1320

BAND NUMBER [C]	TOTAL WORKING FEET [D=input]	TOTAL WORKING FEET [E=(B*D)]	TOTAL AIR FEET [F=A*C*K]	LOOP LENGTH @ MIDPOINT [G (see note)]	WORKING FEET @ MIDPOINT [H=G*R]
1		0		0	0
2		0		0	0
3		0		0	0
4		0		0	0
5		0		0	0

ERROR MESSAG 0

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

C:\123R24\LCATR03\SPAN — LOOP COST ANALYSIS TOOL — Bellcore®

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

LCAT Rel : 1.0.4
Issued : 07/31/96
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 09:22

WORKSHEET SA

Sub Feeder Allocation Table

OFFSET

0	1	2	3	4	5	6	7	8	9	10
Sub Feeder Allocation Table				segloth alloc						
cur_lplgth 26159						COLOCATED HT AND CF, where				
dcldepl = 16000		NO COLOCAT		dstopo = BUS		COLOCATED fdstopo = BUS				
[B] distspa 2049		dstopo = STAF		dstopo = BUS		dstopo = STAF		dstopo = BUS		
horn_rangcur	–dis	subfeed	prifeed	desubfeed	prifeeder	subfeed	prifeed	desubfeed	prifeeder	dif
[C]	[D=C–I	[E]	[F=D–E	[G]	[H=D–G]	[I]	[J=C–I	[K]	[L=C–K]	[M=A–C]
0	0	0	0	0	0	0	0	0	0	26159
500	0	0	0	0	0	500	0	500	0	25659
1000	0	0	0	0	0	1000	0	1000	0	25159
2000	0	0	0	0	0	2000	0	2000	0	24159
3000	951	951	0	951	0	3000	0	3000	0	23159
4000	1951	1951	0	1951	0	4000	0	4000	0	22159
5000	2951	2951	0	2951	0	5000	0	5000	0	21159
6000	3951	3951	0	3951	0	6000	0	6000	0	20159
7000	4951	4951	0	4951	0	7000	0	7000	0	19159
8000	5951	5951	0	5951	0	8000	0	8000	0	18159
9000	6951	6951	0	6951	0	9000	0	9000	0	17159
10000	7951	7951	0	7951	0	10000	0	10000	0	16159
11000	8951	8951	0	8951	0	11000	0	11000	0	15159
12000	9951	9951	0	9951	0	12000	0	12000	0	14159
13000	10951	10951	0	10951	0	13000	0	13000	0	13159
14000	11951	11951	0	11951	0	14000	0	14000	0	12159
15000	12951	12951	0	12951	0	15000	0	15000	0	11159
16000	13951	13951	0	13951	0	16000	0	16000	0	10159
17000	14951	14951	0	14951	0	17000	0	17000	0	9159
18000	15951	7975.5	7973.5	0	15951	9000	9000	0	18000	8159
19000	16951	8475.5	8475.5	0	16951	9500	9500	0	19000	7159
20000	17951	8975.5	8975.5	0	17951	10000	10000	0	20000	6159
80000	77951	15951	62000	1000	76951	15951	64049	1000	79000	–53841

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^{dst} Equals CUR_LPLGTH – NOM_RANGE difference

> DISTSPAN and < DLCDEPL, then CUR_SEGLGTH^{stor} Equals CUR_LPLGTH – NOM_RANGE difference

= > DLCDEPL, then CUR_SEGLGTH^{prior} 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

OHIO ONLY
3 Geographic Areas
ISDN

10/10/96 Revised

		Residence			Business		
		Average F1 Length	Average F2 Length	Average Loop	Average F1 Length	Average F2 Length	Average Loop
		A	B	C	D	E	F
	Band 1						
1	0-18,000	8,298	1,390	9,688	7,007	971	7,977
2	# Of Entries	144			285		
3	18,001-INFINITY	17,880	2,925	20,805	19,201	2,119	21,320
4	# Of Entries	16			8		
5	Ratio						
6	0-18,000	0.8369			0.9378		
7	18,001-INFINITY	0.1631			0.0622		
		1.0000			1.0000		
	Band 2						
8	0-18,000	8,444	2,097	10,541	7,015	1,136	8,151
9	# Of Entries	95			107		
10	18,001-INFINITY	23,425	2,646	26,071	24,110	2,049	26,159
11	# Of Entries	44			57		
12	Ratio	0.6835			0.6524		
13	0-18,000	0.3165			0.3476		
14	18,001-INFINITY	1.0000			1.0000		
	Band 3						
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			30		
19	Ratio	0.4510			0.5775		
20	0-18,000	0.5490			0.4225		
21	18,001-INFINITY	1.0000			1.0000		

C:\123R24\LCATRC35\SPAN **LOOP COST ANALYSIS TOOL** Bellcore®

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

LCAT Rel : 1.0.4
Issued : 07/31/95
STUDY YR : 1996
TEST CASE : 1
LAST UPDATE : 29–Oct–96
TIME : 06:56

WORKSHEET SA

Sub Feeder Allocation Table

OFFSET

	1	2	3	4	5	6	7	8	9	10
Sub Feeder Allocation Table				seglgth alloc						
cur lplgth	8151					COLOCATED RT AND CP, where				
dclldepl =	16000	NO COLOCAT	dstopo = BUS			COLOCATED F	dstopo = BUS			
B distspa	1136	dstopo = STAF	dstopo = BUS			dstopo = STAF	dstopo = BUS			
nom_rangcur–ass		subfeed	prifeed	esubfeed		prifeeder	subfeed	prifeed	esubfeed	prifeeder dif
C	D=C–i	E	F=D–E	G	H=D–G	I	J=C–I	K	L=C–K	M=A–C
0	0	0	0	0	0	0	0	0	0	8151
500	0	0	0	0	0	500	0	500	0	7651
1000	0	0	0	0	0	1000	0	1000	0	7151
2000	854	864	0	864	0	2000	0	2000	0	6151
3000	1854	1864	0	1864	0	3000	0	3000	0	5151
4000	2854	2864	0	2864	0	4000	0	4000	0	4151
5000	3864	3864	0	3864	0	5000	0	5000	0	3151
6000	4864	4864	0	4864	0	6000	0	6000	0	2151
7000	5864	5864	0	5864	0	7000	0	7000	0	1151
8000	6864	6864	0	6864	0	8000	0	8000	0	151
9000	7864	7864	0	7864	0	9000	0	9000	0	–849
10000	8864	8864	0	8864	0	10000	0	10000	0	–1849
11000	9864	9864	0	9864	0	11000	0	11000	0	–2849
12000	10864	10864	0	10864	0	12000	0	12000	0	–3849
13000	11864	11864	0	11864	0	13000	0	13000	0	–4849
14000	12864	12864	0	12864	0	14000	0	14000	0	–5849
15000	13864	13864	0	13864	0	15000	0	15000	0	–6849
16000	14864	14864	0	14864	0	16000	0	16000	0	–7849
17000	15864	15864	0	15864	0	17000	0	17000	0	–8849
18000	16864	8432	8432	0	16864	9000	9000	0	18000	–9849
19000	17864	8932	8932	0	17864	9500	9500	0	19000	–10849
20000	18864	9432	9432	0	18864	10000	10000	0	20000	–11849
80000	78864	16864	62000	1000	77864	16864	63136	1000	79090	–71849

PROVIDED

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^{dst} Equals CUR_LPLGTH – NOM_RANGE difference

> DISTSPAN and < DLCDEPL, then CUR_SEGLGTH^{Star} Equals CUR_LPLGTH – NOM_RANGE difference

= > DLCDEPL, then CUR_SEGLGTH^{prior} 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.

OHIO ONLY
3 Geographic Areas
ISDN

10/10/96 Revised

		Residence			Business		
		Average F1 Length	Average F2 Length	Average Loop	Average F1 Length	Average F2 Length	Average Loop
		A	B	C	D	E	F
	Band 1						
1	0-18,000	8,298	1,390	9,688	7,007	971	7,977
2	# Of Entries	144			285		
3	18,001-INFINITY	17,880	2,925	20,805	19,201	2,119	21,320
4	# Of Entries	16			8		
5	Ratio						
6	0-18,000	0.8369			0.9378		
7	18,001-INFINITY	0.1631			0.0622		
		1.0000			1.0000		
	Band 2						
8	0-18,000	8,444	2,097	10,541	7,015	1,136	8,151
9	# Of Entries	95			107		
10	18,001-INFINITY	23,425	2,646	26,071	24,110	2,049	26,159
11	# Of Entries	44			57		
12	Ratio	0.6835			0.6524		
13	0-18,000	0.3165			0.3476		
14	18,001-INFINITY	1.0000			1.0000		
	Band 3						
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			30		
19	Ratio	0.4510			0.5775		
20	0-18,000	0.5490			0.4225		
21	18,001-INFINITY	1.0000			1.0000		

C:\123R24\LCATR036\RESULTS1
OUTPUT – REPORT D
SHEET 1 of 1

LOOP COST ANALYSIS TOOL

PROSPECTIVE INVESTMENT SUMMARY REPORT

Bellcore®

LCAT Rel : 1.0.4
Issued : 7/31/95

COMPANY: CINCINNATI BELL TEL
CITY / AREA: CINCINNATI
STATE / PROV : OHIO
JOB IDENT : CINCINNATI

CIRCUIT DESIGN : TOTAL TECHNOLOGIES
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 26159 FEET

STUDY YR : 1996
TEST CASE : 1
RUN DATE : 23–Jan–97
TIME : 13:54

Loop Span Set Weighting : 1 UNIT WEIGHTED MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

PLANT ITEM DESCRIPTION	PLANT NAME SEG. NAME EQPT CODE SEG.LGTH.	FEEDER PRIMARY	FEEDER EXTENSION	SUB–	DISTRIBUTION	NETWORK INTERFACE	WEIGHTED TOTAL LOOP
SHARED RESOURCES							
LAND	20C	$ 0.07	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.0742
BUILDING	10C	$ 2.21	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 2.2056
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	$ 0.25	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.2519
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	$ 0.06	$ 5.20	$ 0.00	$ 5.2600
BURIED CABLE (COPPER)	45C	$ 0.00	$ 0.00	$ 0.01	$ 3.73	$ 0.00	$ 3.7400
UNDERGROUND (CU) CA.	5C	$ 0.00	$ 0.00	$ 0.12	$ 0.52	$ 0.00	$ 0.6400
CO EQPT – LOW CAP TERM	257C	$ 6.62	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 6.6193
CO EQPT – LOW CAP CHAN	257C	$ 16.79	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 16.7851
CO EQPT – HI CAP TERM	857C	$ 2.18	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 2.1818
CO EQPT – HI CAP CHAN	857C	$ 3.33	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 3.3302
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	$ 0.08	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.0840
BURIED CABLE (FIBER)	845C	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.0000
UNDERGROUND (FO) CA.	85C	$ 0.08	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.0776
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	$ 0.02	$ 0.00	$ 0.04	$ 1.24	$ 0.00	$ 1.2711
CONDUIT	4C	$ 0.04	$ 0.00	$ 0.04	$ 0.18	$ 0.00	$ 0.2581
SPAN SUMMARY		$ 31.67	$ 0.00	$ 0.24	$ 10.87	$ 2.45	$ 45.23
							$ 45.23

C:\123R24\LCATR036\RESULTS1
OUTPUT – COST_REPORTS

Bellcore (R)
LCAT
Release: 1.0.4
Issued: 7/31/95

LOOP COST ANALYSIS TOOL

COST MODEL – INVESTMENT BY ACCOUNT REPORTS

STUDY NAME: **1996 BAND 2 (OHIO ONLY) BUSINESS ISDN 18001 FEET – INFINITY INTRASTAT**

CURRENT TEST PLAN :

CURRENT JOB IDENT.		CINCINNATI		
BASIS	NETWORK	TEST CASE		LAST SAVE
FR / DS	FLAT RATE	#BANDS	0	17–Jan–97
SVC LEVEL	NARBAND	#CKTS	1	17:04
CST METH	UN INCR	INV LEVEL	ANNCOST	TIME

....your report is ready for viewing

C:\123R24\LCATR036\RESULTS1
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

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

CIRCUIT DESIGN : 1 CDLC
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 26159 FEET

STUDY YR : 1996
TEST CASE : 1
RUN DATE : 23–Jan–97
TIME : 13:54

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

PLANT SEG. NAME / ITEM DESCRIPTION	PLANT EQPT CODE	FEEDER – PRIMARY	FEEDER – EXTENSION	DISTRIBUTION – SUB–	NETWORK INTERFACE		TOTAL LOOP	WEIGHTED TOTAL LOOP
SHARED RESOURCES								
LAND	20C	$ 0.06		$ 0.00	$ 0.00		$ 0.06	$ 0.06
BUILDING	10C	$ 1.82		$ 0.00	$ 0.00		$ 1.82	$ 1.82
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	$ 0.06		$ 0.00	$ 0.00		$ 0.06	$ 0.06
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	$ 1.15		$ 0.06	$ 5.20		$ 6.41	$ 6.41
BURIED CABLE (COPPER)	45C	$ 0.12		$ 0.01	$ 3.73		$ 3.86	$ 3.86
UNDERGROUND (CU) CA.	5C	$ 2.30		$ 0.12	$ 0.52		$ 2.94	$ 2.94
CO EQPT – LOW CAP TERM	257C	$ 9.17		$ 0.00	$ 0.00		$ 9.17	$ 9.17
CO EQPT – LOW CAP CHAN	257C	$ 16.79		$ 0.00	$ 0.00		$ 16.79	$ 16.79
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	$ 0.27		$ 0.01	$ 1.24		$ 1.52	$ 1.52
CONDUIT	4C	$ 0.82		$ 0.04	$ 0.18		$ 1.04	$ 1.04
SPAN SUMMARY		$ 32.56	$ 0.00	$ 0.24	$ 10.87	$ 2.45	$ 46.12	$ 46.12
CIRCUIT DESIGN SUMMARY							$ 46.12	

C:\123R24\LCATR036\RESULTS1
OUTPUT – WORKSHEET D
SHEET 2 of 10

LOOP COST ANALYSIS TOOL

PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore®
LCAT Rel : 1.0.4
Issued : 7/31/95

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

CIRCUIT DESIGN : 2 CDLC
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 26159 FEET

STUDY YR : 1996
TEST CASE : 1
DATE : 23–Jan–97
TIME : 13:54

Circuit Design Mix : 0.0000

UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

PLANT ITEM DESCRIPTION	PLANT SEG. NAME / EQPT CODE	FEEDER PRIMARY	FEEDER EXTENSION	FEEDER SUB–	DISTRIBUTION NETWORK INTERFACE	TOTAL LOOP	WEIGHTED TOTAL LOOP
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 – 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	

C:\123R24\LCATR036\RESULTS1
OUTPUT – WORKSHEET D
SHEET 3 of 10

LOOP COST ANALYSIS TOOL

PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Belcore

LCAT Rel : 1.0.4
Issued : 7/31/95

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

CIRCUIT DESIGN : MELDED CDLC
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 26159 FEET

STUDY YR : 1996
TEST CASE : 1
RUN DATE : 23–Jan–97
TIME : 13:54

Technology Type Mix : 0.0000 | UNIT WEIGHTED MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

PLANT ITEM DESCRIPTION	PLANT SEG. NAME EQPT CODE	FEEDER PRIMARY	FEEDER EXTENSION	FEEDER SUB–	DISTRIBUTION	NETWORK INTERFACE	TOTAL LOOP	TECHNOLOGY WEIGHTED TOTAL LOOP
SHARED RESOURCES								
LAND	20C	$ 0.06	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.06	$ 0.0000
BUILDING	10C	$ 1.82	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 1.82	$ 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	$ 0.06	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.06	$ 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	$ 1.15	$ 0.00	$ 0.06	$ 5.20	$ 0.00	$ 6.41	$ 0.0000
BURIED CABLE (COPPER)	45C	$ 0.12	$ 0.00	$ 0.01	$ 3.73	$ 0.00	$ 3.86	$ 0.0000
UNDERGROUND (CU) CA.	5C	$ 2.30	$ 0.00	$ 0.12	$ 0.52	$ 0.00	$ 2.94	$ 0.0000
CO EQPT – P GAIN TERM	257C	$ 9.17	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 9.17	$ 0.0000
CO EQPT – P GAIN CHAN	257C	$ 16.79	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 16.79	$ 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	$ 0.27	$ 0.00	$ 0.01	$ 1.24	$ 0.00	$ 1.52	$ 0.0000
CONDUIT	4C	$ 0.82	$ 0.00	$ 0.04	$ 0.16	$ 0.00	$ 1.04	$ 0.0000
SPAN SUMMARY		$ 32.56	$ 0.00	$ 0.24	$ 10.87	$ 2.45	$ 46.12	$ 0.00
TECHNOLOGY DESIGN SUMMARY							$ 46.12	

C:\123R24\LCATR036\RESULTS1
OUTPUT – WORKSHEET D
SHEET 4 of 10

LOOP COST ANALYSIS TOOL

PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore®
LCAT Rel : 1.0.4
Issued : 7/31/95

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

CIRCUIT DESIGN : 1 FOMUX
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 26159 FEET

STUDY YR : 1996
TEST CASE : 1
RUN DATE : 23–Jan–97
TIME : 13:54

Circuit Design Mix : 0.0000 UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

PLANT ITEM DESCRIPTION	PLANT SEG. NAME EQPT CODE	FEEDER PRIMARY	FEEDER EXTENSION	FEEDER SUB–	DISTRIBUTION	NETWORK INTERFACE	TOTAL LOOP	WEIGHTED TOTAL LOOP
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 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	

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C:\123R24\LCAT\R036\RESULTS1
OUTPUT – WORKSHEET D
SHEET 5 of 10

LOOP COST ANALYSIS TOOL

PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore

LCAT Rel : 1.0.4
Issued : 7/31/95

COMPANY: CINCINNATI BELL TEL
CITY / AREA: CINCINNATI
STATE / PROV : OHIO
JOB IDENT : CINCINNATI

CIRCUIT DESIGN : 2 FOMUX
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 26159 FEET

STUDY YR : 1996
TEST CASE : 1
RUN DATE : 23–Jan–97
TIME : 13:54

Circuit Design Mix : 0.0000 UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

PLANT SEG. NAME / EQPT CODE / PLANT ITEM DESCRIPTION	FEEDER PRIMARY	FEEDER EXTENSION	SUB–	DISTRIBUTION NETWORK INTERFACE		TOTAL LOOP	WEIGHTED TOTAL LOOP
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 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	

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C:\123R24\LCATR036 RESULTS1
OUTPUT – WORKSHEET D
SHEET 6 of 10

LOOP COST ANALYSIS TOOL

PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore®
LCAT Rel : 1.0.4
Issued : 7/31/95

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

CIRCUIT DESIGN : 3 FOMUX
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 26159 FEET

STUDY YR : 1996
TEST CASE : 1
RUN DATE : 23–Jan–97
TIME : 13:54

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

PLANT SEG. NAME / EQPT CODE / ITEM DESCRIPTION		FEEDER PRIMARY	FEEDER EXTENSION	DISTRIBUTION SUB–	NETWORK INTERFACE		TOTAL LOOP	WEIGHTED TOTAL LOOP
SHARED RESOURCES								
LAND	20C	$ 0.07		$ 0.00	$ 0.00		$ 0.07	$ 0.07
BUILDING	10C	$ 2.21		$ 0.00	$ 0.00		$ 2.21	$ 2.21
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	$ 0.25		$ 0.00	$ 0.00		$ 0.25	$ 0.25
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	$ 0.00		$ 0.06	$ 5.20		$ 5.26	$ 5.26
BURIED CABLE (COPPER)	45C	$ 0.00		$ 0.01	$ 3.73		$ 3.74	$ 3.74
UNDERGROUND (CU) CA.	5C	$ 0.00		$ 0.12	$ 0.52		$ 0.64	$ 0.64
CO EQPT – LOW CAP TERM	257C	$ 6.62		$ 0.00	$ 0.00		$ 6.62	$ 6.62
CO EQPT – LOW CAP CHAN	257C	$ 16.79		$ 0.00	$ 0.00		$ 16.79	$ 16.79
CO EQPT – HI CAP TERM	857C	$ 2.18		$ 0.00	$ 0.00		$ 2.18	$ 2.18
CO EQPT – HI CAP CHAN	857C	$ 3.33		$ 0.00	$ 0.00		$ 3.33	$ 3.33
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	$ 0.08		$ 0.00	$ 0.00		$ 0.08	$ 0.08
BURIED CABLE (FIBER)	845C	$ 0.00		$ 0.00	$ 0.00		$ 0.00	$ 0.00
UNDERGROUND (FO) CA.	85C	$ 0.08		$ 0.00	$ 0.00		$ 0.08	$ 0.08
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	$ 0.02		$ 0.01	$ 1.24		$ 1.27	$ 1.27
CONDUIT	4C	$ 0.04		$ 0.04	$ 0.18		$ 0.26	$ 0.26
SPAN SUMMARY		$ 31.67	$ 0.00	$ 0.24	$ 10.87	$ 2.45	$ 45.23	$ 45.23
							$ 45.23	

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C:\123R24\LCATR036\RESULTS1
OUTPUT – WORKSHEET D
SHEET 7 of 10

LOOP COST ANALYSIS TOOL

PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore®

LCAT Rel : 1.0.4
Issued : 7/31/95

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

CIRCUIT DESIGN : 4 FOMUX
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 25169 FEET

STUDY YR : 1996
TEST CASE : 1
RUN DATE : 23–Jan–97
TIME : 13:54

Circuit Design Mix : 0.0000

UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

PLANT ITEM DESCRIPTION	PLANT SEG. NAME EQPT CODE	FEEDER PRIMARY	FEEDER EXTENSION	FEEDER SUB–	DISTRIBUTION NETWORK INTERFACE	TOTAL LOOP	WEIGHTED TOTAL LOOP
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 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	

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C:\123R24\LCATR036\RESULTS1
OUTPUT – WORKSHEET D
SHEET 8 of 10

LOOP COST ANALYSIS TOOL
PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore®
LCAT Rel : 1.0.4
Issued : 7/31/95

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

CIRCUIT DESIGN : 5 FOMUX
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 26159 FEET

STUDY YR : 1996
TEST CASE : 1
RUN DATE : 23–Jan–97
TIME : 13:54

Circuit Design Mix : 0.0000 UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

PLANT ITEM DESCRIPTION	PLANT SEG. NAME EQPT CODE	FEEDER PRIMARY	FEEDER EXTENSION	FEEDER SUB–	DISTRIBUTION	NETWORK INTERFACE	TOTAL LOOP	WEIGHTED TOTAL LOOP
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 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	

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C:\123R24\LCATR036\RESULTS1 — LOOP COST ANALYSIS TOOL — Bellcore
OUTPUT – WORKSHEET D — PROSPECTIVE INVESTMENT WORKSHEET SUMMARY — LCAT Rel : 1.0.4
SHEET 9 of 10 — 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 2 – BUSINESS ISDN	RUN DATE : 23–Jan–97
JOB IDENT. : CINCINNATI	TOTAL LOOP LENGTH	26159 FEET	TIME : 13:54

Circuit Design Mix : 0.0000 — UNIT MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

PLANT NAME / SEG. NAME / EQPT	FEEDER PRIMARY	FEEDER EXTENSION	SUB–	DISTRIBUTION	NETWORK INTERFACE	TOTAL LOOP	WEIGHTED TOTAL LOOP
PLANT CODE / *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 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	

C:\123R24\LCATR036\RESULTS1
OUTPUT – WORKSHEET D
SHEET 10 of 10

LOOP COST ANALYSIS TOOL

PROSPECTIVE INVESTMENT WORKSHEET SUMMARY

Bellcore®
LCAT Rel : 1.0.4
Issued : 7/31/95

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

CIRCUIT DESIGN : MELDED FOMUX
LOOP SPAN DIVISION : ALL LOOP SPANS
SERVICE CLASS : BAND 2 – BUSINESS ISDN
TOTAL LOOP LENGTH : 26159 FEET

STUDY YR : 1996
TEST CASE : 1
RUN DATE : 23–Jan–97
TIME : 13:54

Technology Type Mix : 1.0000

UNIT WEIGHTED MONTHLY RECURRING COSTS BY ACCOUNT FOR A 0 BAND STUDY

PLANT SEG. NAME / EQPT CODE / ITEM DESCRIPTION		FEEDER PRIMARY	FEEDER EXTENSION	FEEDER SUB–	DISTRIBUTION	NETWORK INTERFACE	TOTAL LOOP	TECHNOLOGY WEIGHTED TOTAL LOOP
SHARED RESOURCES								
LAND	20C	$ 0.07	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.07	$ 0.0742
BUILDING	10C	$ 2.21	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 2.21	$ 2.2056
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	$ 0.25	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.25	$ 0.2519
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	$ 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	$ 0.06	$ 5.20	$ 0.00	$ 5.26	$ 5.2600
BURIED CABLE (COPPER)	45C	$ 0.00	$ 0.00	$ 0.01	$ 3.73	$ 0.00	$ 3.74	$ 3.7400
UNDERGROUND (CU) CA.	5C	$ 0.00	$ 0.00	$ 0.12	$ 0.52	$ 0.00	$ 0.64	$ 0.6400
CO EQPT – LOW CAP TERM	257C	$ 6.62	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 6.62	$ 6.6193
CO EQPT – LOW CAP CHAN	257C	$ 16.79	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 16.79	$ 16.7851
CO EQPT – HI CAP TERM	857C	$ 2.18	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 2.18	$ 2.1818
CO EQPT – HI CAP CHAN	857C	$ 3.33	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 3.33	$ 3.3302
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	$ 0.08	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.08	$ 0.0840
BURIED CABLE (FIBER)	845C	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.0000
UNDERGROUND (FO) CA.	85C	$ 0.08	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.08	$ 0.0776
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	$ 0.02	$ 0.00	$ 0.01	$ 1.24	$ 0.00	$ 1.27	$ 1.2711
CONDUIT	4C	$ 0.04	$ 0.00	$ 0.04	$ 0.18	$ 0.00	$ 0.26	$ 0.2581
SPAN SUMMARY		$ 31.67	$ 0.00	$ 0.24	$ 10.87	$ 2.45	$ 45.23	$ 45.23
							$ 45.23	

C:\123R24\LCATCALC\DIST

RUN – DIST PLNT

LAST UPDATE
23–Jan–97
10:35

Bellcore (R)
LCAT
Release: 1.0.4
Issued: 8/31/95

LOOP COST ANALYSIS TOOL

DISTRIBUTION SEGMENT COST MODEL – BASIC COPPER TECHNOLOGY

STUDY NAME: 1996 BAND 2 (OHIO ONLY) BUSINESS ISDN 18001 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 COST

....your run is finished

C:\123R24\LCATCALC\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

Bellcore (R)
LCAT Release : 1.0.4
Issue Date : 6/31/95

FACILITY TYPE : COPPER CABLE
COMPANY: CINCINNATI BELL TEL. CIRCUIT SEGMENT : DISTRIBUTION PLANT (NON-DLC,NON-COLLOC.)
CITY / AREA: CINCINNATI
STATE / PROV : OHIO SERVICE CLASS : BAND 2 - BUSINESS ISDN

STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23-Jan-97
TIME : 13:44

SEGMENT LENGTH IN FEET [A]	TYPE OF CABLE PLANT	FROM - TABLE 2 - RELATIVE MIX OF TYPE OF CA. PLANT [B]	LENGTH SUBSET BY TYPE OF PLANT [C=A*B]	FROM - TABLE 4 - CABLE INVESTMENT PER PAIR FOOT [D]	CABLE COMPONENTS: CABLE INVESTMENT PER PAIR [E=C*D]	(NOTE 4) WEIGHTED TERMINAL INVESTMENT	AIR DRYER INVESTMENT PER PAIR [F=E*fctr]	DROP WIRE ADJUSTMENT PER PAIR [F=E*fctr]	(NOTE 4) WEIGHTED DROP WIRE INVESTMENT
2049.0	AERIAL	0.620000	1270.4	0.042600	54.12		0.00	0.00	
CONSIDERS:	BURIED	0.330000	676.2	0.066800	45.17		0.00	0.00	
MELDED COPPER CABLE	UNDERGRND	0.050000	102.5	0.058000	5.94		0.00	0.00	
	Check =	1.000000	2049.0						

OUTSIDE PLANT LOADINGS (NOTE 4)

DROP WIRE ADJUSTMENT:

AERIAL CA. =	0.0000
BURIED CA =	0.0000
UNDERGRND =	0.0000

AIR DRYER LOADINGS:

AERIAL CA. =	0.0000
BURIED CA =	0.0000
UNDERGRND =	0.0000

OTHER INVESTMENT

	inv / unit lgth:	inv rtn fctr :
POLE LINE FACTOR (PLf) =	0.0000	0.2530
POLE LINE INVESTMENT (UTIL AERIAL INVEST. x PLf) =	$ 39.12	
UG CONDUIT FACTOR (UCf) =	0.0000	0.5165
CONDUIT INVESTMENT (UTIL UNDGRND INVST x UCf) =	$ 8.77	

FOOTNOTES
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 (SEE BUILDING AND TERMINATING INVESTMENT WORKSHEET)

C:\123R24\LCATCALC\DIST
DIST_PLNT - WORKSHEET A
Sheet 2 of 3

LOOP COST ANALYSIS TOOL

ACCOUNT INVESTMENT WORKSHEET

SERVING AREA INTERFACE TO SERVICE ACCESS POINT INVESTMENT COST MODEL

Bellcore (R)

LCAT Release : 1.0.4
Issue Date : 6/31/95

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 2 - BUSINESS ISDN

STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23-Jan-97
TIME : 13:44

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]	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					1.0000		
INTRABLDG CABLE	52C	V	DIRECT					0.3500		
AERIAL CABLE (COPPER)	22C	V	DIRECT	54.12	1		$ 54	0.3500		$ 155
BURIED CABLE (COPPER)	45C	V	DIRECT	45.17	1		$ 45	0.3500		$ 129
UNDERGROUND (CU) CA.	5C	V	DIRECT	5.94	1		$ 6	0.3500		$ 17
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	39.12	1		$ 39	1.0000		$ 39
CONDUIT	4C	F	DIRECT	8.77	1		$ 9	1.0000		$ 9
									$ 0	$ 349
										$ 349
										distrivty

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.

C:\123R24\LCATCALC\DIST
DIST_PLNT – WORKSHEET A
Sheet 3 of 3

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

LOOP COST ANALYSIS TOOL

PROSPECTIVE AND ANNUAL COSTS WORKSHEET

SERVING AREA INTERFACE TO SERVICE ACCESS POINT INVESTMENT COST MODEL
FACILITY TYPE : COPPER CABLE
CIRCUIT SEGMENT : DISTRIBUTION PLANT-NON-DLC,NON-COLLOC
SERVICE CLASS : BAND 2 – BUSINESS ISDN

Bellcore (R)
LCAT Release : 1.0.4
Issue Date : 8/31/95
STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23–Jan–97
TIME : 13:44

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		$ 155	0.4033		$ 62.36		$ 5.20
BURIED CABLE (COPPER)	45C	1.0000		$ 129	0.3467		$ 44.74		$ 3.73
UNDERGROUND (CU) CA.	5C	1.0000		$ 17	0.3663		$ 6.22		$ 0.52
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			0.3456				
AERIAL CABLE (FIBER)	822C	1.0000			0.2983				
BURIED CABLE (FIBER)	845C	1.0000			0.2724				
UNDERGROUND (FO) CA.	85C	1.0000			0.2659				
CONNECTORS	57C	1.0000			0.3881				
MISC. COM EQP & PWR	57C	1.0000			0.3881				
POLE LINE	1C	1.0000		$ 39	0.3807		$ 14.89		$ 1.24
CONDUIT	4C	1.0000		$ 9	0.2521		$ 2.21		$ 0.18
			dstshrinv	dstdirinv					
TOTALS			$ 0	$ 349		$ 0.00	$ 130.42	$ 0.00	$ 10.87
				$ 349			$ 130.42		$ 10.87
				distinvsy			distann		distmrc

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.

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

LOOP COST ANALYSIS TOOL
BASIC INVESTMENT WORKSHEET

Bellcore(R)
LCAT
Release : 1.0.4

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

FACILITY TYPE : COPPER CABLE
CIRCUIT SEGMENT : SERVICE ACCESS
SERVICE CLASS : BAND 2 - BUSINESS ISDN

STUDY YR: 1996
TEST CASE: 1
RUN DATE : 23-Jan-97
TIME : 13:44

TYPE OF PLANT ITEM	UNIT PLANT INVEST. [A]	PROB. OF OCCURANCE [B]	WEIGHTED TERMINAL INVESTMENT [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

	from length:	from invest. :
POLE LINE FACTOR (PLf) =	2.0000	0.2530
POLE LINE INVESTMENT (UTIL AERIAL INVEST. x PLf) =	$ 0.00	

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