ATTACHMENT B

FPSC DOCKET 960833-TP

TESTIMONY EXHIBITS
OF
D. CALDWELL (DDC-7 - DDC-20)

REDACTED

TWO COPIES

DOCUMENT NUMBER-DATE
09306 SEP -3 96
FPSC-RECORDS/REPORTING

ATTACHMENT A

FPSC DOCKET 960833-TP

TESTIMONY EXHIBITS OF D. CALDWELL (DDC-7 - DDC-20)

Explanation of Proprietary Information

A. This information contains actual unit cost information for discrete cost elements for the item under study. These costs reflect BellSouth's long run incremental cost of providing these elements on a going forward basis. Public Disclosure of this information would provide BellSouth's competitors with an advantage in that they would know the price or rate below which BellSouth could not provide the service. The data is valuable to competitors and potential competitors in formulating strategic plans for entry, pricing, marketing, and overall business strategies concerning access services. This same information on competitors is not available to BellSouth. This information is valuable, it is used by BellSouth in conducting its business and BellSouth strives to keep it secret. Therefore, such information is a trade secret which should be classified as proprietary, confidential business information pursuant to Section 364.183, Florida Statutes and is exempt from the Open Records Act.

B. This informations reflects vendor specific prices negotiated by BellSouth. Public disclosure of this information would impair BellSouth's ability to contract for goods and services on favorable terms. This information is valuable, it is used by BellSouth in conducting its business and BellSouth strives to keep it secret. Therefore, such information is a trade secret which should be classified as proprietary, confidential business information pursuant to Section 364.183, Florida Statutes and is exempt from the Open Records Act.

LOCATION OF THE PROPRIETARY INFORMATION

PAGE NO.	LINE/COL. NO.	REASON
Unbundled Loop (DDC-7) 8/12/96		
F23B01X000012	Cols. A-C	A
21-22	Col. L	A
24	Cols. C; Lines 16-18, 31-33	A
25	Lines 7-9,11, 13-15, 17	A
27	Cols. C; Lines 18, 23-24, 27, 30, 33	A
28	Lines 5, 8, 10-11	A
32-37	Cols. M-N	A
39	Line 11	A
42&44	Lines 117,119,121,123,125,127,130, 132,134,136,139,141,143,145,147,149, 151,153-158	A
43	Lines 13,15,17,19,21,23,26,28,30,32, 35,37,39,41,43,45,47,49-54	A
53	Cols. C&D	A
54,56,58	Cols. A, B, D-G	A
55&57	Cols. C&D	A
60	Col. B	A
63	Lines 4-6; Col. B	A
64	Cols. D-I	A
Unbundled 4-wire DS1 Digital Grade Loop (DDC-8) 8/12/96		
77	Cols. A-C	A
81&82	Cols. A-L	A&B
84&86	Cols. A-L; Lines 35-38, Cols. B-L, Lines 44-46	A&B
88&91	Cols. AA-L	A&B
89&92	Cols. A-L	A&B
94-96	Col. B	A&B
97	Cols. A,C,E,G,I	A&B
98	Cols. A-C,E,G,H,J,K,M,N,P,R,T,V	A
99,101,103	Col. B	A&B
100	Cols. A,C& Sources Col. A, Lines 68-76	A

Unbundled 4-wire DS1 Digital Grade Loop (DDC-8) 8/12/96 continued

F23B01X000102,104,	Cols. A,B,C,E,G	A&B
106,109,110	Cols. A,B,C,E,G	A
105,108	Cols. B&F	A&B
107	Cols. A,C&Sources Col. A, Lines 142-149	A
121	Cols. A&B	A
122	Cols. A,B,D-G	A
124	Lines 24-28	A

Unbundled Exchange Ports (DDC-9) 8/12/96

145,146,148	Cols. A-D	A
147	Cols. A&B	A
149	Col. A	A
155A	Col. C	A
156	Col. C, Lines 3,4,6,12,16,17,19,25,32	A&B
157	Col. C, Line 31	A&B
158-161	Cols. A-F	A
162	Col. C, Lines 2,3,9,10,13,16	B
165	Cols. A-C	A
166	Col. C, Lines 32,33	A&B
167	Col. C, Lines 2,8,12,18,26	A&B
168	Col. C	B
169	Col. C, Lines 49-51,63-87	A&B
170	Col. C, Lines 92-103, 112&113	A&B
171	Col. C	A&B
172&173	Cols. A&F	A
175	Col. C, Lines 2,3,10,11,17-27,35-45	A&B
176	Col. B, Lines 4-14; all of Col. C	A&B
177	Col. B, Lines 4-11; all of Col. C	A&B
179	Cols. A-C	A
180	Col. C	A
181	Col. C, Lines 2-5, 15	A&B
182	Col. C, Lines 3-6, 12-17, 23-25	A&B
183	Col. B, Lines 2-4; all of Col. C	A&B
184	Col. B, Lines 2-8; all of Col. C	A&B
185	Col. C	A
186&187	Cols. A&F	A&B

Unbundled Exchange Ports (DDC-9) 8/12/96 continued

F23B01X000188	Col. C, Lines 3,9,15,19	A&B
191	Cols. A-C	A
192	Col. C	A
193	Col. C, Lines 2-5,15	A&B
194	Col. C, Lines 1&7	A&B
195	Col. B, Lines 2-4; all of Col. C	A&B
196	Col. B, Lines 2-8; all of Col. C	A&B
197	Col. C	A
198&199	Cols. A&F	A&B
200	Col. C, Lines3-9,15-19	A&B
203	Cols. A-C	A&B
204	Col. C; Lines 35&36	A&B
205	Col. C, Lines 3-8,14,18-23,29,36	A&B
206	Col. C, Lines 1&7	A&B
207	Col. C	A&B
208&209	Cols. A&F	A
210	Col. C, Lines 3-24,30-49	A&B
212	Col. C, Lines2,3,10,11,17-27,35-45	A&B
213&214	Col. B, Lines 4-6; all of Col. C	A&B
216	Col. C	A
217	Cols. C-G	A
218	Cols. C-I	A
219	Cols. C-H	A
242	Cols. A-H	A

Unbundled Loop Channelization System & Central Office Channel Interface (DDC-10) 8/12/96

F23B01X000254	Cols. A-C	A
257	Col. B	A
258&259	Cols. C, E-O	A&B
261	Col. A, Lines 2,3,6,9,10,17-20,23,26, 29,30,33,36	A&B
262	Col. A, Lines 2,5,11,14,17,20,23,24,27,30	A&B
267&269	Cols. A&B	A
268&270	Cols. A,B, D-G	A

Special Access Voice Grade Service (DDC-11) 8/12/96

F23B01X000289	Cols. A&B	A
293	Col. A	A
294-299	Cols. A,B,C-I; Lines 15, 18	A
300	Cols, A,B,C,D; Line 14	A
301,303,305	Cols. A,B,C,D; Line 6	A
302&304	Cols. A,B,C,D; Line 4	A
306,308,309	Cols. A-C	A
307	Col. A	A
310&311	Col. C, Equip. Investiment $'s	A&B
315-317	Cols. A&B	A
318-320	Cols. A-D,F-M	A

Operator Provided and Fully Automated Call Handling Service (DDC-12) 8/12/96

F23B01X000340,345,348,351,	Col. A	A
346	Cols. A-F	A&B
347	Cols. A-I	A
349	Col. A, Lines 8,9,12,13,15,16,19, 26-30,51,53	B
350	Cols. A&B, Lines 8,11-13,17,19,21	B
352	Col. A, Lines 28-29,34-35,38,43-44	B
353	Col. A, Lines 14,16-17	A

Verification and Emergency Interrupt Service (DDC-13) 8/12/96

F23B01X000370,374,379	Col. A	A
375	Cols. A-G	A
376	Col. A, Lines 12,14	A
377	Col. A, Lines 9-10, 13-14,16,20, 27-31,51,53	B
378	Cols. A&B, Lines 8,13-15,19,21	B

Directory Assistance Access Service (DDC-14) 8/12/96

F23B01X000395	Col. A	A
399	Col. A, Lines 3-16,20-24	A
400	Col. A	A
401	Col. A, Lines 3-5	A
402	Col. A, Lines 2-3,5-6,8,11,18-22, 43,45	A&B
403	Col. A, Lines 2,5,9,13	A&B
404	Col A, Lines 2-3,5-6,16-24,48-49	B

Directory Assistance DataBase Service (DDC-15) 8/12/96

F23B01X000420	Col. A	A
423	Lines 10,14	A
424	Col. A, Lines 10,13,22; Col B, Lines 10,13,15,18,22-23,25	A
426	Line 7	A

Directory Access to Directory Assistance Service (DDC-16) 8/12/96

F23B01X000439	Col. A, Lines 2,5,7	A
443	Col. A, Lines 12,14,18,20,22	A
444	Col. A	A
445	Col. A, Lines 10-14,24-32, 53-54,57-58	B

DACC Access Service (DDC-17) 8/12/96

F23B01X000464	Col. A	A
467	Col. D	A
468	Col. D, Lines 3,5,9,13,15,19,21,24, 29,31,33,36	A&B
469	Col. D, Lines 4-6,10,14	A&B

Directory Transport (DDC-18) 8/12/96

F23B01X000485	Col. A	A
488	Col. C	A
489	Col. D, Lines 1-5, 13-17	A

Number Services Intercept Access Service (DDC-19) 8/12/96

F23B01X000506	Col. A	A
510	Col. C	A
511	Col. D, Lines 3,5,9,13,15,19,21, 24, 28,30,32,35	A&B
512	Col. D, Lines1-10,14	A&B
513	Col. D, Lines 2-3,5,9,13,15,19,21, 24,29,32	A&B
514	Col. D, Lines 3,5,9,13,15,19,21, 24,29,32,	A&B
515&516	Col. D&F	A

CCS7 Signaling Transport Service (DDC-20) 8/12/96

F23B01X000533	Col. A, Lines 13-24	A
537	Col. A, Lines 14,17-18,21,25-26, 32-34,37-39,44-46	A
539	Col. A, Lines 10,17,23; Col. B, Lines 9-11,13,16-18,20,22-24,26-27, 31,35	B
540	Col. A, Lines 8,11,17-21,23,25-26, 29-30,32-34	A
541	Col. A, Lines 16-17,27; Col. B, Lines12-17, 20-31	B
542	Col. A, Lines 16-17,27; Col. B, Lines 12-17,20-34	B
543	Col. A, Lines 10,17,23; Col. B, Lines 9-11,13,16-18,20,22-24,26-27, 31,35	B

BellSouth Telecommunications, Inc.
FPSC Docket No. 960833-TP
Exhibit No. DDC-7

FLORIDA

UNBUNDLED LOOPS

- 2-WIRE ANALOG VOICE GRADE LOOP
- 4-WIRE ANALOG VOICE GRADE LOOP
- 2-WIRE ISDN DIGITAL GRADE LOOP

COST STUDY DOCUMENTATION

SECTIONS A THRU 7

FLORIDA

UNBUNDLED LOOPS

COST STUDY DOCUMENTATION

CONTENTS

SECTION A	PROPRIETARY RATIONALE
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SECTION 2	DESCRIPTION OF STUDY PROCEDURES
SECTION 3	SUMMARY OF RESULTS
SECTION 4	COST DEVELOPMENT - RECURRING
SECTION 5	COST DEVELOPMENT - NONRECURRING
SECTION 6	SPECIFIC STUDY ASSUMPTIONS
SECTION 7	FACTORS AND LOADINGS

SECTION A

SECTION A

FLORIDA UNBUNDLED LOOP

PROPRIETARY RATIONALE

The Florida Unbundled Loop Cost Study for 2-Wire and 4-Wire Analog Voice Grade Loops and 2-Wire ISDN Digital Grade Loop contains actual unit cost information for discrete cost elements. These costs reflect BellSouth's long run incremental cost of providing this element on a going forward basis. Public disclosure of this information would provide BellSouth's competitors with an advantage in that they would know the price or rate below which BellSouth could not provide the service. The data is valuable to competitors and potential competitors in formulating strategic plans for entry, pricing, marketing and overall business strategies concerning access services. This information relates to the competitive interests of BellSouth and disclosure would impair the competitive business of BellSouth.

Additionally, the study contains information which reflects vendor-specific prices negotiated by BellSouth. Public disclosure of this information would impair BellSouth's ability to contract for goods and/or services on favorable terms. For these reasons, the Florida Unbundled Loop Cost Study is considered proprietary.

SECTION 1

SECTION 1

FLORIDA UNBUNDLED LOOPS

INTRODUCTION AND OVERVIEW

This Long Run Incremental Cost study for Voice Grade Loops (2-Wire and 4-Wire) and 2-Wire ISDN Digital Loops is being provided in response to orders set forth by the Florida Public Service Commission in Docket No. 950984-TP Order No. PSC-96-0444-FOF-TP (Unbundling), issued March 29, 1996.

The Unbundled cost elements referred to as loops (2-wire analog voice grade, 4-wire analog voice grade, and 2-wire ISDN digital) represent the cost of the physical transmission facilities (or channel or group of channels on such facility) which extend from the end office to a demarcation point at the customer's premises, (i.e. the network interface). The cost of each facility is determined by loop characteristics as follows:

- type of cable(fiber or copper)
- plant type (aerial, buried, underground)
- size/gauge
- length
- electronic equipment

Loop costs represent both feeder and distribution outside plant in a single line residence/single line business serving environment. The transmission facility terminates on the main distribution frame and does not enter the BellSouth switch. If the loop is served via digital loop carrier, a central office digital loop carrier terminal is required to convert the digital signal to voice grade analog for delivery to the Alternate Local Exchange Carrier.

The Loop Cost Model is a database tool that houses all the facility characteristics described above and produces an average cost. Spreadsheets are used to convert the loop investments into recurring cost.

Recurring costs presented in this study are directly assigned, incremental and levelized so as to be appropriate for the 1996 - 1998 study period. Nonrecurring costs follow the same convention and represent 1996 - 1998 levelized costs also. These long-run incremental costs are developed by using 1995 level incremental loadings and annual cost factors based on 13.2% Cost of Money and directly assigned labor rates.

SECTION 2

SECTION 2

FLORIDA UNBUNDLED LOOPS

DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of costs supporting the Florida 2-Wire Analog Voice Grade Loop, the 4-Wire Analog Voice Grade Loop, and the 2-Wire ISDN Digital Loop.

All costs are developed utilizing Long Run Incremental Cost methodology. In determining these costs, direct incremental costing techniques are used that are in accordance with accepted economic theory. Direct incremental costs are based on cost causation and include all of the costs directly caused by expanding production, or, alternately, costs that would be saved if the production levels were reduced. Costs are forward looking in nature because only future costs can be saved. Incremental costs are long run to insure that the time period studied is sufficient to capture all forward looking costs affected by the business decision. Shared and common costs are not incremental and therefore are not included. Incremental costs include both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs. Incremental costs account for the expected change in cost to the firm resulting from a new service offering or a change in demand for an existing service.

DEVELOPMENT OF RECURRING COSTS

The monthly costs to BellSouth Telecommunications, Inc., resulting from the capital investments necessary to provide a service are called recurring costs. Recurring costs include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs are the expenses of maintenance and ad valorem and other taxes. These expenses contribute to the ongoing cost to the company associated with the initial capital investment. Recurring costs are developed using incremental economic study applications, representing a forward-looking view of technology and deployment.

The first step in developing an incremental study of recurring costs for the Unbundled Loop costs is to determine the forward-looking network architecture. Material prices for the cables and associated equipment are defined. Next, account specific Telephone Plant Indices are applied, when necessary, to trend investments to the base study period. In-plant factors are applied to material prices to develop installed investments which include engineering and installation (both telephone company and contractor) labor. The deployment probabilities and utilization factors are also considered.

Plant account specific Investment Inflation Factors are applied to the installed investments to trend the base year, or study year, investments to levelized amounts that are valid for a three to five year planning period. Appropriate loadings for land, builidng and miscellaneous equipment, and right-of-way fees are then applied.

Next, 1995 level Florida Intrastate Incremental Annual Cost Factors are used to calculate the direct cost of capital(in this case, 13.2%), ongoing maintenance and other operating expenses and taxes. These factors (specific factors for each USOA FRC) are applied to levelized investments by account code, yielding an annual cost per account code. These costs are then divided by twelve to arrive at a monthly cost per cost element.

DEVELOPMENT OF NONRECURRING COSTS

Nonrecurring costs are "one-time" costs incurred as a result of provisioning, installing, and disconnecting the 2-Wire Analog Voice Grade Loop, the 4-Wire Analog Voice Grade Loop, and the 2-Wire ISDN Digital Loop. The first step in developing nonrecurring costs is to determine the cost elements related to the study. These cost elements are then described by all of the individual work functions required to provision the cost element. The work functions can be grouped into four categories. These are service order, engineering, connect and test, and technician travel time. The work function times, identified by subject matter experts, are used to describe the flow of work within the various work centers involved. Installation and provisioning costs are developed by multiplying the work time for each work function by the directly assigned labor rate for the work group performing the function.

Utilizing work functions, work times, and labor rates, disconnect costs are calculated in the same manner as the installation costs. Since the labor costs will occur in the future, the current labor rates are inflated to that future period in time and then discounted to the present. The discounted disconnect cost is added to the installation cost and gross receipts tax is applied to develop the total nonrecurring cost.

SECTION 3

SECTION 3

FLORIDA UNBUNDLED LOOP

SUMMARY OF RESULTS

This section contains a cost summary for both recurring and nonrecurring cost elements studied for the 1996 - 1998 Unbundled 2-Wire Analog Voice Grade Loop, the 4-Wire Analog Voice Grade Loop, and the 2-Wire ISDN Digital Loop.

FLORIDA UNBUNDLED LOOP

SUMMARY OF RESULTS

		A	B	C
		Monthly Cost	Nonrecurring Cost	
			First	Additional
5	2 Wire Analog Voice Grade Loop	[redacted]	[redacted]	[redacted]
6	4 Wire Analog Voice Grade Loop	[redacted]	[redacted]	[redacted]
7	2 Wire ISDN Digital Grade Loop	[redacted]	[redacted]	[redacted]

SECTION 4

SECTION 4

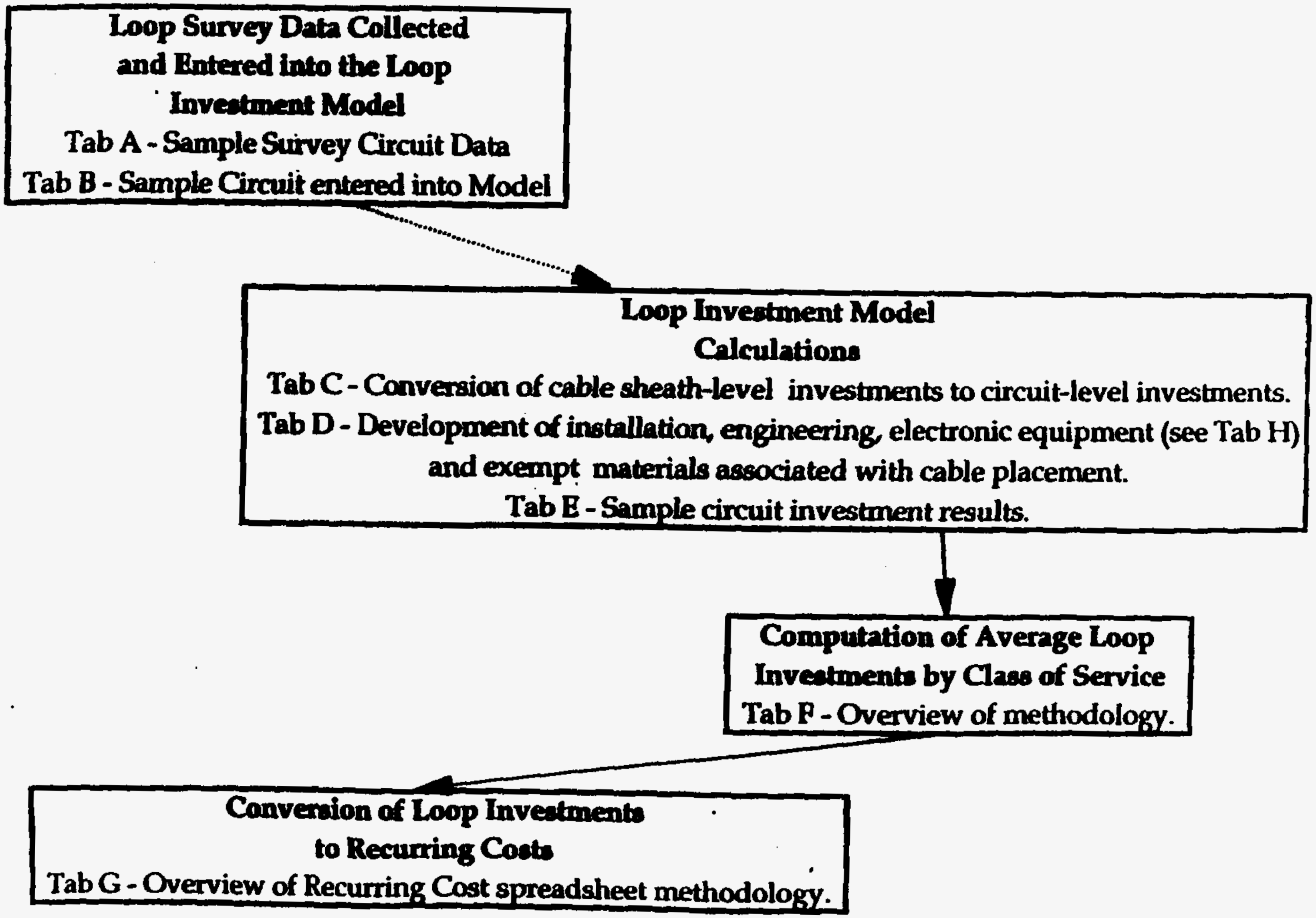
FLORIDA UNBUNDLED LOOPS

COST DEVELOPMENT - RECURRING

Generally, economic cost development is outlined in Section 2. Network architecture is determined, the necessary equipment is identified, material prices are obtained, factors, utilization and loadings are applied and the result is levelized for the study period. Annual cost factors are applied to convert the investment to cost.

The following workpapers show how a typical loop cost investment is developed. From all loop investments an average loop investment is created and then, as described above, annual and monthly costs are developed.

LOOP COST DEVELOPMENT PROCEDURES



Loop Survey Data Collected and Entered into the Loop Investment Model

Tab A - Sample Survey Circuit Data

Tab B - Sample Circuit entered into Model

Loop Investment Model Calculations

Tab C - Conversion of cable sheath-level investments to circuit-level investments.

Tab D - Development of installation, engineering, electronic equipment (see Tab H) and exempt materials associated with cable placement.

Tab E - Sample circuit investment results.

Computation of Average Loop Investments by Class of Service

Tab F - Overview of methodology.

Conversion of Loop Investments to Recurring Costs

Tab G - Overview of Recurring Cost spreadsheet methodology.

TAB A

✓

District: Broward - Fort Lauderdale

MPLE #: 0002
rcuit : 3053609149
C Cat.: RESIDENCE

W.C.: BRDHFLMA
USOC: 1FR

	F1 Information	F2 Information	F3 Information
ble	F028	5751WPD	
ir	3930	1054	
dr	5751 WINSTON PARKBLVD	MB 5460 NW 55TH BLVD	

FRC	Facility	Sec.	Size	Co.	Length	Plat	
31C	[illegible]	F					O M4X
3C	CABLE	F	60		971		
3C	CABLE	F	60		845		
F3C	CABLE	F	60		931		
F3C	CABLE	F	60		3296		
F3C	CABLE	F	60		3986		
F3C	CABLE	F	36		3148		
F3C	CABLE	F	36		2359		
F3C	CABLE	F	36		4652		
F3C	CABLE	F	36		3737		
F3C	CABLE	F	36		62		
F3C	CABLE	F	30		2860		
F2C	CABLE	F	30		1600		
F3C	CABLE	F	30		240		
F3C	CABLE	F	18		1818		
F3C	CABLE	F	18		1652		
F3C	CABLE	F	18		700		
F2C	CABLE	F	18		2252		
F2C	CABLE	F	18		309		
F2C	CABLE	F	18		482		

```
"9543609149",2,1,"45C","Buried Copper Cable",1,600,24,20,"",""
"9543609149",2,2,"45C","Buried Copper Cable",1,900,26,950,"",""
"9543609149",2,3,"45C","Buried Copper Cable",1,400,26,325,"",""
"9543609149",2,4,"45C","Buried Copper Cable",1,200,26,1700,"",""
"9543609149",2,5,"12C","Building Entrance Copper Cable",1,50,26,190,"",""
"9543609149",2,6,"12C","Building Entrance X-Box",1,50,0,0,"MR 5460 NW 55TH BLVD",""
"9543609149",3,1,"5C","Underground End Section or Bridged Tap",4,600,26,1990,"","TW"
"9543609149",3,2,"45C","Buried End Section or Bridged Tap",4,600,26,645,"","=D"
"9543609149",3,3,"45C","Buried End Section or Bridged Tap",4,600,24,20,"",""
"9543609149",3,4,"5C","Underground End Section or Bridged Tap",4,1200,26,20,"",""
```

SAMPLE #: C002

FRC	Facility	Sec.	Size	Ga.	Length	Plat	
FASC	CABLE	F	18		572		
F5C	CABLE	F	12		692		
F4SC	CABLE	F	12		2604		
F22C	CABLE	F	12		2334		
F4SC	CABLE	F	12		909		
FASC	CABLE	F	12		790		
F5C	CABLE	F	18		5276		
257C	REGENERATOR	F				CLLI	MIN AT RT.
5'.	CABLE	F	600	26	40		
=	CABLE	F	600	24	25		
45C	X BOX	I	3600				

TAB B

LOOP # : 200 STATE : FL SVC DESC : Florida Loop Survey Circuit CIRCUIT ID : 3053609149 CLLI DRBHFLMA

CIRCUIT TYPE : V CIRCUIT LEVEL : DS0 DESIGN : 13 CLASS OF SVC: RESIDENCE DLC & MUX LOADINGS :B

ROUTE LENGTH : 52,908 ROUTE MILE : 10.02 AIR MILES : 6.16

W	A	B	C	D	E	F	G	H	I	J	K	L
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Size	Gauge/Mode	[illegible]	[illegible]	[illegible]
6	1	1	Fiber	F5C	FOCALL40DB60	CABLE FB-OPT ALL 40DB 60	F	60	Sgl	40db	971.00	
7	2	1	Fiber	F5C	FOCALL40DB60	CABLE FB-OPT ALL 40DB 60	F	60	Sgl	40db	845.00	
8	3	1	Fiber	F5C	FOCALL40DB60	CABLE FB-OPT ALL 40DB 60	F	60	Sgl	40db	951.00	
9	4	1	Fiber	F5C	FOCALL40DB60	CABLE FB-OPT ALL 40DB 60	F	60	Sgl	40db	3,256.00	
10	5	1	Fiber	F5C	FOCALL40DB60	CABLE FB-OPT ALL 40DB 60	F	60	Sgl	40db	3,886,00	
11	6	1	Fiber	F5C	FOCALL40DB36	CABLE FB-OPT ALL 40DB 36	F	36	Sgl	40db	3,148.00	
12	7	1	Fiber	F5C	FOCALL40DB36	CABLE FB-OPT ALL 40DB 36	F	36	Sgl	40db	2,359.00	
13	8	1	Fiber	F5C	FOCALL40DB36	CABLE FB-OPT ALL 40DB 36	F	36	Sgl	40db	4,653.00	
14	9	1	Fiber	F5C	FOCALL40DB36	CABLE FB-OPT ALL 40DB 36	F	36	Sgl	40db	3,757.00	
15	10	1	Fiber	F5C	FOCALL40DB36	CABLE FB-OPT ALL 40DB 36	F	36	Sgl	40db	62.00	
16	11	1	Fiber	F5C	FOCALL40DB30	CABLE FB-OPT ALL 40DB 30	F	30	Sgl	40db	2,860.00	
17	12	1	Fiber	F22C	FOCALL40DB30	CABLE FB-OPT ALL 40DB 30	F	30	Sgl	40db	1,600.00	
18	13	1	Fiber	F5C	FOCALL40DB30	CABLE FB-OPT ALL 40DB 30	F	30	Sgl	40db	240.00	
19	14	1	Fiber	F5C	FOCALL40DB18	CABLE FB-OPT ALL 40DB 18	F	18	Sgl	40db	1,818.00	
20	15	1	Fiber	F5C	FOCALL40DB18	CABLE FB-OPT ALL 40DB 18	F	18	Sgl	40db	1,652.00	
21	16	1	Fiber	F45C	FOCALL40DB18	CABLE FB-OPT ALL 40DB 18	F	18	Sgl	40db	700.00	
22	17	1	Fiber	F22C	FOCALL40DB18	CABLE FB-OPT ALL 40DB 18	F	18	Sgl	40db	2,212.00	
23	18	1	Fiber	F22C	FOCALL40DB18	CABLE FB-OPT ALL 40DB 18	F	18	Sgl	40db	509.00	
24	19	1	Fiber	F22C	FOCALL40DB18	CABLE FB-OPT ALL 40DB 18	F	18	Sgl	40db	482.00	
25	20	1	Fiber	F45C	FOCALL40DB18	CABLE FB OPT ALL 40DB 18	F	18	Sgl	40db	572.00	
26	21	1	Fiber	F5C	FOCALL40DB12	CABLE FB-OPT ALL 40DB 12	F	12	Sgl	40db	692.00	
27	22	1	Fiber	F45C	FOCALL40DB12	CABLE FB-OPT ALL 40DB 12	F	12	Sgl	40db	2,604.00	
28	23	1	Fiber	F22C	FOCALL40DB12	CABLE FB-OPT ALL 40DB 12	F	12	Sgl	40db	2,834.00	
29	24	1	Fiber	F45C	FOCALL40DB12	CABLE FB-OPT ALL 40DB 12	F	12	Sgl	40db	909.00	
30	25	1	Fiber	F45C	FOCALL40DB12	CABLE FB-OPT ALL 40DB 12	F	12	Sgl	40db	790.00	
31	26	1	Fiber	F5C	FOCALL40DB18	CABLE FB OPT ALL 40DB 18	F	18	Sgl	40db	5,276.00	
32	28	1	Copper	5C	600ULRIC	LRIC mix of 22,24,26 gauge	F	600	MIX	U	40.00	
33	[illegible]	1	Copper	45C	600BLRIC	LRIC mix of 22,24,26 gauge	F	600	MIX	B	25.00	
34	[illegible]	1	Copper	45C	600BLRIC	LRIC mix of 22,24,26 gauge	D	600	MIX	B	20.00	

Tuesday, May .

FLORIDA LOOP COST STUDY -- CABLE .TERIAL INVESTMENTS FOR LOOP SAMPLE #2

CIRCUIT ID : 3053609149   CLLI : DRBHFLMA

LOOP # : 200   STATE : FL   SVC DESC   Florida Loop Survey Circuit

CIRCUIT TYPE : V   CIRCUIT LEVEL : DS0   DESIGN : 13   CLASS OF SVC: RESIDENCE   DLC & MUX LOADINGS :B

ROUTE LENGTH : 52,908   ROUTE MILE : 10.02   AIR MILES : 6.16

		A	B	C	D	E	F	G	H	I	J	K	L
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Size	Gauge/Media	[illegible]	Units	[illegible]
6		32	1	Copper	45C	900BLRIC	LRIC mix of 22,24,26 gauge	D	900	MIX	B	950.00	[redacted]
7		33	1	Copper	45C	400BLRIC	LRIC mix of 22,24,26 gauge	D	400	MIX	B	325.00	[redacted]
8		34	1	Copper	45C	200BLRIC	LRIC mix of 22,24,26 gauge	D	200	MIX	B	1,700.00	[redacted]
9		35	1	Copper	12C	333892750	Copper Riser Cable ARTM	D	50	26	R	190.00	[redacted]

TAB C

TAB C

Conversion of Cable Sheath Investments to DS0-equivalent Investments

The Loop Investment Model stores cable investments at the actual price which BellSouth Telecommunications currently pays for each cable type. The investments are maintained at a "sheath foot" level and must be converted to a circuit-level investment before loop costs can be developed.

The **first step** in developing a circuit-level cable investment is to determine the number of copper pairs or fiber strands which are typically utilized for a given cable. This is accomplished by applying the following utilization percentages to the cable size (# of pairs or strands):

	A	B	C
	Cable Type	Placement	Utilization Percentages
11	Copper	Feeder	[redacted]
12	Copper	Distribution	[redacted]
13	Fiber	Feeder	[redacted]
14	Fiber	Distribution	[redacted]

For example:

16
17
18 [redacted]

The **second step** in developing a circuit-level cable investment is to determine the number of DS0-level circuits supported by the utilized copper pairs or fiber strands as determined above. This is accomplished by applying the following typical DS0 circuit counts to the number of utilized copper pairs or fiber strands:

	A	B	C
	Cable Type	Placement	DS0-equivalent Circuits
24	Copper	Feeder	[redacted]
25	Copper	Distribution	[redacted]
26	DLC* on Copper	Feeder	[redacted]
27	DLC on Fiber	Feeder	[redacted]
28	DLC on Fiber	Distribution	[redacted]

* DLC = Digital Loop Carrier

For example:

31
32
33 [redacted]

The **third step** in developing a circuit-level cable investment is to divide the sheath foot investment by the DS0-equivalent count for the cable and multiply the circuit-foot investment by the number of cable feet.

For example:

7	900 pair buried copper distribution cable:	$ per sheath foot
8	# of DS0-equivalent circuits:	900 * $ ÷ DS0-equivalent circuits
9	Conversion from sheath to circuit investment:	$ per circuit foot
	# of cable feet:	950
11	Total circuit-level cable investment:	950 *.

{Loop segment #32, Item #1 in the sample circuit data and results}

13	60 strand underground fiber feeder cable:	$ per sheath foot
14	# of DS0-equivalent circuits:	60 *$ DS0-equivalent circuits
15	• Conversion from sheath to circuit investment:	$ per circuit foot
	# of cable feet:	971
17	Total circuit-level cable investment:	971 *.

{Loop segment #1, item #1 in the sample circuit data and results.}

TAB D

TAB D

Development of Installation, Engineering, Electronic Equipment and Exempt Material Investments Associated with Cable Placement

After developing circuit-level cable investments, the model computes installation, engineering, and exempt material investments associated with cable placements. This is accomplished through the use of inplant factors which are state and field reporting code specific.

For example:

	A	B	C
	Field Code	Investment Description	Inplant Factor
9	45C	Telco Installation Labor - buried copper cable	[redacted]
11	45C	Telco Engineering Labor- buried copper cable	[redacted]
13	45C	Contractor Installation Labor- buried copper cable	[redacted]
15	45C	Exempt Material- buried copper cable	[redacted]
17	20C	Right-of-Way	[redacted]

18 Circuit-level cable investment: [redacted]
{950ft of 900 pair copper distribution cable; Loop segment #32, item #1 in the sample circuit data and results.}

Calculations:

Compute the Total Material Investment:
23 [redacted] / (1-exempt material factor) =
24 $ [redacted]

Exempt Material Investment:
Total material investment - Cable investment =
27 $ [redacted]

Telco Installation Labor Investment:
Total material investment * Telco installation factor =
30 $ [redacted]

Telco Engineering Labor Investment:
Total material investment * Telco engineering factor =
33 $ [redacted]

Contractor Installation Labor Investment:
Total material investment * Contractor installation factor =
5 $[redacted]

Right-of-Way Investment:
Total material investment * ROW factor =
8 $[redacted]

TOTAL INVESTMENTS FOR THIS CABLE SEGMENT:

10 20C $[redacted]
11 45C $[redacted]

ELECTRONIC EQUIPMENT:

Following the development of total cable segment investments, the model pulls-in electronic investments which have been developed in the Fundamental Digital Loop Carrier Investment Model and the Fundamental Multiplexer Investment Model. These investments are stored in the model at a DS0-equivalent level and are design specific.

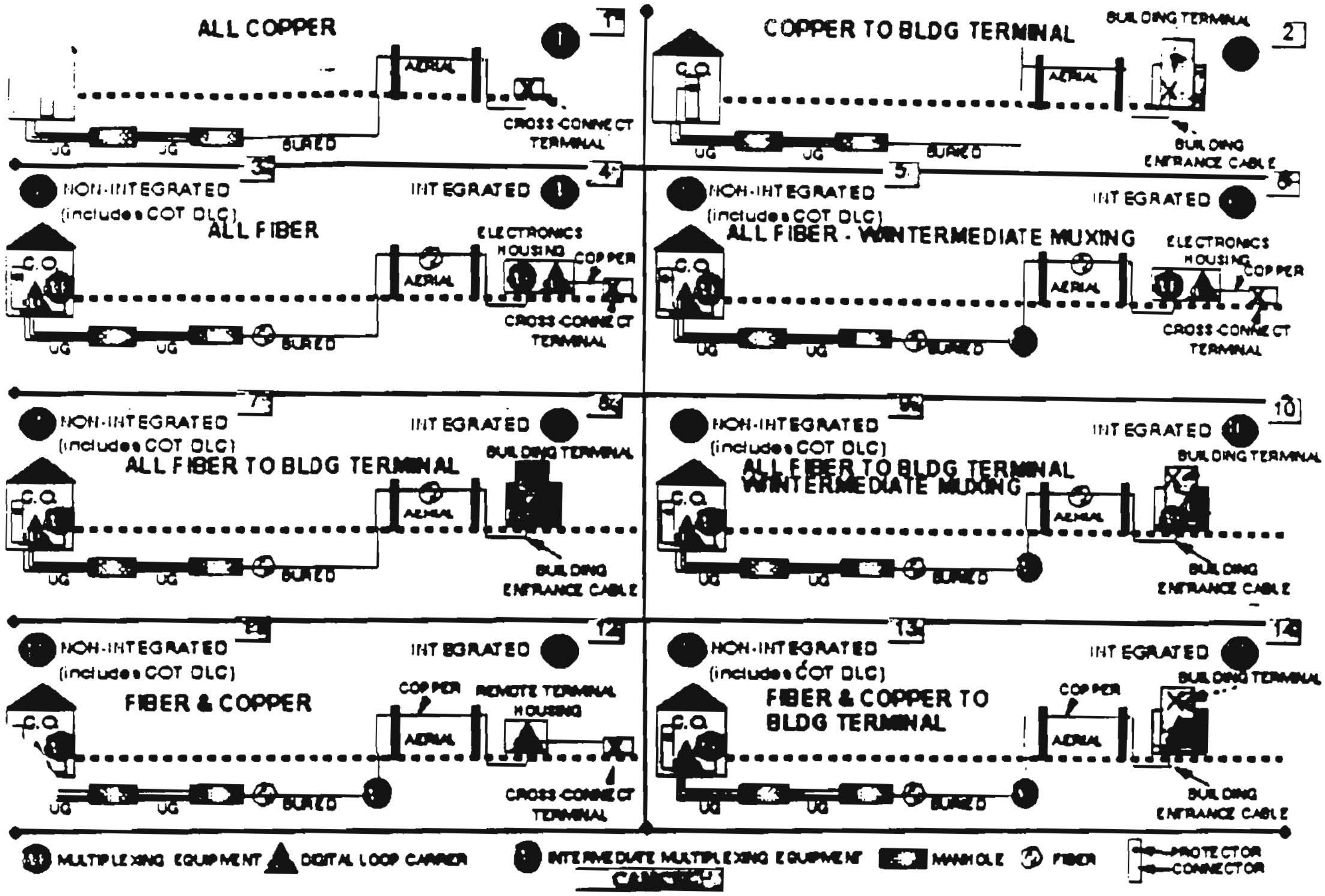
A loop design number is assigned to each survey circuit as it is initially loaded into the Loop Investment Model. Each survey circuit's design is determined by the characteristics of the cable segments (copper/fiber, feeder/distribution, presence of a building terminal, presence of intermediate muxing, etc.) The fourteen possible designs are listed below:

1 All copper loop (no electronic equipment)
2 All copper loop which terminates in a building terminal (no electronic equipment)
3 All fiber in the feeder route - non-integrated digital loop carrier
4 All fiber in the feeder route - integrated digital loop carrier
5 #3 - with intermediate muxing
6 #4 - with intermediate muxing
7 #3 - terminates in a building terminal
8 #4 - terminates in a building terminal
9 #7 - with intermediate muxing
10 #8 - with intermediate muxing

Design descriptions continued:

11 Fiber feeder to a remote terminal with copper feeder to the interface - non-integrated digital loop carrier
12 Fiber feeder to a remote terminal with copper feeder to the interface - integrated digital loop carrier
13 #11 - terminates in a building terminal
14 #12 - terminates in a building terminal

The sample circuit shown in this documentation is a design # 13. The electronic investments shown for this circuit in TAB E are on page #5, Segment #35 and #36. See page #4 for a diagram of these designs.


ALL COPPER
1
AERIAL
CROSS-CONNECT TERMINAL
UG
UG
BURIED
COPPER TO BLDG TERMINAL
BUILDING TERMINAL
2
C.O.
AERIAL
BUILDING ENTRANCE CABLE
UG
UG
BURIED
3
4
5
6
NON-INTEGRATED
(includes COT DLC)
INTEGRATED
ALL FIBER
ELECTRONICS HOUSING
COPPER
C.O.
AERIAL
CROSS-CONNECT TERMINAL
UG
UG
BURIED
NON-INTEGRATED
(includes COT DLC)
INTEGRATED
ALL FIBER - W/INTERMEDIATE MUXING
ELECTRONICS HOUSING
COPPER
C.O.
AERIAL
CROSS-CONNECT TERMINAL
UG
UG
BURIED
7
8
9
10
NON-INTEGRATED
(includes COT DLC)
INTEGRATED
ALL FIBER TO BLDG TERMINAL
BUILDING TERMINAL
C.O.
AERIAL
BUILDING ENTRANCE CABLE
UG
UG
BURIED
NON-INTEGRATED
(includes COT DLC)
INTEGRATED
ALL FIBER TO BLDG TERMINAL W/INTERMEDIATE MUXING
BUILDING TERMINAL
C.O.
AERIAL
BUILDING ENTRANCE CABLE
UG
UG
BURIED
11
12
13
14
NON-INTEGRATED
(includes COT DLC)
INTEGRATED
FIBER & COPPER
COPPER
REMOTE TERMINAL HOUSING
C.O.
AERIAL
CROSS-CONNECT TERMINAL
UG
UG
BURIED
NON-INTEGRATED
(includes COT DLC)
INTEGRATED
FIBER & COPPER TO BLDG TERMINAL
COPPER
BUILDING TERMINAL
C.O.
AERIAL
BUILDING ENTRANCE CABLE
UG
UG
BURIED
MULTIPLEXING EQUIPMENT
DIGITAL LOOP CARRIER
INTERMEDIATE MULTIPLEXING EQUIPMENT
MANHOLE
FIBER
PROTECTOR
CONNECTOR

TAB E

Tuesday [illegible]

LOOP INVESTMENT RESULTS FOR LAFL2WNI

LOOP # 2.00 STATE FL SVC DESC : Florida Loop Survey Circuit CIRCUIT ID : 3053609149 CLLI : CRBHFLMA

CIRCUIT TYPE : V CIRCUIT LEVEL : DS0 DESIGN : 13 CLASS OF SVC: RESIDENCE DLC & MUX LOADINGS B

ROUTE LENGTH : 52,908 ROUTE MILE : 10.02 AIR MILES : 6.16

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	Seg	Item	M/I	FRC	Pid	Type	Description	F/D	Size	Gg/Md	Pl/db	Units	Unit Inv	Totalinv
6	1	1	M	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 60	F	60	Sgl	40d	971	[redacted]	[redacted]
7	1	2	M	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	[redacted]	[redacted]
8	1	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1	[redacted]	[redacted]
9	1	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
10	1	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
11	1	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
12	2	1	M	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 60	F	60	Sgl	40d	845	[redacted]	[redacted]
13	2	2	M	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	[redacted]	[redacted]
14	2	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1	[redacted]	[redacted]
15	2	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
16	2	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
17	2	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
18	3	1	M	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 60	F	60	Sgl	40d	951	[redacted]	[redacted]
19	3	2	M	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	[redacted]	[redacted]
20	3	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1	[redacted]	[redacted]
21	3	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
22	3	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
23		6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
24		1	M	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 60	F	60	Sgl	40d	3.256	[redacted]	[redacted]
25	4	2	M	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	[redacted]	[redacted]
26	4	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1	[redacted]	[redacted]
27	4	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
28	4	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
29	4	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
30	5	1	M	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 60	F	60	Sgl	40d	3.886	[redacted]	[redacted]
31	5	2	M	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	[redacted]	[redacted]
32	5	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1	[redacted]	[redacted]
33	5	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
34	5	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
35	5	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
36	6	1	M	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 36	F	36	Sgl	40d	3.148	[redacted]	[redacted]
37	6	2	M	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	[redacted]	[redacted]
38	6	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1	[redacted]	[redacted]
39	6	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
40	6	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
41	6	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
42	7	1	M	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 36	F	36	Sgl	40d	2.359	[redacted]	[redacted]
43		2	M	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	[redacted]	[redacted]
44		3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1	[redacted]	[redacted]
45	7	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
46	7	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		

Loop Investment Model - Version 1.0

LOOP #: 2.00 STATE: FL SVC DESC: Florida Loop Survey Circuit CIRCUIT ID: 3053609149 CLLI: ORBHFLMA

CIRCUIT TYPE: V CIRCUIT LEVEL: DS0 DESIGN: 13 CLASS OF SVC: RESIDENCE DLC & MUX LOADINGS: 3

ROUTE LENGTH: 52,908 ROUTE MILE: 10.02 AIR MILES: 6.16

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	Seg	Item	M/L	FRC	Pid	Type	Description	F/D	Size	Gg/Md	Pl/db	Units	Unit Inv	Total Inv
6	7	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
7	8	1	M	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 36	F	36	Sgl	40d	4,653		
8	8	2	M	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
9	8	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1		
10	8	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
11	8	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
12	8	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
13	9	1	M	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 36	F	36	Sgl	40d	3,737		
14	9	2	M	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
15	9	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1		
16	9	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
17	9	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
18	9	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
19	10	1	M	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 36	F	36	Sgl	40d	62		
20	10	2	M	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
21	10	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1		
22	10	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
23		5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
24		6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
25	11	1	M	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 30	F	30	Sgl	40d	2,860		
26	11	2	M	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
27	11	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1		
28	11	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
29	11	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
30	11	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
31	12	1	M	F22C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 30	F	30	Sgl	40d	1,600		
32	12	2	M	F22C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
33	12	3	B	1C	SUPPORT_L	DV	Pole ldg for aerial	F	n/a	n/a	n/a	1		
34	12	4	L	F22C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
35	12	5	L	F22C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
36	12	6	L	F22C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
37	13	1	M	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 30	F	30	Sgl	40d	240		
38	13	2	M	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
39	13	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1		
40	13	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
41	13	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
42	13	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
43		1	M	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 18	F	18	Sgl	40d	1,818		
44		2	M	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
45	14	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1		
46	14	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		

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LOOP INVESTMENT RESULTS FOR LAFL2WN1

LOOP # 200 STATE FL SVC DESC : Florida Loop Survey Circuit CIRCUIT ID 3053609149 CLLI ORBHFLMA

CIRCUIT TYPE : V CIRCUIT LEVEL : DS0 DESIGN : 13 CLASS OF SVC: RESIDENCE DLC & MUX LOADINGS B

ROUTE LENGTH : 52,908 ROUTE MILE : 10.02 AIR MILES 5.16

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	Seg	Item	M/I	FRC	Pid	Type	Description	F/D	Size	Gg/Md	Pl/db	Units	Unit Inv	Totalinv
	14	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
6 7	14	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
8	15	1	M	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 18	F	18	Sgl	40d	1,632	[redacted]	[redacted]
9	15	2	M	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	[redacted]	[redacted]
10	15	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1	[redacted]	[redacted]
11	15	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
12	15	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
13	15	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
14	16	1	M	F45C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 18	F	18	Sgl	40d	700	[redacted]	[redacted]
15	16	2	M	F45C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	[redacted]	[redacted]
16	16	3	B	20C	SUPPORT_L	DV	ROW ldg for buried	F	n/a	n/a	n/a	1	[redacted]	[redacted]
17	16	4	L	F45C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
18	16	5	L	F45C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
19	16	6	L	F45C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
20	17	1	M	F22C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 18	F	18	Sgl	.40d	2,232	[redacted]	[redacted]
21	17	2	M	F22C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	[redacted]	[redacted]
22	7	3	B	1C	SUPPORT_L	DV	Pole ldg for aerial	F	n/a	n/a	n/a	1	[redacted]	[redacted]
23		4	L	F22C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
24		5	L	F22C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
25	17	6	L	F22C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
26	18	1	M	F22C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 18	F	18	Sgl	.40d	509	[redacted]	[redacted]
27	18	2	M	F22C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	[redacted]	[redacted]
28	18	3	B	1C	SUPPORT_L	DV	Pole ldg for aerial	F	n/a	n/a	n/a	1	[redacted]	[redacted]
29	18	4	L	F22C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
30	18	5	L	F22C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
31	18	6	L	F22C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
32	19	1	M	F22C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 18	F	18	Sgl	.40d	482	[redacted]	[redacted]
33	19	2	M	F22C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	[redacted]	[redacted]
34	19	3	B	1C	SUPPORT_L	DV	Pole ldg for aerial	F	n/a	n/a	n/a	1	[redacted]	[redacted]
35	19	4	L	F22C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
36	19	5	L	F22C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
37	19	6	L	F22C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
38	20	1	M	F45C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 18	F	18	Sgl	.40d	572	[redacted]	[redacted]
39	20	2	M	F45C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	[redacted]	[redacted]
40	20	3	B	20C	SUPPORT_L	DV	ROW ldg for buried	F	n/a	n/a	n/a	1	[redacted]	[redacted]
41	20	4	L	F45C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
42	20	5	L	F45C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
43		6	L	F45C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1	[redacted]	[redacted]
44		1	M	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 12	F	12	Sgl	.40d	692	[redacted]	[redacted]
45	21	2	M	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	[redacted]	[redacted]
46	21	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1	[redacted]	[redacted]

LOOP INVESTMENT RESULTS FOR LAFL2WN1

LOOP # : 2.00 STATE FL SVC DESC : Florida Loop Survey Circuit CIRCUIT ID : 3053609149 CLLI ORBHFLMA

CIRCUIT TYPE : V CIRCUIT LEVEL : D50 DESIGN : 13 CLASS OF SVC: RESIDENCE DLC & MUX LOADINGS 8

ROUTE LENGTH : 52.908 ROUTE MILE 10.02 AIR MILES 6.16

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	Seg	Item	M/L	FRC	Fid	Type	Description	F/D	Size	Gp/Md	Pl/db	Units	Unit Inv	Totalinv
6	21	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
7	21	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
8	21	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
9	22	1	M	F45C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 12	F	12	Sgl	40d	2.604		
10	22	2	M	F45C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
11	22	3	B	20C	SUPPORT_L	DV	ROW ldg for buried	F	n/a	n/a	n/a	1		
12	22	4	L	F45C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
13	22	5	L	F45C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
14	22	6	L	F45C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
15	23	1	M	F22C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 12	F	12	Sgl	40d	2.834		
16	23	2	M	F22C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
17	23	3	B	1C	SUPPORT_L	DV	Pole ldg for aerial	F	n/a	n/a	n/a	1		
18	23	4	L	F22C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
19	23	5	L	F22C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
20	23	6	L	F22C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
21	24	1	M	F45C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 12	F	12	Sgl	.40d	909		
22	24	2	M	F45C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
23		3	B	20C	SUPPORT_L	DV	ROW ldg for buried	F	n/a	n/a	n/a	1		
24		4	L	F45C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
25	24	5	L	F45C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
26	24	6	L	F45C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
27	25	1	M	F45C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 12	F	12	Sgl	.40d	790		
28	25	2	M	F45C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
29	25	3	B	20C	SUPPORT_L	DV	ROW ldg for buried	F	n/a	n/a	n/a	1		
30	25	4	L	F45C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
31	25	5	L	F45C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
32	25	6	L	F45C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
33	26	1	M	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 18	F	18	Sgl	.40d	5.276		
34	26	2	M	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
35	26	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1		
36	26	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
37	26	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
38	26	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
39	28	1	M	5C	600ULRIC	DV	LRIC mix of 22.24.26 gauge	F	600	MIX	U	40		
40	28	2	M	5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
41	28	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1		
42	28	4	L	5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
43		5	L	5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
44		6	L	5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
45	29	1	M	45C	600BLRIC	DV	LRIC mix of 22.24.26 gauge	F	600	MIX	B	25		
46	29	2	M	45C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		

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LOOP INVESTMENT RESULTS FOR LAFL2WNI

LOOP # 200 STATE FL SVC DESC Florida Loop Survey Circuit CIRCUIT ID 3053609149 CLLI ORBHFLMA
CIRCUIT TYPE : V CIRCUIT LEVEL : DS0 DESIGN : 13 CLASS OF SVC: RESIDENCE DLC & MUX LOADINGS B
ROUTE LENGTH : 52,908 ROUTE MILE : 10.02 AIR MILES 6.16

A B C D E F G H I J K L M N

	Seg	Item	M/I	FRC	Pid	Type	Description	F/D	Size	Gg/Md	Pl/db	Units	Unit Inv	Totalinv
6	29	3	B	20C	SUPPORT_L	DV	ROW ldg for buried	F	n/a	n/a	n/a	1		
7	29	4	L	45C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
8	29	5	L	45C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
9	29	6	L	45C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
10	35	2	B	257C	DLC Equipm	DV	Channel unit plug-in	F	n/a	n/a	RT	1		
11	35	3	B	257C	DLC Equipm	DV	DLC CO. DSX-1 Panel	F	n/a	n/a	CO	1		
12	35	4	B	257C	DLC Equipm	DV	DLC RT. DSX-1 Panel	F	n/a	n/a	RT	1		
13	36	1	B	257C	MUX Equipm	DV	LRIC mix of 22.24.26 gauge	F	n/a	n/a	CO	1		
14	36	2	B	10C	MUX Equipm	DV	Hut	F	n/a	n/a	RT-	1		
15	36	3	B	257C	MUX Equipm	DV	LRIC mix of 22.24.26 gauge	F	n/a	n/a	RT-	1		
16	36	4	B	4C	MUX Equipm	DV	CEV	F	n/a	n/a	RT-	1		

17 INVESTMENT SUBTOTAL FOR INV TYPE. DV

18 INVESTMENT SUBTOTAL FOR FEEDER .L

	Seg	Item	M/I	FRC	Pid	Type	Description	F/D	Size	Gg/Md	Pl/db	Units	Unit Inv	Totalinv
20	31	1	M	45C	600BLRIC	DV	LRIC mix of 22.24.26 gauge	D	600	MIX	B	20-		
21		2	M	45C	EXEMPT_MA	DV	Exempt materials loadings	D	n/a	n/a	n/a	1		
22		3	B	20C	SUPPORT_L	DV	ROW ldg for buried	D	n/a	n/a	n/a	1		
23	31	4	L	45C	INPLANT_E	DV	Telco engineering labor	D	n/a	n/a	n/a	1		
24	31	5	L	45C	INPLANT_IN	DV	Telco installation labor	D	n/a	n/a	n/a	1		
25	31	6	L	45C	INPLANT_C	DV	Contractor engineering & installation labor	D	n/a	n/a	n/a	1		
26	32	1	M	45C	900BLRIC	DV	LRIC mix of 22.24.26 gauge	D	900	MIX	B	950		
27	32	2	M	45C	EXEMPT_MA	DV	Exempt materials loadings	D	n/a	n/a	n/a	1		
28	32	3	B	20C	SUPPORT_L	DV	ROW ldg for buried	D	n/a	n/a	n/a	1		
29	32	4	L	45C	INPLANT_E	DV	Telco engineering labor	D	n/a	n/a	n/a	1		
30	32	5	L	45C	INPLANT_IN	DV	Telco installation labor	D	n/a	n/a	n/a	1		
31	32	6	L	45C	INPLANT_C	DV	Contractor engineering & installation labor	D	n/a	n/a	n/a	1		
32	33	1	M	45C	400BLRIC	DV	LRIC mix of 22.24.26 gauge	D	400	MIX	B	325		
33	33	2	M	45C	EXEMPT_MA	DV	Exempt materials loadings	D	n/a	n/a	n/a	1		
34	33	3	B	20C	SUPPORT_L	DV	ROW ldg for buried	D	n/a	n/a	n/a	1		
35	33	4	L	45C	INPLANT_E	DV	Telco engineering labor	D	n/a	n/a	n/a	1		
36	33	5	L	45C	INPLANT_IN	DV	Telco installation labor	D	n/a	n/a	n/a	1		
37	33	6	L	45C	INPLANT_C	DV	Contractor engineering & installation labor	D	n/a	n/a	n/a	1		
38	34	1	M	45C	200BLRIC	DV	LRIC mix of 22.24.26 gauge	D	200	MIX	B	1,700		
39	34	2	M	45C	EXEMPT_MA	DV	Exempt materials loadings	D	n/a	n/a	n/a	1		
40	34	3	B	20C	SUPPORT_L	DV	ROW ldg for buried	D	n/a	n/a	n/a	1		
41		4	L	45C	INPLANT_E	DV	Telco engineering labor	D	n/a	n/a	n/a	1		
42		5	L	45C	INPLANT_IN	DV	Telco installation labor	D	n/a	n/a	n/a	1		
43	34	6	L	45C	INPLANT_C	DV	Contractor engineering & installation labor	D	n/a	n/a	n/a	1		
44	35	1	M	12C	333892730	DV	Copper Riser Cable ARTM	D	50	26	R	190		

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LOOP INVESTMENT RESULTS FOR LAFL2WN1

LOOP # 2.00 STATE : FL SVC DESC : Florida Loop Survey Circuit CIRCUIT ID 3053609149 CLLI ORBHFLMA

CIRCUIT TYPE : V CIRCUIT LEVEL : DS0 DESIGN : 13 CLASS OF SVC: RESIDENCE DLC & MUX LOADINGS 9

ROUTE LENGTH : 52.908 ROUTE MILE : 10.02 AIR MILES : 6.16

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	Seg	Item	M/I	FRC	Pid	Type	Description	F/D	Size	Gg/Md	Pl/db	Units	Unit Inv	Totalinv
6	35	3	M	12C	EXEMPT_MA	DV	Exempt materials loadings	D	n/a	n/a	n/a	1		[redacted]
7	35	5	L	12C	INPLANT_E	DV	Telco engineering labor	D	n/a	n/a	n/a	1		[redacted]
8	35	7	L	12C	INPLANT_IN	DV	Telco installation labor	D	n/a	n/a	n/a	1		[redacted]
9	35	8	L	12C	INPLANT_C	DV	Contractor engineering & installation labor	D	n/a	n/a	n/a	1		[redacted]

10 INVESTMENT SUBTOTAL FOR INV TYPE: DV [redacted]

11 INVESTMENT SUBTOTAL FOR DISTRIBUTION [redacted]

12 **LOOP MAKEUP INVESTMENT TOTAL:** [redacted]

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TAB F

TAB F

Computation of Average Loop Investments by Class of Service

After developing investments for each circuit in the loop survey, investment dollars are totaled by field reporting code for Residence and Business circuits separately. The totals are then divided by the number of survey circuits for residence and business. The results represent the average or typical investment for each field reporting code for a Residence and Business circuit.

The weighted loop investment is developed by multiplying the average investment for Residence and Business by the number of lines in service at the time the survey circuits were randomly selected for the loop survey. For example, the resulting average investment
11 for aerial metallic cable (22C and 12C - feeder and distribution) is for the 2 wire 100% non-integrated study.

TAB G

Overview of Recurring Cost Spreadsheet Methodology

The following cost summary spreadsheets are developed as follows:

1) LRIC / 100% Nonintegrated - 2 Wire
2) LRIC / 100% Nonintegrated - 4 Wire
3) LRIC / 100% Nonintegrated - 2 Wire ISDN

<u>Cost Methodology:</u>

1) The average investment (Column C) by Field Reporting Code (FRC) is provided by the loop investment model. The average investment represents the combined feeder and distribution average investment per circuit. The average investment per circuit includes the appropriate state sales tax.

2) The annual cost associated with each investment is determined by multiplying the average investment by the capital and operating expense annual cost factors. The total annual cost is divided by 12 to determine the monthly cost. The monthly cost is multiplied by the 3-5 year levelized investment factor to determine the levelized monthly cost.

3) Spreadsheets 1 and 3 provide for a Weighted Residential and Business Loop Cost ** and Spreadsheet 2 provides for a Business Loop Cost only.

4) The total levelized monthly cost for each spreadsheet includes loop associated cost additives (i.e., levelized monthly computer system cost, distributing frame cost, and TIRKS cost).

** The weighted residential and business loop investment (Column C) is developed by weighting the combined feeder and distribution average investment for Residence and the combined feeder and distribution average investment for Business by the respective residence or business number of access lines in service at the time the circuits were randomly selected for the loop survey.

NOTE: The terms "monthly" and "recurring" are interchangeable.

Filename: F2WN2X

08/07/96

A A B C D E F G H I J K L M N O P Q R S T U V W

105	Combined Feeder & Distribution												
106	LRIC / 100% Nonintegrated - 2 Wire												
107	Weighted Residential & Business Loop Cost												
108													
109	State:	FLORIDA											
110												Local	Total	Levelized
111					C.O.M. 13.2%	Income Tax	Total Cap		Advl Tax	Oper Exp	GRT 0.0152	Monthly	Monthly
112			Average	Deprec			(D+F+H)	Mtce		(L+N)	(J+P)*R111	Cost	Cost
113			Investment										
114													
115	A	B	C	(D116*$C117) D	E	F	G	H	I	J	K	(J+P+R)/12 L	(T*V factor) M
116	Land	20C		0.0000	0.1118	0.0514	0.1632	0.0000	0.0113	0.0113	0.0027		1.059
117			☐										
118	Buildings	10C, 110C, 810C		0.0302	0.0986	0.0452	0.1740	[illegible]	0.0077	0.0146	0.0028		1.059
119			☐										
120	Digtl Circ-Pair Gain	257C,D257C,F257C		0.1134	0.0636	0.0288	0.2058	0.0089	0.0113	0.0202	0.0034		0.962
121			☐										
122	Poles	1C, 811C		0.0671	0.0725	0.0325	0.1721	0.0279	0.0113	0.0392	0.0032		[illegible]
123			☐										
124	Aerial Cu-Metallic	22C, 12C, 802C		0.0917	0.0797	0.0338	0.2052	0.0571	0.0113	0.0684	0.0042		1.061
125			☐										
126	Aerial Cu-Fiber	822C, 812C, 882C, 982C,D22C,		0.0667	0.0784	0.0347	0.1798	0.0139	0.0113	0.0252	0.0031		1.003
127		F22C,T22C,D12C,F12C,T12C	☐										
128													
129	Unground Cu-Metallic	5C, 805C		0.1036	0.0813	0.0342	0.2191	0.0291	0.0113	0.0404	0.0039		1.089
130			☐										
131	Unground Cu-Fiber	85C,885C,985C,D5C,F5C,T5C		0.0849	0.0600	0.0335	0.1784	0.0135	0.0113	0.0248	0.0031		1.000
132			☐										
133	Buried Cu-Metallic	45C, 845C		0.0876	0.0809	0.0354	0.2039	0.0543	0.0113	0.0656	0.0041		1.058
134			☐										
135	Buried Cu-Fiber	845C,858C,958C,D45C,		0.0565	0.0816	0.0387	0.1768	0.0144	0.0113	0.0257	0.0031		1.041
136		F45C,T45C	☐										
137													
138	Submarine Cu-Metallic	6C, 806C		0.0860	0.0814	0.0366	0.2040	0.0150	0.0113	0.0263	0.0035		1.054
139			☐										
140	Submarine Cu-Fiber	86C,886C,D6C,F6C,T6C		0.0860	0.0814	0.0355	0.2029	0.0150	0.0113	0.0263	0.0035		1.000
141			☐										
142	Intrbld Ntwk-Metallic	52C		0.0661	0.0785	0.0340	0.1786	0.0320	0.0113	0.0433	0.0034		[illegible]
143			☐										
144	Intrbld Ntwk-Fiber	852C,D52C,F52C,T52C		0.0661	0.0785	0.0340	0.1786	0.0320	0.0113	0.0433	0.0034		$0.00
145			☐										
146	Conduit Systems	4C, 84C, 94C		0.0242	0.0877	[illegible]	0.1520	0.0028	0.0113	0.0141	0.0025		1.044
147			☐										
148	Aerial Drop	22C		0.0917	0.0797	0.0338	0.2052	0.0571	0.0113	0.0684	0.0042		1.061
149			☐										
150	Buried Drop	45C		0.0876	0.0809	0.0354	0.2039	0.0543	0.0113	0.0656	0.0041		1.058
151			☐										
152													
153	Total Investment	SUM(C117..C151)											
154	Subtotal Levelized Monthly Cost	Sum Cost (Column V)											
155	Levelized Monthly Computer Sys Cost												
156	Levelized Monthly Distributing Frame Cost												
157	Levelized Monthly TIRKS Cost	(((0.0052*(1+$R$111)*$C121)/12)*$V120)											
158	Total Levelized Monthly Cost	SUM(V154..V157)											

Filename F4WNX

08/07/96

A A B C D E F G H I J K L M N O P Q R S T U V W

1 Combined Feeder & Distribution
2 LRIC / 100% Nonintegrated - 4 Wire
3 **BUSINESS LOOP**
4
5 **State:** **FLORIDA**

Row	A	B	Average Investment	Deprec	C.O.M. 13.2%	Income Tax	Total Cap (D+F+H)	Mtce	Advl Tax	Oper Exp (L+N)	Local GRT 0.0152 (J+P)*R7	Total Monthly Cost	Levelized Monthly Cost
11	A	B		(D12*$C13)								(J+P+R)/12	(T*V factor)
				D	E	F	G	H	I	J	K	L	M
12	Land	20C		0.0000	0.1118	0.0514	0.1632	0.0000	0.0113	0.0113	0.0027		1.059
14	Buildings	10C, 110C, 810C	☐	0.0302	[illegible]	0.0452	0.1740	0.0069	0.0077	0.0146	0.0029		1.059
16	Digtl Circ-Pair Gain	257C,D257C,F257C	☐	0.1134	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0034		0.962
18	Poles	1C, 811C	☐	[illegible]	[illegible]	[illegible]	0.1721	0.0279	0.0113	0.0392	0.0032		1.072
20	Aerial Ca-Metallic	22C, 12C, 802C	☐	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		1.061
22	Aerial Ca-Fiber	822C, 812C, 882C, 982C,D22C, F22C,T22C,D12C,F12C,T12C	☐	0.0667	0.0784	0.0347	0.1798	0.0139	0.0113	0.0252	0.0031		[illegible]
25	Unground Ca-Metallic	5C, 805C	☐	0.1036	0.0813	0.0342	0.2191	0.0291	0.0113	0.0404	0.0039		1.069
27	Unground Ca-Fiber	85C,885C,985C,D5C,F5C,T5C	☐	0.0626	0.0800	0.0358	0.1784	0.0135	0.0113	0.0248	0.0031		[illegible]
29	Buried Ca-Metallic	45C, 845C	☐	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		1.058
31	Buried Ca-Fiber	845C,858C,958C,D45C, F45C,T45C	☐	0.0585	0.0816	0.0367	0.1768	0.0144	0.0113	0.0257	0.0031		[illegible]
34	Submarine Ca-Metallic	8C, 808C	☐	0.0880	0.0814	0.0368	0.2040	0.0150	0.0113	0.0263	0.0035		1.054
36	Submarine Ca-Fiber	88C,888C,D8C,F8C,T8C	☐	0.0860	0.0814	0.0355	0.2029	0.0150	0.0113	0.0263	0.0035		[illegible]
38	Intrbld Ntwk-Metallic	52C	☐	0.0661	0.0785	0.0340	0.1786	0.0320	0.0113	0.0433	0.0034		[illegible]
40	Intrbld Ntwk-Fiber	852C,D52C,F52C,T52C	☐	[illegible]	[illegible]	[illegible]	0.1786	0.0320	0.0113	0.0433	0.0034		1.000
42	Conduit Systems	4C, 84C, 94C	☐	0.0742	0.0877	0.0401	0.1520	0.0028	0.0113	0.0141	[illegible]		[illegible]
44	Aerial Drop	22C	☐	0.0917	0.0797	0.0338	0.2052	0.0371	0.0113	[illegible]	[illegible]		1.051
46	Buried Drop	45C	☐	0.0876	[illegible]	0.0354	0.2039	0.0543	0.0113	0.0656	0.0041		1.058

49 Total Investment SUM(C12..C47)
50 Subtotal Levelized Monthly Cost Sum Cost (Column V)
51 Levelized Monthly Computer Sys Cost
52 Levelized Monthly Distributing Frame Cost
53 Levelized Monthly TIRKS Cost (((0.0052*(1+$R$7)*$C17)/12)*$V16)
54 Total Levelized Monthly Cost SUM(V50..V53)

A A B C D E F G H I J K L M N O P Q R S T U V W

105 Combined Feeder & Distribution
106 LRIC / 100% Nonintegrated - 2 Wire ISDN
107 Weighted Residential & Business Loop Cost
108
109 State: FLORIDA

110 111 112			Average Investment	Deprec	C.O.M. 13.2%	Income Tax	Total Cap (D+F+H)	Mtce	Advel Tax	Oper Exp (L+N)	Local GRT 0.0152 (J+P)*R111	Total Monthly Cost	Levelized Monthly Cost
113													
114				(D116*$C117) —> |								(J+P+R)/12	(T*V factor)
115	A	B	C	D	E	F	G	H	I	J	K	L	M
116	Land	20C		0.0000	0.1118	0.0514	0.1632	0.0000	0.0113	0.0113	0.0027		1.059
117													
118	Buildings	10C, 110C, 810C		[illegible]	[illegible]	[illegible]	0.1740	[illegible]	0.0077	0.0148	0.0029		[illegible]
119													
120	Digtl Circ-Pair Gain	257C,D257C,F257C		0.1134	0.0636	0.0288	0.2058	0.0089	0.0113	0.0202	0.0034		0.962
121													
122	Poles	1C, 811C		0.0671	0.0725	0.0325	0.1721	0.0279	0.0113	0.0392	0.0032		1.072
123													
124	Aerial Ca-Metallic	22C, 12C, 802C		[illegible]	0.0787	0.0338	0.2052	0.0571	0.0113	0.0684	0.0042		[illegible]
125													
126	Aerial Ca-Fiber	822C, 812C, 882C, 982C,D22C,		0.0687	0.0764	0.0347	0.1798	0.0139	0.0113	0.0252	0.0031		1.003
127		F22C,T22C,D12C,F12C,T12C											
128													
129	Unground Ca-Metallic	5C, 805C		0.1036	0.0813	0.0342	0.2191	0.0291	0.0113	0.0404	0.0039		1.089
130													
131	Unground Ca-Fiber	85C,885C,985C,D5C,F5C,T5C		0.0626	0.0800	0.0358	0.1784	0.0135	0.0113	0.0248	0.0031		1.000
132													
133	Buried Ca-Metallic	45C, 845C		[illegible]	[illegible]	0.0354	0.2036	0.0543	0.0113	0.0656	0.0041		1.058
134													
135	Buried Ca-Fiber	845C,858C,958C,D45C,		0.0585	0.0816	0.0367	0.1768	0.0144	0.0113	0.0257	0.0031		1.041
136		F45C,T45C											
137													
138	Submarine Ca-Metallic	6C, 806C		0.0860	0.0814	0.0366	0.2040	0.0150	0.0113	0.0263	0.0035		1.054
139													
140	Submarine Ca-Fiber	86C,886C,D6C,F6C,T6C		0.0860	0.0814	0.0355	0.2029	0.0150	0.0113	0.0263	0.0035		[illegible]
141													
142	Intrbld Ntwk-Metallic	52C		0.0661	0.0765	0.0340	0.1766	0.0320	0.0113	0.0433	0.0034		[illegible]
143													
144	Intrbld Ntwk-Fiber	852C,D52C,F52C,T52C				[illegible]	[illegible]	[illegible]	0.0113	0.0433	0.0034		1.000
145													
146	Conduit Systems	4C, 84C, 94C		0.0242	0.0877	0.0401	0.1520	0.0028	0.0113	0.0141	[illegible]		[illegible]
147													
148	Aerial Drop	22C		[illegible]	0.0787	0.0338	0.2052	0.0571	0.0113	0.0684	0.0042		[illegible]
149													
150	Buried Drop	45C		0.0876	0.0806	0.0354	0.2036	0.0543	0.0113	0.0656	0.0041		1.058
151													
152													
153	Total Investment	SUM(C117..C151)											
154	Subtotal Levelized Monthly Cost	Sum Cost (Column V)											
155	Levelized Monthly Computer Sys Cost												
156	Levelized Monthly Distributing Frame Cost												
157	Levelized Monthly TIRKS Cost	(((0.0052*(1+$R$111)*$C121)/12)*$V120)											
158	Total Levelized Monthly Cost	SUM(V154..V157)											

TAB H

FUNDAMENTAL DIGITAL LOOP CARRIER INVESTMENT MODEL

The Fundamental Digital Loop Carrier Investment Model develops the investment for digital loop carrier systems. Investments are calculated for the system (which includes the system hardwired equipment, common plug-ins, and DSX-1 panel), deferrable plug-ins and housing (cabinets, huts and Controlled Environment Vaults). Network data is used to determine the vendor and system types which will be deployed, as well as the probability of occurrence for each system. Calculated investments are combined appropriately for the various designs specified in the Loop Investment Model.

Illustrative Example Investment Calculations:

Central Office Terminal and Remote Terminal

	$20,000.00	Material Price (Hardwire, commons, DSX-1 Panel)
x	1.0750	In-Plant Factor
=	$21,500.00	Installed Investment
+	200	# Circuits per System
=	$ 107.50	Per Circuit Investment
x	.40	Probability of System
=	$ 43.00	Weighted Investment
+	.70	Utilization
=	$ 61.43	Utilized Investment

Plug-in

	$ 150.00	Plug-in Material Price
x	1.0900	In-Plant Factor
=	$ 163.50	Installed Investment
+	2	# Channels per Plug-in
=	$ 81.75	Per Circuit Investment
x	.40	Probability of System
=	$ 32.70	Weighted Investment
x	1.075	Spare Stock Factor
=	$ 35.15	Plug-in Investment

FUNDAMENTAL MULTIPLEXER INVESTMENT MODEL

The Fundamental Multiplexer Investment Model develops the investment for SONET Multiplexers deployed in the Outside Plant loop. Investment data used to develop calculations for this model are taken from the SONET Fundamental Investment Model described on Page 3 of 3. Investments are developed for the hardwired equipment, common plug-ins and the DS1 working card at the DS1 level. Network data is used to determine the vendor and system types which will be deployed, as well as the probability of occurrence for each system. These investments are then combined appropriately for the various designs specified in the Loop Investment Model.

Illustrative Example Investment Calculations:
Central Office and Remote Terminal

	$250.00	Hardwire and Common Investment (per DS1)
+	$200.00	DS1 Card (per DS1)
+	$ 2.50	Fiber Terminal (per DS1)
+	$ .50	Pigtails (per DS1)
+	$ 1.00	Fiber Jumpers (per DS1)
=	$454.00	Total Investment per system (per DS1)
×	.50	System probability of occurrence
=	$227.00	Weighted Investment
÷	.70	Utilization
=	$324.29	Utilized Investment
+	24	# Circuits per DS1
=	$ 13.51	Circuit Investment

SONET FUNDAMENTAL INVESTMENT MODEL

The SONET Fundamental Investment Model develops investments for SONET lightwave multiplexing equipment, associated circuit equipment, such as DSX panels, and the fiber facilities connecting the SONET equipment.

Illustrative Example Investment Calculations:

	$50,000.00	Material Price
×	1.01	TPI
=	$50,500.00	Current Material Price
×	1.075	In-Plant Factor
=	$54,287.50	Installed Investment
×	1.00	Quantity of Items
=	$54,287.50	Total Installed Investment
+	2,000	Unit Capacity
=	$ 27.14	Unit Investment
×	1.250	Investment Inflation Factor
=	$ 33.93	Levelized Investment
+	.70	Utilization
=	$ 48.47	Study Period Investment
×	.50	Probability of Occurrence
=	$ 24.24	Total Investment

	$ 24.24	Total Investment
×	.11	MCE&P Factor
=	$ 2.67	MCE&P Investment

	$ 24.24	Total Investment		$ 24.24	Total Investment
+	$ 2.67	MCE&P Investment	+	$ 2.67	MCE&P Investment
=	$ 26.91			$ 26.91	
×	.0003	Land Factor	×	.0013	Building Factor
=	$ .01	Land Investment	=	$ .03	Building Investment

SECTION 5

SECTION 5

FLORIDA UNBUNDLED LOOP

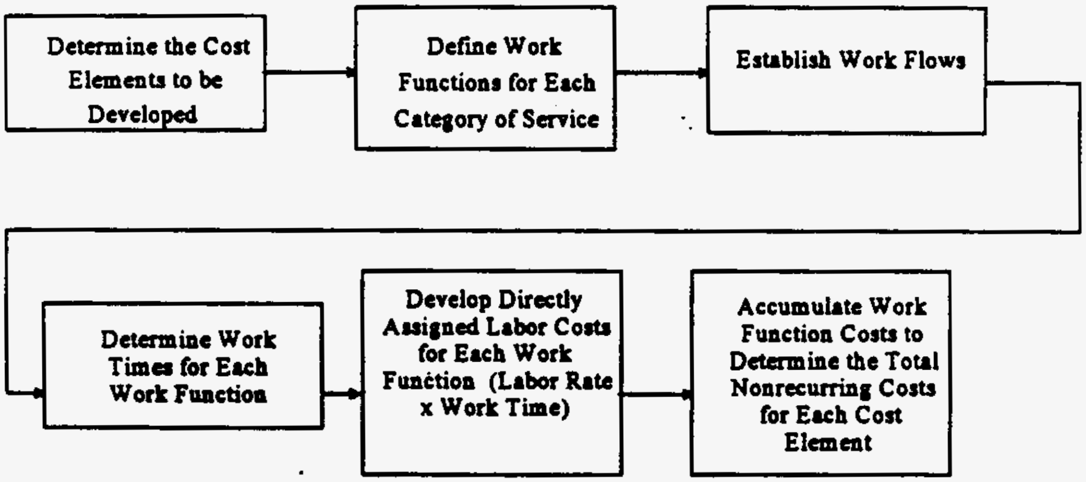
COST DEVELOPMENT - NONRECURRING

Nonrecurring costs are one-time costs incurred as a result of provisioning, installing, disconnecting and completion of orders initiated by a customer request for the Unbundled Analog Loops. The Nonrecurring Cost Study is performed to determine the service order, provisioning and disconnect costs associated with the cost element listed above. Calculations for the nonrecurring costs are included in this section.

Figure 5-1 shows a generalized flow of the steps necessary for developing nonrecurring costs. Each part of this flow will be explained in more detail in this section.

Figure 5-1

Generalized Flow Diagram for Developing Nonrecurring Costs



The first step in developing nonrecurring costs is to determine the cost elements to be studied. Each cost element is then described by all of the individual work functions required to provision the element. An example of a work function is the designing of a circuit in the Circuit Provisioning Group.

The work functions required to provide the Unbundled Analog Loops can be grouped into four categories. These are:

1) Service Order
2) Engineering
3) Connect and Test
4) Technician Travel Time

Work functions included in these categories range from clerical activities to installation activities.

The next step in developing nonrecurring costs requires that Company subject matter experts identify the work functions involved in the provisioning of the Unbundled Analog Loops (an example of a work function is making a cross-connect in the central office). These work functions are then used to describe the flow of work within the various work centers involved in provisioning the element.

The next step in the development of nonrecurring costs is to determine work times for each work function associated with the nonrecurring costs of the Unbundled Analog Loops. The work times of the various work groups are determined from Subject Matter Expert inputs. Each work time estimate is made by a subject matter expert who thoroughly understands how each activity is done.

A spreadsheet model is used to incorporate the specific work functions and labor rates. In order to arrive at the nonrecurring cost for the element studied, the work times for each work function required is multiplied by the appropriate labor rate. The labor inflation factors (LIF) are used to bring the labor rate to the study period. The levelized labor rate is expressed on a per minute basis, as are the worktimes. The labor rates and the labor inflation factors are shown in Section 7. Next, the individual work function costs are accumulated into the total cost for the cost element studied.

To recognize cost reductions on orders with loops, costs are calculated separately for the first and additional system and/or interface. "First" refers to the first item on a service order. "Additional" costs are the incremental costs of providing one or more duplicates of the item on the same service order at the same time as the first.

The basic process by which nonrecurring costs are calculated consists of combining unit work times with hourly costs of each specific service category. These work times, and service order related work times, are multiplied by the directly assigned labor rates for the work groups performing the activities.

Utilizing work functions, work times, and labor rates, disconnect costs are calculated in the same manner as the installation costs. Since the labor costs will occur in the future, the current labor rates are inflated to that future period in time and then discounted to the present. The discounted disconnect cost is added to the installation cost and gross receipts tax is applied to develop the total nonrecurring cost.

The following workpapers reflect the cost development.

SUMMARY OF NONRECURRING COSTS

STATE: FLORIDA
WORKPAPER: 700
PAGE: 1 OF 1
DATE: Aug-96

2 WIRE ANALOG VOICE GRADE LOOP

(1996-1998 Level Incremental Costs)

	A	B	C	D
1	DESCRIPTION	SOURCE	FIRST	ADDTL
2				
3	Service Order	WP750 Col G LN8		
4				
5	Engineering	WP750 Col G LN10 and LN12		
6				
7	Connect & Test	WP750 Col G LN14 thrU LN18		
8				
9	Technician Travel Time	WP750 Col G LN20		
10				
11				
12	Total Nonrecurring Cost	Sum of L3, L5, L7, L9		
13				
14				
15				
16				
17				
18				
19				
20				

DEVELOPMENT OF NONRECURRING COST
2 WIRE ANALOG VOICE GRADE LOOP

LEVEL 1996 – 1998

DIRECTLY ASSIGNED

STATE: FLORIDA
WORKPAPER: 750
PAGE: 1 OF 1
DATE: Aug–96

		(A) INSTALL WORKTIMES (HRS)		(B) DISCONNECT WORKTIMES (HRS)		(C) LEVELIZED LABOR	(D) INSTALL COST (A*C)		(E) DISCONNECT COST (B*C)		(F) DISCOUNTED DISCONNECT COST (E*DDF)		(G) (D+F)*(1+GRT)	
	DESCRIPTION	FIRST	ADDTL	FIRST	ADDTL	RATE	FIRST	ADDTL	FIRST	ADDTL	FIRST	ADDTL	TOTAL FIRST	TOTAL ADDTL
1														
2														
3														
4														
5														
6														
7														
8	CUSTOMER POINT OF CONTACT–ICSC					$40.80								
9														
10	FACILITIES ASSIGNMENT–FACS					$33.32								
11														
12	CIRCUIT PROVISIONING CENTER–CPC					$36.65								
13														
14	NETWORK ADMINISTRATION					$35.03								
15														
16	CO INSTALL & MTCE–CKT & FAC–NTEL					$41.64								
17														
18	INSTALL & MTCE–SPEC SVCS–SSIM (CONN & TEST)					$44.15								
19														
20	INSTALL & MTCE–SPEC SVCS–SSIM (TRAVEL)					$44.15								
21														
22														
23	TOTAL NONRECURRING COST													
24														
25														

Private/Proprietary: No disclosure outside BellSouth except by written agreement.

SUMMARY OF NONRECURRING COSTS

STATE: FLORIDA
WORKPAPER: 800
PAGE: 1 OF 1
DATE: Aug-96

4 WIRE ANALOG VOICE GRADE LOOP

(1996-1998 Level Incremental Costs)

	A	B	C	D
1	DESCRIPTION	SOURCE	FIRST	ADDTL
2				
3	Service Order	WP850 Col G LN8		
4				
5	Engineering	WP850 Col G LN10 and LN12		
6				
7	Connect & Test	WP850 Col G LN14 thrU LN18		
8				
9	Technician Travel Time	WP850 Col G LN20		
10				
11				
12	Total Nonrecurring Cost	Sum of L3, L5, L7, L9		
13				
14				
15				
16				
17				
18				
19				
20				

DEVELOPMENT OF NONRECURRING COST
4 WIRE ANALOG VOICE GRADE LOOP

LEVEL 1996 – 1998 DIRECTLY ASSIGNED

STATE: FLORIDA
WORKPAPER: 850
PAGE: 1 OF 1
DATE: Aug–96

	(A)		(B)		(C)	(D)		(E)		(F)		(G)	
	INSTALL WORKTIMES (HRS)		DISCONNECT WORKTIMES (HRS)		LEVELIZED LABOR RATE	INSTALL COST (A*C)		DISCONNECT COST (B*C)		DISCOUNTED DISCONNECT COST (E*DDF)		(D+F)*(1+GRT) TOTAL	TOTAL
DESCRIPTION	FIRST	ADDTL	FIRST	ADDTL	RATE	FIRST	ADDTL	FIRST	ADDTL	FIRST	ADDTL	FIRST	ADDTL
CUSTOMER POINT OF CONTACT–ICSC					$40.80								
FACILITIES ASSIGNMENT–FACS					$33.32								
CIRCUIT PROVISIONING CENTER–CPC					$36.65								
NETWORK ADMINISTRATION					$35.03								
CO INSTALL & MTCE–CKT & FAC–NTEL					$41.64								
INSTALL & MTCE–SPEC SVCS–SSIM (CONN & TEST)					$44.15								
INSTALL & MTCE–SPEC SVCS–SSIM (TRAVEL)					$44.15								
TOTAL NONRECURRING COST													

SUMMARY OF NONRECURRING COSTS

STATE: **FLORIDA**
WORKPAPER: **410**
PAGE: **1 OF 1**
DATE: **Jul-96**

2 WIRE ISDN UNBUNDLED LOOP

(1996-1998 Level Incremental Costs)

	A	B	C	D
1	DESCRIPTION	SOURCE	FIRST	ADDTL
2				
3	Service Order	WP850 COL G L8 THRU L10		
4				
5	Engineering	WP850 COL G L12 THRU L16		
6				
7	Connect & Test	WP850 COL G L18 THRU L26		
8				
9	Technician Travel Time	WP850 COL G L28		
10				
11				
12	Total Nonrecurring Cost	L3+L5+L7+L9		
13				
14				
15				
16				
17				
18				
19				
20				

DEVELOPMENT OF NONRECURRING COST
2 WIRE ISDN UNBUNDLED LOOP

LEVEL 1996 - 1998

DIRECTLY ASSIGNED

STATE: FLORIDA
WORKPAPER: 458
PAGE: 1 OF 1
DATE: Jul-96

		(A) INSTALL WORKTIMES (HRS)		(B) DISCONNECT WORKTIMES (HRS)		(C) LEVELIZED LABOR	(D) INSTALL COST (A*C)		(E) DISCONNECT COST (B*C)		(F) DISCOUNTED DISCONNECT COST (E*DDF)		(G) (D+F) * (1+GRT)	
	DESCRIPTION	FIRST	ADDTL	FIRST	ADDTL	RATE	FIRST	ADDTL	FIRST	ADDTL	FIRST	ADDTL	TOTAL FIRST	TOTAL ADDTL
8	CUSTOMER POINT OF CONTACT (ICSC)	[redacted]		[redacted]		$40.80			[redacted]		[redacted]		[redacted]	
10	INSTALLATION & MTCE CENTER (IMC)	[redacted]		[redacted]		$35.97			[redacted]		[redacted]		[redacted]	
12	CIRCUIT PROVISIONING CENTER (CPC)	[redacted]		[redacted]		$35.87			[redacted]		[redacted]		[redacted]	
14	FACILITIES ASSIGNMENT (FACS)	[redacted]		[redacted]		$33.31			[redacted]		[redacted]		[redacted]	
16	OUTSIDE PLANT ENGINEERING (OSPE)	[redacted]		[redacted]		$44.02			[redacted]		[redacted]		[redacted]	
18	CO ADMIN CKT, CARRIER & FAC (NTEC)	[redacted]		[redacted]		$39.82			[redacted]		[redacted]		[redacted]	
20	NETWORK PLUG-IN ADMINISTRATION (PICS)	[redacted]		[redacted]		$40.54			[redacted]		[redacted]		[redacted]	
22	NETWORK SERVICES-CLERICAL	[redacted]		[redacted]		$33.56			[redacted]		[redacted]		[redacted]	
24	SPECIAL SERVICES COORD & TESTING (SSC)	[redacted]		[redacted]		$38.19			[redacted]		[redacted]		[redacted]	
26	INSTALL & MTCE - SPECIAL SERVICES (SSIM)	[redacted]		[redacted]		$41.95			[redacted]		[redacted]		[redacted]	
28	INSTALL & MTCE - SPECIAL SERVICES (SSIM)	[redacted]		[redacted]		$41.95			[redacted]		[redacted]		[redacted]	
31	TOTAL NONRECURRING COST												[redacted]	

SECTION 6

SECTION 6

FLORIDA UNBUNDLED LOOP

SPECIFIC STUDY ASSUMPTIONS

The cost study for the Unbundled Loops for the state of Florida is based on incremental economic theory and assumptions, plus specific Network deployment strategies, first choice provisioning guidelines, and equipment purchasing information.

Cost study assumptions are as follows.

1. Forward-looking technology is represented in the following manner:
   - for all loops up to 12,000 feet, the feeder sections will be copper placements
   - for all loops greater than 12,000 feet, the feeder sections will be fiber placements
   - all distribution sections of the loop will include a mix of 22, 24, 26 gauge copper cable

2. Utilization of cable segments is applied as follows:

	A	B
		Cable Pair/Strand Utilization
20	copper (SLC)	utilization
21	copper (feeder)	utilization
22	copper (dist'n)	utilization
23	fiber (feeder)	utilization
24	fiber (dist'n)	utilization

3. Study period of 1996 to 1998 based on 1995 investments and factors

4. The cost of money applied is 13.2%

SECTION 7

SECTION 7

FLORIDA UNBUNDLED LOOPS

FACTORS AND LOADINGS

Following are the incremental annual cost factors, miscellaneous loadings and labor rates used in the 2-Wire Analog Voice Grade Loop, the 4-Wire Analog Voice Grade Loop, and the 2-Wire ISDN Digital Loop.

Florida Unbundled Loop

Factors and Loadings

	A	B	
	Miscellaneous Loadings	(see attached database worksheet)	
4	Computer Regional Monthly Systems Cost	[redacted]	
5	Distributing Frame Weighted Monthly Cost	[redacted]	(2-wire)
6		[redacted]	(4-wire)
	TIRKS Regional Annual Expense Factor	.0052	
	Sales Tax	.06	
	Annual Cost Factors:	(see attached spreadsheet)	
	Gross Receipts Tax Factor	0.0152	
	Discounted Disconnect Factor		
	2-Wire Analog Voice Grade Loop	0.9080	
	4-Wire Analog Voice Grade Loop	0.8961	
	2-Wire ISDN Digital Grade Loop	0.8014	
	1995 Directly Assigned Hourly Labor Rates		
	Customer Point of Contact (ICSC)	$38.30	
	CO Install & Maintenance (NTEL)	$39.09	
	Circuit Provisioning Group (CPG)	$34.41	
	Network Admin	$32.89	
	Facilties Assignment (FACS)	$31.28	
	Install & Mtce - Spec Svcs (SSIM)	$41.45	
	Outside Plant Engineering	$45.26	
	Spec Svcs (NICS)	$33.72	
	CO Admin Ckt, Carrier & Fact (NTEC)	$36.05	
	Network Planning & Eng (PICS)	$41.65	
	Network Services Clerical	$30.21	
	Special Svc Coord & Testing (SSC)	$36.41	
	Outside Work Group Ded Spec (DSS)	$41.45	
	Labor Inflation		
	Telco Eng		
	Year 1	3.4%	
	Year 2	3.8%	
	Year 3	3.6%	
	Telco COE		
	Year 1	3.2%	
	Year 2	3.5%	
	Year 3	3.4%	

Investment Inplant Factors

	A	B	C	D	E	F	G	H	I
	AC	State	Description	%Nonexempt	%Exempt	%Telco Eng	%Telco Inst	%Labor-Contr	%Support
4	12C	FL	Aerial Cable - Metallic (Entrance Cable)			[redacted]		[redacted]	
	22C	FL	Aerial Cable - Metallic			[redacted]		[redacted]	
	248	FL	Aerial Cable - Metallic (Service Drop)			[redacted]		[redacted]	
	45C	FL	Buried Cable - Metallic			[redacted]		[redacted]	
	52C	FL	Intrabldg Ntwk Cable - Metallic			[redacted]		[redacted]	
	548	FL	Buried Cable - Metallic (Service Drop)			[redacted]		[redacted]	
	5C	FL	Underground - Metallic			[redacted]		[redacted]	
	6C	FL	Submarine Cable - Metallic			[redacted]		[redacted]	
	D12	FL	Aerial Cable - Non-Metallic (Entrance Cable)			[redacted]		[redacted]	
	F12	FL	Aerial Cable - Non-Metallic (Entrance Cable)			[redacted]		[redacted]	
	T12	FL	Aerial Cable - Non-Metallic (Entrance Cable)			[redacted]		[redacted]	
	D22	FL	Aerial Cable - Non-Metallic (Distr)			[redacted]		[redacted]	
	F22	FL	Aerial Cable - Non-Metallic (Feeder)			[redacted]		[redacted]	
	T22	FL	Aerial Cable - Non-Metallic (Interofc)			[redacted]		[redacted]	
	D45	FL	Buried Cable - Non-Metallic (Distr)			[redacted]		[redacted]	
	F45	FL	Buried Cable - Non-Metallic (Feeder)			[redacted]		[redacted]	
	T45	FL	Buried Cable - Non-Metallic (Interofc)			[redacted]		[redacted]	
	D52	FL	Intrabldg Ntwk Cable - Non-Metallic (Distr)			[redacted]		[redacted]	
	F52	FL	Intrabldg Ntwk Cable - Non-Metallic (Feeder)			[redacted]		[redacted]	
	T52	FL	Intrabldg Ntwk Cable - Non-Metallic (Interofc)			[redacted]		[redacted]	
	D5C	FL	Underground Cable - Non-Metallic (Distr)			[redacted]		[redacted]	
	F5C	FL	Underground Cable - Non-Metallic (Feeder)			[redacted]		[redacted]	
	C	FL	Underground Cable - Non-Metallic (Interofc)			[redacted]		[redacted]	
	5C	FL	Submarine Cable - Non-Metallic (Distr)			[redacted]		[redacted]	
	[illegible]	FL	Submarine Cable - Non-Metallic (Feeder)			[redacted]		[redacted]	
29	T6C	FL	Submarine Cable - Non-Metallic (Interofc)			[redacted]		[redacted]	

NOTICE: Not for use or disclosure outside BellSouth except under written agreement

Filename REVINCRE

Mon 10 May 93

1995 FLORIDA
ACCOUNT AVERAGE ANNUAL COST FACTORS
INCREMENTAL

* FOR USE IN SERVICE COST STUDIES ONLY *

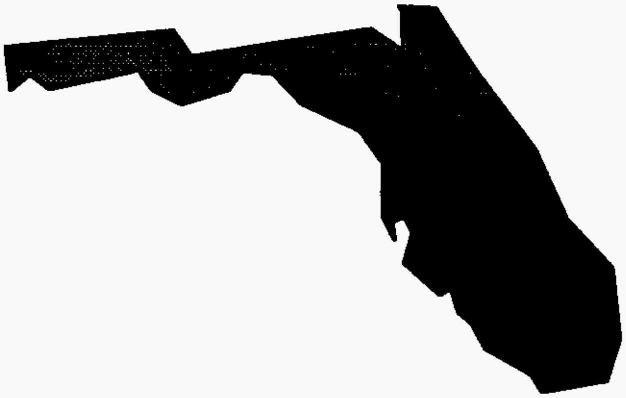
	A	B	depreciation	aclc_com	aclc_inc tax	cap_exp	aclc_mnce	aclc_adval tax	admin_de	aclc_oper_exp	aclc_grt_comb	tot_combined	aclc_grt_local	tot_local	aclc_grt_ptl	tot_ptl
105			a	b	c	d	e	f	g	h	i	j	k	l	m	n
107											0 0152		0 0152		0 0152	
108				13 2%		(a+b+c)				(e+f+g)	x (d+h)	(d+h+i)	x (d+h)	(d+h+k)	x (d+h)	(d+h+m)
110	LAND	20C	0 0000	0 1118	0 0514	0 1632	0 0000	0 0113	0 0000	0 0113	0 0027	0 1772				
111	BUILDINGS	10C, 110C, 010C	[illegible]	0 0966	0 0452	0 1740	0 0060	0 0113	0 0000	0 0182	0 0029	0 1951				
112	DIGTL CIRC-PAIR GAIN	257C,D257C,F257C	0 1134	0 0636	0 0280	0 2050	0 0080	0 0113	0 0000	0 0202	0 0034	0 2294				
113	POLES	1C, 011C	0 0071	0 0726	0 0325	0 1721	0 0270	0 0113	0 0000	0 0382	0 0032	0 2145				
114	AERIAL CA - METAL	22C, 12C, 002C	0 0017	0 0707	0 0338	0 2062	0 0571	0 0113	0 0000	0 0684	0 0042	0 2770				
115	AERIAL CA - FIBER	822C, 812C, 882C, 802C,D22C,	0 0067	0 0704	0 0347	0 1700	0 0130	0 0113	0 0000	0 0252	0 0031	0 2081				
116		F22C,T22C,D12C,F12C,T12C														
117	UNGROUND CA - METAL	5C, 005C	0 1036	0 0013	0 0342	0 2101	0 0291	0 0113	0 0000	0 0404	0 0039	0 2634				
118	UNGROUND CA - FIBER	85C,885C,805C,D5C,F5C,T5C	[illegible]	[illegible]	0 0358	0 1704	0 0135	0 0113	0 0000	0 0248	0 0031	0 2063				
119	BURIED CA - METAL	45C, 045C	[illegible]	[illegible]	0 0364	0 2030	0 0643	0 0113	0 0000	0 0656	0 0041	0 2736				
120	BURIED CA - FIBER	845C,885C,805C,D45C,	[illegible]	0 0010	0 0367	0 1766	0 0144	0 0113	0 0000	0 0257	0 0031	0 2056				
121		F45C,T45C														
122	SUBMARINE CA-METAL	6C, 006C	[illegible]	0 0014	0 0366	0 2040	0 0150	0 0113	0 0000	0 0263	0 0035	0 2338				
123	SUBMARINE CA-FIBER	86C,886C,D6C,F6C,T6C	[illegible]	0 0014	0 0366	0 2020	0 0150	0 0113	0 0000	0 0263	0 0035	0 2327				
124	INTRBLD NTWK-METAL	52C	0 0061	0 0706	0 0348	0 1708	0 0320	0 0113	0 0000	0 0433	0 0034	0 2253				
125	INTRBLD NTWK-FIBER	852C,D52C,F52C,T52C	0 0061	0 0706	0 0348	0 1708	0 0320	0 0113	0 0000	0 0433	0 0034	0 2253				
126	CONDUIT SYSTEMS	4C, 04C, 84C	0 0042	0 0077	0 0401	0 1520	0 0026	0 0113	0 0000	0 0141	0 0025	0 1686				

128 NOTE Certain states in the BellSouth region (GA & NC) assess gross receipts tax only on "local" revenues. For these states, it is necessary to publish "local", "private line and toll", and "combined" factors.
129 Beware that the definitions of "local" and "private line and toll" are defined by the taxing authority for gross receipts tax purposes and may vary from state to state according to tax law.

131 For those states which assess gross receipts tax on local, private line, and toll revenues, the gross receipts tax factor is based on the overall effective tax rate.

BellSouth Telecommunications, Inc.
FPSC Docket No. 960833-TP
Exhibit No. DDC-8

FLORIDA



UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

COST STUDY DOCUMENTATION

SECTIONS A THRU 7

FLORIDA
UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP COST STUDY DOCUMENTATION

CONTENTS

SECTION A	PROPRIETARY RATIONALE
SECTION 1	INTRODUCTION AND OVERVIEW
SECTION 2	DESCRIPTION OF STUDY PROCEDURES
SECTION 3	SUMMARY OF RESULTS
SECTION 4	COST DEVELOPMENT - RECURRING
SECTION 5	COST DEVELOPMENT - NONRECURRING
SECTION 6	SPECIFIC STUDY ASSUMPTIONS
SECTION 7	FACTORS AND LOADINGS

SECTION A

SECTION A

FLORIDA UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

PROPRIETARY RATIONALE

The Florida Unbundled 4-Wire DS1 Digital Grade Loop Cost Study contains actual unit cost information for discrete cost elements. These costs reflect BellSouth's long run incremental cost of providing this element on a going forward basis. Public disclosure of this information would provide BellSouth's competitors with an advantage in that they would know the price or rate below which BellSouth could not provide the service. The data is valuable to competitors and potential competitors in formulating strategic plans for entry, pricing, marketing and overall business strategies concerning access services. This information relates to the competitive interests of BellSouth and disclosure would impair the competitive business of BellSouth. For these reasons, the Florida Unbundled 4-Wire DS1 Digital Grade Loop Cost Study is considered proprietary.

Additionally, the study contains information which reflects vendor-specific prices negotiated by BellSouth. Public disclosure of this information would impair BellSouth's ability to contract for goods and/or services on favorable terms. For these reasons, the Florida Unbundled Loop Cost Study is considered proprietary.

SECTION 1

SECTION 1

FLORIDA UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

INTRODUCTION AND OVERVIEW

This Long Run Incremental Cost study for the Unbundled 4-Wire DS1 Digital Grade Loop in the state of Florida is being provided in response to Docket No. 950984-TP Order No. PSC-96-0444-FOF-TP Issued March 29, 1996.

The Unbundled 4-Wire DS1 Digital Grade Loop provides for simultaneous two-way transmission of isochronous digital signals at speeds of 1.544 Mbps. When the facility is used with a standard channel bank or direct integration equipment, it provides the equivalent of 24 voice grade channels. The facility extends from the network interface at the Alternative Local Exchange Company's (ALEC) customer premises to a DSX-1 cross-connect panel termination in the central office.

A long run incremental cost study considers the network architectures and technologies that will be used to provide the service being studied in the future. BellSouth Network provided the following five designs as representative of the forward looking network architectures which will be used to deploy DS1 service from the central office to a customer premises.

- ◊ Design #1 - Central Office to Customer Premises on all copper
- ◊ Design #2 - Central Office to Customer Premises on an OC-3 SONET Ring
- ◊ Design #3 - Central Office to Customer Premises on an OC-3+ SONET Ring
- ◊ Design #4 - Central Office through an Intermediate Hub on an OC-3 SONET Ring to Customer Premises on a Copper Extension
- ◊ Design #5 - Central Office through an Intermediate Hub on an OC-12 SONET Ring to Customer Premises on an OC-3 SONET Ring Extension

Recurring costs were developed for each design and then weighted by the probability of occurrence.

Recurring costs presented in this study are directly assigned, incremental and levelized so as to be appropriate for the 1996-1998 study period. Nonrecurring costs follow the same convention and represent 1996-1998 level costs also. These long-run incremental costs are developed by using 1995 level incremental loadings and annual cost factors based on 13.2% Cost of Money and directly assigned labor rates.

SECTION 2

SECTION 2

FLORIDA UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of costs supporting the Florida Unbundled 4-Wire DS1 Digital Grade Loop.

All costs are developed utilizing Long Run Incremental Cost methodology. In determining costs, direct incremental costing techniques are used that are in accordance with accepted economic theory. Direct incremental costs are based on cost causation and include all of the costs directly caused by expanding production, or, alternatively, costs that would be saved if the production levels were reduced. Costs are forward looking in nature because only future costs can be saved. Incremental costs are long run to insure that the time period studied is sufficient to capture all forward looking costs affected by the business decision. Shared and common costs are not incremental and therefore are not included. Incremental costs include both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs. Incremental costs account for the expected change in cost to the firm resulting from a new service offering or a change in demand for an existing service.

THE DEVELOPMENT OF RECURRING COSTS

The monthly costs to BellSouth Telecommunications, Inc., resulting from the capital investments necessary to provide a service are called recurring costs. Recurring costs include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs are the expenses of maintenance and ad valorem and other taxes. These expenses contribute to the ongoing cost to the company associated with the initial capital investment. Recurring costs are developed using incremental economic study applications, representing a forward-looking view of technology and deployment.

The first step in developing an incremental study of recurring costs for the Unbundled 4-Wire DS1 Digital Grade Loop is to determine the forward-looking network architecture. Material prices for the equipment are defined. Next, account specific Telephone Plant Indices are applied, when necessary, to trend investments to the base study period. In-plant factors are applied to material prices to develop installed investments which include engineering and installation labor. The deployment probabilities, capacity, spare stock, and utilization of the equipment are also considered.

Plant account specific Investment Inflation Factors are applied to the installed investments to trend the base year, or study year, investments to levelized amounts that are valid for a three to five year planning period. Appropriate loadings for land, building and miscellaneous common equipment and power are then applied.

Next, 1995 level Florida Intrastate Incremental Annual Cost Factors are used to calculate the direct cost of capital (in this case, 13.2%), ongoing maintenance and other operating expenses and taxes. These factors (specific factors for each USOA FRC) are applied to levelized investments by account code, yielding an annual cost per account code. These costs are then divided by twelve to arrive at a monthly cost per cost element.

THE DEVELOPMENT OF NONRECURRING COSTS

Nonrecurring costs are "one-time" costs incurred as a result of provisioning, installing, and disconnecting the Unbundled 4-Wire DS1 Digital Grade Loop. The first step in developing nonrecurring costs is to determine the cost elements related to the study. These cost elements are then described by all of the individual work functions required to provision the cost element. The work functions can be grouped into four categories. These are service order, engineering, connect and test, and technician travel time. The work function times, identified by subject matter experts, are used to describe the flow of work within the various work centers involved. Installation and provisioning costs are developed by multiplying the work time for each work function by the directly assigned labor rate for the work group performing the function.

Utilizing work functions, work times, and labor rates, disconnect costs are calculated in the same manner as the installation costs. Since the labor costs will occur in the future, the current labor rates are inflated to that future period in time and then discounted to the present. The discounted disconnect cost is added to the installation cost and gross receipts tax is applied to develop the total nonrecurring cost.

SECTION 3

SECTION 3

FLORIDA UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

SUMMARY OF RESULTS

This section contains a cost summary for both recurring and nonrecurring cost elements studied for the 1996-1998 Unbundled 4-Wire DS1 Digital Grade Loop for Florida.

FLORIDA UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

SUMMARY OF RESULTS

		A	B	C
		Monthly	Nonrecurring Cost	
		Cost	First	Additional
5	4-Wire DS1 Digital Grade Loop			

SECTION 4

SECTION 4

FLORIDA UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

COST DEVELOPMENT - RECURRING

This section defines the cost development of the recurring costs for the Florida Unbundled 4-Wire DS1 Digital Grade Loop.

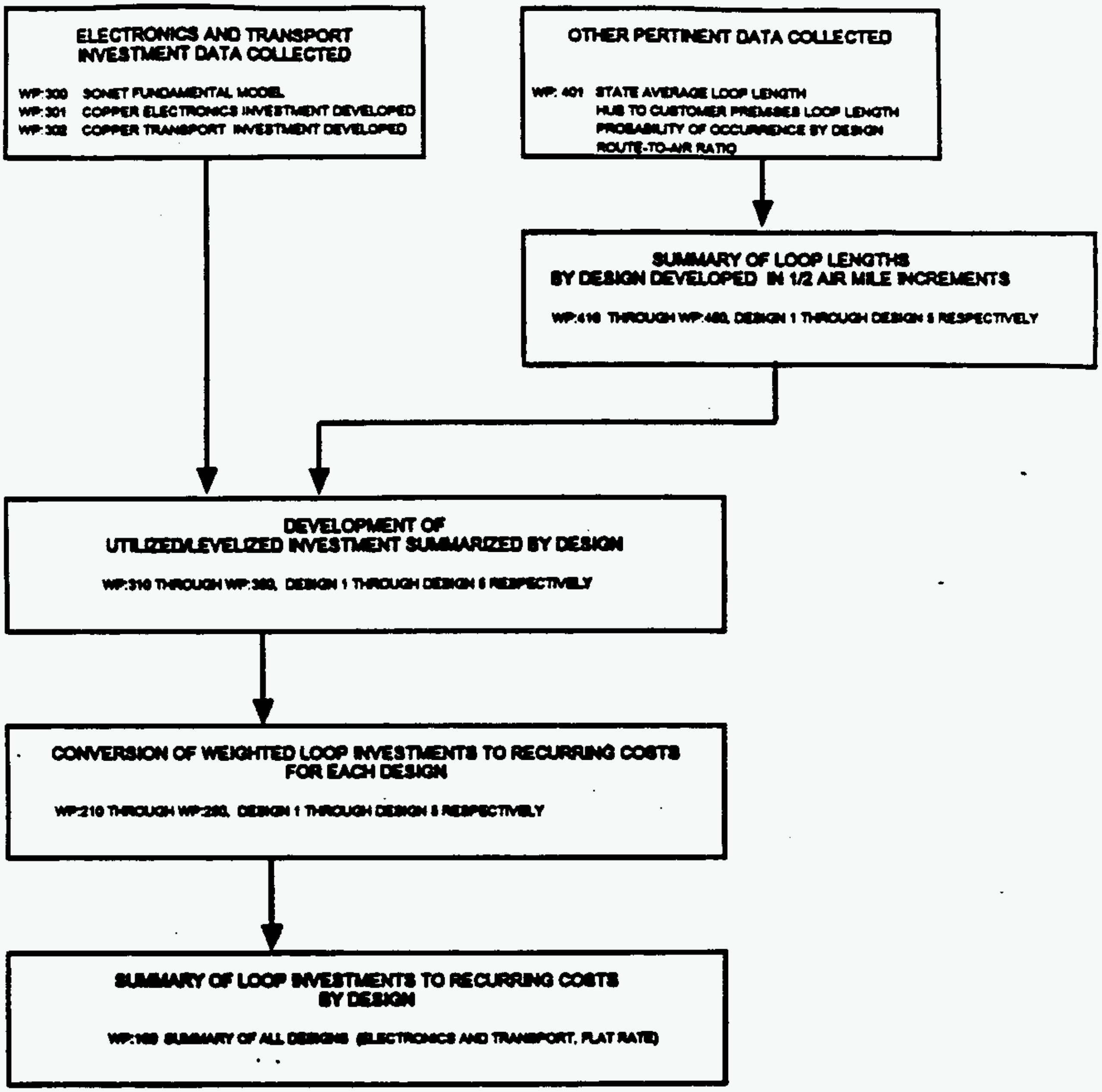
Generally, economic cost development is outlined in Section 2. Network architecture is determined, the necessary equipment is identified, material prices are obtained, factors, utilization and loadings are applied and the result is levelized for the study period. Annual cost factors are applied to convert the investment to cost.

Recurring costs are developed for each of the five network designs. The costs are developed for fixed electronics, which includes all hardwired and common plug-ins in the central office, any intermediate hubbing, and at the customer premises. The working DS1 cards are only included at the central office and customer premises. Recurring costs for the transport are also developed on a per half-mile which includes the fiber and all support structures.

Since the service is flat rated, a flat rate cost is developed for each design based on the average length of the local channel. The designs are weighted by probability of occurrence to determine the cost of the 4-Wire DS1 Digital Grade Loop offering.

The following workpapers develop the investment, convert the investment to monthly costs, and summarize the results.

4-WIRE DS1 DIGITAL GRADE LOOP



SUMMARY

UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP
1996-1998 LEVEL

STATE: FLORIDA
WORKPAPER: 100
PAGE 1 OF 1
DATE: APRIL, 1996

LINE NO.		(A) INVESTMENT	(B) DEPREC.	(C) COM	(D) IT EXPENSE	(E)=(B)+(C)+(D) TOTAL CAPITAL COSTS	(F) MAINT.	(G) AD VALOREM AND OTHER TAXES	(H) TIRKS EXPENSE	(I)=(F)+(G)+(H) TOTAL OPERATING COSTS	(J) GRT	(K)=(E)+(I)+(J) TOTAL UNIT ANNUAL COSTS	(L)=(K)/12 TOTAL UNIT MONTHLY COSTS	SOURCES
1	DESIGN 1													
2														
3														
4														
5	ELECTRONICS													WP 210. Page 1 of 2. Line 40
6	TRANSPORT (FLAT RATE)													WP 210. Pagg 1 of 2. Line 40
7														
8														
9	DESIGN 2													
10														
11														
12	ELECTRONICS													WP 220 Page 1 of 2. Line 43
13	TRANSPORT (FLAT RATE)													WP.220. Page 1 of 2. Line 44
14														
15														
16	DESIGN 3													
17														
18														
19	ELECTRONICS													WP 230 Page 1 of 2. Line 43
20	TRANSPORT (FLAT RATE)													WP.230. Page 1 of 2. Line 44
21														
22														
23	DESIGN 4													
24														
25														
26	ELECTRONICS													WP 240 Page 2 of 3. Line 80
27	TRANSPORT (FLAT RATE)													WP 240 Page 2 of 3. Line 81
28														
29														
30	DESIGN 5													
31														
32														
33	ELECTRONICS													WP 250 Page 2 of 3. Line 74
34	TRANSPORT (FLAT RATE)													WP 250 Page 2 of 3. Line 75
35														
36														
37														
38														
39	TOTAL													
40	ALL DESIGNS													
41														
42	ELECTRONICS													WP 100,Pg 1 of 1. Lines 5,12,19,26,33
43	TRANSPORT (FLAT RATE)													WP 100,Pg 1 of 1. Lines 6,13,20,27,34
44														
45	TOTAL FLAT RATE													WP 100,Pg 1 of 1. Lines 42,43

MONTHLY COST DEVELOPMENT

UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP
1996-1998 LEVEL

STATE FLORIDA
WORKPAPER 210
PAGE 1 OF 2
DATE APRIL, 1996

DESIGN 1 INVESTMENT/COST SUMMARY
ELECTRONICS and TRANSPORT

LINE NO.			ACCT CODE	(A) INVESTMENTS	(B) DEPREC	(C) COM	(D) IT EXPENSE	(E)=(B)+(C)+(D) TOTAL CAPITAL COSTS	(F) MAINT	(G) AD VALOREM AND OTHER TAXES	(H) [illegible] EXPENSE	(I)=(F)+(G)+(H) TOTAL OPERATING COST	(J) GRT	(K)=(E)+(I)+(J) UNIT ANNUAL COSTS	(L)=(K)/12 MONTHLY COSTS (AIR MILES)
1	*ELECTRONICS*														
2	*SOURCE FOR COL (A) INV WP 310,*		257C												
3	*PAGE 1 OF 2, LINES 32 THRU 36*		377C												
4			30C												
5			18C												
6			12C												
7															
8	TOTAL ELECTRONICS DESIGN 1														
9															
10	TRANSPORT 1/2 MILE (AIR MILE)														
11	*SOURCE FOR COL (A) INV. WP:310,*		22C												
12	*PAGE 2 OF 2, LINES 60 THRU 76*		1C												
13			3C												
14			4C												
15			45C												
16			257C												
17															
18	TOTAL TRANSPORT DESIGN 1														
19															
20															
21															
22															
23			*SOURCE*												
24	TOTAL FIRST HALF AIR MILE	ELECTRONICS	*LINE 8*												
25		TRANSPORT	*LINE 18*												
26															
27															
28	TOTAL SECOND HALF MILE	TRANSPORT	*LINE 18*												
29															
30	TOTAL FLAT RATE	ELECTRONICS	LINE 8												
31		TRANSPORT	INE 18 * WP:410												
32			*LINE 18*												
33															
34															
35	WEIGHTED INVESTMENT/COST SUMMARY														
36															
37			*SOURCE*												
38	PROBABILITY OF OCCURRENCE	14.40%	WP:401, LINE 12												
39															
40	WEIGHTED FIRST HALF AIR MILE	ELECTRONICS	LINE 24 * LINE 38												
41		TRANSPORT	LINE 26 * LINE 36												
42															
43	WEIGHTED SECOND HALF MILE	TRANSPORT	LINE 26 * LINE 38												
44															
45															
46	FLAT RATE WEIGHTED INVESTMENT/COST SUMMARY														
47															
48		ELECTRONICS	LINE 30 * LINE 38												
49		TRANSPORT	LINE 31 * LINE 38												
50															
51															
52															

MONTHLY COST DEVELOPMENT

UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP
1996-1998 LEVEL

STATE FLORIDA
WORKPAPER 210
PAGE 2 OF 2
DATE APRIL 1998

DESIGN 1 INVESTMENT/COST SUMMARY
ELECTRONICS and TRANSPORT (cont.)

SOURCES:

ELECTRONICS WP:210, PAGE 1 OF 2, LINES 1 THRU 8

COLUMN (A) WP:310, Page 1 of 2, Lines 32 thru 36 (acct code specific)
COLUMN (B) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (A) (acct code specific)
COLUMN (C) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (B) (acct code specific)
COLUMN (D) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (C) (acct code specific)
COLUMN (E) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (D) (acct code specific)
COLUMN (F) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (E) (acct code specific)
COLUMN (G) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (F) (acct code specific)
COLUMN (H) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, TIRKS expense (acct code specific)
COLUMN (I) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (H) (acct code specific)
COLUMN (J) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (I) (acct code specific)
COLUMN (K) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (J) (acct code specific)
COLUMN (L) Calculation

SOURCES:

TRANSPORT WP:210, PAGE 1 OF 2, LINES 10 THRU 16

COLUMN (A) WP:310, Page 2 of 2, Lines 67 thru 72 (acct code specific)
COLUMN (B) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (A) (acct code specific)
COLUMN (C) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (B) (acct code specific)
COLUMN (D) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (C) (acct code specific)
COLUMN (E) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (D) (acct code specific)
COLUMN (F) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (E) (acct code specific)
COLUMN (G) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (F) (acct code specific)
COLUMN (H) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, TIRKS expense (acct code specific)
COLUMN (I) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (H) (acct code specific)
COLUMN (J) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (I) (acct code specific)
COLUMN (K) WP:210, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (J) (acct code specific)
COLUMN (L) Calculation

SOURCES:

TOTALS WP:210, PAGE 1 OF 2, LINES 24 THRU 33

TOTAL FIRST HALF MILE - ELECTRONICS WP:210, Page 1 of 2, Line 8 (Column (A) thru (L) (category specific)
TOTAL FIRST HALF MILE - TRANSPORT WP:210, Page 1 of 2, Line 18 (Column (A) thru (L) (category specific)

TOTAL SECOND HALF MILE - TRANSPORT WP:210, Page 1 of 2, Line 18 (Column (A) thru (L) (category specific)

TOTAL FLAT RATE - ELECTRONICS WP:210, Page 1 of 2, Line 8 (Column (A) thru (L) (category specific)
TOTAL FLAT RATE - TRANSPORT WP:210, Page 1 of 2, Line 18 (Column (A) thru (L) (category specific) multiplied by WP:410, Line 16

PROBABILITY OF OCCURRENCE WP:401, Page 1 of 1, Line 12
WEIGHTED FIRST HALF AIR MILE - ELECTRONICS WP:210, Page 1 of 2, Line 24 (Column (A) thru (L) (category specific) multiplied by WP:210, Page 1 of 2, Line 38
WEIGHTED FIRST HALF AIR MILE - TRANSPORT WP:210, Page 1 of 2, Line 25 (Column (A) thru (L) (category specific) multiplied by WP:210, Page 1 of 2, Line 38

WEIGHTED FLAT RATE - ELECTRONICS WP:210, Page 1 of 2, Line 30 (Column (A) thru (L) (category specific) multiplied by WP:210, Page 1 of 2, Line 38
WEIGHTED FLAT RATE AIR MILE - TRANSPORT WP:210, Page 1 of 2, Line 31 (Column (A) thru (L) (category specific) multiplied by WP:210, Page 1 of 2, Line 38

MONTHLY COST DEVELOPMENT

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UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP
1996-1998 LEVEL

DESIGN 2 INVESTMENT/COST SUMMARY
ELECTRONICS and TRANSPORT

	LINE NO.			ACCT CODE	(A) INVESTMENTS	(B) DEPREC.	(C) COM	(D) IT EXPENSE	(E)=(B)+(C)+(D) TOTAL CAPITAL COSTS	(F) MAINT	(G) AD VALOREM AND OTHER TAXES	(H) TRKS EXPENSE	(I)=(F)+(G)+(H) TOTAL OPERATING COST	(J) GRI	(K)=(E)+(I)+(J) UNIT ANNUAL COSTS	(L)=(K)/12 MONTHLY COSTS (AIR MILES)
	1	ELECTRONICS														
	2	*SOURCE FOR COL (A) INV. WP 320,*		257C												
	3	*PAGE 1 OF 2, LINES 40 THRU 43*		26C												
	4			16C												
	5			812C												
	6															
	7		TOTAL ELECTRONICS DESIGN 2													
	8															
	9	TRANSPORT 1/2 MILE (AIR MILE)														
	10	*SOURCE FOR COL (A) INV. WP 320,*		822C												
	11	*PAGE 2 OF 2, LINES 05 THRU 09*		1C												
	12			85C												
	13			4C												
	14			865C												
	15															
	16		TOTAL TRANSPORT DESIGN 2													
	17															
	18															
	19			SOURCE												
	20	TOTAL, FIRST HALF AIR MILE	ELECTRONICS	LINE 7												
	21		TRANSPORT	LINE 16												
	22															
	23															
	24	TOTAL, SECOND HALF MILE	TRANSPORT	LINE 16												
	25															
	26	TOTAL, FLAT RATE	ELECTRONICS	LINE 7												
	27		TRANSPORT	LINE 16 * WP 420												
	28			LINE 16												
	29															
	30															
	31	WEIGHTED INVESTMENT/COST SUMMARY														
	32			SOURCE												
	33	PROBABILITY OF OCCURRENCE	35.00%	WP 401, LINE 13												
	34															
35	35	WEIGHTED FIRST HALF AIR MILE	ELECTRONICS	LINE 20 * LINE 33												
	36		TRANSPORT	LINE 21 * LINE 33												
	37															
38	38	WEIGHTED SECOND HALF MILE	TRANSPORT	LINE 24 * LINE 33												
	39															
	40															
	41	FLAT RATE WEIGHTED INVESTMENT/COST SUMMARY														
	42															
	43		ELECTRONICS	LINE 26 * LINE 33	$780.73											
44	44		TRANSPORT	LINE 27 * LINE 33	$137.91											
	45															
	46															
46	47															

MONTHLY COST DEVELOPMENT

UNBUNDLED 4 WIRE DS1 DIGITAL GRADE LOOP
1996 1998 LEVEL

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DESIGN 2 INVESTMENT/COST SUMMARY
ELECTRONICS and TRANSPORT (cont.)

SOURCES

ELECTRONICS WP 220, PAGE 1 OF 2, LINES 1 THRU 5

COLUMN (A)	WP:220, Page 1 of 2, Lines 38 thru 42 (acct code specific)
COLUMN (B)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (A) (acct code specific)
COLUMN (C)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (B) (acct code specific)
COLUMN (D)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (C) (acct code specific)
COLUMN (E)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (D) (acct code specific)
COLUMN (F)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (E) (acct code specific)
COLUMN (G)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (F) (acct code specific)
COLUMN (H)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, TIRKS expense (acct code specific)
COLUMN (I)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (H) (acct code specific)
COLUMN (J)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (I) (acct code specific)
COLUMN (K)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (J) (acct code specific)
COLUMN (L)	Calculation

SOURCES

TRANSPORT WP:220, PAGE 1 OF 2, LINES 9 THRU 15

COLUMN (A)	WP:220, Page 2 of 2, Lines 95 thru 99 (acct code specific)
COLUMN (B)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (A) (acct code specific)
COLUMN (C)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (B) (acct code specific)
COLUMN (D)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (C) (acct code specific)
COLUMN (E)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (D) (acct code specific)
COLUMN (F)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (E) (acct code specific)
COLUMN (G)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (F) (acct code specific)
COLUMN (H)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, TIRKS expense (acct code specific)
COLUMN (I)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (H) (acct code specific)
COLUMN (J)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (I) (acct code specific)
COLUMN (K)	WP:220, Page 1 of 2, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (J) (acct code specific)
COLUMN (L)	Calculation

SOURCES

TOTALS WP 220, PAGE 1 OF 2, LINES 20 THRU 46

TOTAL FIRST HALF MILE - ELECTRONICS	WP:220, Page 1 of 2, Line 7 (Column (A) thru (L) (category specific)
TOTAL FIRST HALF MILE - TRANSPORT	WP:220, Page 1 of 2, Line 16 (Column (A) thru (L) (category specific)
TOTAL SECOND HALF MILE - TRANSPORT	WP:220, Page 1 of 2, Line 16 (Column (A) thru (L) (category specific)
TOTAL FLAT RATE - ELECTRONICS	WP:220, Page 1 of 2, Line 7 (Column (A) thru (L) (category specific)
TOTAL FLAT RATE - TRANSPORT	WP:220, Page 1 of 2, Line 16 (Column (A) thru (L) category specific multiplied by WP:420, Line 12
PROBABILITY OF OCCURRENCE	WP:401, Page 1 of 1, Line 13
WEIGHTED FIRST HALF AIR MILE - ELECTRONICS	WP:220, Page 1 of 2, Line 20 (Column (A) thru (L) (category specific) multiplied by WP:220, Page 1 of 2, Line 33
WEIGHTED FIRST HALF AIR MILE - TRANSPORT	WP:220, Page 1 of 2, Line 21 (Column (A) thru (L) (category specific) multiplied by WP:220, Page 1 of 2, Line 33
WEIGHTED FLAT RATE - ELECTRONICS	WP:220, Page 1 of 2, Line 26 (Column (A) thru (L) (category specific) multiplied by WP:220, Page 1 of 2, Line 33
WEIGHTED FLAT RATE AIR MILE - TRANSPORT	WP:220, Page 1 of 2, Line 27 (Column (A) thru (L) (category specific) multiplied by WP:220, Page 1 of 2, Line 33

MONTHLY COST DEVELOPMENT

UNBUNDLED 4 WIRE DS1 DIGITAL GRADE LOOP
1996-1999 LEVEL

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DESIGN 3 INVESTMENT/COST SUMMARY
ELECTRONICS and TRANSPORT

	LINE NO.			ACCT CODE	(A) INVESTMENTS	(B) DEPREC.	(C) COM	(D) IT EXPENSE	(E)=(B)+(C)+(D) TOTAL CAPITAL COSTS	(F) MAINT.	(G) AD VALOREM AND OTHER TAXES	(H) [illegible] EXPENSE	(I)=(F)+(G)+(H) TOTAL OPERATING COST	(J) GRI	(K)=(E)+(I)+(J) UNIT ANNUAL COSTS	(L)=(K)/12 MONTHLY COSTS (AIR MILES)
	1	ELECTRONICS														
	2	*SOURCE FOR COL (A) INV WP:330,*		257C												
	3	*PAGE 1 OF 2, LINES 37 THRU 42*		20C												
	4			10C												
	5			812C												
	6															
	7	TOTAL ELECTRONICS DESIGN 3														
	8															
	9	TRANSPORT 1/2 MILE (AIR MILE)														
	10	*SOURCE FOR COL (A) INV. WP:330,*		822C												
	11	*PAGE 2 OF 2, LINES 98 THRU 148*		5C												
	12			85C												
	13			4C												
	14			845C												
	15															
	16	TOTAL TRANSPORT DESIGN 3														
	17															
	18															
	19			*SOURCE*												
	20	TOTAL, FIRST HALF AIR MILE	ELECTRONICS	*LINE 7*												
	21		TRANSPORT	*LINE 16*												
	22															
	23															
	24	TOTAL, SECOND HALF MILE	TRANSPORT	*LINE 16*												
	25															
	26	TOTAL, FLAT RATE	ELECTRONICS	*LINE 7*												
	27		TRANSPORT	*LINE 16 * WP:430,*												
	28			*LINE 16*												
	29															
	30															
	31	WEIGHTED INVESTMENT/COST SUMMARY														
	32			*SOURCE*												
	33	PROBABILITY OF OCCURENCE	15.00%	*WP:601, LINE 14*												
	34															
35	35	WEIGHTED FIRST HALF AIR MILE	ELECTRONICS	*LINE 20 * LINE 33*												
	36		TRANSPORT	*LINE 21 * LINE 33*												
	37															
38	38	WEIGHTED SECOND HALF MILE	TRANSPORT	*LINE 24 * LINE 33*												
	39															
	40															
	41	FLAT RATE WEIGHTED INVESTMENT/COST SUMMARY														
	42															
	43		ELECTRONICS	*LINE 26 * LINE 33*	$390.99											
44	44		TRANSPORT	*LINE 27 * LINE 33*	$19.76											
	45															
46	46															

MONTHLY COST DEVELOPMENT

UNBUNDLED 4 WIRE DS1 DIGITAL GRADE LOOP
[illegible] LEVEL

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DESIGN 3 INVESTMENT/COST SUMMARY
ELECTRONICS and TRANSPORT (cont.)

SOURCES
ELECTRONICS WP 230, PAGE 1 OF 2, LINES 1 THRU 6

COLUMN (A)	WP:230, Page 1 of 2, Lines 38 thru 41 (acct code specific)
COLUMN (B)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (A) (acct code specific)
COLUMN (C)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (B) (acct code specific)
COLUMN (D)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (C) (acct code specific)
COLUMN (E)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (D) (acct code specific)
COLUMN (F)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (E) (acct code specific)
COLUMN (G)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (F) (acct code specific)
COLUMN (H)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, TIRKS expense (acct code specific)
COLUMN (I)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (H) (acct code specific)
COLUMN (J)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (I) (acct code specific)
COLUMN (K)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (J) (acct code specific)
COLUMN (L)	Calculation

SOURCES
TRANSPORT WP 230, PAGE 1 OF 2, LINES 9 THRU 16

COLUMN (A)	WP:230, Page 2 of 2, Lines 98 thru 103 (acct code specific)
COLUMN (B)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (A) (acct code specific)
COLUMN (C)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (B) (acct code specific)
COLUMN (D)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (C) (acct code specific)
COLUMN (E)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (D) (acct code specific)
COLUMN (F)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (E) (acct code specific)
COLUMN (G)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (F) (acct code specific)
COLUMN (H)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, TIRKS expense (acct code specific)
COLUMN (I)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (H) (acct code specific)
COLUMN (J)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (I) (acct code specific)
COLUMN (K)	WP:230, Page 1 of 2, Column (A) (acct code specific) multiplied by WP FACTORS, Page 1 of 1, Lines 1 thru 13, Column (J) (acct code specific)
COLUMN (L)	Calculation

SOURCES
TOTALS WP 230, PAGE 1 OF 2, LINES 20 THRU 45

TOTAL FIRST HALF MILE - ELECTRONICS	WP:230, Page 1 of 2, Line 7 (Column (A) thru (L) (category specific)
TOTAL FIRST HALF MILE - TRANSPORT	WP:230, Page 1 of 2, Line 16 (Column (A) thru (L) (category specific)
TOTAL SECOND HALF MILE - TRANSPORT	WP:230, Page 1 of 2, Line 16 (Column (A) thru (L) (category specific)
TOTAL FLAT RATE - ELECTRONICS	WP:230, Page 1 of 2, Line 7 (Column (A) thru (L) (category specific)
TOTAL FLAT RATE - TRANSPORT	WP:230, Page 1 of 2, Line 16 (Column (A) thru (L) category specific multiplied by WP:430, Line 16
PROBABILITY OF OCCURRENCE	WP:401, Page 1 of 1, Line 14
WEIGHTED FIRST HALF AIR MILE - ELECTRONICS	WP:230, Page 1 of 2, Line 20 (Column (A) thru (L) (category specific) multiplied by WP:230, Page 1 of 2, Line 33
WEIGHTED FIRST HALF AIR MILE - TRANSPORT	WP:230, Page 1 of 2, Line 21 (Column (A) thru (L) (category specific) multiplied by WP:230, Page 1 of 2, Line 33
WEIGHTED FLAT RATE - ELECTRONICS	WP:230, Page 1 of 2, Line 26 (Column (A) thru (L) (category specific) multiplied by WP:230, Page 1 of 2, Line 33
WEIGHTED FLAT RATE AIR MILE - TRANSPORT	WP:230, Page 1 of 2, Line 27 (Column (A) thru (L) (category specific) multiplied by WP:230, Page 1 of 2, Line 33

UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP
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MONTHLY COST DEVELOPMENT

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DESIGN 4 INVESTMENT/COST SUMMARY
ELECTRONICS and TRANSPORT

LINE NO		ACCT CODE	(AA) INVESTMENT	(BB) WEIGHT	(A)=(AA)*(BB) WEIGHTED INVESTMENT	(B) DEPREC	(C) COM	(D) IT EXPENSE	(E)=(B)+(C)+(D) TOTAL CAPITAL COSTS	(F) MAINT	(G) AD VALOREM AND OTHER TAXES	(H) INVS EXPENSE	(I)=(F)+(G)+(H) TOTAL OPERATING COST	(J) GRI	(K)=(E)+(I)+(J) UNIT ANNUAL COSTS	(L)=(K)/12 MONTHLY COSTS (AIR MILES)
1																
2	ELECTRONICS	257C														
3	SOURCE FOR COL (AA) INV. WP: 240,	28C														
4	PAGE 2 OF 3, LINES 30 THRU 41	16C														
5		12C														
6																
7	TOTAL ELECTRONICS DESIGN 4															
8																
9																
10	TRANSPORT (CO TO HUB) - FIBER	812C														
11	1/4 MILE (AIR MILE)	1C														
12	SOURCE FOR COL (AA) INV. WP: 240,	85C														
13	PAGE 2 OF 3, LINES 66 THRU 141	4C														
14	SOURCE FOR COL (BB) 16 WP: 401	845C														
15	PAGE 1 OF 1, LINE 2															
16	TOTAL TRANSPORT (CO TO HUB) DESIGN 4															
17																
18																
19	TRANSPORT (HUB TO CP) - COPPER	22C														
20	1/4 MILE (AIR MILE)	1C														
21	SOURCE FOR COL (AA) INV. WP: 240,	5C														
22	PAGE 3 OF 3, LINES 142 THRU 147	4C														
23	SOURCE FOR COL (BB) 16 WP: 401	45C														
24	PAGE 1 OF 1, LINE 1	257C														
25																
26	TOTAL TRANSPORT (HUB TO CP) DESIGN 4															
27																
28																
29																
30																
31	TOTAL TRANSPORT DESIGN 4	812C														
32	1/4 MILE (AIR MILE)	1C														
33	SUM OF LINES 11 THRU 30 (ACCOUNT	85C														
34	CODE SPECIFIC)	4C														
35		845C														
36		22C														
37		45C														
38		5C														
39		257C														
40																
41	TOTAL TRANSPORT DESIGN 4															[illegible]
42																
43																

MONTHLY COST DEVELOPMENT

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45 UNBUNDLED 4 WIRE DS1 DIGITAL GRADE LOOP
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47
48
49
50 [illegible] & INVESTMENT SUMMARY
51 ELECTRONICS and TRANSPORT (cont.)

(A)	(B)	(C)	(D)	(E)=(B)+(C)+(D)	(F)	(G)	(H)	(I)=(F)+(G)+(H)	(J)	(K)=(E)+(I)+(J)	(L)=(K)/12
WEIGHTED INVESTMENT	DEPREC	COM	IT EXPENSE	TOTAL CAPITAL COSTS	MAINT	AD VALOREM AND OTHER TAXES	INVS EXPENSE	TOTAL OPERATING COST	GRT	UNIT ANNUAL COSTS	MONTHLY COSTS (VARIABLES)

56			SOURCE
57	TOTAL FIRST HALF AIR MILE	ELECTRONICS	LINE 7
58		TRANSPORT	LINE 41
59			
60			
61	TOTAL SECOND HALF MILE	TRANSPORT	LINE 41
62			
63	TOTAL FLAT RATE	ELECTRONICS	LINE 7
64		TRANSPORT	LINE 41 * WP-44G
65			LINE 37
66			
67			
68	WEIGHTED INVESTMENT/COST SUMMARY		
69			SOURCE
70	PROBABILITY OF OCCURRENCE	21.00%	WP-404, LINE 16
71			
72	WEIGHTED FIRST HALF AIR MILE	ELECTRONICS	LINE 57 * LINE 70
73		TRANSPORT	LINE 58 * LINE 70
74			
75	WEIGHTED SECOND HALF MILE	TRANSPORT	LINE 61 * LINE 70
76			
77			
78	FLAT RATE WEIGHTED INVESTMENT/COST SUMMARY		
79			
80		ELECTRONICS	LINE 63 * LINE 70
81		TRANSPORT	LINE 64 * LINE 70
82			
83			

MONTHLY COST DEVELOPMENT

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UNBUNDLED 4 WIRE [illegible] DIGITAL GRADE LOOP
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SOURCES

ELECTRONICS WP 240, PAGE 1 OF 3, LINES THRU 5

COLUMN (AA)	WP:240, Page 1 of 3, Lines 39 thru 42 (acct code specific)
COLUMN (BB)	N/A
COLUMN (A)	Calculation
COLUMN (B)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (A) (acct code specific)
COLUMN (C)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (B) (acct code specific)
COLUMN (D)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (C) (acct code specific)
COLUMN (E)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (D) (acct code specific)
COLUMN (F)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (E) (acct code specific)
COLUMN (G)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (F) (acct code specific)
COLUMN (H)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, TIRKS expense (acct code specific)
COLUMN (I)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (H) (acct code specific)
COLUMN (J)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (I) (acct code specific)
COLUMN (K)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (J) (acct code specific)
COLUMN (L)	Calculation

SOURCES

TRANSPORT (FIBER INVESTMENTS) WP 240, PAGE 1 OF 3, LINES 10 THRU 14

COLUMN (AA)	WP:240, Page 3 of 3, Lines 98 thru 102 (acct code specific)
COLUMN (BB)	WP:401, Page 1 of 1, Line 3, Column (B)
COLUMN (A)	Calculation

TRANSPORT (COPPER INVESTMENTS) WP 240, PAGE 1 OF 3, LINES 19 THRU 24

COLUMN (AA)	WP:240, Page 3 of 3, Lines 142 thru 147 (acct code specific)
COLUMN (BB)	WP:401, Page 1 of 1, Line 1, Column (B)
COLUMN (A)	Calculation

SOURCES

TRANSPORT (TOTAL COPPER AND FIBER INVESTMENTS) WP 240, PAGE 1 OF 3, LINES 24 THRU 85

COLUMN (A)	WP:240, Page 1 of 3, Sum of Lines 10 thru 24, Column (A) (acct code specific)
COLUMN (B)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (A) (acct code specific)
COLUMN (C)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (B) (acct code specific)
COLUMN (D)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (C) (acct code specific)
COLUMN (E)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (D) (acct code specific)
COLUMN (F)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (E) (acct code specific)
COLUMN (G)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (F) (acct code specific)
COLUMN (H)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, TIRKS expense (acct code specific)
COLUMN (I)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (H) (acct code specific)
COLUMN (J)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (I) (acct code specific)
COLUMN (K)	WP:240, Page 1 of 3, Column (A) (acct code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (J) (acct code specific)
COLUMN (L)	Calculation

SOURCES

TOTALS

TOTAL FIRST HALF MILE - ELECTRONICS	WP:240, Page 2 of 3, Line 8 (Column (A) thru (L) (category specific)
TOTAL FIRST HALF MILE - TRANSPORT	WP:240, Page 2 of 3, Line 41 (Column (A) thru (L) (category specific)
TOTAL SECOND HALF MILE - TRANSPORT	WP:240, Page 2 of 3, Line 41 (Column (A) thru (L) (category specific)
TOTAL FLAT RATE - ELECTRONICS	WP:240, Page 2 of 3, Line 8 (Column (A) thru (L) (category specific)
TOTAL FLAT RATE - TRANSPORT	WP:240, Page 2 of 3, Line 41 (Column (A) thru (L) category specific multiplied by WP:440, Line 20
PROBABILITY OF OCCURRENCE	WP:401, Page 1 of 1, Line 15
WEIGHTED FIRST HALF AIR MILE - ELECTRONICS	WP:240, Page 2 of 3, Line 57 (Column (A) thru (L) (category specific) multiplied by WP:240, Page 2 of 3, Line 70
WEIGHTED FIRST HALF AIR MILE - TRANSPORT	WP:240, Page 2 of 3, Line 58 (Column (A) thru (L) (category specific) multiplied by WP:240, Page 2 of 3, Line 70
WEIGHTED FLAT RATE - ELECTRONICS	WP:240, Page 2 of 3, Line 63 (Column (A) thru (L) (category specific) multiplied by WP:240, Page 2 of 3, Line 70
WEIGHTED FLAT RATE AIR MILE - TRANSPORT	WP:240, Page 2 of 3, Line 64 (Column (A) thru (L) (category specific) multiplied by WP:240, Page 2 of 3, Line 70

MONTHLY COST DEVELOPMENT

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UNBUNDLED 4 WIRE DS1 DIGITAL GRADE LOOP
1996 1998 LEVEL

DESIGN 3 INVESTMENT/COST SUMMARY
ELECTRONICS and TRANSPORT

LINE NO		ACCT CODE	(AA) INVESTMENT	(BB) WEIGHT	(A)= (AA)*(BB) WEIGHTED INVESTMENT	(B) DEPREC	(C) COM	(D) IT EXPENSE	(E)=(B)+(C)+(D) TOTAL CAPITAL COSTS	(F) MAINT	(G) AD VALOREM AND OTHER TAXES	(H) [illegible] EXPENSE	(I)=(E)+(F)+(G)+(H) TOTAL OPERATING COST	(J) GRT	(K)=(I)+(J)+[illegible] UNIT ANNUAL COSTS	(L)= (K)/12 MONTHLY COSTS (AIR MILES)
1		257C														
2	<u>ELECTRONICS</u>	20C														
3	*SOURCE FOR COL (AA) INV. WP: 330*	14C														
4	*PAGE 1 OF 3, LINES 36 THRU 43*	812C														
5																
6																
7	TOTAL ELECTRONICS DESIGN 3															
8																
9		822C														
10	<u>TRANSPORT (CO TO HUB)</u>	1C														
11	1/4 MILE (AIR MILE)	85C														
12	*SOURCE FOR COL (AA) INV. WP: 330*	4C														
13	*PAGE 3 OF 3, LINES 70 THRU 83*	845C														
14	*SOURCE FOR COL (BB) IS WP: 404*															
15	*PAGE 1 OF 2, LINE 3*															
16	TOTAL TRANSPORT (CO TO HUB) DESIGN 3															
17		822C														
18	<u>TRANSPORT (HUB TO CO)</u>	1C														
19	1/4 MILE (AIR MILE)	85C														
20	*SOURCE FOR COL (AA) INV. WP: 330*	4C														
21	*PAGE 3 OF 3, LINES 134 THRU 150*	845C														
22	*SOURCE FOR COL (BB) IS WP: 404*															
23	*PAGE 1 OF 2, LINE 3*															
24	TOTAL TRANSPORT (HUB TO CO) DESIGN 3															
25		822C														
26	<u>TOTAL TRANSPORT DESIGN 3</u>	1C														
27	1/4 MILE (AIR MILE)	85C														
28	*SUM OF LINES 12 THRU 23 (ACCOUNT*	4C														
29	*CODE SPECIFIC)*	845C														
30																
31																
32	TOTAL TRANSPORT DESIGN 3															
33																

MONTHLY COST DEVELOPMENT

UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP
1996-1998 LEVEL

				(A) WEIGHTED INVESTMENT	(B) DEPREC	(C) COM	(D) IT EXPENSE	(E)=(B)+(C)+(D) TOTAL CAPITAL COSTS	(F) MAINT	(G) AD VALOREM AND OTHER TAXES	(H) [illegible] EXPENSE	(I)=(F)+(G)+(H) TOTAL OPERATING COST	(J) GRT	(K)=(E)+(I)+(J) UNIT ANNUAL COSTS	(L)=(K)/12 MONTHLY COSTS (AIR MILES)
43	SECTION 5 INVESTMENT/COST SUMMARY (cont.)														
44	ELECTRONICS and TRANSPORT														
45															
46															
47															
48															
49															
50															
51			SOURCE												
52	TOTAL, FIRST HALF AIR MILE	ELECTRONICS	LINE 7												
53		TRANSPORT	LINE 8												
54															
55	TOTAL, SECOND HALF MILE	TRANSPORT	LINE 9												
56															
57	TOTAL, FLAT RATE	ELECTRONICS	LINE 7												
58		TRANSPORT	LINE 8 * WP:400												
59			LINE 34												
60															
61															
62	WEIGHTED INVESTMENT/COST SUMMARY														
63															
64	PROBABILITY OF OCCURRENCE	15.00%	WP:401, LINE 10												
65															
66	WEIGHTED FIRST HALF AIR MILE	ELECTRONICS	LINE 52 * LINE 64												
67		TRANSPORT	LINE 53 * LINE 64												
68															
69	WEIGHTED SECOND HALF MILE	TRANSPORT	LINE 55 * LINE 64												
70															
71															
72	FLAT RATE WEIGHTED INVESTMENT/COST SUMMARY														
73															
74		ELECTRONICS	LINE 57 * LINE 64												
75		TRANSPORT	LINE 59 * LINE 64												
76															
77															

UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP
1996-1998 LEVEL

MONTHLY COST DEVELOPMENT

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DESIGN 8 INVESTMENT/COST SUMMARY (cont.)
ELECTRONICS and TRANSPORT

SOURCES

ELECTRONICS WP: 250, PAGE 1 OF 3, LINES 1 THRU 6

COLUMN (AA)	WP:250, Page 1 of 3, Lines 30 thru 42 (cost code specific)
COLUMN (BB)	N/A
COLUMN (A)	Calculation
COLUMN (B)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (A) (cost code specific)
COLUMN (C)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (B) (cost code specific)
COLUMN (D)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (C) (cost code specific)
COLUMN (E)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (D) (cost code specific)
COLUMN (F)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (E) (cost code specific)
COLUMN (G)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (F) (cost code specific)
COLUMN (H)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, TIRKS expense (cost code specific)
COLUMN (I)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (H) (cost code specific)
COLUMN (J)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (I) (cost code specific)
COLUMN (K)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (J) (cost code specific)
COLUMN (L)	Calculation

SOURCES

TRANSPORT (OC-12 FIBER INVESTMENTS) WP: 250, PAGE 1 OF 3, LINES 10 THRU 14

COLUMN (AA)	WP:250, Page 2 of 3, Lines 74 thru 78 (cost code specific)
COLUMN (BB)	WP:401, Page 1 of 1, Line 3 Column (B)
COLUMN (A)	Calculation

SOURCES

TRANSPORT (OC-3 FIBER INVESTMENTS) WP 250, PAGE 1 OF 3, LINES 19 THRU 24

COLUMN (AA)	WP:250, Page 2 of 3, Lines 120 thru 130 (cost code specific)
COLUMN (BB)	WP:401, Page 1 of 1, Line 1, Column (B)
COLUMN (A)	Calculation

SOURCES

TRANSPORT (OC-12 AND OC-3 FIBER INVESTMENTS) WP 250, PAGE 1 OF 3, LINES 20 THRU 24

COLUMN (A)	WP:250, Page 1 of 3, Sum of Lines 10 thru 24, Column (A) (cost code specific)
COLUMN (B)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (A) (cost code specific)
COLUMN (C)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (B) (cost code specific)
COLUMN (D)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (C) (cost code specific)
COLUMN (E)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (D) (cost code specific)
COLUMN (F)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (E) (cost code specific)
COLUMN (G)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (F) (cost code specific)
COLUMN (H)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, TIRKS expense (cost code specific)
COLUMN (I)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (H) (cost code specific)
COLUMN (J)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (I) (cost code specific)
COLUMN (K)	WP:250, Page 1 of 3, Column (A) (cost code specific) multiplied by WP:FACTORS, Page 1 of 1, Lines 1 thru 13, Column (J) (cost code specific)
COLUMN (L)	Calculation

SOURCES

TOTALS

TOTAL FIRST HALF MILE - ELECTRONICS	WP:250, Page 1 of 3, Line 7 (Column (A) thru (L) (category specific)
TOTAL FIRST HALF MILE - TRANSPORT	WP:250, Page 1 of 3, Line 32 (Column (A) thru (L) (category specific)
TOTAL SECOND HALF MILE - TRANSPORT	WP:250, Page 1 of 3, Line 32 (Column (A) thru (L) (category specific)
TOTAL FLAT RATE - ELECTRONICS	WP:250, Page 1 of 3, Line 7 (Column (A) thru (L) (category specific)
TOTAL FLAT RATE - TRANSPORT	WP:250, Page 1 of 3, Line 32 (Column (A) thru (L) category specific multiplied by WP:401, Line 16
PROBABILITY OF OCCURENCE	WP:401, Page 1 of 1, Line 16
WEIGHTED FIRST HALF AIR MILE - ELECTRONICS	WP:250, Page 2 of 3, Line 52 (Column (A) thru (L) (category specific) multiplied by WP 250, Page 2 of 3, Line 64
WEIGHTED FIRST HALF AIR MILE - TRANSPORT	WP:250, Page 2 of 3, Line 53 (Column (A) thru (L) (category specific) multiplied by WP:250, Page 2 of 3, Line 64
WEIGHTED FLAT RATE - ELECTRONICS	WP:250, Page 2 of 3, Line 57 (Column (A) thru (L) (category specific) multiplied by WP:250, Page 2 of 3, Line 64
WEIGHTED FLAT RATE AIR MILE - TRANSPORT	WP:250, Page 2 of 3, Line 58 (Column (A) thru (L) (category specific) multiplied by WP:250, Page 2 of 3, Line 64

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		A	B	C
LINE NO	DESCRIPTION	ACCT NO.	UTILIZED / LEVELIZED INVESTMENT	SOURCES
1	ELECTRONICS			
2	Battery Back-up - OC3 (CP)	257C		FUNDAMENTAL SONET MODEL
3	CO Node - OC3	257C		-
4	MCE & P	257C		-
5	Land	20C		-
6	Building	10C		-
7	CO Node - OC12	257C		-
8	MCE & P	257C		-
9	Land	20C		-
10	Building	10C		-
11	CP NODE - OC3	257C		-
12	CO INT. DS1 ON OC-3 DIRECT	257C		-
13	MCE & P	257C		-
14	Land	20C		-
15	Building	10C		-
16	CO INT. DS1 ON OC-3 JOINT	257C		-
17	MCE & P	257C		-
18	Land	20C		-
19	Building	10C		-
20	CP INT. DS1 ON OC-3 DIRECT	257C		-
21	CP INT. DS1 ON OC-3 JOINT	257C		-
22	CO DS1 ON OC-12 DIRECT	257C		-
23	MCE & P	257C		-
24	Land	20C		-
25	Building	10C		-
26	CO DS1 ON OC-12 JOINT	257C		-
27	MCE & P	257C		-
28	Land	20C		-
29	Building	10C		-
30	CO DATA COMMUNICATIONS OC-3	257C		-
31	MCE & P	257C		-
32	Land	20C		-
33	Building	10C		-
34	CO DATA COMMUNICATIONS OC-12	257C		-
35	MCE & P	257C		-
36	Land	20C		-
37	Building	10C		-
38	CP NETWORK INTERFACE	257C		-
39	HUB INTERFACE STS-1 OC3	257C		-
40	MCE & P	257C		-
41	Land	20C		-
42	Building	10C		-

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LINE NO	DESCRIPTION	A ACCT NO.	B UTILIZED / LEVELIZED INVESTMENT	C SOURCES
43	HUB INTERFACE STS-1 OC12	257C		FUNDAMENTAL SONET MODEL
44	MCE & P	257C		-
45	Land	20C		-
46	Building	10C		-
47	CP BUILDING ENTRANCE CABLE OC3	812C		-
48	CP BUILDING ENTRANCE CABLE OC12	812C		-
49	CO INTERFACE DS1 ON OC3 (FLM) DIRECT	257C		-
50	MCE & P	257C		-
51	Land	20C		-
52	Building	10C		-
53	CO INTERFACE DS1 ON OC3 (FLM) JOINT	257C		-
54	MCE & P	257C		-
55	Land	20C		-
56	Building	10C		-
57	CO NODE OC3 (FLM)	257C		-
58	MCE & P	257C		-
59	Land	20C		-
60	Building	10C		-
61	CP INTERFACE DS1 ON OC3 (FLM) DIRECT	257C		-
62	CP INTERFACE DS1 ON OC3 (FLM) JOINT	257C		-
63	CP NODE OC3 (FLM)	257C		-
64	HUB CONN STS-1 ON OC-3 DIRECT (FLM)	257C		-
65	MCE & P	257C		-
66	Land	20C		-
67	Building	10C		-
68	HUB INTERFACE DS1 ON OC-3 DIRECT	257C		-
69	MCE & P	257C		-
70	Land	20C		-
71	Building	10C		-
72	HUB INTERFACE DS1 ON OC-3 JOINT	257C		-
73	MCE & P	257C		-
74	Land	20C		-
75	Building	10C		-
76	HUB INTERFACE DS1 ON OC-3 DIRECT(FLM)	257C		-
77	MCE & P	257C		-
78	Land	20C		-
79	Building	10C		-
80	HUB INTERFACE DS1 ON OC-3 JOINT(FLM)	257C		-
81	MCE & P	257C		-
82	Land	20C		-
83	Building	10C		-

		A	B	C
LINE NO.	DESCRIPTION	ACCT NO.	UTILIZED / LEVELIZED INVESTMENT	SOURCES
84	HUB NODE-OC3	257C		FUNDAMENTAL SONET MODEL
85	MCE & P	257C		-
86	Land	20C		-
87	Building	10C		-
88	HUB NODE-OC3 (FLM)	257C		-
89	MCE & P	257C		-
90	Land	20C		-
91	Building	10C		-
92	HUB NODE-OC12	257C		-
93	MCE & P	257C		-
94	Land	20C		-
95	Building	10C		-
96				
97	<u>TRANSPORT</u>			
98	FIBER - OC3 PER MILE PER STRAND			
99	POLE	1C		-
100	AERIAL FIBER	822C		-
101	BURIED FIBER	845C		-
102	CONDUIT	4C		-
103	UNDERGROUND FIBER	85C		-
104	FIBER - OC12 PER MILE PER STRAND AND FLM 150+			
105	POLE	1C		-
106	AERIAL FIBER	822C		-
107	BURIED FIBER	845C		-
108	CONDUIT	4C		-
109	UNDERGROUND FIBER	85C		-
110				
111				
112				

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DEVELOPMENT OF COPPER ELECTRONICS LEVELIZED, UTILIZED INVESTMENT

LINE NO.	DESCRIPTION	ACCT	(A) MATERIAL PRICE PER T1	(B) IN PLANT FACTOR	(C)=(A)*(B) INSTALLED INV	(D) INFLATION FACTOR	(E)=(C)*(D) 96-98 LEVELIZED INV	(F) UTILIZATION	(G)=(E)/(F) LEVELIZED UTIL INVESTMENT BEFORE LOADINGS	(H) MISC LOAD	(I)=(G)*(H) LEVELIZED UTIL INVESTMENT WITH LOADINGS
	CENTRAL OFFICE										
1	DSX-1 PANEL	257C		1.2107		0.962		0.85			
2		257C								0.0159	
3		20C								0.0030	
4		10C								0.0404	
5											
6											
7	OFFICE REPEATER BAY	257C		1.2107		0.962		0.85			
8		257C								0.0159	
9		20C								0.0030	
10		10C								0.0404	
11											
12											
13											
14	MDF	377C									
15		377C									
16		377C									
17		377C									
18				1.3574		1.012		0.85			
19		377C								0.0962	
20		20C								0.0030	
21		10C								0.0404	
22											
23	**CUSTOMER PREMISES**										
24											
25	BLDG ENTRANCE CABLE	12C				1.081		0.70			
26											
27											
28											
29											
30											

SOURCES

COLUMN A	NETWORK
COLUMN B	ECONOMIC ANALYSIS
COLUMN C	CALCULATION (NOTE: BLDG ENTRANCE CABLE SOURCE WAS ECONOMIC ANALYSIS DEPT.)
COLUMN D	ECONOMIC ANALYSIS
COLUMN E	CALCULATION
COLUMN F	NETWORK
COLUMN G	CALCULATION
COLUMN H	ECONOMIC ANALYSIS
COLUMN I	CALCULATION (NOTE: 20C AND 10C LOADINGS WERE BASED ON TOTAL 257C PER CATEGORY)

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DEVELOPMENT OF COPPER TRANSPORT LEVELIZED, UTILIZED INVESTMENT

LINE NO.	26 GAUGE COPPER CABLE	ACCT CODE	(A) INSTALLED INV PER PAIR PER FOOT	(B)=(A)*2 2 PAIR PER FOOT	(C)=(B)*2640 INV PER 1/2 MILE (2640*(B))	(D) DIST TO CODE	(E)=(C)*(D) COPPER CABLE WEIGHTED INVESTMENT	(F) ADJ FOR AIR DRYER	(G)=(E)*FACTOR ADJ FOR DROP WIRE	(H)=(E)+(F)+(G) COPPER CABLE WEIGHTED INVESTMENT WITH ADJ	(I) POLE/CONDUIT FACTOR	(J)=(H)*(I) POLE/CONDUIT INVESTMENT
1	AERIAL	22C				0.152777		N/A				
2	BURIED	45C				0.633938		N/A				
3	UNDERGROUND	5C				0.213286		N/A				
4	POLE	1C				1					0.2522	
5	CONDUIT	4C									0.3895	
6												
7												
8	AIR DRYER		0									
9	DROP WIRE ADJ.		-0.141283									
10												
11												

LINE NO.	REPEATER	ACCT	(K) INV	(L) DIST TO CODE	(M)=(K)*(L) REPEATER WEIGHTED INVESTMENT
12					
13					
14					
15					
16					
17	AERIAL	257C		0.152777	
18	BURIED	257C		0.633938	
19	UNDERGROUND	257C		0.213286	
20		257C		1	
21					
22					
23					

24 COPPER TRANSPORT LEVELIZED, UTILIZED INVESTMENT SUMMARY

LINE NO.		ACCT	(N) TOTAL INV PER DS1	(O) TPI	(P)=(N)*(O) TOTAL BASE YR INV PER DS1	(Q) INPLANT	(R)=(P)*(Q) INSTALLED INVESTMENT	(S) INFLATION FACTOR	(T)=(R)*(S) LEVELIZED INVESTMENT	(U) UTILIZATION FACTOR	(V)=(T)/(U) UTIL/LEV INVESTMENT PER DS1 & PER 1/2 MILE	
25												
26												
27												
28												
29												
30												
31												
32	REPEATER	257C		1		1.2107		0.982		0.85		257C
33												
34	AERIAL	22C		1		N/A		1.081		0.70		22C
35	BURIED	45C		1		N/A		1.058		0.70		45C
36	UNDERGROUND	5C		1		N/A		1.080		0.70		5C
37	POLE	1C		1		N/A		1.072		0.70		1C
38	CONDUIT	4C		1		N/A		1.044		0.70		4C
39												
40												

SOURCES

COLUMN A	ECONOMIC ANALYSIS - VRUCS	COLUMN I	ECONOMIC ANALYSIS - FACTORS	COLUMN Q	ECONOMIC ANALYSIS - FACTORS
COLUMN B	CALCULATION	COLUMN J	CALCULATION	COLUMN R	CALCULATION
COLUMN C	CALCULATION	COLUMN K	NETWORK	COLUMN S	ECONOMIC ANALYSIS - FACTORS
COLUMN D	ECONOMIC ANALYSIS - VRUCS	COLUMN L	ECONOMIC ANALYSIS - VRUCS	COLUMN T	CALCULATION
COLUMN E	CALCULATION	COLUMN M	CALCULATION	COLUMN U	NETWORK
COLUMN F	N/A	COLUMN N	COLUMNS (G), (H), and (J)	COLUMN V	CALCULATION
COLUMN G	CALCULATION	COLUMN O	ECONOMIC ANALYSIS - FACTORS		
COLUMN H	CALCULATION	COLUMN P	CALCULATION		

UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP
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DESIGN #1
ELECTRONIC INVESTMENTS

		A	B	C
LINE NO.		ACCT CODE	LEVELIZED UTILIZED INVESTMENT	SOURCES
	CENTRAL OFFICE - ELECTRONICS			
1	DSX1 PANEL	257C		WP:301, Page 1 of 1, Line 1
2	MC&AP	257C		WP:301, Page 1 of 1, Line 2
3	LAND	20C		WP:301, Page 1 of 1, Line 3
4	BUILDING	10C		WP:301, Page 1 of 1, Line 4
5				
6				
7	OFFICE REPEATER BAY	257C		WP:301, Page 1 of 1, Line 7
8	MC&AP	257C		WP:301, Page 1 of 1, Line 8
9	LAND	20C		WP:301, Page 1 of 1, Line 9
10	BUILDING	10C		WP:301, Page 1 of 1, Line 10
11				
12				
13	MAIN DISTRIBUTION FRAME	377C		WP:301, Page 1 of 1, Line 18
14	MC&AP	377C		WP:301, Page 1 of 1, Line 19
15	LAND	20C		WP:301, Page 1 of 1, Line 20
16	BUILDING	10C		WP:301, Page 1 of 1, Line 21
17				
18				
19	**CUSTOMER PREMISES - ELECTRONICS**			
20				
21				
22	BLDG ENTRANCE CABLE - COPPER	12C		WP:301, Page 1 of 1, Line 25
23				
24	NETWORK INTERFACE	257C		WP:300, Page 1 of 3, Line 38
25				
26				
27				
28				
29				
30				
31	TOTAL ELECTRONIC INVESTMENT BY FRC			
32		257C		SUM WP:310, Page 1 of 2, Lines 1,2,7,8,24
33		377C		SUM WP:310, Page 1 of 2, Lines 13,14
34		20C		SUM WP:310, Page 1 of 2, Lines 3,9,15
35		10C		SUM WP:310, Page 1 of 2, Lines 4,10,16
36		12C		SUM WP:310, Page 1 of 2, Line 22
37				
38	TOTAL DESIGN I ELECTRONIC INVESTMENT			SUM WP:310, Page 1 of 2, Line 32 thru 36

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44 **DESIGN #1**
45 **TRANSPORT INVESTMENTS**

48 CENTRAL OFFICE TO CUSTOMER PREMISES

		ACCT CODE	(A) TOTAL INVESTMENT PER 1/2 MILE (ROUTE MILES)	(B) ROUTE TO AIR RATIO	(C)=(A)*(B) TOTAL INVESTMENT PER 1/2 MILE (AIR MILES)	SOURCES COLUMN A	SOURCES COLUMN B
55	26 GAUGE						
56		22C		1.43		WP:302, Page 1 of 1, Line 34	WP:401, Page 1 of 1, Line 22
57	AERIAL COPPER	1C		1.43		WP:302, Page 1 of 1, Line 37	"
58	POLE	5C		1.43		WP:302, Page 1 of 1, Line 36	"
59	UNDERGROUND COPPER	4C		1.43		WP:302, Page 1 of 1, Line 38	"
60	CONDUIT	45C		1.43		WP:302, Page 1 of 1, Line 35	"
61	BURIED COPPER	257C		1.43		WP:302, Page 1 of 1, Line 32	"
62	REPEATER						
67		22C				WP:310, Page 2 of 2, Line 56	
68 68	TOTAL TRANSPORT BY FRC	1C				WP:310, Page 2 of 2, Line 57	
69		5C				WP:310, Page 2 of 2, Line 58	
70		4C				WP:310, Page 2 of 2, Line 59	
71		45C				WP:310, Page 2 of 2, Line 60	
72		257C				WP:310, Page 2 of 2, Line 61	
76 76	TOTAL DESIGN #1 TRANSPORT INVESTMENTS					SUM WP:310, Page 2 of 2, Line 67 thru 72	
77	1/2 MILE (AIR MILE)						

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DESIGN #2
ELECTRONIC INVESTMENTS

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		A	B	C
LINE NO.		ACCT CODE	LEVELIZED UTILIZED INVESTMENT	SOURCES
1	CENTRAL OFFICE - ELECTRONICS			
2	DS1 ON OC3 - DIRECT	257C		WP 300, Page 1 of 3, Line 12
3	MCE&P	257C		WP 300, Page 1 of 3, Line 13
4	LAND	20C		WP 300, Page 1 of 3, Line 14
5	BUILDING	10C		WP 300, Page 1 of 3, Line 15
7	DS1 ON OC3 - JOINT	257C		WP 300, Page 1 of 3, Line 16
8	MCE&P	257C		WP 300, Page 1 of 3, Line 17
9	LAND	20C		WP 300, Page 1 of 3, Line 18
10	BUILDING	10C		WP 300, Page 1 of 3, Line 19
12	CO NODE - OC3	257C		WP 300, Page 1 of 3, Line 3
13	MCE&P	257C		WP 300, Page 1 of 3, Line 4
14	LAND	20C		WP 300, Page 1 of 3, Line 6
15	BUILDING	10C		WP 300, Page 1 of 3, Line 8
17	DATA COMM LINK - OC3	257C		WP 300, Page 1 of 3, Line 30
18	MCE&P	257C		WP 300, Page 1 of 3, Line 31
19	LAND	20C		WP 300, Page 1 of 3, Line 32
20	BUILDING	10C		WP 300, Page 1 of 3, Line 33
22	CUSTOMER PREMISES ELECTRONICS -			
24	CP NODE - OC3 (5 Nodes)	257C		WP:300, Page 1 of 3, Line 11 multiplied by 5
26	DS1 ON OC3 - DIRECT	257C		WP:300, Page 1 of 3, Line 20
28	DS1 ON OC3 - JOINT	257C		WP:300, Page 1 of 3, Line 21
30	BLDG ENTRANCE CABLE - OC3	812C		WP:300, Page 2 of 3, Line 47
32	NETWORK INTERFACE	257C		WP:300, Page 1 of 3, Line 38
34	BATTERY BACK-UP	257C		WP:300, Page 1 of 3, Line 2
39	TOTAL ELECTRONIC INVESTMENT BY FRC			
40		257C		SUM WP:320, Page 1 of 2, Lines 1,2,6,7,11,12,16,17,23,25,27,31,33
41		20C		SUM WP:320, Page 1 of 2, Lines 3,8,13,18
42		10C		SUM WP:320, Page 1 of 2, Lines 7,9,14,19
43		812C		SUM WP:320, Page 1 of 2, Line 29
44				
45	TOTAL DESIGN 2 ELECTRONIC INVESTMENT			SUM WP:320, Page 1 of 2, Line 38 thru 42

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50 **DESIGN #2**
51 **TRANSPORT INVESTMENTS**

53 **CENTRAL OFFICE TO CUSTOMER PREMISES OC-3**

		ACCT CODE	(A) INVESTMENT PER MILE PER STRAND (ROUTE MILES)	(B)= (A) / 2 INVESTMENT PER 1/2 MILE PER STRAND (ROUTE MILES)	SOURCES COLUMN (A)	SOURCES COLUMN (B)
62	AERIAL FIBER	822C			WP:300, Page 3 of 3, Line 100	Calculation
63	POLE	1C			WP:300, Page 3 of 3, Line 99	•
64	UNDERGROUND FIBER	85C			WP:300, Page 3 of 3, Line 103	•
65	CONDUIT	4C			WP:300, Page 3 of 3, Line 102	•
66	BURIED FIBER	845C			WP:300, Page 3 of 3, Line 101	•

		ACCT CODE	(C) INVESTMENT PER 1/2 MILE PER STRAND (ROUTE MILES)	(D) TOTAL NUMBER OF STRANDS PER ARRANGEMENT	(E)= (C) * (D) INVESTMENT PER 1/2 MILE PER ARRANGEMENT (ROUTE MILES)	(F) ROUTE TO AIR RATIO	(G) = (E) * (F) TOTAL INVESTMENT PER 1/2 MILE PER ARRANGEMENT (AIR MILES)	SOURCES
78	TOTAL TRANSPORT - OC 3							
79	STANDARD ARRANGEMENT BY FRC	822C		3		1.43		COLUMN (C) Calculation
80		1C		3		1.43		COLUMN (D) Network
81		85C		3		1.43		COLUMN (E) Calculation
82		4C		3		1.43		COLUMN (F) WP:401, Pg 1 of 1, Ln 22
83		845C		3		1.43		COLUMN (G) Calculation
86	TOTAL TRANSPORT - OC 3							
87	DIVERSITY ARRANGEMENT BY FRC	822C		3		1.43		
88		1C		3		1.43		
89		85C		3		1.43		
90		4C		3		1.43		
91		845C		3		1.43		
95	TOTAL TRANSPORT BY FRC (6 STRANDS)	822C						SUM WP:320, Page 2 of 2, Lines 79,87
96		1C						SUM WP:320, Page 2 of 2, Lines 80,88
97		85C						SUM WP:320, Page 2 of 2, Lines 81,89
98		4C						SUM WP:320, Page 2 of 2, Lines 82,90
99		845C						SUM WP:320, Page 2 of 2, Lines 83,91
101	TOTAL DESIGN #2 TRANSPORT INVESTMENTS							SUM WP:320, Page 2 of 2, Lines 95 thru 99
102	1/2 MILE (AIR MILE)							

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DESIGN #3
ELECTRONIC INVESTMENTS

LINE NO.		A ACCT CODE	B LEVELIZED UTILIZED INVESTMENT	C SOURCES
	CENTRAL OFFICE - ELECTRONICS (FLM 150s)			
1	DS1 ON OC3 - DIRECT	257C		WP:300, Page 2 of 3, Line 49
2	MCEAP	257C		WP:300, Page 2 of 3, Line 50
3	LAND	20C		WP:300, Page 2 of 3, Line 51
4	BUILDING	10C		WP:300, Page 2 of 3, Line 52
6	DS1 ON OC3 - JOINT	257C		WP:300, Page 2 of 3, Line 53
7	MCEAP	257C		WP:300, Page 2 of 3, Line 54
8	LAND	20C		WP:300, Page 2 of 3, Line 55
9	BUILDING	10C		WP:300, Page 2 of 3, Line 56
11	CO NODE - OC3	257C		WP:300, Page 2 of 3, Line 57
12	MCEAP	257C		WP:300, Page 2 of 3, Line 58
13	LAND	20C		WP:300, Page 2 of 3, Line 59
14	BUILDING	10C		WP:300, Page 2 of 3, Line 60
16	DATA COMM LINK - OC3	257C		WP:300, Page 1 of 3, Line 30
17	MCEAP	257C		WP:300, Page 1 of 3, Line 31
18	LAND	20C		WP:300, Page 1 of 3, Line 32
19	BUILDING	10C		WP:300, Page 1 of 3, Line 33
21	CUSTOMER PREMISES ELECTRONICS - (FLM150)			
23	CP NODE - OC3 (5 Nodes)	257C		WP:300, Page 2 of 3, Line 63 multiplied by 5
25	DS1 ON OC3 - DIRECT	257C		WP:300, Page 2 of 3, Line 61
27	DS1 ON OC3 - JOINT	257C		WP:300, Page 2 of 3, Line 62
29	BLDG ENTRANCE CABLE - OC12	812C		WP:300, Page 2 of 3, Line 48
31	NETWORK INTERFACE	257C		WP:300, Page 1 of 3, Line 36
33	BATTERY BACK-UP	257C		WP:300, Page 1 of 3, Line 2
37	TOTAL ELECTRONIC INVESTMENT BY FRC			
38		257C		SUM WP:330, Page 1 of 2, Lines 1,2,6,7,11,12,16,17,23,25,27,31,33
39		20C		SUM WP:330, Page 1 of 2, Lines 3,8,13,18
40		10C		SUM WP:330, Page 1 of 2, Lines 7,9,14,19
41		812C		SUM WP:330, Page 1 of 2, Line 29
42				
43	TOTAL DESIGN 3 ELECTRONIC INVESTMENT			SUM WP:330, Page 1 of 2, Lines 37 thru 41
44				

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DESIGN #3
TRANSPORT INVESTMENTS

CENTRAL OFFICE TO CUSTOMER PREMISES OC-3 (FLM 150+)

	ACCT CODE	(A) INVESTMENT PER MILE PER STRAND (ROUTE MILES)	(B)=(A)/2 INVESTMENT PER 1/2 MILE PER STRAND (ROUTE MILES)	SOURCES COLUMN (A)	SOURCES COLUMN (B)
AERIAL FIBER	822C			WP:300, Page 3 of 3, Line 106	Calculation
POLE	1C			WP:300, Page 3 of 3, Line 105	•
UNDERGROUND FIBER	85C			WP:300, Page 3 of 3, Line 100	•
CONDUIT	4C			WP:300, Page 3 of 3, Line 108	•
BURIED FIBER	845C			WP:300, Page 3 of 3, Line 107	•

	ACCT CODE	(C) INVESTMENT PER 1/2 MILE PER STRAND (ROUTE MILES)	(D) TOTAL NUMBER OF STRANDS PER ARRANGEMENT	(E)=(C)*(D) INVESTMENT PER 1/2 MILE PER ARRANGEMENT (ROUTE MILES)	(F) ROUTE TO AIR RATIO	(G)=(E)*(F) TOTAL INVESTMENT PER 1/2 MILE PER ARRANGEMENT (AIR MILES)	SOURCES	
TOTAL TRANSPORT - OC 3 FLM150+								
STANDARD ARRANGEMENT BY FRC	822C		3		1.43		COLUMN (C)	Calculation
	1C		3		1.43		COLUMN (D)	Network
	85C		3		1.43		COLUMN (E)	Calculation
	4C		3		1.43		COLUMN (F)	WP:401, Pg 1 of 1, Ln 22
	845C		3		1.43		COLUMN (G)	Calculation
TOTAL TRANSPORT - OC 3 FLM150+								
DIVERSITY ARRANGEMENT BY FRC	822C		3		1.43			
	1C		3		1.43			
	85C		3		1.43			
	4C		3		1.43			
	845C		3		1.43			
TOTAL TRANSPORT BY FRC (6 STRANDS)	822C						SUM WP:330, Page 2 of 2, Lines 82,90	
	1C						SUM WP:330, Page 2 of 2, Lines 83,91	
	85C						SUM WP:330, Page 2 of 2, Lines 84,92	
	4C						SUM WP:330, Page 2 of 2, Lines 85,93	
	845C						SUM WP:330, Page 2 of 2, Lines 86,94	
TOTAL DESIGN #3 TRANSPORT INVESTMENTS 1/2 MILE (AIR MILE)							]SUM WP:330, Page 2 of 2, Lines 98 thru 103	

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DESIGN #4
ELECTRONIC INVESTMENTS

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LINE NO.		A ACCT CODE	B LEVELIZED UTILIZED INVESTMENT	C SOURCES	D	E ACCT CODE	F LEVELIZED UTILIZED INVESTMENT	G SOURCES
	CENTRAL OFFICE - ELECTRONICS				**FIBER HUB - ELECTRONICS -**			
1								
2	DS1 ON OC3 - DIRECT	257C		WP 300, Pg 1 of 3, Ln 12	HUB NODE - OC3 (5 Nodes)	257C		WP 300, Pg 3 of 3, Ln 84 x 5
3	MCE&P	257C		WP 300, Pg 1 of 3, Ln 13	MCE&P	257C		WP 300, Pg 3 of 3, Ln 85 x 5
4	LAND	20C		WP 300, Pg 1 of 3, Ln 14	LAND	20C		WP 300, Pg 3 of 3, Ln 86 x 5
5	BUILDING	10C		WP 300, Pg 1 of 3, Ln 15	BUILDING	10C		WP 300, Pg 3 of 3, Ln 87 x 5
6								
7	DS1 ON OC3 - JOINT	257C		WP 300, Pg 1 of 3, Ln 16	DSX1 PANEL (2)	257C		WP 301, Pg 1 of 1, Ln 1 x 2
8	MCE&P	257C		WP 300, Pg 1 of 3, Ln 17	MCE&P	257C		WP 301, Pg 1 of 1, Ln 2 x 2
9	LAND	20C		WP 300, Pg 1 of 3, Ln 18	LAND	20C		WP 301, Pg 1 of 1, Ln 3 x 2
10	BUILDING	10C		WP 300, Pg 1 of 3, Ln 19	BUILDING	10C		WP 301, Pg 1 of 1, Ln 4 x 2
11								
12	CO NODE - OC3	257C		WP 300, Pg 1 of 3, Ln 3	OFFICE REPEATER BAY	257C		WP 301, Pg 1 of 1, Ln 7
13	MCE&P	257C		WP 300, Pg 1 of 3, Ln 4	MCE&P	257C		WP 301, Pg 1 of 1, Ln 8
14	LAND	20C		WP 300, Pg 1 of 3, Ln 5	LAND	20C		WP 301, Pg 1 of 1, Ln 9
15	BUILDING	10C		WP 300, Pg 1 of 3, Ln 6	BUILDING	10C		WP 301, Pg 1 of 1, Ln 10
16								
17	DATA COMM LINK - OC3	257C		WP 300, Pg 1 of 3, Ln 30	HUB INTERFACE - DS1 ON OC-3			
18	MCE&P	257C		WP 300, Pg 1 of 3, Ln 31	DIRECT	257C		WP 300, Pg 2 of 3, Ln 68
19	LAND	20C		WP 300, Pg 1 of 3, Ln 32	MCE&P	257C		WP 300, Pg 2 of 3, Ln 69
20	BUILDING	10C		WP 300, Pg 1 of 3, Ln 33	LAND	20C		WP 300, Pg 2 of 3, Ln 70
21					BUILDING	10C		WP 300, Pg 2 of 3, Ln 71
22	**CUSTOMER PREMISES ELECTRONICS -**							
23					HUB INTERFACE - DS1 ON OC-3			
24	BLDG ENTRANCE CABLE - COPPER	12C		WP 301, Pg 1 of 1, Ln 23	DIRECT	257C		WP 300, Pg 2 of 3, Ln 72
25					MCE&P	257C		WP 300, Pg 2 of 3, Ln 73
26	NETWORK INTERFACE	257C		WP 300, Pg 1 of 3, Ln 38	LAND	20C		WP 300, Pg 2 of 3, Ln 74
27					BUILDING	10C		WP 300, Pg 2 of 3, Ln 75
[illegible]								
34								
35								
36								
37								
38								
39	**TOTAL ELECTRONIC INVESTMENT BY FRC**							
40		257C		SUM WP 340, Page 1 of 3, Lines 1,2,6,7,11,12,16,17,26				
41		20C		SUM WP 340, Page 1 of 3, Lines 3,8,13,18				
42		10C		SUM WP 340, Page 1 of 3, Lines 4,9,14,19				
43		12C		SUM WP 340, Page 1 of 3, Line 23				
44								
45	TOTAL DESIGN 4 ELECTRONIC INVESTMENT			SUM WP 340, Page 1 of 3, Line 38 thru 42				

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DESIGN #4
TRANSPORT INVESTMENTS

		ACCT CODE	(A) INVESTMENT PER MILE PER STRAND (ROUTE MILES)	(B)= (A) / 2 INVESTMENT PER 1/2 MILE PER STRAND (ROUTE MILES)	SOURCES COLUMN (A)	SOURCES COLUMN (B)
57	CENTRAL OFFICE TO FIBER HUB OC-3					
58						
59						
60						
61						
62						
63						
64						
65	AERIAL FIBER	822C			WP:300, Page 3 of 3, Line 100	Calculation
66	POLE	1C			WP:300, Page 3 of 3, Line 99	•
67	UNDERGROUND FIBER	85C			WP:300, Page 3 of 3, Line 103	•
68	CONDUIT	4C			WP:300, Page 3 of 3, Line 102	•
69	BURIED FIBER	845C			WP:300, Page 3 of 3, Line 101	•

		ACCT CODE	(C) INVESTMENT PER 1/2 MILE PER STRAND (ROUTE MILES)	(D) TOTAL NUMBER OF STRANDS PER ARRANGEMENT	(E)= (C) * (D) INVESTMENT PER 1/2 MILE PER ARRANGEMENT (ROUTE MILES)	(F) ROUTE TO AIR RATIO	(G) = (E) * (F) TOTAL INVESTMENT PER 1/2 MILE PER ARRANGEMENT (AIR MILES)	SOURCES
70								
71								
72								
73								
74								
75								
76								
77								
78								
79								
80								
81	CO TO HUB							COLUMN (C) Calculation
82	STANDARD ARRANGEMENT BY FRC	822C		3		1.43		COLUMN (D) Network
83		1C		3		1.43		COLUMN (E) Calculation
84		85C		3		1.43		COLUMN (F) WP 401, Pg 1 of 1, Ln 22
85		4C		3		1.43		COLUMN (G) Calculation
86		845C		3		1.43		
87								
88								
89	CO TO HUB							
90	DIVERSITY ARRANGEMENT BY FRC	822C		3		1.43		
91		1C		3		1.43		
92		85C		3		1.43		
93		4C		3		1.43		
94		845C		3		1.43		
95								
96								
97								
98	CO TO HUB TRANSPORT BY FRC (6 STRANDS)	822C						SUM WP 340, Page 2 of 3, Lines 82,90
99		1C						SUM WP 340, Page 2 of 3, Lines 83,91
100		85C						SUM WP 340, Page 2 of 3, Lines 84,92
101		4C						SUM WP 340, Page 2 of 3, Lines 85,93
102		845C						SUM WP 340, Page 2 of 3, Lines 86,94
103								SUM WP 340, Page 2 of 3, Lines 98 thru 102
104	CO TO HUB DESIGN #2 TRANSPORT INVESTMENTS							
105	1/2 MILE (AIR MILE)							

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		ACCT CODE	(A) INVESTMENT PER 1/2 MILE (ROUTE MILES)	(B) ROUTE TO AIR RATIO	(C)=(A)*(B) INVESTMENT PER 1/2 MILE (AIR MILES)	SOURCES COLUMN A	SOURCES COLUMN B
112	**DESIGN #4**						
113	**TRANSPORT INVESTMENTS**						
114							
115							
116	**FIBER HUB TO CUSTOMER PREMISES COPPER**						
117							
118							
119							
120							
121							
122	26 GAUGE						
123							
124	AERIAL COPPER	22C		$1.43		WP 302, Page 1 of 1, Line 34	WP 401, Page 1 of 1, Line 22
125	POLE	1C		$1.43		WP 302, Page 1 of 1, Line 37	•
126	UNDERGROUND COPPER	5C		$1.43		WP 302, Page 1 of 1, Line 36	•
127	CONDUIT	4C		$1.43		WP 302, Page 1 of 1, Line 38	•
128	BURIED COPPER	45C		$1.43		WP 302, Page 1 of 1, Line 35	•
129	REPEATER	257C		$1.43		WP 302, Page 1 of 1, Line 32	•
130							
131							
132							
133							
134							
135							
136							
137							
138							
139							
140							
141							
142 142	**HUB TO CP COPPER TRANSPORT BY FRC**	22C					SUM WP 340, Page 3 of 3, Line 124
143		1C					SUM WP 340, Page 3 of 3, Line 125
144		5C					SUM WP 340, Page 3 of 3, Line 126
145		4C					SUM WP 340, Page 3 of 3, Line 127
146		45C					SUM WP 340, Page 3 of 3, Line 128
147		257C					SUM WP 340, Page 3 of 3, Line 129
148							SUM WP 340, Page 3 of 3, Line 142 thru 147
149 149	**HUB TO CP DESIGN #4 COPPER TRANSPORT INVESTMENTS**						
150	**1/2 MILE (AIR MILE)**						
151							
152							
153							

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DESIGN #5
ELECTRONIC INVESTMENTS

		A	B	C	D	E	F	G
LINE NO.		ACCT CODE	LEVELIZED UTILIZED INVESTMENT	SOURCES		ACCT CODE	LEVELIZED UTILIZED INVESTMENT	SOURCES
	CENTRAL OFFICE - ELECTRONICS :				**FIBER HUB - ELECTRONICS :**			
1	DS1 ON OC12 - DIRECT	257C		WP 300,Pg 1 of 3, Ln 22	HUB NODE - OC12	257C	[redacted]	WP 300,Pg 3 of 3, Ln 82
2	MCE&P	257C		WP 300,Pg 1 of 3, Ln 23	MCE&P	257C	[redacted]	WP 300,Pg 3 of 2, Ln 83
3	LAND	20C		WP 300,Pg 1 of 3, Ln 24	LAND	20C	[redacted]	WP 300,Pg 3 of 3, Ln 84
4	BUILDING	10C		WP 300,Pg 1 of 3, Ln 25	BUILDING	10C	[redacted]	WP 300,Pg 3 of 3, Ln 85
6	DS1 ON OC12 - JOINT	257C		WP 300,Pg 1 of 3, Ln 26	HUB INTERFACE STS-1 OC12	257C	[redacted]	WP 300,Pg 2 of 3, Ln 43
7	MCE&P	257C		WP 300,Pg 1 of 3, Ln 27	MCE&P	257C	[redacted]	WP 300,Pg 2 of 3, Ln 44
8	LAND	20C		WP 300,Pg 1 of 3, Ln 28	LAND	20C	[redacted]	WP 300,Pg 2 of 3, Ln 45
9	BUILDING	10C		WP 300,Pg 1 of 3, Ln 29	BUILDING	10C	[redacted]	WP 300,Pg 2 of 3, Ln 46
11	CO NODE - OC12	257C		WP 300,Pg 1 of 3, Ln 7	HUB INTERFACE STS-1 OC3	257C	[redacted]	WP 300,Pg 1 of 3, Ln 39
12	MCE&P	257C		WP 300,Pg 1 of 3, Ln 8	MCE&P	257C	[redacted]	WP 300,Pg 1 of 3, Ln 40
13	LAND	20C		WP 300,Pg 1 of 3, Ln 9	LAND	20C	[redacted]	WP 300,Pg 1 of 3, Ln 41
14	BUILDING	10C		WP 300,Pg 1 of 3, Ln 10	BUILDING	10C	[redacted]	WP 300,Pg 1 of 3, Ln 42
16	DATA COMM LINK - OC12	257C		WP 300,Pg 1 of 3, Ln 34	HUB NODE - OC3	257C	[redacted]	WP 300,Pg 3 of 3, Ln 84
17	MCE&P	257C		WP 300,Pg 1 of 3, Ln 35	MCE&P	257C	[redacted]	WP 300,Pg 3 of 3, Ln 85
18	LAND	20C		WP 300,Pg 1 of 3, Ln 36	LAND	20C	[redacted]	WP 300,Pg 3 of 3, Ln 86
19	BUILDING	10C		WP 300,Pg 1 of 3, Ln 37	BUILDING	10C		WP 300,Pg 3 of 3, Ln 87
20								
21	**CUSTOMER PREMISES ELECTRONICS :**							
23	CP NODE - OC3 (5 Nodes)	257C		WP 300,Pg 1 of 3, Ln 11x5				
26	DS1 ON OC3 - DIRECT	257C		WP 300,Pg 1 of 3, Ln 20				
27	DS1 ON OC3 - JOINT	257C		WP 300,Pg 1 of 3, Ln 21				
29	BLDG ENTRANCE CABLE - OC3	812C		WP 300,Pg 2 of 3, Ln 47				
31	NETWORK INTERFACE	257C		WP 300,Pg 1 of 3, Ln 30				
33	BATTERY BACK-UP	257C		WP 300,Pg 1 of 3, Ln 2				
37								
38	**TOTAL ELECTRONIC INVESTMENT BY FRC**							
39		257C		SUM WP 360, Page 1 of 3, Lines 1,2,6,7,11,12,16,17,23,26,31,33				
40		20C		SUM WP 360, Page 1 of 3, Lines 3,8,13,18				
41		10C		SUM WP 360, Page 1 of 3, Lines 4,9,14,19				
42		812C		SUM WP 360, Page 1 of 3, Line 29				
43								
44	TOTAL ELECTRONIC DESIGN 5 INVESTMENT			SUM WP 360, Page 1 of 3, Lines 39 thru 42				

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UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP
1996-1998 LEVEL

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DESIGN #5
TRANSPORT INVESTMENTS

CENTRAL OFFICE TO FIBER HUB OC-12

		ACCT CODE	(A) INVESTMENT PER MILE PER STRAND (ROUTE MILES)	(B)= (A) / 2 INVESTMENT PER 1/2 MILE PER STRAND (ROUTE MILES)	SOURCES COLUMN (A)	SOURCES COLUMN (B)
					WP:300, Page 3 of 3, Line 106	Calculation
45	AERIAL FIBER	822C			WP:300, Page 3 of 3, Line 105	•
46	POLE	1C			WP 300, Page 3 of 3, Line 109	•
47	UNDERGROUND FIBER	85C			WP:300, Page 3 of 3, Line 108	•
48	CONDUIT	4C			WP:300, Page 3 of 3, Line 107	•
49	BURIED FIBER	845C				
50						
51						
52						
53						
54						
55						

		ACCT CODE	(C) INVESTMENT PER 1/2 MILE PER STRAND (ROUTE MILES)	(D) TOTAL NUMBER OF STRANDS PER ARRANGEMENT	(E)= (C) * (D) INVESTMENT PER 1/2 MILE PER ARRANGEMENT (ROUTE MILES)	(F) ROUTE TO AIR RATIO	(G) = (E) * (F) TOTAL INVESTMENT PER 1/2 MILE PER ARRANGEMENT (AIR MILES)	SOURCES	
56									
57									
58									
59									
60									
61	CO TO HUB								
62	STANDARD ARRANGEMENT BY FRC	822C		3		1.43		COLUMN (C)	Calculation
63		1C		3		1.43		COLUMN (D)	Network
64		85C		3		1.43		COLUMN (E)	Calculation
65		4C		3		1.43		COLUMN (F)	WP 401, Pg 1 of 1, Ln 22
66		845C		3		1.43		COLUMN (G)	Calculation
67									
68									
69	CO TO HUB								
70	DIVERSITY ARRANGEMENT BY FRC	822C		3		1.43			
71		1C		3		1.43			
72		85C		3		1.43			
73		4C		3		1.43			
74		845C		3		1.43			
75									
76									
77									
78	CO TO HUB TRANSPORT BY FRC (6 STRANDS)	822C						SUM WP 350, Page 2 of 3, Lines 58,66	
79		1C						SUM WP 350, Page 2 of 3, Lines 69,67	
80		85C						SUM WP 350, Page 2 of 3, Lines 60,68	
81		4C						SUM WP 350, Page 2 of 3, Lines 61,69	
82		845C						SUM WP 350, Page 2 of 3, Lines 62 70	
83									
84	CO TO HUB DESIGN #5 TRANSPORT INVESTMENTS						$	SUM WP 350, Page 2 of 3, Lines 98 thru 102	
85	1/2 MILE (AIR MILE)								

UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP
1996-1998 LEVEL

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DESIGN #5
TRANSPORT INVESTMENTS

FIBER HUB TO CUSTOMER PREMISES OC-3

	ACCT CODE	(A) INVESTMENT PER MILE PER STRAND (ROUTE MILES)	(B)=(A)/2 INVESTMENT PER 1/2 MILE PER STRAND (ROUTE MILES)	SOURCES COLUMN (A)	SOURCES COLUMN (B)
AERIAL FIBER	822C			WP:300, Page 3 of 3, Line 100	Calculation
POLE	1C			WP:300, Page 3 of 3, Line 99	•
UNDERGROUND FIBER	85C			WP:300, Page 3 of 3, Line 103	•
CONDUIT	4C			WP:300, Page 3 of 3, Line 102	•
BURIED FIBER	845C			WP:300, Page 3 of 3, Line 101	•

	ACCT CODE	(C) INVESTMENT PER 1/2 MILE PER STRAND (ROUTE MILES)	(D) TOTAL NUMBER OF STRANDS PER ARRANGEMENT	(E)=(C)*(D) INVESTMENT PER 1/2 MILE PER ARRANGEMENT (ROUTE MILES)	(F) ROUTE TO AIR RATIO	(G)=(E)*(F) TOTAL INVESTMENT PER 1/2 MILE PER ARRANGEMENT (AIR MILES)	SOURCES
HUB TO CP							
STANDARD ARRANGEMENT BY FRC	822C		3		1.43		COLUMN (C) Calculation
	1C		3		1.43		COLUMN (D) Network
	85C		3		1.43		COLUMN (E) Calculation
	4C		3		1.43		COLUMN (F) WP.401, Pg 1 of 1, Ln 22
	845C		3		1.43		COLUMN (G) Calculation
HUB TO CP							
DIVERSITY ARRANGEMENT BY FRC	822C		3		1.43		
	1C		3		1.43		
	85C		3		1.43		
	4C		3		1.43		
	845C		3		1.43		
HUB TO CP TRANSPORT BY FRC (6 STRANDS)	822C						SUM WP 350, Page 3 of 3, Lines 113,121
	1C						SUM WP 350, Page 3 of 3, Lines 114,122
	85C						SUM WP 350, Page 3 of 3, Lines 115,123
	4C						SUM WP 350, Page 3 of 3, Lines 116,124
	845C						SUM WP 350, Page 3 of 3, Lines 117,125
HUB TO CP DESIGN #5 TRANSPORT INVESTMENTS 1/2 MILE (AIR MILE)							SUM WP 350, Page 3 of 3, Lines 98 thru 102

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LINE NO.	DESCRIPTION	SOURCES	(A) LENGTHS	(B)=(A)/LINE 2 % to total
1	HUB TO CP LOOP LENGTH (feet)	NETWORK	4,500	38.83%
2	STATE AVG LOOP LENGTH (feet)	ECONOMIC ANALYSIS	11,590	
3	CO TO HUB (feet)	LINE 2 - LINE1	7,090	61.17%
4				100.00%
5				
6				
7				
8			(A)	
9				
10				
11	PROBABILITY OF OCCURRENCE			
12	DESIGN #1	BBS NETWORK	10.00%	
13	DESIGN #2	•	35.00%	
14	DESIGN #3	•	15.00%	
15	DESIGN #4	•	25.00%	
16	DESIGN #5	•	15.00%	
17		CALCULATION	100.00%	
18				
19				
20				
21				
22	ROUTE-TO-AIR RATIO	ECONOMIC ANALYSIS	1.43	
23				
24				
25				
26				
27				
28				
29				

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UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP
1996-1998 LEVEL

DESIGN #1
LOOP LENGTH SUMMARY

LINE NO		(A) (ROUTE MILES) FEET	(B)=(A)/2640 (ROUTE MILES) HALF MILES	(C) ROUTE-TO AIR RATIO	(D)=(B)/(C) (AIR MILES) HALF MILES
1	STATE AVG LOOP LENGTH	11,590			
2					
3	DESIGN 1		5	1.43	4
4	CO TO CP LOOP LENGTH				

DESIGN 1

DESIGN 1 STATE AVG. AIR 1/2 MILES 4

SOURCES
COLUMN (A) WP:401, Page 1 of 1, Line 2
COLUMN (B) Calculation
COLUMN (C) WP:401, Page 1 of 1, Line 22
COLUMN (D) Calculation

UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP
1996-1998 LEVEL

DESIGN #2
LOOP LENGTH SUMMARY

STATE FLORIDA
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LINE NO.		(A) (ROUTE MILES) FEET	(B)=(A)/2640 (ROUTE MILES) HALF MILES	(C) ROUTE-TO AIR RATIO	(D)=(B)/(C) (AIR MILES) HALF MILES
1	STATE AVG LOOP LENGTH	11,590			
2					
3	DESIGN 2				
4	CO TO CP LOOP LENGTH				
5	(CIRCUMFERENCE OF STATE AVG)	36,393	14	1.43	10

DESIGN 2 STATE AVG. AIR 1/2 MILES 10

SOURCES

COLUMN (A)
LINE 1 WP:401, Page 1 of 1, Line 2
LINE 5 WP:401, Page 1 of 1, Line 2 multiplied by 3.14
COLUMN (B) Calculation
COLUMN (C) WP:401, Page 1 of 1, Line 22
COLUMN (D) Calculation

UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP
1996-1998 LEVEL

DESIGN #3
LOOP LENGTH SUMMARY

STATE FLORIDA
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DATE APRIL, 1996

LINE NO.		(A) (ROUTE MILES) FEET	(B)=(A)/2640 (ROUTE MILES) HALF MILES	(C) ROUTE-TO AIR RATIO	(D)=(B)/(C) (AIR MILES) HALF MILES
1	STATE AVG LOOP LENGTH	11,590			
2					
3	DESIGN 3				
4	CO TO CP LOOP LENGTH				
5	(CIRCUMFERENCE OF STATE AVG)	36,393	14	1.43	10
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					

DESIGN 3

DESIGN 3 STATE AVG. AIR 1/2 MILES	10

SOURCES
COLUMN (A)
LINE 1 WP:401, Page 1 of 1, Line 2
LINE 5 WP:401, Page 1 of 1, Line 2 multiplied by 3.14
COLUMN (B) Calculation
COLUMN (C) WP:401, Page 1 of 1, Line 22
COLUMN (D) Calculation

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UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP
1996-1998 LEVEL

DESIGN #4
LOOP LENGTH SUMMARY

LINE NO		(AA)	(A) (ROUTE MILES) FEET	(B)=(A)/2640 (ROUTE MILES) HALF MILES	(C) ROUTE-TO AIR RATIO	(D)=(B)/(C) (AIR MILES) HALF MILES
1	STATE AVG LOOP LENGTH		11,590			
2	CO TO HUB WEIGHT	61.17%				
3	DESIGN 4					
4	(CIRCUMFERENCE OF STATE AVG)		22,263	9	1.43	7
5						
6						
7	HUB TO CP WEIGHT	38.83%				
8	DESIGN 4					
9	HUB TO CP LOOP LENGTH		4,500	2	1.43	2
10	(POINT TO POINT)					

DESIGN 4

DESIGN 4 STATE AVG. AIR 1/2 MILES 9

SOURCES
COLUMN (AA)
Line 3 WP:401, Page 1 of 1, Column (B), Line 3
Line 8 WP:401, Page 1 of 1, Column (B), Line 1
COLUMN (A) x 3.14
Line 1 WP:401, Page 1 of 1, Column (A), Line 2
Line 4 WP:401, Page 1 of 1, Column (A), Line 1 multiplied by WP:440, Page 1 of 1, Column (AA) Line 3
Line 6 WP:440, Page 1 of 1, Column (A), Line 1
Line 11 WP:401, Page 1 of 1, Column (A), Line 1
COLUMN (B) Calculation
COLUMN (C) WP:401, Page 1 of 1, Line 22
COLUMN (D) Calculation

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DATE APRIL, 1998

UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP
1996-1998 LEVEL

LINE NO.		(AA)	(A) (ROUTE MILES) FEET	(B)=(A)/2640 (ROUTE MILES) HALF MILES	(C) ROUTE TO AIR RATIO	(D)=(B)/(C) (AIR MILES) HALF MILES
1	STATE AVG LOOP LENGTH		11,590			
2						
3	CO TO HUB WEIGHT	61.17%				
4	DESIGN 2					
5	CO TO HUB LOOP LENGTH		7,090	3	1.43	3
6	(POINT TO POINT)					
7						
8	HUB TO CP WEIGHT	38.83%				
9	DESIGN 2					
10	HUB TO CP LOOP LENGTH		14,130	6	1.43	5
11	(CIRCUMFERENCE OF STATE AVG)					
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						

DESIGN 5

DESIGN 5 STATE AVG. AIR 1/2 MILES	8

22 **SOURCES**

23 COLUMN (AA)

24 Line 3 WP:401, Page 1 of 1, Column (B), Line 3

25 Line 8 WP:401, Page 1 of 1, Column (B), Line 1

26 COLUMN (A)

27 Line 1 WP:401, Page 1 of 1, Column (A), Line 2

28 Line 6 WP:450, Page 1 of 1, Column (A), Line 1 multiplied by WP:450, Page 1 of 1, Column (AA) Line 3

29 Line 11 WP:401, Page 1 of 1, Column (A), Line 1 x 3.14

30 COLUMN (B) Calculation

31 COLUMN (C) WP:401, Page 1 of 1, Line 22

32 COLUMN (D) Calculation

33

34

SECTION 5

SECTION 5

FLORIDA UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

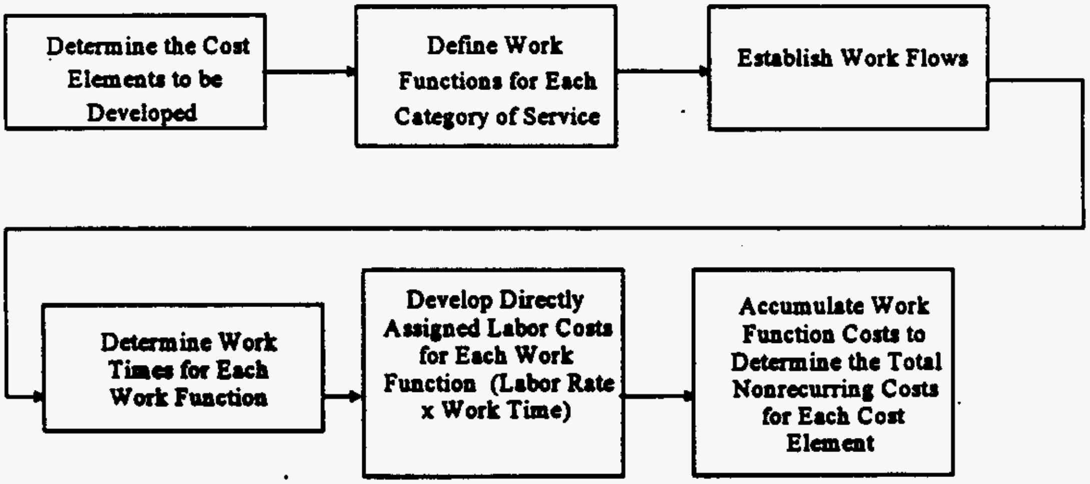
COST DEVELOPMENT - NONRECURRING

Nonrecurring costs are one-time costs incurred as a result of provisioning, installing, disconnecting and completion of orders initiated by a customer request for the Unbundled 4-Wire DS1 Digital Grade Loop. The Nonrecurring Cost Study is performed to determine the service order, provisioning and disconnect costs associated with the cost element listed above. Calculations for the nonrecurring costs are included in this section.

Figure 5-1 shows a generalized flow of the steps necessary for developing nonrecurring costs. Each part of this flow will be explained in more detail in this section.

Figure 5-1

Generalized Flow Diagram for Developing Nonrecurring Costs



The first step in developing nonrecurring costs is to determine the cost elements to be studied. Each cost element is then described by all of the individual work functions required to provision the element. An example of a work function is the designing of a circuit in the Circuit Provisioning Group.

The work functions required to provide the Unbundled 4-Wire DS1 Digital Grade Loop can be grouped into four categories. These are:

1) Service Order
2) Engineering
3) Connect and Test
4) Technician Travel Time

Work functions included in these categories range from clerical activities to installation activities.

The next step in developing nonrecurring costs requires that Company Subject Matter Experts identify the work functions involved in the provisioning of the Unbundled 4-Wire DS1 Digital Grade Loop. (an example of a work function is making a cross-connect in the central office). These work functions are then used to describe the flow of work within the various work centers involved in provisioning the element.

The next step in the development of nonrecurring costs is to determine work rimes for each work function associated with the nonrecurring costs of the Unbundled 4-Wire DS1 Digital Grade Loop. The work times of the various work groups are determined from Subject Matter Expert inputs. Each work time estimate is made by a subject matter expert who thoroughly understands how each activity is done.

A spreadsheet model is used to incorporate the specific work functions and labor rates. In order to arrive at the nonrecurring cost for the element studied, the work time for each work function required is multiplied by the appropriate labor rate. The labor inflation factors (LIF) are used to bring the labor rate to the study period. The levelized labor rate is expressed on a pre minute basis on workpaper 750, as are the worktimes. The labor rates and the labor inflation factors are shown in Section 7. Next, the individual work function costs are accumulated into the total cost for the cost element studied.

To recognize cost reductions on orders with loops, costs are calculated separately for the first and additional loop. "First" refers to the first item on a service order. "Additional" costs are the incremental costs of providing one or more duplicates of the item on the same service order at the same time as the first.

The basic process by which nonrecurring costs are calculated consists of combining unit work times with hourly costs of each specific service category. These labor time, and service order related work times, are multiplied by the directly assigned labor rates for the work groups performing the activities.

Utilizing work functions, work times, and labor rates, disconnect costs are calculated in the same manner as the installation costs. Since the labor costs will occur in the future, the current labor rates are inflated to that future period in time and then discounted to the present. The discounted disconnect cost is added to the installation cost and gross receipts tax is applied to develop the total nonrecurring cost.

The following workpapers reflect the cost development.

SUMMARY OF NONRECURRING COSTS

STATE: FLORIDA
WORKPAPER: 700
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4 WIRE DS1 DIGITAL GRADE LOOP

(1996-1998 Level Incremental Costs)

			A	B
1	DESCRIPTION	SOURCE	FIRST	ADDTL
2				
3	Service Order	WP750 Col G LN7 thru LN21		
4				
5	Engineering	WP750 Col G LN24 thru LN28		
6				
7	Connect & Test	WP750 Col G LN31 thru LN35		
8				
9	Technician Travel Time	WP750 Col G LN38		
10				
11				
12	Total Nonrecurring Cost	Sum of L3, L5, L7, L9		
13				
14				
15				
16				
17				
18				
19				
20				

DEVELOPMENT OF NONRECURRING COSTS
4 WIRE DS1 DIGITAL GRADE LOOP

STATE: FLORIDA
WORKPAPER: 750
PAGE: 1 OF 1
DATE: Aug-96

LEVEL 1996 - 1998

DIRECTLY ASSIGNED

1 2 3 4 5	DESCRIPTION	(A) INSTALL WORKTIMES (HRS) FIRST	 ADDTL	(B) DISCONNECT WORKTIMES (HRS) FIRST	 ADDTL	(C) LEVELIZED LABOR RATE	(D) INSTALL COST (A*C) FIRST	 ADDTL	(E) DISCONNECT COST (B*C) FIRST	 ADDTL	(F) DISCOUNTED DISCONNECT COST (E*DDF) FIRST	 ADDTL	(G) (D+F)*(1+GRT) TOTAL FIRST	 TOTAL ADDTL
6	SERVICE ORDER													
7	CUSTOMER POINT OF CONTACT-ICSC		[redacted]			$40.80								
8														
9	ISC TEAM MEMBER		[redacted]			$42.06								
10														
11	ISC CLERICAL SUPPORT		[redacted]			$31.47								
12														
13	CIRCUIT PROVISIONING CENTER-CPC		[redacted]			$36.65								
14														
15	NETWORK PLUG-IN ADMINISTRATION-PICS		[redacted]			$44.56								
16														
17	NETWORK ADMINISTRATION		[redacted]			$35.03								
18														
19	CO INSTALL & MTCE - CKT & FAC-NTEL		[redacted]			$41.64								
20														
21	INSTALLATION & MTCE CENTER-IMC		[redacted]			$35.92								
22														
23	ENGINEERING													
24	FACILITIES ASSIGNMENT-FACS		[redacted]			$33.32								
25														
26	CIRCUIT PROVISIONING CENTER-CPC		[redacted]			$36.65								
27														
28	OUTSIDE PLANT ENGINEERING-OSPE		[redacted]			$46.42								
29														
30	CONNECT & TEST													
31	NETWORK ADMINISTRATION		[redacted]			$35.03								
32														
33	CO INSTALL & MTCE - CKT & FAC-NTEL		[redacted]			$41.64								
34														
35	INSTALL & MTCE - SPEC SVCS-SSIM (CONN & TEST)		[redacted]			$44.15								
36														
37	TRAVEL													
38	INSTALL & MTCE - SPEC SVCS-SSIM (TRAVEL)		[redacted]			$44.15								
39														
40	TOTAL NONRECURRING COST													

SECTION 6

SECTION 6

FLORIDA UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

SPECIFIC STUDY ASSUMPTIONS

The cost study for the Unbundled 4-Wire DS1 Digital Grade Loop for the state of Florida is based on incremental economic theory and assumptions, plus specific Network deployment strategies, first choice provisioning guidelines, and equipment purchasing information.

Cost study assumptions are as follows.

1. The cost of money is 13.2%, the forward-looking incremental cost to the firm.

2. The 4-Wire DS1 Digital Grade Loop is deployed just like MegaLink® Service; it is deployed on the same network architecture designs as MegaLink® Service and the same provisioning guidelines are used for both. Also, customer distribution is assumed to be similar, so MegaLink® Service loop lengths are used to determine the flat rate cost.

3. Five network architectures will be used to deploy DS1 local channels. The designs are based on Network Strategic Planning's Deployment Guidelines. These designs are found on the following pages of this section.

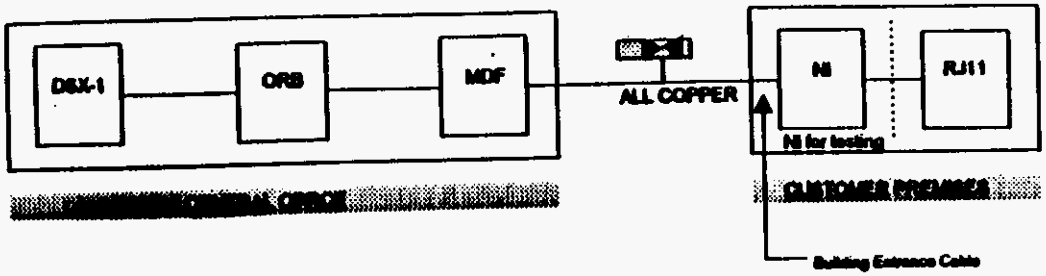
4. The probabilities of occurrence for the designs are based on estimates by BellSouth Network Subject Matter Experts. They are as following:

24 Design #1 Probability of Occurrence -
Design #2 Probability of Occurrence -
Design #3 Probability of Occurrence -
Design #4 Probability of Occurrence -
28 Design #5 Probability of Occurrence -

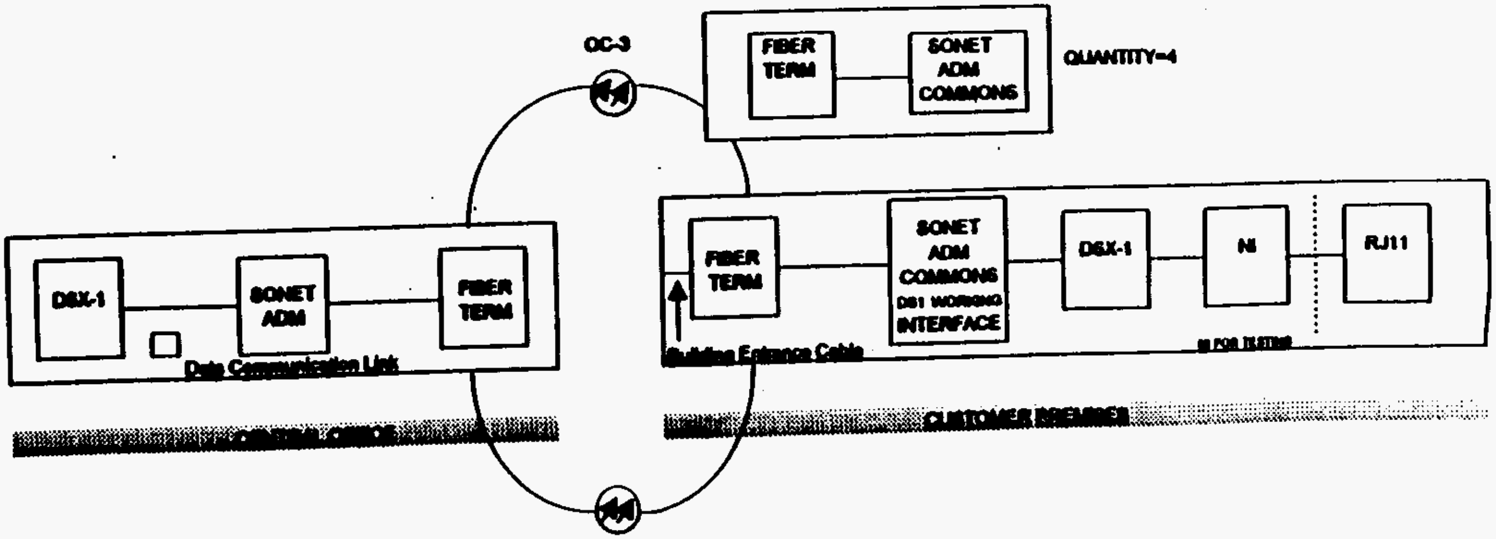
5. The SONET Fundamental Investment Model provided the equipment investments.

UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

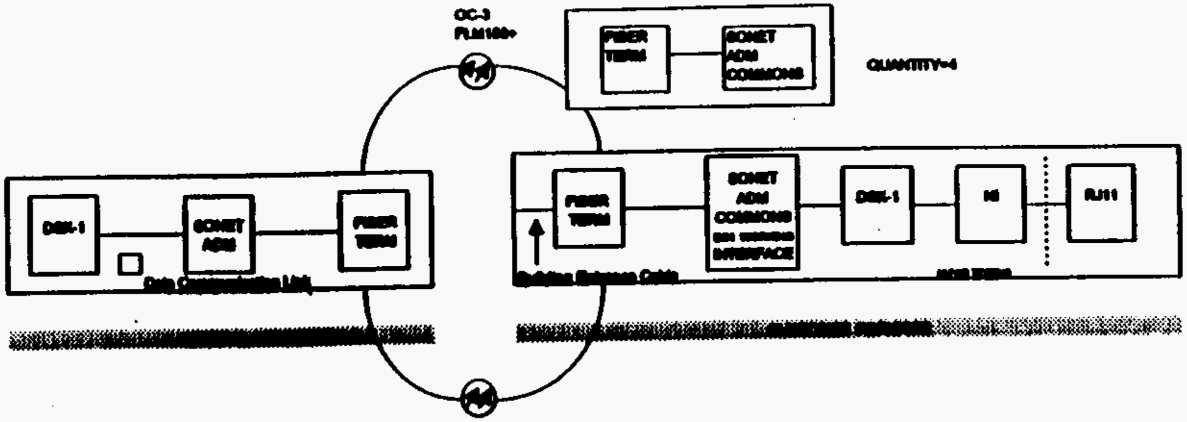
Design # 1



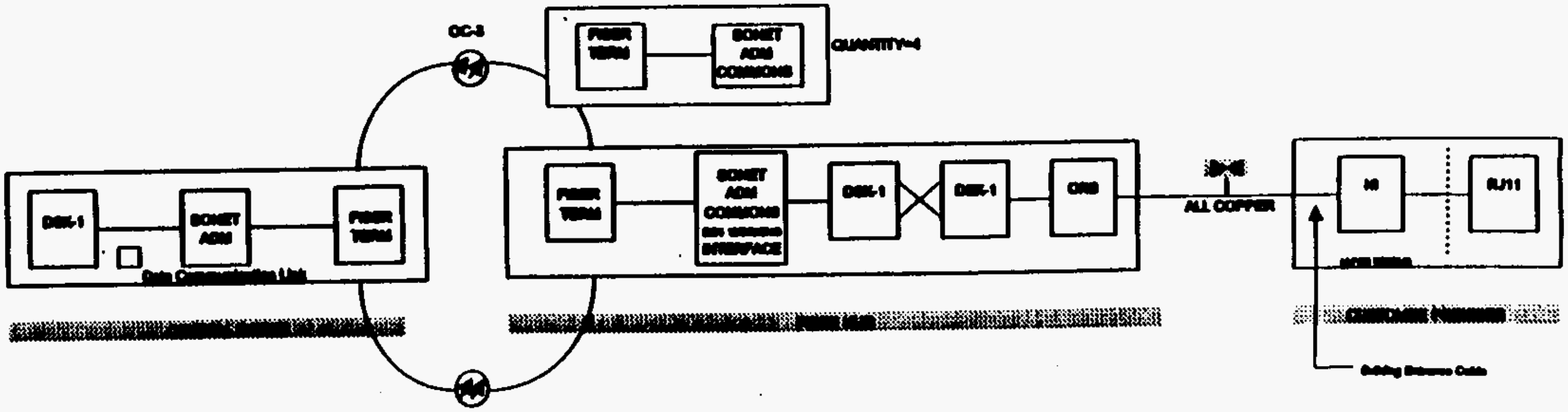
Design # 2



Design # 3
PROBABILITY OF
OCCURENCE __10%

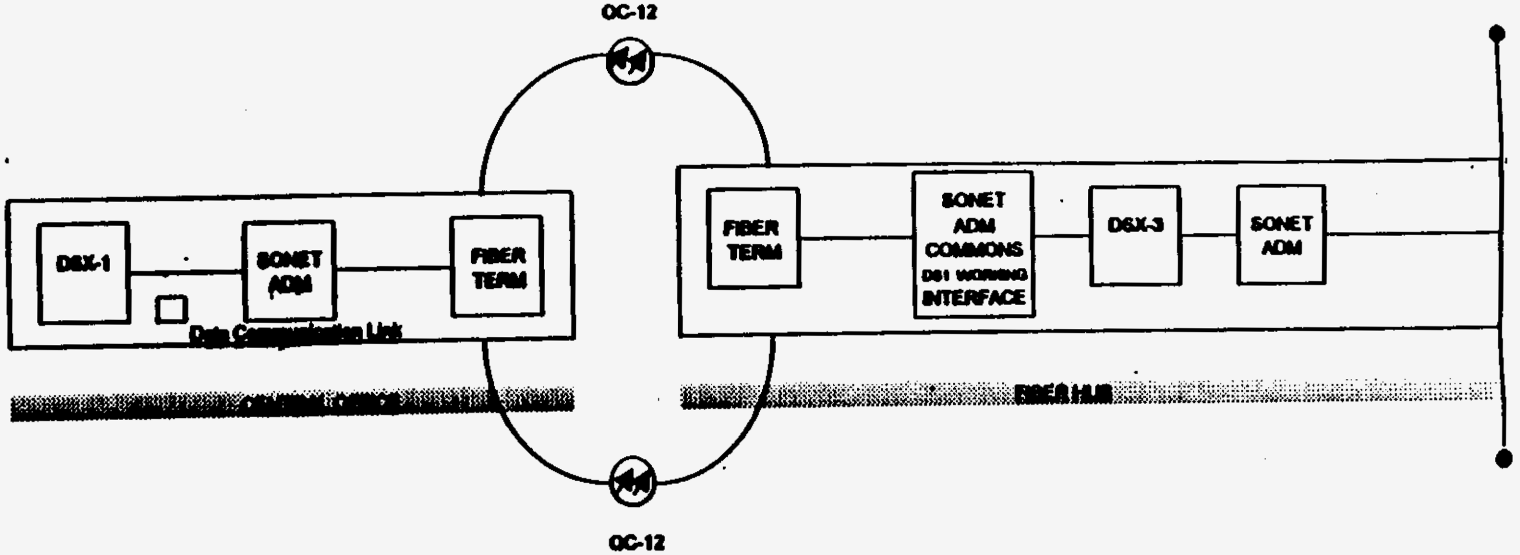


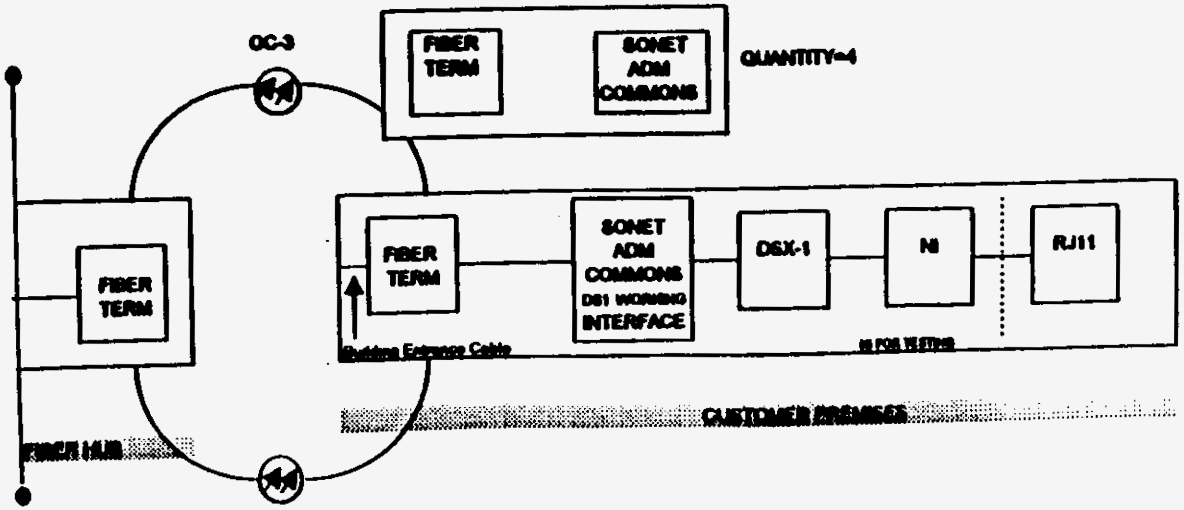
Design # 4
PROBABILITY OF
OCCURENCE __20%



UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

Design # 5





SECTION 7

SECTION 7

FLORIDA UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

FACTORS AND LOADINGS

Following are the incremental annual cost factors and labor rates used in the Unbundled 4-Wire DS1 Digital Grade Loop cost study for Florida.

Florida Unbundled 4-Wire DS1 Digital Grade Loop

Factors and Loadings

Distribution to Code	22C	0.152777
	45C	0.633938
	5C	0.213285
Route to Air Ratio		1.43
In Plant Factors	257C	1.2107
Levelization Factor	257C	0.962
Gross Receipts Tax Factor		0.0152
Discounted Disconnect Factor		0.8562
Annual Cost Factors:		
Digital Circuit - Pair Gain	257C	
Depreciation		0.1134
Cost of Money		0.0636
Income Tax		0.0288
Maintenance		0.0089
Ad Valorem Tax		0.0113
TIRKS Expense		0.0052
Gross Receipts Tax		0.0035
Digital Electronic Switch	377C	
Depreciation		0.1134
Cost of Money		0.0651
Income Tax		0.0302
Maintenance		0.0282
Ad Valorem Tax		0.0113
TIRKS Expense		0.0000
Gross Receipts Tax		0.0038
Aerial Cable - Metallic	12C, 22C	
Depreciation		0.0917
Cost of Money		0.0797
Income Tax		0.0338
Maintenance		0.0571
Ad Valorem Tax		0.0113
TIRKS Expense		0.0000
Gross Receipts Tax		0.0042

Florida Unbundled 4-Wire DS1 Digital Grade Loop

Factors and Loadings

Underground Cable -		
Metal	5C	
Depreciation		0.1036
Cost of Money		0.0813
Income Tax		0.0342
Maintenance		0.0291
Ad Valorem Tax		0.0113
TIRKS Expense		0.0000
Gross Receipts Tax		0.0039
Buried Cable - Metal	45C	
Depreciation		0.0876
Cost of Money		0.0809
Income Tax		0.0354
Maintenance		0.0543
Ad Valorem Tax		0.0113
TIRKS Expense		0.0000
Gross Receipts Tax		0.0041
Aerial Cable - Fiber	812C, 822C	
Depreciation		0.0667
Cost of Money		0.0784
Income Tax		0.0347
Maintenance		0.0139
Ad Valorem Tax		0.0113
TIRKS Expense		0.0000
Gross Receipts Tax		0.0031
Underground Cable -		
Fiber	85C	
Depreciation		0.0626
Cost of Money		0.0800
Income Tax		0.0358
Maintenance		0.0135
Ad Valorem Tax		0.0113
TIRKS Expense		0.0000
Gross Receipts Tax		0.0031
Buried Cable - Fiber	845C	
Depreciation		0.0585
Cost of Money		0.0816
Income Tax		0.0367
Maintenance		0.0144
Ad Valorem Tax		0.0113
TIRKS Expense		0.0000
Gross Receipts Tax		0.0031

Florida Unbundled 4-Wire DS1 Digital Grade Loop

Factors and Loadings

Poles	1C	
Depreciation		0.0671
Cost of Money		0.0725
Income Tax		0.0325
Maintenance		0.0279
Ad Valorem Tax		0.0113
TIRKS Expense		0.0000
Gross Receipts Tax		0.0032
Conduit	4C	
Depreciation		0.0242
Cost of Money		0.0877
Income Tax		0.0401
Maintenance		0.0028
Ad Valorem Tax		0.0113
TIRKS Expense		0.0000
Gross Receipts Tax		0.0025
Land	20C	
Depreciation		0.0000
Cost of Money		0.1118
Income Tax		0.0514
Maintenance		0.0000
Ad Valorem Tax		0.0113
TIRKS Expense		0.0000
Gross Receipts Tax		0.0027
Building	10C	
Depreciation		0.0302
Cost of Money		0.0986
Income Tax		0.0452
Maintenance		0.0069
Ad Valorem Tax		0.0113
TIRKS Expense		0.0000
Gross Receipts Tax		0.0029

1995 Directly Assigned Hourly Labor Rates

Customer Point of Contact (ICSC)	$38.30
ISC Team Member	$39.49
ISC Clerical Support	$29.54
CO Install & Maintenance (NTEL)	$39.09
Circuit Provisioning Center	$34.41
Network Planning & Eng (PICS)	$41.65
Spec Srvcs Disp & Admin Ctr (SSDAC)	$33.72
Network Admin	$32.89
Faciltiies Assignment (FACS)	$31.28
Outside Plant Engineering (OSPE)	$45.26
Install & Mtce - Spec Svcs (SSIM)	$41.45

Florida Unbundled 4-Wire DS1 Digital Grade Loop

Factors and Loadings

Labor Inflation

Telco Eng	
Year 1	3.4%
Year 2	3.8%
Year 3	3.6%
Telco COE	
Year 1	3.2%
Year 2	3.5%
Year 3	3.4%

BellSouth Telecommunications, Inc.
FPSC Docket No. 960833-TP
Exhibit No. DDC-9

FLORIDA

UNBUNDLED EXCHANGE PORTS

COST STUDY DOCUMENTATION

SECTIONS A THRU 6

FLORIDA
UNBUNDLED EXCHANGE PORTS
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SECTION A

SECTION A

COST STUDY DOCUMENTATION
PROPRIETARY RATIONALE

UNBUNDLED EXCHANGE PORTS

The Unbundled Exchange Ports Cost Study contains actual unit cost information for discrete cost elements. These costs reflect BellSouth's long run incremental cost of providing these elements on a going forward basis. Public disclosure of this information would provide BellSouth's competitors with an advantage. The data is valuable to competitors and potential competitors in formulating strategic plans for entry, pricing, marketing and overall business strategies. This information relates to the competitive interests of BellSouth and disclosure would impair the competitive business of BellSouth.

Additionally, the study contains information which reflects vendor-specific prices negotiated by BellSouth. Public disclosure of this information would impair BellSouth's ability to contract for goods and/or services on favorable terms.

Two models developed by Bellcore are used in this study. SCIS, Switching Cost Information System, is the foundation for the calculation of switch investments contained in the study. The model's mathematical formulas include information which is covered by proprietary agreements between Bellcore and the switch vendors. NCAT, Network Cost Analysis Tool, is used to develop the cost of local usage. Both models use sophisticated programming and data management techniques which are the intellectual property of Bellcore.

For these reasons, the Unbundled Exchange Ports Cost Study is considered proprietary.

SECTION 1

SECTION 1

INTRODUCTION AND OVERVIEW

FLORIDA UNBUNDLED PORTS COST STUDY DOCUMENTATION

These Long Run Incremental Cost (LRIC)and Total Service Long Run Incremental Cost (TSLRIC) studies are being provided for Unbundled Ports in the state of Florida in response to Docket No. 950984-TP, Order No. PSC-96-0444-FOF-TP Issued March 29, 1996.

LRIC is the volume sensitive incremental cost. TSLRIC is expressed as a unit incremental cost. It is developed by dividing the volume insensitive incremental cost by demand, and then adding the resultant value to the volume sensitive incremental cost.

Unbundled Ports include local networking and various types of switch terminations which allow access to switch features and functions. (Section 5 contains detailed drawings of the network components.) Unbundled ports provide the Alternative Local Exchange Companies (ALECs) with a physical presence in the switch and use of the local switched network [1].

Recurring costs presented in this study are directly assigned, incremental and levelized to be appropriate for the 1996-1998 study period. Nonrecurring costs follow the same convention and represent 1996-1998 level costs also. These long-run incremental costs are developed by using 1995 level incremental loadings and annual cost factors based on 13.2% Cost of Money and directly assigned labor rates.

---

[1] The 2-wire digital ISDN port usage is strictly for circuit-switched traffic. The nonrecurring cost to configure ISDN channels per individual customer specifications is not included.

SECTION 2

SECTION 2

DESCRIPTION OF STUDY PROCEDURES

FLORIDA UNBUNDLED PORTS
COST STUDY DOCUMENTATION

This section describes the general principles for the development of costs supporting the Florida Unbundled Ports.

In determining these costs, direct incremental costing techniques are used that are in accordance with accepted economic theory. Direct incremental costs are based on cost causation and include all of the costs directly caused by expanding production, or, alternately, costs that would be saved if the production levels were reduced. Costs are forward-looking in nature because only future costs can be saved. Incremental costs are long run to insure that the time period studied is sufficient to capture all forward-looking costs affected by the business decision. Incremental costs include both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs. Incremental costs account for the expected change in cost to the firm resulting from a new service offering or a change in demand for an existing service.

THE DEVELOPMENT OF RECURRING COSTS

The monthly costs to BellSouth Telecommunications, Inc., resulting from the capital investments, necessary to provide a service are called recurring costs. Recurring costs include capital and operating costs. While capital costs include depreciation, cost of money ~~and~~ income tax, operating costs are the expenses of maintenance, ad valorem and other taxes. These expenses contribute to the ongoing cost to the company associated with the initial capital investment. Recurring costs are developed using incremental economic study applications, representing a forward-looking view of technology and deployment.

The first step in developing an incremental study of recurring costs for the Unbundled Ports is to determine the forward-looking Vendor EF&I (engineered, furnished and installed) investments. This is accomplished through the use of Bellcore's proprietary modeling tool, SCIS, Switching Cost Information System, version

2.1. In-plant factors are applied to vendor investments to develop installed investments which include engineering and installation labor.

Plant account specific Investment Inflation Factors are applied to the installed investments to trend the base year, or study year, investments to levelized amounts that are valid for a three to five year planning period. Appropriate loadings for land, building and miscellaneous common equipment and power are then applied.

Next, 1995-level Florida Intrastate Incremental Annual Cost Factors are used to calculate the direct cost of capital (in this case, 13.2%), ongoing maintenance and operating expenses, and taxes. These factors (specific factors for each USOA FRC) are applied to levelized investments by account code, yielding an annual cost per account code. These costs are then divided by twelve to arrive at a monthly cost per cost element.

LRIC is the volume sensitive incremental cost. The average volume insensitive incremental unit cost is developed by dividing the total insensitive costs by demand. The TSLRIC Unit Cost is developed by adding the LRIC volume sensitive unit cost and the average volume insensitive incremental unit cost.

THE DEVELOPMENT OF NONRECURRING COSTS

Nonrecurring costs are "one-time" costs incurred as a result of provisioning, installing, and disconnecting the Unbundled Ports. The work function times, identified by subject matter experts, are used to describe the flow of work within the various work centers involved. Installation and provisioning costs are developed by multiplying the work time for each work function by the directly assigned labor rate for the work group performing the function.

Utilizing work functions, work times and labor rates, disconnect costs are calculated in the same manner as the installation costs. Since the labor costs will occur in the future, the current labor rates are inflated to that future period in time and then discounted to the present. The disconnect cost is added to the installation cost and the gross receipts tax is applied to develop the total nonrecurring cost.

DEVELOPMENT OF LOCAL USAGE COSTS

The study utilizes Bellcore's Network Cost Analysis Tool (NCAT) model to develop these costs. The version used in this study is 4.1. Refer to Section 4 for a detailed explanation of the NCAT model.

SECTION 3

SECTION 3, PAGE 1
SUMMARY OF RESULTS

FLORIDA UNBUNDLED PORTS
COST STUDY DOCUMENTATION

This section contains a cost summary for both recurring and nonrecurring cost elements studied for 1996-1998 Unbundled Ports for Florida and the Local Measured Usage, as required.

	Rate Element	A Unit Recurring LRIC	Nonrecurring[1]	B	C Unit Recurring Equivalent[4]	D TSLRIC Unit Recurring
	2W Analog[2]					
11	Residence	$	Volume Sensitive			$
12			Labor	$		$
13			RTU Fees	$	$	$
14			Volume Insensitive RTU	$		$
15						$
	2W Analog[2]					
17	Business	$	Volume Sensitive			$
18			Labor	$		$
19			RTU Fees	$	$	$
20			Volume Insensitive RTU	$		$
21						$
	2W Analog[2]					
23	PBX	$	Volume Sensitive			$
24			Labor	$		$
25			RTU Fees	$	$	$
26			Volume Insensitive RTU	$		$
27						$
28	2W ISDN Digital[2]	$	Volume Sensitive			$
29			Labor	$		$
30			RTU Fees	$	$	$
31			Volume Insensitive RTU	$	$	$
32						$

SECTION 3, PAGE 2

SUMMARY OF RESULTS

FLORIDA UNBUNDLED PORTS
COST STUDY DOCUMENTATION

	Rate Element	A Unit Recurring LRIC	Nonrecurring[1]	B	Unit Recurring Equivalent[4] C	TSLRIC Unit Recurring D
8	2W DID Analog	$	Volume Sensitive			$
9			Labor	$		$
10			RTU Fees	$		$
11			Volume Insensitive RTU	$		$
12						$
13	4W DID Digital	$	Volume Sensitive			$
14			Labor	$		$
15			RTU Fees	$		$
16			Volume Insensitive RTU	$		$
17						$
18	4W ISDN Digital[2]	$	Volume Sensitive			$
19			Labor	$		$
20			RTU Fees	$	$	$
21			Volume Insensitive RTU	$	$	$
22						$

SECTION 3, PAGE 3
SUMMARY OF RESULTS

FLORIDA UNBUNDLED PORTS
COST STUDY DOCUMENTATION

Additional Port, Same Location

	Rate Element	Nonrecurring [5]		Unit Recurring Equivalent [4]
			A	B
	2W Analog Residence	Volume Sensitive		
10		Labor	$	
11		RTU Fees	$	$
	2W Analog Business	Volume Sensitive		
14		Labor	$	
15		RTU Fees	$	$
	2W Analog PBX	Volume Sensitive		
18		Labor	$	
19		RTU Fees	$	$
	2W ISDN Digital	Volume Sensitive		
21		Labor	$	
22		RTU Fees	$	$
23		Volume Insensitive RTU	$	$

SUMMARY OF RESULTS

FLORIDA UNBUNDLED PORTS
COST STUDY DOCUMENTATION

Additional Port, Same Location

	Rate Element	Nonrecurring[5]	A	Unit Recurring Equivalent[4] B
	2W DID Analog	Volume Sensitive		
9		Labor	$	
10		RTU Fees	$	
	4W DID Digital	Volume Sensitive		
12		Labor	$	
13		RTU Fees	$	
	4W ISDN Digital	Volume Sensitive		
15		Labor	$	
16		RTU Fees	$	$
17		Volume Insensitive RTU	$	$

Local Measured Usage - per Call

	Cost Element	C Initial Minute	D Additional Minute
	2W Analog Port		
21	Peak	$	$
22	Off-Peak	$	$
23	2W ISDN Digital Port	$	$
24	4W ISDN DS1 Digital Port	$	$

EXPLANATION OF FOOTNOTES

FLORIDA UNBUNDLED PORTS
COST STUDY DOCUMENTATION

[1] First item on service order.

A

[2] Usage costs are in addition to these costs. As an example, average usage characteristics for a 2W analog port would indicate an additional average monthly cost of:

9 Residential $

10 Business $

11 PBX $

[3] The Volume Insensitive RTU Fees occur on a per office basis. The costs displayed in this summary have been divided by the per office demand.

[4] The nonrecurring RTU fee can be amortized over the economic life of the digital switch, 120 months.

[5] Additional ports, for the same physical location.

SECTION 4

SECTION 4

COST DEVELOPMENT - RECURRING & NONRECURRING

FLORIDA UNBUNDLED PORTS
COST STUDY DOCUMENTATION

This section defines the cost development for the Florida Unbundled Ports.

Recurring Cost Development
The basic economic cost development is outlined in Section 2. Network architecture is determined, the necessary equipment is identified, vendor EF&I investments are calculated, factors and loadings are applied and the result is levelized for the study period. Annual cost factors are applied to convert the investment to cost. An internally developed model, ACE, is used to perform the mathematical calculations necessary to convert investments to costs. Since the results are linear with respect to the investment, a conversion factor by plant account code (and in-plant factor) can be developed. Tab 6 outlines the development of the factor; a $10,000 investment was run through the ACE model. To obtain the factor, the monthly cost is divided by 10,000.

As mentioned in Section 2, the SCIS (Switching Cost Information System) model lays the foundation for developing the vendor EF&I investments. The model outputs reflect vendor design criteria, BellSouth engineering rules, and customer usage characteristics.

Workpapers 20-24, where applicable, develop the investment and convert the investment to monthly costs.

Workpaper 22 of the 2-Wire ISDN Port Study (Tab 4B)develops the Right To Use (RTU) expense per port termination. RTU fees are both volume sensitive, sold on a per BRI or per Switch Module (SM) basis, and volume insensitive, sold per office. The TSLRIC Unit Costs are developed by adding the LRIC Unit Costs (volume sensitive) to the volume insensitive unit costs (per office costs divided by demand).

Workpaper 33 of the 4-Wire ISDN DS1 Port Study (Tab 4E) develops the RTU expense per port termination. As with the 2-Wire ISDN Port, the RTU fees are both volume sensitive and volume insensitive. The TSLRIC Unit Costs are developed by adding the LRIC Unit Costs to the volume insensitive unit costs.

Nonrecurring Cost Development

Nonrecurring costs are one-time costs incurred as a result of provisioning, installing and disconnecting service and completion of orders for Unbundled Ports.

Company subject matter experts identify the work functions involved in the provisioning of the Unbundled Ports. These work functions are then used to describe the flow of work within the various work centers involved in provisioning the element.

The next step in the development of nonrecurring costs is to determine work times for each work function associated with the nonrecurring costs of the Unbundled Ports. The work times of the various work groups are determined from Subject Matter Expert inputs.

A spreadsheet model is used to incorporate the specific work functions and labor rates. In order to arrive at the nonrecurring cost for the element studied, the work times for each work function required is multiplied by the appropriate directly assigned labor rate. The labor inflation factor is used to bring the labor rate to the study period and gross receipts tax is added.

Next, the individual work function costs are accumulated into the total cost for the cost element studied.

The basic process by which nonrecurring costs are calculated consists of combining unit work times with hourly costs of each specific service category. These labor times, and service order related work times, are multiplied by the directly assigned labor rates for the work groups performing the activities.

Utilizing work functions, work times and labor rates, disconnect costs are calculated in the same manner as the installation costs. Since the labor costs will occur in the future, the current labor rates are inflated to that future period in time and then discounted to the present. The disconnect cost is added to the installation cost and the gross receipts tax is applied to develop the total nonrecurring cost.

Workpapers 30-31 (if needed) detail the development of the nonrecurring costs.

Local Measured Usage

Local measured usage costs were developed through the utilization of the Network Cost Analysis Tool (NCAT), version 4.1. This model was developed and is maintained by Bellcore.

Bellcore's Network Cost Analysis Tool - Production Module (NCAT) is used to develop long run incremental costs for various services, including Local, MTS, WATS, WatsSaver® service, 800, and Switched

Access. The NCAT application has four modules. They are the report system, calculator, usage and the database modules. The database module contains files that must be populated in order to use the application. More specifically, the end office, tandem, facility, tandem homing arrangement, point of termination (POT), POT homing arrangement, alias, annual cost factor, facility/termination unit investment, SCIS Model Office Results Transfer (SMORT), switch mix and study parameters files must be either built or obtained from appropriate sources for input to NCAT.

The end office, tandem, tandem homing arrangement, point of termination, and switch mix files are developed from Company databases such as Local Switching Demand and Facility (LSDF), Local Exchange Routing Guide (LERG), General Trunk Forecast (GTF), and Interexchange Carrier Access Database System (ICADS). The information in the study parameter files is obtained from the Call Setup application and the Network department. Some of the fields are user defined.

The SMORT file is obtained from the Switching Cost Information System (SCIS) module. This file contains the necessary information to develop switch investments for DMS, DCO and 5ESS technologies and their corresponding remotes.

The facility or TIRKS file is obtained from the Information Technologies (IT) organization. This file contains the trunking information for toll and switched access services for the state under study.

The investments in the Facility Termination Unit Investment (FTUI) file are obtained from the Economic Costs Fundamental Interoffice Group. This file contains banded facility and termination investments for each plant account used in the service under study.

The point-to-point usage data for toll and switched access is obtained from the IT department. The data is preprocessed into usage file format defined and required by NCAT. Local service point-to-point usage is developed using Subscriber Line Usage Study (SLUS) data and NCAT's LOCALPRO module.

Once all the files in the database are populated and the usage files are obtained and loaded, the NCAT calculator can be invoked. The calculator's main function is to produce long run incremental costs in the form of the costs for the initial and additional minute of use by distance band and by time of day or rate period; but, in order to develop the long run incremental cost, a selected demand change percent or stimulation factor is used to determine "offered load" (messages and minutes) for the service under study. The network component costs are based on the amount of resources necessary to carry this "offered load". This cost is structured into two components: setup and duration.

The setup and duration costs are used to develop costs for an initial and an additional minute in the following manner; the duration cost is the cost for the additional minute. The costs for an initial minute is the sum of the setup cost per message, the volume sensitive expense per message and the duration cost per minute.

The results from the NCAT model are contained in a separate tab labeled Local Usage. The development of incremental cost above Local Measured Usage is outlined in Workpapers 40-42, if required.

SECTION 4A

Unbundled Exchange Ports
Monthly Costs – Summary

State: Florida
Workpaper: 20
Page: 1 of 1
Date: 08/09/96

	A	B	C
LN	Description	Source	Amount
1	Ports [1]		
2	Residential	WP21, LN32	
3	Business	WP21, LN32	
4	PBX	WP21, LN32	
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30	**Note:**		
31	[1] The non–traffic sensitive switch termination does not vary by class of service.		
32	The equipment required is the same for Residence, Business and PBX terminations.		
33			
34			
35			

Unbundled Exchange Ports
Monthly Costs – Ports

State: Florida
Workpaper: 21
Page: 1 of 1
Date: 08/09/96

	A	B	C
LN	Description	Source	Amount
1	**5ESS Calculations**		
2	Investment	SCIS/MO – 5ESS Line Termination Report	
3	MDF & Protector		
4	NTS Switching Investment		
5			
6	Investment per Port	LN3+LN4	
7			
8	Account Code for Investment		377C
9			
10	Conversion Factor – Investment to Cost	ACE Report 20, Total Monthly Cost/10,000	0.027047
11			
12	**5ESS Monthly Cost**	LN6*LN10	
13			
14	**DMS Calculations**		
15	Investment	SCIS/MO – DMS Line Termination Report	
16	MDF & Protector		
17	NTS Switching Investment		
18			
19	Investment per Port	LN16+LN17	
20			
21	Account Code for Investment		377C
22			
23	Conversion Factor – Investment to Cost	ACE Report 20, Total Monthly Cost/10,000	0.027047
24			
25	**DMS Monthly Cost**	LN19*LN23	
26			
27	**Meld Calculations**		
28	Technology Distribution	D&F Database – NALs	
29	5ESS		68.5%
30	DMS		31.5%
31			
32	**Melded Monthly Cost**	LN12*LN29+LN25*LN30	
33			
34			
35			

Unbundled Exchange Ports
Nonrecurring Costs – Summary

State: Florida
Workpaper: 30
Page: 1 of 1
Date: 08/09/96

	A	B	C
LN	Description	Source	Amount
1	**Nonrecurring Cost – First**		
2	Residential	WP31A, LN14	
3	Business	WP31A, LN30	
4	PBX	WP31B, LN14	
5			
6	**Nonrecurring Cost – Additional**		
7	Residential	WP32A, LN14	
8	Business	WP32A, LN30	
9	PBX	WP32B, LN14	
10			
11	RTU Fee, per Port [1]	WP34, LN10	
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30	[1] Note: The RTU fee can be amortized over the economic life of the switch.		
31	This unit recurring equivalent is (WP34, LN16):		$0.31
32			
33			
34			
35			

Unbundled Exchange Ports
Nonrecurring Costs – First
Residence & Business

State: Florida
Workpaper: 31A
Page: 1 of 1
Date: 08/09/96

		A	B	C	D	E	F
LN	**Description**	**Hours**	**Labor Rate**	**Inflation Factor (WP35, LN19)**	**GRT Factor**	**Disconnect Factor**	**Nonrecurring Cost**
1	**Residential**						
2	**Local Carrier Service Center (LCSC)**						
3	**Installation**		$38.30	1.0652	1.0152		
4	**Disconnect**		$38.30	1.0652	1.0152	0.9114	
5							
6	**Line and Number Administration** [1]						
7	**Installation**		$30.21	1.0652	1.0152		
8	**Disconnect**		$30.21	1.0652	1.0152	0.9114	
9							
10	**CO Install, Maintenance & Administration – Software**						
11	**Installation**		$37.38	1.0652	1.0152		
12	**Disconnect**		$37.38	1.0652	1.0152	0.9114	
13							
14	**Total Nonrecurring Cost – Residence**		Sum (LN3...LN12)				
15							
16							
17	**Business**						
18	**Local Carrier Service Center (LCSC)**						
19	**Installation**		$38.30	1.0652	1.0152		
20	**Disconnect**		$38.30	1.0652	1.0152	0.8981	
21							
22	**Line and Number Administration** [1]						
23	**Installation**		$30.21	1.0652	1.0152		
24	**Disconnect**		$30.21	1.0652	1.0152	0.8981	
25							
26	**CO Install, Maintenance & Administration – Software**						
27	**Installation**		$37.38	1.0652	1.0152		
28	**Disconnect**		$37.38	1.0652	1.0152	0.8981	
29							
30	**Total Nonrecurring Cost – Business**		Sum (LN19...LN28)				
31							
32	[1] **Note:**						
33	Function performed by Network Services Clerical.						
34							
35							

Unbundled Exchange Ports
Nonrecurring Costs – First
PBX

State: Florida
Workpaper: 31B
Page: 1 of 1
Date: 08/09/96

		A	B	C	D	E	F
LN	**Description**	**Hours**	**Labor Rate**	**Inflation Factor (WP35, LN19)**	**GRT Factor**	**Disconnect Factor**	**Nonrecurring Cost**
1	**PBX**						
2	**Local Carrier Service Center (LCSC)**						
3	Installation		$38.30	1.0652	1.0152		
4	Disconnect		$38.30	1.0652	1.0152	0.8193	
5							
6	***Line and Number Administration*** [1]						
7	Installation		$30.21	1.0652	1.0152		
8	Disconnect		$30.21	1.0652	1.0152	0.8193	
9							
10	**CO Install, Maintenance & Administration – Software**						
11	Installation		$37.38	1.0652	1.0152		
12	Disconnect		$37.38	1.0652	1.0152	0.8193	
13							
14	**Total Nonrecurring Cost – PBX**		Sum (LN3...LN12)				
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32	[1] **Note:**						
33	Function performed by Network Services Clerical.						
34							
35							

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Unbundled Exchange Ports
Nonrecurring Costs -- Additional
Residence & Business

State: Florida
Workpaper: 32A
Page: 1 of 1
Date: 08/09/96

		A	B	C	D	E	F
LN	**Description**	**Hours**	**Labor Rate**	**Inflation Factor (WP35, LN19)**	**GRT Factor**	**Disconnect Factor**	**Nonrecurring Cost**
1	***Residence***						
2	**Local Carrier Service Center (LCSC)**						
3	Installation		$38.30	1.0652	1.0152		
4	Disconnect		$38.30	1.0652	1.0152	0.9114	
5							
6	**Line and Number Administration** [1]						
7	Installation		$30.21	1.0652	1.0152		
8	Disconnect		$30.21	1.0652	1.0152	0.9114	
9							
10	**CO Install, Maintenance & Administration -- Software**						
11	Installation		$37.38	1.0652	1.0152		
12	Disconnect		$37.38	1.0652	1.0152	0.9114	
13							
14	**Total Nonrecurring Cost -- Residence**		Sum (LN3...LN12)				
15							
16							
17	**Business**						
18	***Local Carrier Service Center (LCSC)***						
19	Installation		$38.30	1.0652	1.0152		
20	Disconnect		$38.30	1.0652	1.0152	0.8981	
21							
22	**Line and Number Administration** [1]						
23	Installation		$30.21	1.0652	1.0152		
24	Disconnect		$30.21	1.0652	1.0152	0.8981	
25							
26	**CO Install, Maintenance & Administration -- Software**						
27	Installation		$37.38	1.0652	1.0152		
28	Disconnect		$37.38	1.0652	1.0152	0.8981	
29							
30	**Total Nonrecurring Cost -- Business**		Sum (LN19...LN28)				
31							
32	[1] ***Note:***						
33	Function performed by Network Services Clerical.						
34							
35							

Unbundled Exchange Ports
Nonrecurring Costs – Additional
PBX

State: Florida
Workpaper: 32B
Page: 1 of 1
Date: 08/09/96

		A	B	C	D	E	F
LN	**Description**	**Hours**	**Labor Rate**	**Inflation Factor (WP35, LN19)**	**GRT Factor**	**Disconnect Factor**	**Nonrecurring Cost**
1	**PBX**						
2	**Local Carrier Service Center (LCSC)**						
3	Installation		$38.30	1.0652	1.0152		
4	Disconnect		$38.30	1.0652	1.0152	0.8193	
5							
6	**Line and Number Administration** [1]						
7	Installation		$30.21	1.0652	1.0152		
8	Disconnect		$30.21	1.0652	1.0152	0.8193	
9							
10	**CO Install, Maintenance & Administration – Software**						
11	Installation		$37.38	1.0652	1.0152		
12	Disconnect		$37.38	1.0652	1.0152	0.8193	
13							
14	**Total Nonrecurring Cost – PBX**		Sum (LN3...LN12)				
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32	[1] **Note:**						
33	Function performed by Network Services Clerical.						
34							
35							

Unbundled Exchange Ports
Development of RTU Fees

State: Florida
Workpaper: 34
Page: 1 of 1
Date: 08/09/96

	A	B	C
LN	Description	Source	Amount
1	**Ports**		
2	5ESS	Contract PR-6700-B	
3	DMS	None Required	
4			
5	**Meld Calculations**		
6	Technology Distribution	D&F Database - NALs	
7	5ESS		68.5%
8	DMS		31.5%
9	Melded RTU Fee	LN2*LN7+LN3*LN8	
10	Melded RTU w/GRT	LN9*LN24	
11			
12	**Port RTU Fee Expressed as Unit Recurring Equivalent**		
13	Melded RTU Fee w/ GRT	LN10	
14	Monthly Interest Rate	Based on 13.2% Annual Interest Rate	1.04%
15	Term (Months)	Digital Equipment Economic Life	120
16	Unit Recurring Equivalent	@pmt(LN13,LN14,LN15)	
17			
18			
19			
20			
21			
22			
23			
24	GRT Factor	Fundamental Cost Group	1.0152
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			

Unbundled Exchange Ports
Development of Inflation Factor

State: Florida
Workpaper: 35
Page: 1 of 1
Date: 08/09/96

LN	Description	Amount Year 1	Amount Year 2	Amount Year 3
1	**Labor Levelizing Factor Calculation**			
2				
3	Inward Movement	1	1	1
4				
5	Present Worth Factors [1]	0.8834	0.7804	0.6894
6				
7				
8				
9	Inflation per Year (Labor)	1.032	1.035	1.034
10	Cummulative Inflation (Year 1, Year 1 * Year 2, etc..)	1.032	1.068	1.104
11				
12				
13	Present Worth of Inward Movement (LN3*LN5)	0.8834	0.7804	0.6894
14	Present Worth of Cummulative Inflation (LN5*LN10)	0.9117	0.8335	0.7614
15				
16	Sum of Present Worth of Inward Movement (Sum LN13)	2.35		
17	Sum of Present Worth of Cummulative Inflation (Sum LN14)	2.51		
18				
19	Levelizing Factor (LN17/LN16)	1.0652		
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30	[1] Present Worth Factor = 1/(1+.0132) ^ n			
31	n = Year; 13.2% = Cost of Money			
32				
33				
34				
35				

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SECTION 4B

Summary of Costs

State: Florida
Workpaper: 10
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		A	B	C
	Rate Element	**Monthly**	**Nonrecurring First**	**Nonrecurring Additional**
7	**2W ISDN Digital Port**			
	Usage			
9	Initial Minute			
10	Additional Conversation Minutes (per Minute)			

2W ISDN Digital Port
Summary of Monthly Costs

State: Florida
Workpaper: 20
Page: 1 of 1
Date: 08/09/96

	A	B	C
LN	Description	Source	Amount
1	**Switching Costs**	WP21, LN26	
2			
3	**RTU Fees** [1]	WP22, LN103	
4			
5	**Total Monthly Cost**	LN1+LN3	
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30	[1] **Note:**		
31	The RTU fee is comprised of volume sensitive and volume insensitive costs expressed on a per termination basis.		
32	The volume sensitive cost is:		
33	The volume insensitive cost is:		
34			
35			
36			
37			
38			
39			
40			

2W ISDN Digital Port
Monthly Costs – Switching

State: Florida
Workpaper: 21
Page: 1 of 1
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	A	B	C
LN	Description	Source	Amount
1	**5ESS Calculations**		
2	Investment per ISDN Port	SCIS/MO – 5ESS ISDN Line Termination Report	
3			
4	Account Code for Investment		377C
5			
6	Conversion Factor – Investment to Cost	ACE Report 20, Total Monthly Cost/10,000	0.027047
7			
8	**5ESS Monthly Cost**	LN2*LN6	
9			
10			
11	**DMS Calculations**		
12	Investment per ISDN Port	SCIS/MO – DMS ISDN Line Termination Report	
13			
14	Account Code for Investment		377C
15			
16	Conversion Factor – Investment to Cost	ACE Report 20, Total Monthly Cost/10,000	0.027047
17			
18	**DMS Monthly Cost**	LN12*LN16	
19			
20			
21	**Meld Calculations**		
22	Technology Distribution	D&F Database – NALs	
23	5ESS		68.5%
24	DMS		31.5%
25			
26	**Melded Monthly Cost**	LN8*LN23+LN18*LN24	
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			

2W ISDN Digital Port
Development of RTU Fee Costs

State: Florida
Workpaper: 22
Page: 1 of 3
Date: 08/09/96

	A	B	C
LN	Description	Source	Amount
1	RTU Packages -- Discounted Cost		
2	5ESS		
3	National ISDN I Package	Per Office	
4	NIS1BSW National ISDN Base		
5	NIS1SBB Standard BRI Base		
6	NIS1DAT Basic Data for Standard BRI		
7	NIS1CSD Deluxe CSD for Standard BRI		
8	NIS1PSD Deluxe PSD for BRI		
9	ISBRIDS BRI Data Service Package		
10	National ISDN II Package	Per Office	
11	Total per Office	LN3+LN10	
12	ISDNOAM ISDN OA&M Package	Per SM	
13	GX75RTU X.75' Packet Gateway Access	Per SM	
14	CCSQRTU Q931/SS7 Interworking	per SM	
15	Total per SM RTU Fees	LN12+LN13+LN14	
16	ISBRIDS BRI Data Services Package	Per BRI	
17			
18	DMS100		
19	NTX750AB ISDN Basic Access		
20	Per 2B+D		
21	Per 1B+D		
22	Per Switch		
23	NTX753AB ISDN Advanced Signalling		
24	NTX754AB ISDN EKTS		
25	NTX755AC ISDN Supplementary Services		
26	NTX756AA ISDN Display Services		
27	NTX757AA ISDN/ISUP Interworking		
28	NTX767AA ISDN Routing & Digital Analysis		
29	DMS-IPH Software Packages		
30	NTXP47AA -- Packet Handler base		
31	NTXH77AA -- Channelized Access on LPP/LIS		
32	NTXP75AA -- DMS PH SERVORD		
33	NTX159AA ISDN Automatic Message Accounting		
34	NTXJ51AA ISDN Digital Test Access	Per Office	
35	NTXJ51AA ISDN Digital Test Access	Per BRI	
36	NTX119AA MDC Message Waiting		
37	NTXN89AA Testing ISDN Services		
38	NTXN91AA TL-1 Testing Interface Base		
39	NTXN93AA TL-1 Testing ISDN Services		
40	NTXR55AA TL-1 Parsing Interface Base		
41	NTX167AB CCS7 Trunk Signaling		
42	NTXF92AA ISDN OA&M Base		
43	NI2 National ISDN II		
44	Total per Switch Expenses	@SUM(LN19..LN43)-LN21-LN20-LN35	
45			

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2W ISDN Digital Port
Development of RTU Fee Costs

State: Florida
Workpaper: 22
Page: 2 of 3
Date: 08/09/96

	A	B	C
LN	Description	Source	Amount
46	**Model Office Statistics**	Network	
47			
48			
49	Total BRI's	Melded 5ESS & DMS	
50	1B+D		
51	2B+D		
52			
53	**Technology Distribution**	D&F Database – NALs	
54	5ESS		68.5%
55	DMS		31.5%
56			
57	Monthly Interest Rate	Based on Annual 13.2% Rate	1.04%
58			
59	Term (Months)	377C Economic Life	120
60			
61	**Volume Sensitive RTU Fees**		
62	**5ESS**		
63	Per BRI	LN16	
64	Per SM	LN15	
65			
66	Capacity per SM (Based on current CCS load)	Network	
67			
68	Total 5ESS per BRI	LN63+LN64/LN66	
69			
70	**DMS**		
71	Per 1B+D	LN21	
72	Per 2B+D	LN20	
73			
74	Probability of 1B+D	LN50/LN49	
75	Probability of 2B+D	LN51/LN49	
76			
77	Melded 1B+D & 2B+D	LN71*LN74+LN72*LN75	
78			
79	Per BRI	LN35	
80			
81	Total DMS per BRI	LN77+LN79	
82			
83	Melded 5ESS & DMS	LN54*LN68+LN55*LN81	
84			
85	Volume Sensitive Expressed as Unit Recurring	@PMT(LN83,LN57,LN59)	
86			
87	Unit Recurring Equivalent w/GRT	LN85*LN105	
88			
89			
90			

2W ISDN Digital Port
Development of RTU Fee Costs

State: Florida
Workpaper: 22
Page: 3 of 3
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	A	B	C
LN	**Description**	**Source**	**Amount**
91	**Volume Insensitive RTU Fee (per Office)**		
92	5ESS	LN11	
93	DMS	LN44	
94			
95	Melded per Office	LN54*LN92+LN55*LN93	
96			
97	Volume Insensitive per BRI	LN95/LN49	
98			
99	Volume Insensitive Expressed as Unit Recurring	@PMT(LN95,LN57,LN59)	
100			
101	Unit Recurring w/GRT	LN99*LN105	
102			
103	Total RTU per BRI	LN87+LN101	
104			
105	GRT Factor	Fundamental Cost Group	1.0152
106			
107			
108			
109	**Note:**		
110	If left as a nonrecurring cost, the per BRI RTU Fee would be:		
111			
112	Volume Sensitive:	LN83*LN105	
113	Volume Insensitive:	LN97*LN105	
114			
115			
116			
117			
118			
119			
120			
121			
122			
123			
124			
125			
126			
127			
128			
129			
130			
131			
132			
133			
134			
135			

2W ISDN Digital Port
Summary of Nonrecurring Costs

State: Florida
Workpaper: 30
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	A	B	C
LN	Description	Source	Amount
1	Nonrecurring Cost – First	WP31, LN33	
2			
3	Nonrecurring Cost – Additional	WP32, LN33	
4			
5	RTU Fees [1]		
6	Volume Sensitive	WP22, LN112	
7	Volume Insensitive	WP22, LN113	
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30	[1] Note: The RTU Fees can be ammortized over the economic life of the switch.		
31	These unit recurring eqivalent fees have been added to the switching recurring costs.		
32	This sum is displayed on WP20, LN5.		
33			
34			
35			
36			
37			
38			
39			
40			

2W ISDN Digital Port
Nonrecurring Costs – First

State: Florida
Workpaper: 31
Page: 1 of 1
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		A	B	C	D	E	F
LN	Description	Hours	Labor Rate	Inflation Factor (WP33, LN19)	GRT Factor	Disconnect Factor	Nonrecurring Cost
1	Local Carrier Service Center (LCSC)						
2	Installation		$38.30	1.0652	1.0152		
3	Disconnect		$38.30	1.0652	1.0152	0.8014	
4							
5	Circuit Provisioning Center (CPC)						
6	Installation		$34.41	1.0652	1.0152		
7	Disconnect		$34.41	1.0652	1.0152	0.8014	
8							
9	Facilities Assignment (FACS)						
10	Installation		$31.28	1.0652	1.0152		
11	Disconnect		$31.28	1.0652	1.0152	0.8014	
12							
13	CO Install & Maintenance – Circuit & Facility						
14	Installation		$39.09	1.0652	1.0152		
15	Disconnect		$39.09	1.0652	1.0152	0.8014	
16							
17	Network Plug–in Administration (PICS)						
18	Installation		$41.65	1.0652	1.0152		
19	Disconnect		$41.65	1.0652	1.0152	0.8014	
20							
21	CO Install, Maintenance & Administration – Software						
22	Installation		$37.38	1.0652	1.0152		
23	Disconnect		$37.38	1.0652	1.0152	0.8014	
24							
25	Network Services Clerical (SOP89)						
26	Installation		$30.21	1.0652	1.0152		
27	Disconnect		$30.21	1.0652	1.0152	0.8014	
28							
29	Special Services Coordinate & Test (SSC)						
30	Installation		$36.41	1.0652	1.0152		
31	Disconnect		$36.41	1.0652	1.0152	0.8014	
32							
33	Total Nonrecurring	Sum(LN2...LN31)					
34							
35							

2W ISDN Digital Port
Nonrecurring Costs – Additional

State: Florida
Workpaper. 32
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		A	B	C	D	E	F
LN	**Description**	**Hours**	**Labor Rate**	**Inflation Factor (WP33, LN19)**	**GRT Factor**	**Disconnect Factor**	**Nonrecurring Cost**
1	**Local Carrier Service Center (LCSC)**						
2	Installation		$38.30	1.0652	1.0152		
3	Disconnect		$38.30	1.0652	1.0152	0.8014	
4							
5	**Circuit Provisioning Center (CPC)**						
6	Installation		$34.41	1.0652	1.0152		
7	Disconnect		$34.41	1.0652	1.0152	0.8014	
8							
9	**Facilities Assignment (FACS)**						
10	Installation		$31.28	1.0652	1.0152		
11	Disconnect		$31.28	1.0652	1.0152	0.8014	
12							
13	**CO Install & Maintenance – Circuit & Facility**						
14	Installation		$39.09	1.0652	1.0152		
15	Disconnect		$39.09	1.0652	1.0152	0.8014	
16							
17	**Network Plug–in Administration (PICS)**						
18	Installation		$41.65	1.0652	1.0152		
19	Disconnect		$41.65	1.0652	1.0152	0.8014	
20							
21	***CO Install, Maintenance & Administration – Software***						
22	Installation		$37.38	1.0652	1.0152		
23	Disconnect		$37.38	1.0652	1.0152	0.8014	
24							
25	**Network Services Clerical (SOP89)**						
26	Installation		$30.21	1.0652	1.0152		
27	Disconnect		$30.21	1.0652	1.0152	0.8014	
28							
29	**Special Services Coordinate & Test (SSC)**						
30	Installation		$36.41	1.0652	1.0152		
31	Disconnect		$36.41	1.0652	1.0152	0.8014	
32							
33	**Total Nonrecurring**	Sum(LN2...LN31)					
34							
35							

Unbundled Exchange Ports
Development of Inflation Factor

State: Florida
Workpaper: 33
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LN	Description	Amount	Amount	Amount
1	**Labor Levelizing Factor Calculation**	**Year 1**	**Year 2**	**Year 3**
2				
3	Inward Movement	1	1	1
4				
5	Present Worth Factors [1]	0.8834	0.7804	0.6894
6				
7				
8				
9	Inflation per Year (Labor)	1.032	1.035	1.034
10	Cummulative Inflation (Year 1, Year 1 * Year 2, etc..)	1.032	1.068	1.104
11				
12				
13	Present Worth of Inward Movement (LN3*LN5)	0.8834	0.7804	0.6894
14	Present Worth of Cummulative Inflation (LN5*LN10)	0.9117	0.8335	0.7614
15				
16	Sum of Present Worth of Inward Movement (Sum LN13)	2.35		
17	Sum of Present Worth of Cummulative Inflation (Sum LN14)	2.51		
18				
19	Levelizing Factor (LN17/LN16)	1.0652		
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30	[1] Present Worth Factor = 1/(1+.0132) ^ n			
31	n = Year; 13.2% = Cost of Money			
32				
33				
34				
35				

2W ISDN Digital Port
Incremental ISDN Usage Cost

State: Florida
Workpaper: 40
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Date: 08/09/96

		A	B	C
	LN	Description	Source	Amount
	1	**Call Set-up Incremental BH Investment**		
	2	5ESS	WP41, LN16	
	3	DMS	WP42, LN8	
	4			
	5	Account Code for Investment		377C
	6			
	7	Conversion Factor – Investment to Cost	ACE Report 20, Total Monthly Cost/10,000	0.027047
	8			
	9	**Monthly Cost**		
	10	5ESS	LN2*LN7	
	11	DMS	LN3*LN7	
	12			
	13	**Technology Distribution**	D&F Database – NALs	
	14	5ESS		68.5%
	15	DMS		31.5%
	16			
17	17	**Melded BH Call Set-up Cost**	LN10*LN14+LN11*LN15	
	18			
	19	**MOU Incremental BH Investment**		
	20	5ESS	No Incremental Cost	
	21	DMS	WP42, LN11	
	22			
	23	**Monthly Cost**		
	24	5ESS	LN7*LN20	
	25	DMS	LN7*LN21	
	26			
27	27	**Melded BH MOU Cost**	LN14*LN24+LN15*LN25	
	28			
	29	**Conversion of BH Cost to Any Time, Any Day**		
	30	Factors		
	31	BH/Full Day Ratio	Network Study (NCAT)	10%
	32	Days per Month	365/12	30.4
	33			
	34	Calculation		
35	35	Call Set-up	LN17*LN31/LN32	
	36	MOU	LN27*LN31/LN32	
	37			
	38	Cost for First Minute of Use (Incremental to POTS)	LN35+LN36	
	39	Cost for Additional Minute (Incremental to POTS)	LN36	
	40			
	41	Cost for Call Setup (POTS)	NCAT	
	42	Cost for Additional Minute (POTS)	NCAT	
	43			
	44	**Total Cost for Initial Minute**	LN38+LN41+LN42	
45	45	**Total Cost for Additional Minute**	LN39+LN42	

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2W ISDN Digital Port
Development of BH Incremental Usage Investment 5ESS

State: Florida
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	A	B	C
LN	Description	Source	Amount
1	**Incremental Cost of ISDN Usage**		
2	**5ESS Calculations**		
3	Call Set-up		
4	EPHC		
5			
6			
7			
8			
9			
10	**Packet**		
11			
12			
13			
14			
15			
16	**Incremental Call Set-up Investment**	LN8+LN14	
17			
18	**Model Office Outputs**	SCIS/MO Output	
19	IMO2 SM Realtime (ISDN SMs)		
20	IMO5 Access Packet per Second		
21			
22			
23	**User Input**	Network	
24	IP1 BH ISDN-ISDN IAO Calls		
25	IP2 BH ISDN-POTS IAO Calls		
26	IP3 BH POTS-ISDN IAO Calls		
27	IP4 BH ISDN-Trunk Calls		
28	IP5 BH Trunk-ISDN Calls		
29			
30	**SCIS/IN Database Items**		
31	AT3 Realtime per EPHC	Assumption Table Item #3	
32	RS569 BRI-BRI Increment	SM Realtime Table Item #569	
33	RS569.02 BRI-Line Increment	SM Realtime Table Item #569.02	
34	RS569.03 Line-BRI Increment	SM Realtime Table Item #569.03	
35	RS569.06 BRI-Trunk Increment	SM Realtime Table Item #569.06	
36	RS569.07 Trunk-BRI Increment	SM Realtime Table Item #569.07	
37	PT569 BRI-BRI IAO	Packet Table Item #569	
38	PT569.01 BRI-POTS; POTS-BRI IAO	Packet Table Item #569.01	
39	PT569.02 BRI-Trunk	Packet Table Item #569.02	
40	PT569.03 Trunk-BRI	Packet Table Item #569.03	
41			
42			
43			
44			
45			

2W ISDN Digital Port
Development of BH Incremental Usage Investment DMS

State: Florida
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	A	B	C
LN	Description	Source	Amount
1	Incremental Cost of ISDN Usage		
2	DMS Calculations		
3	Call Set-up		
4	Getting Started		
5			
6			
7			
8			
9			
10	MOU[1]		
11	Line CCS		
12			
13	Model Office Outputs	SCIS/MO Output	
14	IMO4 ISDN Line CCS		
15	MO1 Getting Started		
16	MO4 Line CCS		
17			
18	User Input	Network	
19	IP1 BH ISDN-ISDN IAO Calls		
20	IP2 BH ISDN-POTS IAO Calls		
21	IP3 BH POTS-ISDN IAO Calls		
22	IP4 BH ISDN-Trunk Calls		
23	IP5 BH Trunk-ISDN Calls		
24			
25	SCIS/IN Database Items		
26	RT569 BRI-BRI Increment	Realtime Table Item #569	
27	RT569.02 BRI-Line Increment	Realtime Table Item #569.02	
28	RT569.03 Line-BRI Increment	Realtime Table Item #569.03	
29	RT560.06 BRI-Trunk Increment	Realtime Table Item #569.06	
30	RT569.07 Trunk-BRI Increment	Realtime Table Item #569.07	
31			
32			
33			
34			
35			
36			
37			
38			
39			
40	Note:		
41	[1] In the 5ESS, the ISDN line CCS is < POTS Line CCS.		
42	Thus, there is no incremental cost for MOU in the 5ESS.		
43			
44			
45			

SECTION 4C

Summary of Costs

State: Florida
Workpaper: 10
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		A	B	C
	Rate Element	**Monthly**	**Nonrecurring First**	**Nonrecurring Additional**
7	**2W DID Port**			

Note:
Costs do not include establishing the first trunk group and groups of numbers.

2W DID Port
Summary of Monthly Costs

State: Florida
Workpaper: 20
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	A	B	C
LN	Description	Source	Amount
2	**Switching Costs**	WP21, LN15	[redacted]
3			
4	**Circuit Equipment**	WP22, LN25	[redacted]
5			
6	**Total Monthly Cost**	LN1+LN3	[redacted]
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
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37			
38			
39			
40			

2W DID Port
Calculation of Monthly Switching Costs

State: Florida
Workpaper: 21
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Date: 08/09/96

A B C

LN	Description	Source	Amount
1	**Investments per 2W DID Port**		
2	5ESS	WP23, LN6	
3	DMS	WP24, LN10	
4			
5	Melded Investment	LN2*LN12 +LN3*LN13	
6			377C
7	Account Code for Investment		
8			0.027047
9	Conversion Factor -- Investment to Cost	ACE Report 20, Total Monthly Cost/10,000	
10			
11	**Technology Distribution**	D&F Database -- NALs	68.5%
12	5ESS		31.5%
13	DMS		
14			
15	**Monthly Cost**	LN5*LN9	
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
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37			
38			
39			
40			

2W DID Port
Monthly Costs – Circuit Equipment

State: Florida
Workpaper: 22
Page: 1 of 1
Date: 08/09/96

	A	B	C
LN	Description	Source	Amount
1	**Circuit Equipment Required to Terminate 2W DID Port**		
2			
3	D4 Hardwire	Fundamental Study	
4	DSX Bay	Fundamental Study	
5			
6	Total Hardwire Investment	LN3+LN4	
7			
8	Account for Investment		357C
9			
10	Conversion Factor – Investment to Cost [1]	ACE Report 20, Total Monthly Cost/10,000	0.041306
11			
12	**Monthly Cost – Hardwire**	LN6*LN10	
13			
14	Common Plug-in	Fundamental Study	
15	2WR DPO Plug-in	Fundamental Study	
16			
17	Total Hardwire Investment	LN14+LN15	
18			
19	Account for Investment		357C
20			
21	Conversion Factor – Investment to Cost [2]	ACE Report 20, Total Monthly Cost/10,000	0.023414
22			
23	**Monthly Cost – Plug-in**	LN17*LN21	
24			
25	**Total Circuit Equipment Monthly Cost**		
26			
27			
28			
29			
30	**Note:**		
31	[1] Incorporates hardwire in-plant factor.		
32			
33	[2] Incorporates plug-in in-plant factor.		
34			
35			
36			
37			
38			
39			
40			

2W DID Port
Development of 5ESS Investments

State: Florida
Workpaper: 23
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	A	B	C
LN	**Description**	**Source**	**Amount**
1	**5ESS Investment Calculations**		
2	**EPHC**		
3			
4	**Hardware**		
5			
6	**Total Investment**	LN2+LN4	
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18	**Model Office Outputs**	SCIS/MO Output	
19	MO2 SM Realtime		
20			
21			
22			
23	**User Input**	Network	
24	IP1 BH DID Calls per Trunk		
25	IP2 Number of Trunks		
26			
27			
28			
29			
30	**SCIS/IN Database Items**		
31	AT3 Realtime per EPHC	Assumption Table Item 3	
32	RS22.03 DID Call per Trunk	Realtime Table Item 22.03	
33	ME6 Digital Trunk	Miscellaneous Equation Item 6	
34			
35			
36			
37			
38			
39	EPHC = Equivalent POTS half-call.		
40			

2W DID Port
Development of DMS Investment

State: Florida
Workpaper: 24
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	A	B	C
LN	**Description**	**Source**	**Amount**
1	**DMS Investment Calculations**		
2	**Getting Started**		
3			
4	**Hardware**		
5			
6	**Memory**		
7	Data Store		
8	Data Fill		
9			
10	**Total Investment**	LN2+LN4+LN7+LN8	
11			
12			
13	**Model Office Outputs**		
14	MO1 Getting Started	SCIS/MO Output	
15			
16			
17			
18	**User Input**	Network	
19	IP1 BH DID Calls per Trunk		
20	IP2 Number of Trunks		
21			
22			
23			
24			
25	**SCIS/IN Database Items**		
26	RT22 DID	Realtime Table Item 22	
27	MD22 DID Words	Memory Table Item MD22	
28	MF22 DID Words	Memory Table Item MF22	
29	IT15 Data Store Words	Investment Table Item 15	
30	IT16 Data Fill Words	Investment Table Item 16	
31	ME6 Digital Trunk	Miscellaneous Equation Item 6	
32			
33			
34			
35			
36			
37			
38			
39			
40			

2W DID Port
Nonrecurring Costs – Summary

State: Florida
Workpaper: 30
Page: 1 of 1
Date: 08/09/96

	A	B	C
LN	Description	Source	Amount
1	**Nonrecurring Cost – First**	WP31, LN30	
2			
3	**Nonrecurring Cost – Additional**	WP32, LN30	
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
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33			
34			
35			

2W DID Port
Nonrecurring Costs – First

State: Florida
Workpaper: 31
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		A	B	C	D	E	F
LN	Description	Hours	Labor Rate	Inflation Factor (WP34, LN19)	GRT Factor	Disconnect Factor	Nonrecurring Cost
1	**Local Carrier Service Center (LCSC)**						
2	Installation		$38.30	1.0652	1.0152		
3	Disconnect		$38.30	1.0652	1.0152	0.8193	
4							
5	**Circuit Provisioning Center (CPC)**						
6	Installation		$34.41	1.0652	1.0152		
7	Disconnect		$34.41	1.0652	1.0152	0.8193	
8							
9	**Network Services Clerical (SOP89)**						
10	Installation		$30.21	1.0652	1.0152		
11	Disconnect		$30.21	1.0652	1.0152	0.8193	
12							
13	**CO Install, Maintenance & Administration – Software**						
14	Installation		$37.38	1.0652	1.0152		
15	Disconnect		$37.38	1.0652	1.0152	0.8193	
16							
17	**CO Install & Maintenance – Circuit & Facility**						
18	Installation		$39.09	1.0652	1.0152		
19	Disconnect		$39.09	1.0652	1.0152	0.8193	
20							
21	**CO Administration – Circuit, Carrier & Facility**						
22	Installation		$36.05	1.0652	1.0152		
23	Disconnect		$36.05	1.0652	1.0152	0.8193	
24							
25	**RTU Fees**	WP33, LN19					
26							
27							
28							
29							
30	**Total Nonrecurring**	Sum(LN2...LN25)					
31							
32							
33							
34							
35							

2W DID Port
Nonrecurring Costs -- Additional

State: Florida
Workpaper: 32
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		A	B	C	D	E	F
LN	**Description**	**Hours**	**Labor Rate**	**Inflation Factor (WP34, LN19)**	**GRT Factor**	**Disconnect Factor**	**Nonrecurring Cost**
1	**Local Carrier Service Center (LCSC)**						
2	Installation		$38.30	1.0652	1.0152		
3	Disconnect		$38.30	1.0652	1.0152	0.8193	
4							
5	**Circuit Provisioning Center (CPC)**						
6	Installation		$34.41	1.0652	1.0152		
7	Disconnect		$34.41	1.0652	1.0152	0.8193	
8							
9	**Network Services Clerical (SOP89)**						
10	Installation		$30.21	1.0652	1.0152		
11	Disconnect		$30.21	1.0652	1.0152	0.8193	
12							
13	**CO Install, Maintenance & Administration -- Software**						
14	Installation		$37.38	1.0652	1.0152		
15	Disconnect		$37.38	1.0652	1.0152	0.8193	
16							
17	**CO Install & Maintenance -- Circuit & Facility**						
18	Installation		$39.09	1.0652	1.0152		
19	Disconnect		$39.09	1.0652	1.0152	0.8193	
20							
21	**CO Administration -- Circuit, Carrier & Facility**						
22	Installation		$36.05	1.0652	1.0152		
23	Disconnect		$36.05	1.0652	1.0152	0.8193	
24							
25	**RTU Fees**	WP33, LN19					
26							
27							
28							
29							
30	**Total Nonrecurring**	Sum(LN2...LN25)					
31							
32							
33							
34							
35							

2W DID Port
Development of RTU Fee Costs

State: Florida
Workpaper: 33
Page: 1 of 1
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LN	A Description	B Source	C Amount
1	DMS100 RTU Fees	Contract PR6900	
2	Per 100 Lines		
3	NTX100AA	Part of Buy-out w/NTI	
4			
5			
6			
7			
8			
9	5ESS RTU Fees	None Required	
10			
11	Technology Distribution	D&F Database - NALs	
12	5ESS		68.5%
13	DMS		31.5%
14			
15	Melded RTU Fee	LN3*LN13+LN9*LN12	
16			
17	GRT Tax Factor	Fundamental Cost Group	1.0152
18			
19	RTU w/GRT	LN15*LN17	
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			

Unbundled Exchange Ports
Development of Inflation Factor

State: Florida
Workpaper: 34
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LN	Description	Amount	Amount	Amount
1	**Labor Levelizing Factor Calculation**	**Year 1**	**Year 2**	**Year 3**
2				
3	Inward Movement	1	1	1
4				
5	Present Worth Factors [1]	0.8834	0.7804	0.6894
6				
7				
8				
9	Inflation per Year (Labor)	1.032	1.035	1.034
10	Cummulative Inflation (Year 1, Year 1 * Year 2, etc..)	1.032	1.068	1.104
11				
12				
13	Present Worth of Inward Movement (LN3*LN5)	0.8834	0.7804	0.6894
14	Present Worth of Cummulative Inflation (LN5*LN10)	0.9117	0.8335	0.7614
15				
16	Sum of Present Worth of Inward Movement (Sum LN13)	2.35		
17	Sum of Present Worth of Cummulative Inflation (Sum LN14)	2.51		
18				
19	Levelizing Factor (LN17/LN16)	1.0652		
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30	[1] Present Worth Factor = 1/(1+.0132) ^ n			
31	n = Year; 13.2% = Cost of Money			
32				
33				
34				
35				

Private/Proprietary: No disclosure outside BellSouth except by written agreement.

SECTION 4D

Summary of Costs

State: Florida
Workpaper: 10
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		A	B	C
	Rate Element	Monthly	Nonrecurring First	Nonrecurring Additional
7	4W DS1 DID Port			

Note:
Costs do not include establishing the first trunk group and groups of numbers.
Nonrecurring costs do not include service activation.

4W DS1 DID Port
Summary of Monthly Costs

State: Florida
Workpaper: 20
Page: 1 of 1
Date: 08/09/96

	A	B	C
LN	Description	Source	Amount
2	**Switching Costs**	WP21, LN15	
3			
4	**DSX**	WP22, LN7	
5			
6	**Total Monthly Cost**	LN1+LN3	
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			

4W DS1 DID Port
Calculation of Monthly Switching Costs

State: Florida
Workpaper: 21
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Date: 08/09/96

LN	Description	Source	Amount
	A	B	C
1	**Investments per 4W DS1 DID Port**		
2	5ESS	WP23, LN6	
3	DMS	WP24, LN10	
4			
5	Melded Investment	LN2*LN12 +LN3*LN13	
6			
7	Account Code for Investment		377C
8			
9	Conversion Factor – Investment to Cost	ACE Report 20, Total Monthly Cost/10,000	0.027047
10			
11	**Technology Distribution**	D&F Database – NALs	
12	5ESS		68.5%
13	DMS		31.5%
14			
15	**Monthly Cost**	LN5*LN9	
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			

4W DS1 DID Port
Monthly Costs – DSX

State: Florida
Workpaper: 22
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Date: 08/09/96

	A	B	C
LN	Description	Source	Amount
1	DSX Investment[1]	Fundamental Cost	
2			
3	Account Code [2]		357C
4			
5	Conversion Factor – Investment to Cost	ACE Report 20, Total Monthly Cost/10,000	0.041306
6			
7	Monthly Cost	LN1*LN5	
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30	Note:		
31	[1] This is for 1/2 DSX bay termination.		
32			
33	[2] Hardwire in-plant		
34			
35			
36			
37			
38			
39			
40			

4W DS1 DID Port
Development of 5ESS Investments

State: Florida
Workpaper: 23
Page: 1 of 1
Date: 08/09/96

	A	B	C
LN	Description	Source	Amount
1	5ESS Investment Calculations		
2	EPHC		
3			
4	Hardware		
5			
6	Total Investment	LN2+LN4	
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18	Model Office Outputs	SCIS/MO Output	
19	MO2 SM Realtime		
20			
21			
22			
23	User Input	Network	
24	IP1 BH DID Calls per Trunk		
25	IP2 Number of Trunks		
26			
27			
28			
29			
30	SCIS/IN Database Items		
31	AT3 Realtime per EPHC	Assumption Table Item 3	
32	RS22.03 DID Call per Trunk	Realtime Table Item 22.03	
33	ME6 Digital Trunk	Miscellaneous Equation Item 6	
34			
35			
36			
37			
38			
39			
40			

4W DS1 DID Port
Development of DMS Investment

State: Florida
Workpaper: 24
Page: 1 of 1
Date: 08/09/96

A B C

LN	Description	Source	Amount
1	**DMS Investment Calculations**		
2	**Getting Started**		
3			
4	**Hardware**		
5			
6	**Memory**		
7	Data Store		
8	Data Fill		
9			
10	**Total Investment**	LN2+LN4+LN7+LN8	
11			
12			
13	**Model Office Outputs**		
14	MO1 Getting Started	SCIS/MO Output	
15			
16			
17			
18	**User Input**	Network	
19	IP1 BH DID Calls per Trunk		
20	IP2 Number of Trunks		
21			
22			
23			
24			
25	**SCIS/IN Database Items**		
26	RT22 DID	Realtime Table Item 22	
27	MD22 DID Words	Memory Table Item MD22	
28	MF22 DID Words	Memory Table Item MF22	
29	IT15 Data Store Words	Investment Table Item 15	
30	IT16 Data Fill Words	Investment Table Item 16	
31	ME6 Digital Trunk	Miscellaneous Equation Item 6	
32			
33			
34			
35			
36			
37			
38			
39			
40			

Private/Proprietary:No disclosure outside BST w/o written agreement.

4W DS1 DID Port
Nonrecurring Costs – Summary

State: Florida
Workpaper: 30
Page: 1 of 1
Date: 08/09/96

	A	B	C
LN	Description	Source	Amount
1	**Nonrecurring Cost – First**	WP31, LN30	
2			
3	**Nonrecurring Cost – Additional**	WP32, LN30	
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
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22			
23			
24			
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26			
27			
28			
29			
30			
31			
32			
33			
34			
35			

4W DS1 DID Port
Nonrecurring Costs – First

State: Florida
Workpaper: 31
Page: 1 of 1
Date: 08/09/96

		A	B	C	D	E	F
LN	Description	Hours	Labor Rate	Inflation Factor (WP34, LN19)	GRT Factor	Disconnect Factor	Nonrecurring Cost
1	**Local Carrier Service Center (LCSC)**						
2	Installation		$38.30	1.0652	1.0152		
3	Disconnect		$38.30	1.0652	1.0152	0.8193	
4							
5	**Circuit Provisioning Center (CPC)**						
6	Installation		$34.41	1.0652	1.0152		
7	Disconnect		$34.41	1.0652	1.0152	0.8193	
8							
9	**Network Services Clerical (SOP89)**						
10	Installation		$30.21	1.0652	1.0152		
11	Disconnect		$30.21	1.0652	1.0152	0.8193	
12							
13	**Switching Control Center (SCC)**						
14	Installation		$37.38	1.0652	1.0152		
15	Disconnect		$37.38	1.0652	1.0152	0.8193	
16							
17							
18							
19							
20							
21	**RTU Fees**	WP33, LN19					
22							
23							
24							
25							
26							
27							
28							
29							
30	**Total Nonrecurring**	Sum(LN2...LN21)					
31							
32							
33							
34							
35							

Private/Proprietary:No disclosure outside BST w/o written agreement.

4W DS1 DID Port
Nonrecurring Costs – Additional

State: Florida
Workpaper: 32
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		A	B	C	D	E	F
LN	**Description**	**Hours**	**Labor Rate**	**Inflation Factor (WP34, LN19)**	**GRT Factor**	**Disconnect Factor**	**Nonrecurring Cost**
1	**Local Carrier Service Center (LCSC)**						
2	Installation		$38.30	1.0652	1.0152		
3	Disconnect		$38.30	1.0652	1.0152	0.8193	
4							
5	**Circuit Provisioning Center (CPC)**						
6	Installation		$34.41	1.0652	1.0152		
7	Disconnect		$34.41	1.0652	1.0152	0.8193	
8							
9	**Network Services Clerical (SOP89)**						
10	Installation		$30.21	1.0652	1.0152		
11	Disconnect		$30.21	1.0652	1.0152	0.8193	
12							
13	**Switching Control Center (SCC)**						
14	Installation		$37.38	1.0652	1.0152		
15	Disconnect		$37.38	1.0652	1.0152	0.8193	
16							
17							
18							
19							
20							
21	**RTU Fees**	WP33, LN19					
22							
23							
24							
25							
26							
27							
28							
29							
30	**Total Nonrecurring**	Sum(LN2...LN21)					
31							
32							
33							
34							
35							

4W DS1 DID Port
Development of RTU Fee Costs

State: Florida
Workpaper: 33
Page: 1 of 1
Date: 08/09/96

	A	B	C
LN	Description	Source	Amount
1	**DMS100 RTU Fees**	Contract PR6900	
2	**Per 100 Lines**		
3	NTX100AA	Buy-out w/NTI	
4			
5			
6			
7			
8			
9	**5ESS RTU Fees**	None Required	
10			
11	**Technology Distribution**	D&F Database – NALs	
12	5ESS		68.5%
13	DMS		31.5%
14			
15	Melded RTU Fee	LN3*LN13+LN9*LN12	
16			
17	GRT Tax Factor	Fundamental Cost Group	
18			
19	RTU w/GRT	LN15*LN17	
20			
21			
22			
23			
24			
25			
26			
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Unbundled Exchange Ports
Development of Inflation Factor

State: Florida
Workpaper: 34
Page: 1 of 1
Date: 08/09/96

LN	Description	Amount	Amount	Amount
1	**Labor Levelizing Factor Calculation**	**Year 1**	**Year 2**	**Year 3**
2				
3	Inward Movement	1	1	1
4				
5	Present Worth Factors [1]	0.8834	0.7804	0.6894
6				
7				
8				
9	Inflation per Year (Labor)	1.032	1.035	1.034
10	Cummulative Inflation (Year 1, Year 1 * Year 2, etc..)	1.032	1.068	1.104
11				
12				
13	Present Worth of Inward Movement (LN3*LN5)	0.8834	0.7804	0.6894
14	Present Worth of Cummulative Inflation (LN5*LN10)	0.9117	0.8335	0.7614
15				
16	Sum of Present Worth of Inward Movement (Sum LN13)	2.35		
17	Sum of Present Worth of Cummulative Inflation (Sum LN14)	2.51		
18				
19	Levelizing Factor (LN17/LN16)	**1.0652**		
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30	[1] Present Worth Factor = 1/(1+.0132) ^ n			
31	n = Year; 13.2% = Cost of Money			
32				
33				
34				
35				

SECTION 4E

Summary of Costs

State: Florida
Workpaper: 10
Page: 1 of 1
Date: 08/09/96

		A	B	C
	Rate Element	**Monthly**	**Nonrecurring First**	**Nonrecurring Additional**
7	**4W ISDN DS1 Port (PRI)**			
	Usage			
9	First Minute of Use			
10	Additional Conversation Minutes (per Minute)			

4W ISDN DS1 Port (PRI)
Summary of Monthly Costs

State: Florida
Workpaper: 20
Page: 1 of 1
Date: 08/09/96

	A	B	C
LN	Description	Source	Amount
1	**Switching Costs**[1]	WP21, LN36	
2			
3	**DSX**	WP22, LN7	
4			
5	**RTU Fees** [2]	WP33, LN45	
6			
7	**Total Monthly Cost**	LN1+LN3+LN5	
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30	**Notes:**		
31	[1] The switching costs only include the physical termination, i.e. call–by–call access and incoming call identification are not included.		
32			
33	[2] The RTU fee is comprised of volume sensitive and volume insensitive costs.The breakdown, per month, per PRI is:		
34			
35	Volume Sensitive RTU Fee:		
36	Volume Insensitive RTU Fee:		
37			
38			
39			
40			

4W ISDN DS1 Port (PRI)
Monthly Costs

State: Florida
Workpaper: 21
Page: 1 of 1
Date: 08/09/96

	A	B	C
LN	Description	Source	Amount
1	**5ESS Calculations**		
2	Investment	SCIS/MO – 5ESS ISDN Line Termination Report	
3	Minimum Cost per D Channel		
4			
5	Minimum Cost per B Channel		
6	Number of B Channels		
7			
8	Investment per Port	LN3+LN5*LN6	
9			
10	Account Code for Investment		377C
11			
12	Conversion Factor – Investment to Cost	ACE Report 20, Total Monthly Cost/10,000	0.027047
13			
14	**5ESS Monthly Cost**	LN8*LN12	
15			
16	**DMS Calculations**		
17	Investment	SCIS/MO – DMS ISDN Line Termination Report	
18	Minimum Cost per D Channel		
19			
20	Minimum Cost per B Channel		
21	Number of B Channels		
22			
23	Investment per Port	LN18+LN20*LN21	
24			
25	Account Code for Investment		377C
26			
27	Conversion Factor – Investment to Cost	ACE Report 20, Total Monthly Cost/10,000	0.027047
28			
29	**DMS Monthly Cost**	LN23*LN27	[redacted]
30			
31	**Meld Calculations**		
32	Technology Distribution	D&F Database – NALs	
33	5ESS		68.5%
34	DMS		31.5%
35			
36	**Melded Monthly Cost**	LN14*LN33+LN29*LN34	[redacted]
37			
38			
39			
40			

4W ISDN DS1 Port (PRI)
Monthly Costs – DSX

State: Florida
Workpaper: 22
Page: 1 of 1
Date: 08/09/96

LN	A Description	B Source	C Amount
1	DSX Investment[1]	Fundamental Cost	
2			
3	Account Code		257C
4			
5	Conversion Factor – Investment to Cost	ACE Report 20, Total Monthly Cost/10,000	0.030121
6			
7	Monthly Cost	LN1*LN5	[redacted]
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30	Note:		
31	[1] This is for 1/2 DSX bay termination.		
32			
33			
34			
35			
36			
37			
38			
39			
40			

4W ISDN DS1 Port (PRI)
Nonrecurring Cost – Summary

State: Florida
Workpaper: 30
Page: 1 of 1
Date: ·08/09/96

	A	B	C
LN	Description	Source	Amount
1	**Nonrecurring Cost – First**	WP31, LN30	
2			
3	**Nonrecurring Cost – Additional**	WP32, LN30	
4			
5	**RTU Fees** [1]		
6	Volume Sensitive	WP33, LN48	
7	Volume Insensitive	WP33, LN49	
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30	[1] Note: The RTU Fees can be ammortized over the economic life of the switch.		
31	These unit recurring eqivalent fees have been added to the other recurring costs.		
32	This sum is displayed on WP20, LN7.		
33			
34			
35			

4W ISDN DS1 Port (PRI)
Nonrecurring Costs – First

State: Florida
Workpaper: 31
Page: 1 of 1
Date: 08/09/96

		A	B	C	D	E	F
LN	Description	Hours	Labor Rate	Inflation Factor (WP34, LN19)	GRT Factor	Disconnect Factor	Nonrecurring Cost
1	**Local Carrier Service Center (LCSC)**						
2	Installation		$38.30	1.0652	1.0152		
3	Disconnect		$38.30	1.0652	1.0152	0.7338	
4							
5	**Circuit Provisioning Center (CPC)**						
6	Installation		$34.41	1.0652	1.0152		
7	Disconnect		$34.41	1.0652	1.0152	0.7338	
8							
9	**Network Plug–in Administration (PICS)**						
10	Installation		$41.65	1.0652	1.0152		
11	Disconnect		$41.65	1.0652	1.0152	0.7338	
12							
13	**CO Installation, Maintenance, & Administration – Software**						
14	Installation		$37.38	1.0652	1.0152		
15	Disconnect		$37.38	1.0652	1.0152	0.7338	
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30	**Total Nonrecurring**	Sum(LN2...LN15)					$133.63
31							
32							
33							
34							
35							

4W ISDN DS1 Port (PRI)
Nonrecurring Costs – Additional

State: Florida
Workpaper: 32
Page: 1 of 1
Date: 08/09/96

		A	B	C	D	E	F
LN	Description	Hours	Labor Rate	Inflation Factor (WP34, LN19)	GRT Factor	Disconnect Factor	Nonrecurring Cost
1	**Local Carrier Service Center (LCSC)**						
2	Installation		$38.30	1.0652	1.0152		
3	Disconnect		$38.30	1.0652	1.0152	0.7338	
4							
5	**Circuit Provisioning Center (CPC)**						
6	Installation		$34.41	1.0652	1.0152		
7	Disconnect		$34.41	1.0652	1.0152	0.7338	
8							
9	**Network Plug–in Administration (PICS)**						
10	Installation		$41.65	1.0652	1.0152		
11	Disconnect		$41.65	1.0652	1.0152	0.7338	
12							
13	**CO Installation, Maintenance, & Administration – Software**						
14	Installation		$37.38	1.0652	1.0152		
15	Disconnect		$37.38	1.0652	1.0152	0.7338	
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30	**Total Nonrecurring**	Sum(LN2...LN15)					**$113.13**
31							
32							
33							
34							
35							

4W ISDN DS1 Port (PRI)
Development of RTU Fee Costs

State: Florida
Workpaper: 33
Page: 1 of 1
Date: 08/09/96

A B C

LN	Description	Source	Amount
1	**DMS100 RTU Fees**	Contract PR6900	
2	**Per Office**		
3	NTX790AB	PRI Interface Base	
4	NTX793AA	Integrated Services Access	
5	NTX794AA	PRI/CCS7 Interworking	
6	NTN53AA	D Channel Back-up	
7	Total per Office	LN3+LN4+LN5+LN6	
8			
9	**Per PRI**		
10	NTX790AB	PRI Interface Base	
11			
12	Average PRIs per office	Model Office Input	
13			
14	**5ESS RTU Fees**	Contract PR6700B	
15	**Per PRI**		
16	ISRIPRT (includes ISCCART)	ISDN Primary Rate Interface	
17	NISSPRI	NI2 - Basic (1% of interfaces)	
18	5ESS RTU per PRI		
19			
20	**Volume Sensitive RTU Fees**		
21	DMS	LN10	
22	5ESS	LN18	
23			
24	**Melded Volume Sensitive RTU Fee**	LN21*LN27+LN22*LN28	
25			
26	**Distribution**	NALs	
27	DMS		31.5%
28	5ESS		68.5%
29			
30	Monthly Interest Rate	Based on Annual 13.2% Rate	
31	Term (Months)	Economic Life of 377C Account	
32	GRT	Fundamental Cost Group	
33	**Volume Sensitive Expressed as Unit Recurring**	(@PMT(LN24,LN30,LN31))*LN32	
34			
35	**Volume Insensitive RTU Fees**		
36	DMS	LN7	
37	5ESS	N/A	
38			
39	**Melded Volume Insensitive RTU Fee**	LN27*LN36+LN28*LN37	
40			
41	**Melded Volume Insensitive per PRI**	LN39/LN12	
42			
43	**Volume Insensitive Expressed as Unit Recurring**	(@PMT(LN41,LN30,LN31))*LN32	
44			
45	**Total RTU per PRI, per Month**	LN33+LN43	
46			
47	Note: If left as a nonrecurring cost the per PRI RTU fee would be:		
48	**Volume Sensitive:**	LN24*LN32	
49	**Volume Insensitive**	LN32*LN41	
50			

Unbundled Exchange Ports
Development of Inflation Factor

State: Florida
Workpaper: 34
Page: 1 of 1
Date: 08/09/96

LN	Description	Amount	Amount	Amount
1	**Labor Levelizing Factor Calculation**	**Year 1**	**Year 2**	**Year 3**
2				
3	Inward Movement	1	1	1
4				
5	Present Worth Factors [1]	0.8834	0.7804	0.6894
6				
7				
8				
9	Inflation per Year (Labor)	1.032	1.035	1.034
10	Cummulative Inflation (Year 1, Year 1 * Year 2, etc..)	1.032	1.068	1.104
11				
12				
13	Present Worth of Inward Movement (LN3*LN5)	0.8834	0.7804	0.6894
14	Present Worth of Cummulative Inflation (LN5*LN10)	0.9117	0.8335	0.7614
15				
16	Sum of Present Worth of Inward Movement (Sum LN13)	2.35		
17	Sum of Present Worth of Cummulative Inflation (Sum LN14)	2.51		
18				
19	Levelizing Factor (LN17/LN16)	1.0652		
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30	[1] Present Worth Factor = 1/(1+.0132)^n			
31	n = Year; 13.2% = Cost of Money			
32				
33				
34				
35				

4W ISDN DS1 Port (PRI)
Incremental ISDN Usage Cost

State: Florida
Workpaper: 40
Page: 1 of 1
Date: 08/09/96

	A	B	C
LN	**Description**	**Source**	**Amount**
1	**Call Set-up Incremental BH Investment**		
2	5ESS	WP41, LN6	
3	DMS	WP42, LN6	
4			
5	Account Code for Investment		377C
6			
7	Conversion Factor – Investment to Cost	ACE Report 20, Total Monthly Cost/10,000	0.027047
8			
9	**Monthly Cost**		
10	5ESS		
11	DMS		
12			
13	**Technology Distribution**	D&F Database – NALs	
14	5ESS		68.5%
15	DMS		31.5%
16			
17	**Melded BH Call Set-up Cost**	LN10*LN14+LN11*LN15	
18			
19	**MOU Incremental BH Investment**		
20	5ESS	No Incremental Cost	
21	DMS	No Incremental Cost	
22			
23	**Monthly Cost**		
24	5ESS	LN7*LN20	
25	DMS	LN7*LN21	
26			
27	**Melded BH MOU Cost**	LN14*LN24+LN15*LN25	
28			
29	**Conversion of BH Cost to Any Time, Any Day**		
30	Factors		
31	BH/Full Day Ratio	Network Study (NCAT)	10%
32	Days per Month	365/12	30.4
33			
34	Calculation		
35	Call Set-up	LN17*LN31/LN32	
36	MOU	LN27*LN31/LN32	
37			
38	Cost for First Minute of Use (Incremental to POTS)	LN35+LN36	
39	Cost for Additional Minute (Incremental to POTS)	LN36	
40			
41	Cost for First Minute of Use (POTS)	NCAT	
42	Cost for Additional Minute (POTS)	NCAT	
43			
44	**Total Cost for First Minute of Use**	LN38+LN41	
45	**Total Cost for Additional Minute**	LN39+LN42	

4W ISDN DS1 Port (PRI)
Development of BH Incremental Usage Investment 5ESS

State: Florida
Workpaper: 41
Page: 1 of 1
Date: 08/09/96

	A	B	C
LN	**Description**	**Source**	**Amount**
1	**Incremental Cost of ISDN Usage**		
2	**5ESS Calculations**		
3	<u>Call Set-up</u>		
4	EPHC		
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18	**Model Office Outputs**	SCIS/MO Output	
19	IMO2 SM Realtime (ISDN SMs)		
20			
21			
22			
23	**User Input**	Network	
24	IP1 BH Originating IAO Calls		
25	IP2 BH Originating IEO Calls		
26	IP3 BH Terminating Calls		
27			
28			
29			
30	**SCIS/IN Database Items**		
31	AT3 Realtime per EPHC	Assumption Table Item 3	
32	RS192 IAO Increment	Realtime Table Item 192	
33	RS192.01 IEO Increment	Realtime Table Item 192.01	
34	RS192.02 Terminating Increment	Realtime Table Item 192.02	
35			
36			
37			
38			
39	EPHC = Equivalent POTS half-call.		
40			

Private/Proprietary:No disclosure outside BellSouth except by written agreement.

4W ISDN DS1 Port (PRI)
Development of BH Incremental Usage Investment DMS

State: Florida
Workpaper: 42
Page: 1 of 1
Date: 08/09/96

LN	Description	Source	Amount
1	**Incremental Cost of ISDN Usage**		
2	**DMS Calculations**		
3	Call Set-up		
4	**Getting Started**		
5			
6			
7			
8			
9			
10			
11			
12			
13	**Model Office Outputs**		
14	MO1 Getting Started	SCIS/MO Output	
15			
16			
17			
18	**User Input**	Network	
19	IP1 BH Originating IAO Calls		
20	IP2 BH Originating IEO Calls		
21	IP3 BH Terminating Calls		
22			
23			
24			
25	**SCIS/IN Database Items**		
26	RT192 IAO Incremental to L-L	Realtime Table Item 192	
27	RT192.01 L-T Increment	Realtime Table Item 192.01	
28	RT192.02 Terminating Increment	Realtime Table Item 192.02	
29			
30			
31			
32			
33			
34			
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36			
37			
38			
39			
40			

SECTION 4F

Unbundled Exchange Ports
Development of Adjusted Usage Costs

State: Florida
Workpaper: 100A
Page: 1 of 1
Date: 08/09/96

	A	B	C
LN	Description	Source	Amount
1	Peak Costs [1]		
2	NCAT Results (All Bands)	WP100, LN20	
3	Set-up	Column C + Column D	
4	Duration	Column E	
5			
6			
7	Adjustment Factors	Tab 6C, WP40, LN46	
8	Set-up		Total Calls
9	Duration		Total Minutes
10			
11			
12	Adjusted Costs		
13	Set-up	LN3*(1+LN8)	
14	Duration	LN4*(1+LN9)	
15			
16	Peak Costs		
17	Initial Minute Cost	LN13+LN14	
18	Additional Minute Cost	LN14	
19			
20			
21	Off-Peak Costs [1]		
22	NCAT Results (All Bands)	WP100, LN23	
23	Set-up	Column C + Column D	
24	Duration	Column E	
25			
26			
27	Adjustment Factors	Tab 6C, WP40, LN46	
28	Set-up		Total Calls
29	Duration		Total Minutes
30			
31			
32	Adjusted Costs		
33	Set-up	LN23*(1+LN28)	
34	Duration	LN24*(1+LN29)	
35			
36	Off-Peak Costs		
37	Initial Minute Cost	LN33+LN34	
38	Additional Minute Cost	LN34	
39			
40			
41	Note:		
42	[1] Peak defined as all times except 12PM-2PM, 9PM-9AM, and all day Saturday and Sunday.		
43	The exceptions are considered off-peak.		
44			
45			

NETWORK COST ANALYSIS TOOL (NCAT)

STATE: FLORIDA
WORKPAPER: 100
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UNIT COST SUMMARY

	(A)	(B)	(C)	(D)	(E)	(F)	(G)
						=(C+D+E)	=(E)
1	DISTANCE	RP	COST/MSG	EXP/MSG	COST/MIN	COST /	COST /
2	BAND	(Hrs.)	(SETUP)		DURATION	FIRST MIN	ADDL MIN
3	------------	-----	--------	--------	--------	---------	--------
4							
5	IAO	09-11					
6		14-20					
7		08					
8		12-13					
9		21-07					
10		AVG					
11							
12	0.0-9999.9	09-11					
13		14-20					
14		08					
15		12-13					
16		21-07					
17		AVG					
18							
19	ALL	09-11					
20		14-20					
21		08					
22		12-13					
23		21-07					
24		AVG					

NETWORK COST ANALYSIS TOOL (NCAT)

STATE: FLORIDA
WORKPAPER: 200
PAGE: 1 OF 2
DATE: 23-JUL-96

TRAFFIC SENSITIVE UNIT COST - SETUP RELATED

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
			=(D+E+F+G+H+I)						
1	DISTANCE		TOTAL	SWITCHING			TRUNKING		
2	BAND	RP		EO	TDM	MEAS	FAC	TERM	SS7
3									
4									
5	0.0	09-11							
6		14-20							
7		AVG							
8									
9	1.0-9999.9	09-11							
10		14-20							
11		AVG							
12									
13	ALL	09-11							
14		14-20							
15		08							
16		12-13							
17		21-07							
18		AVG							

NETWORK COST ANALYSIS TOOL (NCAT)

STATE: FLORIDA
WORKPAPER: 200
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```
                                   TRAFFIC SENSITIVE  UNIT COST - DURATION RELATED
      (A)          (B)       (C)      (D)         (E)        (F)         (G)        (H)
                        =(D+E+F+G+H)
 1  DISTANCE                TOTAL   |---------SWITCHING---------| |-----TRUNKING----|
 2    BAND          RP                EO          TDM        MEAS         FAC       TERM
 3-------------   -----  ---------  ---------  ---------  ---------  ---------  ---------
 4
 5   0.0           09-11
 6                 14-20
 7                 AVG
 8
 9   1.0-9999.9    09-11
10                 14-20
11                 AVG
12
13   ALL           09-11
14                 14-20
15                 08
16                 12-13
17                 21-07
18                 AVG
```

SECTION 5

SECTION 5

SPECIFIC STUDY ASSUMPTIONS

FLORIDA UNBUNDLED PORTS COST STUDY DOCUMENTATION

The cost studies are based on incremental economic theory and assumptions, plus specific Network deployment strategies, first choice provisioning guidelines, and equipment purchasing information.

Cost study assumptions are as follows:

Ports

1. The cost of money is 13.2%, the forward-looking incremental cost to the firm.

2. The port costs developed do not provide any feature functionality. Only the cost to provide a physical connection to the switch have been considered.

3. Network usage is required to gain access to the switch network. The 2-wire digital ISDN port usage is strictly for circuit-switched traffic. The nonrecurring cost to configure ISDN channels per individual customer specifications is not included.

4. RTU fees have been included where applicable to account for the expense which must be paid to the switch vendors upon termination.

5. The nonrecurring cost development utilizes a service specific location life; impacts discounted disconnect factor. The nonrecurring costs for the 2W Analog port and the 2W ISDN port include the establishment of telephone numbers.

6. Alternative Network Serving Arrangements, ANSA, have not been considered in the ISDN ports.

Local Measured Usage

1. Trunk attempt and CCS (Centum (100) Call Seconds) busy hours are the same as the originating office attempt and CCS busy hours.

2. Measurement equipment attempt and CCS busy hours are the same as the attempt and CCS busy hours for the corresponding switch. The measurement equipment is assumed to be LAMA, Local Automatic Message Accounting.

3. The ratio of average busy season daily traffic load to average business day traffic load is 1.1:1.

4. All tandems are assumed to perform both originating and terminating functions.

5. Signaling System 7 (SS7) is assumed for all trunks.

6. Interoffice trunks are engineered to overflow six percent of the peak traffic load.

7. Trunk utilization is eighty-five percent.

8. A stimulation rate of ten percent is used to obtain a meaningful and manageable increment of usage.

9. When switch-specific investments are not available, a technology-specific weighted investment is used.

10. Replacement switch technology is assumed for each end office and tandem office.

11. The number of digits sent per outgoing call is 7.

12. The number of digits received is 7.

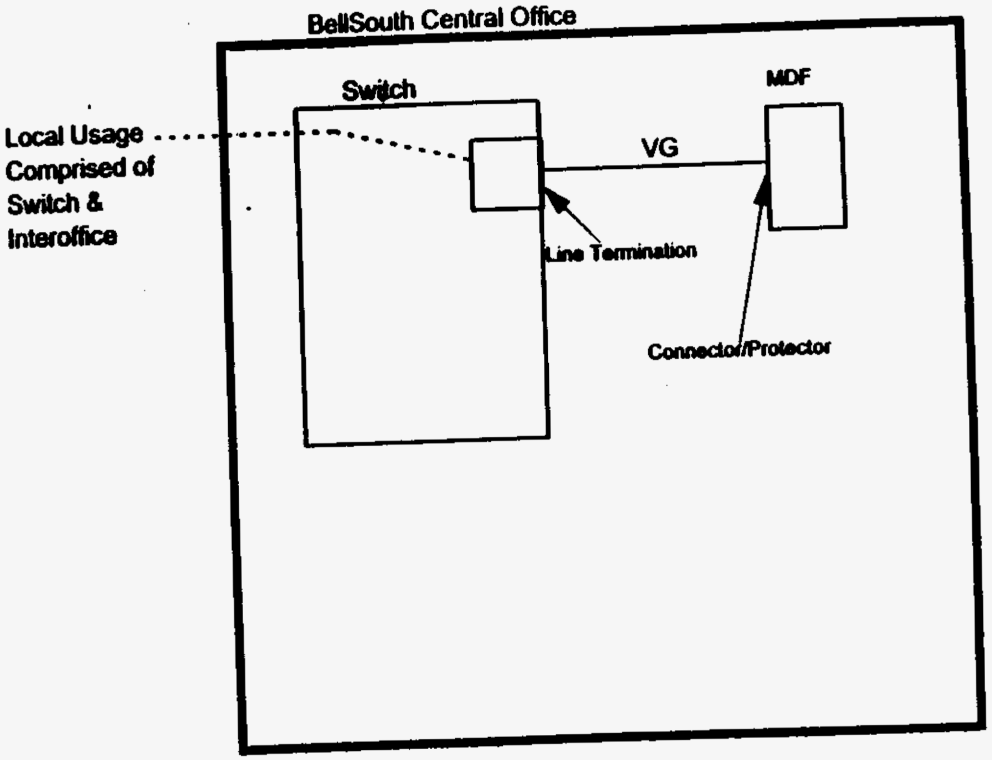
13. The grade of service is 0.01.

14. The number of annual business days is 250 (i.e., excludes weekends and holidays).

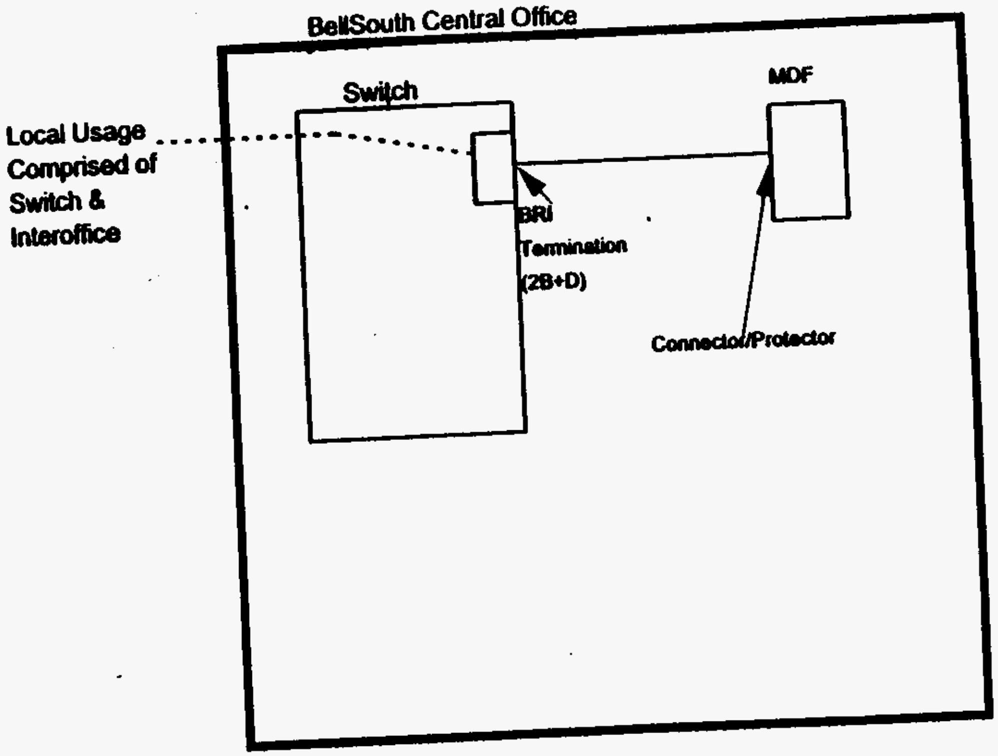
15. Average business day load to average calendar day load is 1.177:1.

16. The number of digits dialed is 7.

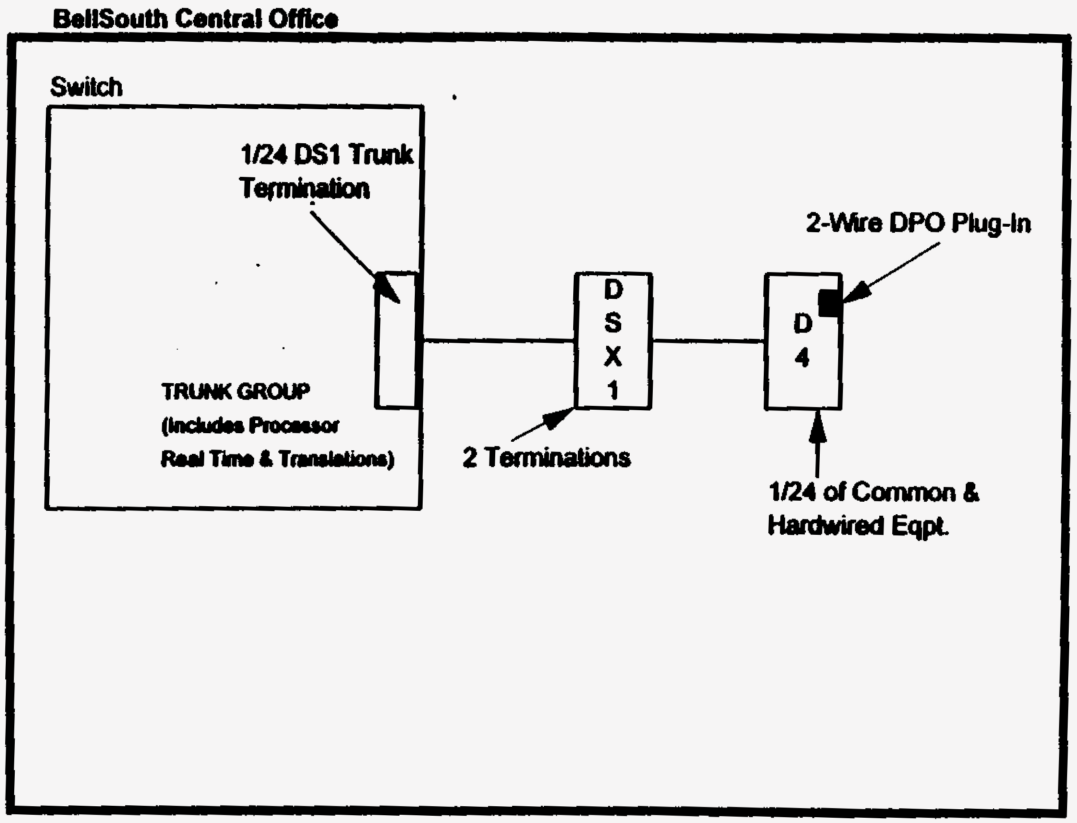
Unbundled 2-Wire Analog Port



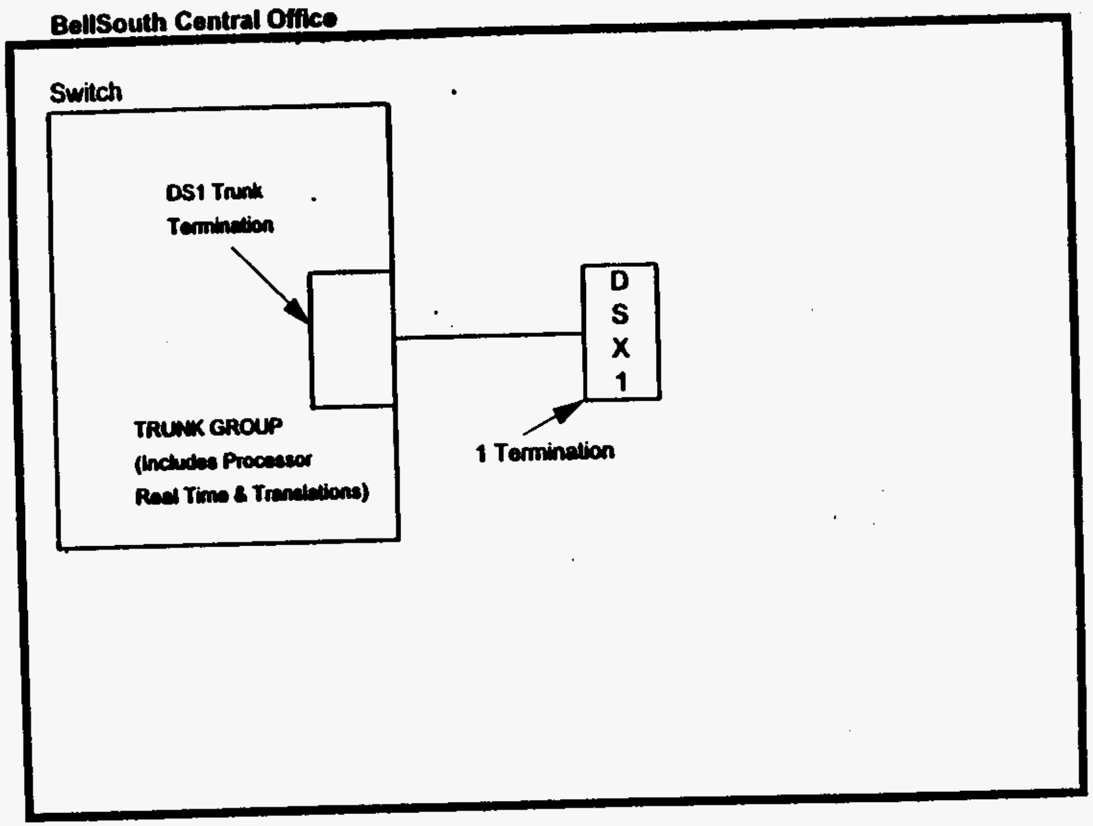
Unbundled 2-Wire ISDN Digital Line Port



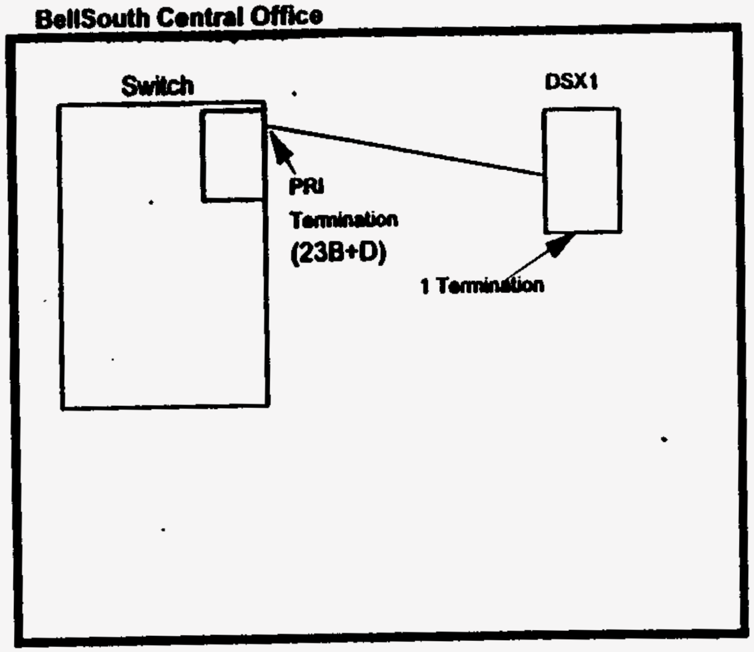
Unbundled 2-Wire Analog DID Trunk Port



Unbundled 4-Wire DS1 DIGITAL DID Trunk Port



Unbundled 4-Wire ISDN DS1 Digital Trunk Port



SECTION 6

SECTION 6

COST STUDY DOCUMENTATION
FACTORS AND LOADINGS

UNBUNDLED EXCHANGE PORTS

Following are the incremental annual cost factors, miscellaneous loadings and labor rates used in the Unbundled Exchange Ports cost study. Also included is the development of the conversion factor and the adjustment factor for unbillable calls.

SECTION 6A

SECTION 6A

LABOR RATES, LABOR INFLATION, ETC.
FLORIDA

Directly Assigned Labor Rates - 1995

Work Center	Job Function Code	Rate
CO Install, Maintenance & Administration - Software	432X	$37.38
Circuit Provisioning Center (CPC)	470X	$34.41
Switching Control Center (SCC)	432X	$37.38
Frame Control Center	434X	$36.05
CO Install & Maintenance - Carrier & Facility	431X	$39.09
Local Carrier Service Center (LCSC)	2300	$38.30
Facilities Assignment (FACS)	400X	$31.28
Network Plug-in Administration (PICS)	341X	$41.65
Network Services Clerical (SOP89)	2700	$30.21
Special Services Coordinate & Test (SSC)	471X	$36.41

Discounted Disconnect Factor	Location Life	Factor
Residence	25 Months	.9114
Business	29 Months	.8981
PBX & DID (2W & 4W)	54 Months	.8193
2W ISDN	60 Months	.8014
4W ISDN	74 Months	.7338

Labor Inflation Rate	
1996	1.032
1997	1.035
1998	1.034

Inflation Levelizing Factors	
Labor	1.0652
Digital Switch Equipment (377C)	1.0120
Digital Circuit Equipment (357C)	.9700

Loading Factors	
InPlant (Telco)	1.1236
InPlant (Hardwire)	1.8700
InPlant (Plug-in)	1.0600
Common Equipment & Power (377C)	1.0962
Common Equipment & Power (357C)	1.1202
Building Loading	.0404
Land Loading	.0030

Annual Cost Factors	
Annual Cost 10C (Building)	.1772
Annual Cost 20C (Land)	.1951
Annual Cost 357C (Digital Circuit)	.2355 (Includes TIRKS Expense of .0052)
Annual Cost 377C (Digital Switch)	.2520

SECTION 6B

USOC ANNUAL COST DETAILS
Study Number:
Study Name: SAMPLE OF $10,000
Tariff Element: SAMPLE OF $10,000

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State	Tariff Ref	USOC	Modifier	Technology	Volume Sensitivity	Economic Type	Investment Basis
FL					VS	DIR	

INVESTMENT DATA					ANNUAL COST FACTORS							ANNUAL EXPENSES						
Field Code	St	Capital Investment	Operating Investment	Date	Depr. Factor	C.O.M. Factor	Inc Tax Factor	Mtce. Factor	Admin Factor	AdVal Factor	GRT Factor	Depr. Expense	C.O.M. Expense	Inc Tax Expense	Mtce. Expense	Admin Expense	Adval Expense	GRT Expense
10C	FL	600.61	600.61		.0302	.0986	.0452	.0069	0.0000	.0113	.0152	18.14	59.22	27.15	4.14	0.00	6.79	1.75
20C	FL	44.60	44.60		0.0000	.1118	.0514	0.0000	0.0000	.0113	.0152	0.00	4.99	2.29	0.00	0.00	.50	.12
257C	FL	14,866.62	14,866.62		.1134	.0636	.0288	.0089	.0052	.0113	.0152	1,685.88	945.52	428.16	132.31	77.31	167.99	52.24

SUMMARY:	ADJUSTED TOTAL INVESTMENT		15,511.84
	ANNUAL CAPITAL COSTS:	Depreciation Expense	1,704.01
		Cost of Money	1,009.72
		Income Tax Expense	457.60
	ANNUAL OPERATING EXPENSES:	Maintenance Expense	136.46
		Administration Expense	77.31
		Ad Valorem and Other Taxes	175.28
	Gross Receipts Tax		54:12
	TOTAL ANNUAL COSTS		3,614.50

TOTAL MONTHLY COST: 301.21

NOTES: 1. Capital and Operating Investments are the BOOKED INVESTMENTS from ACE Report 10.
2. Depreciation, Cost of Money, and Income Tax Expenses = Capital Investment multiplied by the corresponding Annual Cost Factor.
3. Maintenance, Administrative, and Ad Valorem Expenses = Operating Investment multiplied by the corresponding Annual Cost Factor.
4. Gross Receipts Tax = Gross Receipts Tax Factor multiplied by the sum of Capital Costs and Operating Expenses.

NOTICE: NOT FOR USE OR DISCLOSURE OUTSIDE BELLSOUTH WITHOUT WRITTEN AGREEMENT.

USOC INVESTMENT DETAILS
Study Number:
Study Name: SAMPLE OF $10,000
Tariff Element: SAMPLE OF $10,000

ACE REPORT 10
Page 1
5/15/96

State	Tariff Ref	USOC	Modifier	Technology	Vol. Sens.	Economic Type	Investment Basis
FL			A		VS	DIR	

PRIMARY INVESTMENT DATA					INVESTMENT LOADING FACTORS				SUPPORT STRUCTURE LOADINGS			BOOKED INVESTMENTS	
Field Code	Description	Capital Investment	Operating Investment	Date	FC Factor	InPlant Factor	InPlant Type	CE&P Factor	Loading Factor	Loading Type	Field Code	Capital Investment	Operating Investment
357C	SAMPLE OF $10,000	10,000.00	10,000.00	5/08/96	.9700	1.8700	H	1.1202				20,319.31	20,319.31
357C	- Support Loading ----->			5/08/96					.0404	circuit_bldg	10C	820.90	820.90
357C	- Support Loading ----->			5/08/96					.0030	circuit_land	20C	60.96	60.96
									ADJUSTED TOTAL INVESTMENT:			21,201.17	21,201.17

NOTES:
1. The BOOKED INVESTMENT for PRIMARY INVESTMENTS is calculated by multiplying the PRIMARY INVESTMENT by the applicable INVESTMENT LOADING FACTORS.
2. The BOOKED INVESTMENT for SUPPORT STRUCTURE LOADINGS is calculated by multiplying the applicable Loading Factor by the sum of INVESTMENTS for each primary Field Code.
3. InPlant Factor types: T = Telco, C = Material Composite, H = Material Hardwire, P = Material Plugin
4. The FC factor is the levelized inflation factor for investments.

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USOC INVESTMENT DETAILS
Study Number:
Study Name: SAMPLE OF $10,000
Tariff Element: SAMPLE OF $10,000

ACE REPORT 10

5/15/96

State	Tariff Ref	USOC	Modifier	Technology	Vol. Sens.	Economic Type	Investment Basis
FL			B		VS	DIR	

PRIMARY INVESTMENT DATA					INVESTMENT LOADING FACTORS				SUPPORT STRUCTURE LOADINGS			BOOKED INVESTMENTS	
Field Code	Description	Capital Investment	Operating Investment	Date	FC Factor	InPlant Factor	InPlant Type	CE&P Factor	Loading Factor	Loading Type	Field Code	Capital Investment	Operating Investment
357C	SAMPLE OF $10,000	10,000.00	10,000.00	5/08/96	.9700	1.0600	P	1.1202				11,517.90	11,517.90
357C	- Support Loading ----->			5/08/96					.0404	circuit_bldg	10C	465.32	465.32
357C	- Support Loading ----->			5/08/96					.0030	circuit_land	20C	34.55	34.55
									ADJUSTED TOTAL INVESTMENT:			12,017.77	12,017.77

NOTES: 1. The BOOKED INVESTMENT for PRIMARY INVESTMENTS is calculated by multiplying the PRIMARY INVESTMENT by the applicable INVESTMENT LOADING FACTORS.
2. The BOOKED INVESTMENT for SUPPORT STRUCTURE LOADINGS is calculated by multiplying the applicable Loading Factor by the sum of INVESTMENTS for each primary Field Code.
3. InPlant Factor types: T = Telco, C = Material Composite, H = Material Hardwire, P = Material Plugin
4. The FC factor is the levelized inflation factor for investments.

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USOC ANNUAL COST DETAILS
Study Number:
Study Name: SAMPLE OF $10,000
Tariff Element: SAMPLE OF $10,000

ACE REPORT 20

5/15/96

State	Tariff Ref	USOC	Modifier	Technology	Volume Sensitivity	Economic Type	Investment Basis
FL			A		VS	DIR	

INVESTMENT DATA					ANNUAL COST FACTORS							ANNUAL EXPENSES						
Field Code	St	Capital Investment	Operating Investment	Date	Depr. Factor	C.O.M. Factor	Inc Tax Factor	Mtce. Factor	Admin Factor	AdVal Factor	GRT Factor	Depr. Expense	C.O.M. Expense	Inc Tax Expense	Mtce. Expense	Admin Expense	Adval Expense	GRT Expense
10C	FL	820.90	820.90		.0302	.0986	.0452	.0069	0.0000	.0113	.0152	24.79	80.94	37.10	5.66	0.00	9.28	2.40
20C	FL	60.96	60.96		0.0000	.1118	.0514	0.0000	0.0000	.0113	.0152	0.00	6.82	3.13	0.00	0.00	.69	.16
357C	FL	20,319.31	20,319.31		.1134	.0638	.0297	.0086	.0052	.0113	.0152	2,304.21	1,296.37	603.48	174.75	105.66	229.61	71.65

SUMMARY:				
	ADJUSTED TOTAL INVESTMENT		21,201.17	
	ANNUAL CAPITAL COSTS:	Depreciation Expense	2,329.00	
		Cost of Money	1,384.13	
		Income Tax Expense	643.72	
	ANNUAL OPERATING EXPENSES:	Maintenance Expense	180.41	
		Administration Expense	105.66	
		Ad Valorem and Other Taxes	239.57	
	Gross Receipts Tax		74.21	
	TOTAL ANNUAL COSTS		4,956.71	TOTAL MONTHLY COST: 413.06

NOTES:
1. Capital and Operating Investments are the BOOKED INVESTMENTS from ACE Report 10.
2. Depreciation, Cost of Money, and Income Tax Expenses = Capital Investment multiplied by the corresponding Annual Cost Factor.
3. Maintenance, Administrative, and Ad Valorem Expenses = Operating Investment multiplied by the corresponding Annual Cost Factor.
4. Gross Receipts Tax = Gross Receipts Tax Factor multiplied by the sum of Capital Costs and Operating Expenses.

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USOC ANNUAL COST DETAILS                                                                                          ACE REPORT 20
Study Number:                                                                                                         Page   2
Study Name:   SAMPLE OF $10,000                                                                                      5/15/96
Tariff Element: SAMPLE OF $10,000

State   Tariff Ref     USOC         Modifier              Technology  Volume Sensitivity  Economic Type  Investment Basis
FL                                  B                                 VS                  DIR

              INVESTMENT DATA                                   ANNUAL COST FACTORS                                             ANNUAL EXPENSES
-----------------------------------------   --------------------------------------------------   -----------------------------------------------------------
Field         Capital    Operating          Depr.  C.O.M. Inc Tax Mtce.  Admin  AdVal  GRT       Depr.    C.O.M.   Inc Tax  Mtce.    Admin    Adval    GRT
Code   St   Investment Investment   Date    Factor Factor Factor  Factor Factor Factor Factor    Expense  Expense  Expense  Expense  Expense  Expense  Expense
------ ---  ---------- ---------- --------  ------ ------ ------- ------ ------ ------ ------    -------- -------- -------- -------- -------- -------- --------
10C    FL       465.32     465.32            .0302  .0986  .0452   .0069 0.0000  .0113  .0152       14.05    45.88    21.03     3.21     0.00     5.26     1.36
20C    FL        34.55      34.55           0.0000  .1118  .0514  0.0000 0.0000  .0113  .0152        0.00     3.86     1.78     0.00     0.00      .39      .09
357C   FL    11,517.90  11,517.90            .1134  .0638  .0297   .0086  .0052  .0113  .0152    1,306.13   734.84   342.08    99.05    59.89   130.15    40.62
-----------------------------------------   --------------------------------------------------   -----------------------------------------------------------

SUMMARY:      ADJUSTED TOTAL INVESTMENT                                 12,017.77
              ANNUAL CAPITAL COSTS:       Depreciation Expense           1,320.18
                                          Cost of Money                    784.59
                                          Income Tax Expense               364.89
              ANNUAL OPERATING EXPENSES:  Maintenance Expense              102.26
                                          Administration Expense            59.89
                                          Ad Valorem and Other Taxes       135.80
              Gross Receipts Tax                                            42.07
              TOTAL ANNUAL COSTS                                         2,809.68       TOTAL MONTHLY COST:      234.14
```

NOTES: 1. Capital and Operating Investments are the BOOKED INVESTMENTS from ACE Report 10.

2. Depreciation, Cost of Money, and Income Tax Expenses = Capital Investment multiplied by the corresponding Annual Cost Factor.

3. Maintenance, Administrative, and Ad Valorem Expenses = Operating Investment multiplied by the corresponding Annual Cost Factor.

4. Gross Receipts Tax = Gross Receipts Tax Factor multiplied by the sum of Capital Costs and Operating Expenses.

USOC ANNUAL COST DETAILS
Study Number:
Study Name: SAMPLE OF $10,000
Tariff Element: SAMPLE OF $10,000

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Page 1
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State	Tariff Ref	USOC	Modifier	Technology	Volume Sensitivity	Economic Type	Investment Basis
FL	$10,000				VS	DIR	

INVESTMENT DATA					ANNUAL COST FACTORS							ANNUAL EXPENSES						
Field Code	St	Capital Investment	Operating Investment	Date	Depr. Factor	C.O.M. Factor	Inc Tax Factor	Mtce. Factor	Admin Factor	AdVal Factor	GRT Factor	Depr. Expense	C.O.M. Expense	Inc Tax Expense	Mtce. Expense	Admin Expense	Adval Expense	GRT Expense
10C	FL	503.57	503.57		.0302	.0986	.0452	.0069	0.0000	.0113	.0152	15.21	49.65	22.76	3.47	0.00	5.69	1.47
20C	FL	37.39	37.39		0.0000	.1118	.0514	0.0000	0.0000	.0113	.0152	0.00	4.18	1.92	0.00	0.00	.42	.10
377C	FL	12,464.71	12,464.71		.1134	.0651	.0302	.0282	0.0000	.0113	.0152	1,413.50	811.45	376.43	351.50	0.00	140.85	47.02

SUMMARY:	ADJUSTED TOTAL INVESTMENT		13,005.67
	ANNUAL CAPITAL COSTS:	Depreciation Expense	1,428.71
		Cost of Money	865.29
		Income Tax Expense	401.12
	ANNUAL OPERATING EXPENSES:	Maintenance Expense	354.98
		Administration Expense	0.00
		Ad Valorem and Other Taxes	146.96
	Gross Receipts Tax		48.60
	TOTAL ANNUAL COSTS		3,245.65

TOTAL MONTHLY COST: 270.47

NOTES:
1. Capital and Operating Investments are the BOOKED INVESTMENTS from ACE Report 10.
2. Depreciation, Cost of Money, and Income Tax Expenses = Capital Investment multiplied by the corresponding Annual Cost Factor.
3. Maintenance, Administrative, and Ad Valorem Expenses = Operating Investment multiplied by the corresponding Annual Cost Factor.
4. Gross Receipts Tax = Gross Receipts Tax Factor multiplied by the sum of Capital Costs and Operating Expenses.

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USOC INVESTMENT DETAILS
Study Number:
Study Name: SAMPLE OF $10,000
Tariff Element: SAMPLE OF $10,000

ACE REPORT 10

5/15/96

State	Tariff Ref	USOC	Modifier	Technology	Vol. Sens.	Economic Type	Investment Basis
FL	$10,000				VS	DIR	

PRIMARY INVESTMENT DATA					INVESTMENT LOADING FACTORS				SUPPORT STRUCTURE LOADINGS			BOOKED INVESTMENTS	
Field Code	Description	Capital Investment	Operating Investment	Date	FC Factor	InPlant Factor	InPlant Type	CE&P Factor	Loading Factor	Loading Type	Field Code	Capital Investment	Operating Investment
377C	SAMPLE OF $10,000	10,000.00	10,000.00	5/07/96	1.0120	1.1236	T	1.0962				12,464.71	12,464.71
377C	- Support Loading ----->			5/07/96					.0404	switch_bldg	10C	503.57	503.57
377C	- Support Loading ----->			5/07/96					.0030	switch_land	20C	37.39	37.39
									ADJUSTED TOTAL INVESTMENT:			13,005.67	13,005.67

NOTES: 1. The BOOKED INVESTMENT for PRIMARY INVESTMENTS is calculated by multiplying the PRIMARY INVESTMENT by the applicable INVESTMENT LOADING FACTORS.
2. The BOOKED INVESTMENT for SUPPORT STRUCTURE LOADINGS is calculated by multiplying the applicable *Loading Factor by the sum of* INVESTMENTS for each primary Field Code.
3. InPlant Factor types: T = Telco, C = Material Composite, H = Material Hardwire, P = Material Plugin
4. The FC factor is the levelized inflation factor for investments.

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USOC INVESTMENT DETAILS
Study Number:
Study Name: SAMPLE OF $10,000
Tariff Element: SAMPLE OF $10,000

State	Tariff Ref	USOC	Modifier	Technology	Vol. Sens.	Economic Type	Investment Basis
FL					VS	DIR	

PRIMARY INVESTMENT DATA						INVESTMENT LOADING FACTORS				SUPPORT STRUCTURE LOADINGS			BOOKED INVESTMENTS	
Field Code	Description	Capital Investment	Operating Investment	Date		FC Factor	InPlant Factor	InPlant Type	CE&P Factor	Loading Factor	Loading Type	Field Code	Capital Investment	Operating Investment
257C	SAMPLE OF $10,000	10,000.00	10,000.00	5/08/96		.9620	1.5212	H	1.0159				14,866.62	14,866.62
257C	- Support Loading ----->			5/08/96						.0404	circuit_bldg	10C	600.61	600.61
257C	- Support Loading ----->			5/08/96						.0030	circuit_land	20C	44.60	44.60
										ADJUSTED TOTAL INVESTMENT:			15,511.84	15,511.84

NOTES: 1. The BOOKED INVESTMENT for PRIMARY INVESTMENTS is calculated by multiplying the PRIMARY INVESTMENT by the applicable *INVESTMENT LOADING FACTORS*.

2. The BOOKED INVESTMENT for SUPPORT STRUCTURE LOADINGS *is calculated by multiplying the applicable* Loading Factor by the sum of *INVESTMENTS for each primary* Field Code.

3. InPlant Factor types: T = Telco, C = Material Composite, H = Material Hardwire, P = Material Plugin

4. The FC factor is the levelized inflation factor for investments.

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SECTION 6C

Unbundled Exchange Ports
Development of Monthly Usage Costs by Class of Service & Adjustment Factor

State: Florida
Workpaper: 40
Page: 1 of 1
Date: 08/09/96

		A	B	C	D	E	F	G	H
1	**Residential**	**Calls/LN**	**Min/Call**	**Lines**	**Total Calls**	**Total Minutes**			
2	Measured								
3	Message								
4	Flat								
5	E911								
6									
7	Total						NCAT [1]	NCAT [1]	
8							$/Set-up	$/MOU	$/Month
9	Average – Residential								
10									
11									
12	**Business**	**Calls/LN**	**Min/Call**	**Lines**	**Total Calls**	**Total Minutes**			
13	Measured								
14	Message								
15	Flat								
16	E911								
17									
18	Total						NCAT [1]	NCAT [1]	
19							$/Set-up	$/MOU	$/Month
20	Average – Business								
21									
22									
23	**PBX**	**Calls/LN**	**Min/Call**	**Lines**	**Total Calls**	**Total Minutes**			
24	Measured								
25	Message								
26	Flat								
27	E911								
28									
29	Total						NCAT [1]	NCAT [1]	
30							$/Set-up	$/MOU	$/Month
31	Average – PBX								
32									
33									
34	**Coin**	**Calls/LN**	**Min/Call**	**Lines**	**Total Calls**	**Total Minutes**			
35	Public & Semi-Public								
36	E911								
37									
38	Total						NCAT [1]	NCAT [1]	
39							$/Set-up	$/MOU	$/Month
40	Average – Coin								
41									
42									
43									
44	**Calculation of Adjustment Factor**				**Set-Up**	**Duration**			
45	Unbillable Calls	E911							
46	Factor	Unbillable/Billable							
47									
48	Notes:								
49	[1] NCAT results reflect average costs, i.e. all rate periods.								
50									

BellSouth Telecommunications, Inc.
FPSC Docket No. 960833-TP
Exhibit No. DDC-10

FLORIDA

UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

COST STUDY DOCUMENTATION

SECTIONS A THRU 7

FLORIDA

UNBUNDLED LOOP CHANNELIZATION SYSTEM
AND
CENTRAL OFFICE CHANNEL INTERFACE

COST STUDY DOCUMENTATION

CONTENTS

SECTION A	PROPRIETARY RATIONALE
SECTION 1	INTRODUCTION AND OVERVIEW
SECTION 2	DESCRIPTION OF STUDY PROCEDURES
SECTION 3	SUMMARY OF RESULTS
SECTION 4	COST DEVELOPMENT - RECURRING
SECTION 5	COST DEVELOPMENT - NONRECURRING
SECTION 6	SPECIFIC STUDY ASSUMPTIONS
SECTION 7	FACTORS AND LOADINGS

SECTION A

SECTION A

FLORIDA UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

PROPRIETARY RATIONALE

The Florida Unbundled Loop Channelization System and Central Office Channel Interface Cost Study contains actual unit cost information for discrete cost elements. These costs reflect BellSouth's long run incremental cost of providing this element on a going forward basis. Public disclosure of this information would provide BellSouth's competitors with an advantage in that they would know the price or rate below which BellSouth could not provide the service. The data is valuable to competitors and potential competitors in formulating strategic plans for entry, pricing, marketing and overall business strategies concerning access services. This information relates to the competitive interests of BellSouth and disclosure would impair the competitive business of BellSouth.

Additionally, the study contains information which reflects vendor-specific prices negotiated by BellSouth. Public disclosure of this information would impair BellSouth's ability to contract for goods and/or services on favorable terms. For these reasons, the Florida Unbundled Loop Channelization System and Central Office Channel Interface Cost Study is considered proprietary.

SECTION 1

SECTION 1

FLORIDA UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

INTRODUCTION AND OVERVIEW

This Long Run Incremental Cost study for the Unbundled Loop Channelization System and Central Office Channel Interface in the state of Florida is being provided in response to Docket No. 950984-TP Order No. PSC-96-0444-FOF-TP Issued March 29, 1996.

The Unbundled Loop Channelization System and Central Office Channel Interface is an arrangement offered to the Alternative Local Exchange Companies (ALECs) for the purpose of channelizing multiple Digital Loop Carrier 1.544 Mbps channels on a non-concentrated or concentrated basis up to a maximum of 96 channels per system. These channels are only available for connection to Unbundled Access Loops, voice grade only. Included in this cost study and associated with the Unbundled Loop Channelization System is the Central Office Channel Interface. The Unbundled Loop Channelization System requires a Central Office Channel Interface for each channel of lesser (voice grade) capacity.

Recurring costs presented in this study are directly assigned, incremental and levelized so as to be appropriate for the 1996-1998 study period. Nonrecurring costs follow the same convention and represent 1996-1998 level costs also. These long-run incremental costs are developed by using 1995 level incremental loadings and annual cost factors based on 13.2% Cost of Money and directly assigned labor rates.

SECTION 2

SECTION 2

FLORIDA UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of costs supporting the Florida Unbundled Loop Channelization System and Central Office Channel Interface.

All costs are developed utilizing Long Run Incremental Cost methodology. In determining these costs, direct incremental costing techniques are used that are in accordance with accepted economic theory. Direct incremental costs are based on cost causation and include all of the costs directly caused by expanding production, or, alternately, costs that would be saved if the production levels were reduced. Costs are forward looking in nature because only future costs can be saved. Incremental costs are long run to insure that the time period studied is sufficient to capture all forward looking costs affected by the business decision. Shared and common costs are not incremental and therefore are not included. Incremental costs include both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs. Incremental costs account for the expected change in cost to the firm resulting from a new service offering or a change in demand for an existing service.

THE DEVELOPMENT OF RECURRING COSTS

The monthly costs to BellSouth Telecommunications, Inc., resulting from the capital investments necessary to provide a service are called recurring costs. Recurring costs include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs are the expenses of maintenance and ad valorem and other taxes. These expenses contribute to the ongoing cost to the company associated with the initial capital investment. Recurring costs are developed using incremental economic study applications, representing a forward-looking view of technology and deployment.

The first step in developing an incremental study of recurring costs for the Unbundled Loop Channelization System and Central Office Channel Interface is to determine the forward-looking network architecture. Material prices for the equipment are defined. Next, account specific Telephone Plant Indices are applied, when necessary, to trend investments to the base study period. In-plant factors are applied to material prices to develop installed investments which include engineering and installation labor. The deployment probabilities, capacity, spare stock and utilization of the equipment are also considered.

Plant account specific Investment Inflation Factors are applied to the installed investments to trend the base year, or study year, investments to levelized amounts that are valid for a three to five year planning period. Appropriate loadings for land, building and miscellaneous common equipment and power are then applied.

Next, 1995 level Florida Intrastate Incremental Annual Cost Factors are used to calculate the direct cost of capital (in this case, 13.2%), ongoing maintenance and other operating expenses and taxes. These factors (specific factors for each USOA FRC) are applied to levelized investments by account code, yielding an annual cost per account code. These costs are then divided by twelve to arrive at a monthly cost per cost element.

THE DEVELOPMENT OF NONRECURRING COSTS

Nonrecurring costs are "one-time" costs incurred as a result of provisioning, installing, and disconnecting the Unbundled Loop Channelization System and Central Office Channel Interface. The first step in developing nonrecurring costs is to determine the cost elements related to the study. These cost elements are then described by all of the individual work functions required to provision the cost element. The work functions can be grouped into four categories. These are service order, engineering, connect and test, and technician travel time. The work function times, identified by subject matter experts, are used to describe the flow of work within the various work centers involved. Installation and provisioning costs are developed by multiplying the work time for each work function by the directly assigned labor rate for the work group performing the function.

Utilizing work functions, work times, and labor rates, disconnect costs are calculated in the same manner as the installation costs. Since the labor costs will occur in the future, the current labor rates are inflated to that future period in time and then discounted to the present. The discounted disconnect cost is added to the installation cost and gross receipts tax is applied to develop the total nonrecurring cost.

SECTION 3

SECTION 3

FLORIDA UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

SUMMARY OF RESULTS

This section contains a cost summary for both recurring and nonrecurring cost elements studied for the 1996-1998 Unbundled Loop Channelization System and Central Office Channel Interface for Florida.

FLORIDA UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

SUMMARY OF RESULTS

		A	B	C
		Monthly	Nonrecurring Cost	
		Cost	First	Additional
6	Channelization System			
7	Central Office Channel			
8	Interface - Voice			

SECTION 4

SECTION 4

FLORIDA UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

COST DEVELOPMENT - RECURRING

This section defines the cost development of the recurring costs for the Florida Unbundled Loop Channelization System and Central Office Channel Interface.

Generally, economic cost development is outlined in Section 2. Network architecture is determined, the necessary equipment is identified, material prices are obtained, factors, utilization and loadings are applied and the result is levelized for the study period. Annual cost factors are applied to convert the investment to cost.

Recurring costs are developed for the system and for the voice grade feature activation. The system is a TR303 96 capacity digital loop carrier remote terminal. Since the system is located in the central office, bulk power is not required. The system cost includes the hardwired equipment and the common plug-ins. The Voice (Unbundled Exchange Access) Central Office Channel Interface is based on a Plain Old Telephone (POTS) plug-in. Since the interface cost element is per circuit and the plug-in serves two voice grade circuits, the monthly cost is divided by two.

The following workpapers develop the investment, convert the investment to monthly costs, and summarize the results.

UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE COST SUMMARY

State: Florida
Workpaper: 100
Page: 1 OF 1
Date: May-96

Ln	A DESCRIPTION	B MONTHLY COST	C SOURCE
1			
2	(CONCENTRATED AND NON-CONCENTRATED)		
3			
4	System - Capacity 96 Voice Grade Circuits		Wp200 Pg1 Ln 10 Col O
5			
6	Working Plug-in for 96 capacity system serves 2 POTS lines		
7	Cost per Circuit		Wp200 Pg2 Ln 10 Col C
8			
9			
10			
11			
12			
13			
14			
15	Note:		
16	Concentrated is Mode II.		
17	Non-concentrated is Mode I.		
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

UNBUNDLED LOOP CHANNELIZATION SYSTEM AND
CENTRAL OFFICE CHANNEL INTERFACE
MONTHLY UNIT COST DEVELOPMENT

State Florida
Workpaper 200
Page. 1 OF 2
Date May 96

RATE ELEMENT: System Capacity 96 Voice Grade Circuits

					ANNUAL COSTS										MONTHLY COST
Ln	A **Description:**	B Account Code	C **Investment**	D **Source**	E=C*FACTOR **Depreciation**	F=C*FACTOR **COM**	G=C*FACTOR Income Tax	H=E+F+G Capital Expense	I=C*FACTOR **Maintenance**	J=C*FACTOR Ad Valorum Tax	K=C*FACTOR **TIRKS Exp.**	L=I+J+K Operating Expense	M=C*FACTOR **GRT**	N=H+L+M **Total**	O=N/12
1															
2	Installed investment per	357C	$	Wp300 Pg1 Ln 30	-										
3	96 capacity system														
4	*(Mode I or Mode II)*														
5															
6	Land	20C	$	Wp300 Pg1 Ln 33	$ -	$			$ -	$	-	$			
7															
8	Buildings	10C	$	Wp300 Pg1 Ln 36	$						-	$			
9															
10	Total												Total per Circu $		
11															
12															
13	NOTE:														
14	FACTOR = ACF Located in Wp201pg1														
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															

UNBUNDLED LOOP CHANNELIZATION SYSTEM AND
CENTRAL OFFICE CHANNEL INTERFACE
MONTHLY UNIT COST DEVELOPMENT

State: Florida
Workpaper: 200
Page: 2 OF 2
Date: May-96

RATE ELEMENT: Working Plug-in for 96 capacity system - Serves 2 POTS lines

					ANNUAL COSTS										MONTHLY COST
	A	B	C	D	E=C*FACTOR	F=C*FACTOR	G=C*FACTOR	H=E+F+G	I=C*FACTOR	J=C*FACTOR	K=C*FACTOR	L=I+J+K	M=C*FACTOR	N=H+L+M	O=N/12
Ln	Description:	Account Code	Investment	Source	Depreciation	COM	Income Tax	Capital Expense	Maintenance	Ad Valorum Tax	TIRKS Exp.	Operating Expense	GRT	Total	
1															
2	Installed investment	367C	$	Wp300 Pg2 Ln 24	$										
3															
4	Land	20C	$	Wp300 Pg2 Ln 27	$										
5															
6	Buildings	10C	$	Wp300 Pg2 Ln 30	$										
7															
8	Total		$	Total Ln 2, 4, 6											
9															
10	Total per Circuit		$	Ln 8 Col 0/2											
11															
12															
13	NOTE:														
14	FACTOR = *ACF Located in Wp201pg1*														
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															

UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE ANNUAL COST FACTORS

State: Florida
Workpaper: 201
Page: 1 OF 1
Date: May-96

Ln	Description	Code	Depreciation	COM	Inc. Tax	Cap. Expense	Maintenance	Adval. Tax	TIRKS Exp.	Opr. Expense	GRT	Total
1												
2	Digital Circuit	357C	0.1134	0.0638	0.0297	0.2069	0.0086	0.0113	0.0052	0.0251	0.0035	0.2355
3	Buildings	10C	0.0302	0.0986	0.0452	0.1740	0.0069	0.0113	0.0000	0.0182	0.0029	0.1951
4	Land	20C	0.0000	0.1118	0.0514	0.1632	0.0000	0.0113	0.0000	0.0113	0.0027	0.1772
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												

State	Florida
Work Paper	300
Page	1 of 2
Date	May 96

UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

Development of Investment

Ln	Description	A Result	B FRC	C Source
1	**Material Price**			
2	Hardwired		$357C	Network
3	Common Plug-Ins		357C	Network
4				
5	**Misc Material Loadings for Common Plug-Ins**		0.10	Network
6	Total Material Price for Common Plugs	$	357C	(1+Line 5)*Line 3
7				
8	**Telephone Plant Index**		1.00 357C	Network
9	Hardwired Material Price-Base Year	$	357C	Line 2*Line 8
10	Common Plug-In Material Price-Base Year	$	357C	Line 6*Line 8
11				
12	**In-Plant-Factors**			
13	Hardwired		1.50 357C	Network
14	Common Plug-Ins		1.25 357C	Network
15				
16	**Installed Investment**			
17	Hardwired		357C	Line 13*Line 9
18	Common Plugs		357C	Line 14*Line 10
19	2 DSX-1 Terminations (Installed/Utilized)	$	357C	Fundamental Investment Model
20	Total Installed Investment	$	357C	Line 17+Line 18+Line 19
21				
22	**Levelization Factor (Inflation)**		0.970 357C	Economic Analysis
23	Inflated Investment		357C	Line 20*Line 22
24				
25	**Utilization Factor**		1.00	Tariff Structure
26	Utilized/Inflated Circuit	$	357C	(Line 23)/Line 25
27				
28	**Misc. Common Equipment & Power Factor**		0.1202 357C	Economic Analysis
29	MCE&P Investment in CKT		357C	Line 26*Line 28
30	Total Investment in CKT		357C	Line 26+Line 29
31				
32	**Land Factor**		0.0030 20C	Economic Analysis
33	Land Investment	$		Line 30*Line 32
34				
35	**Building Factor**		0.0404 10C	Economic Analysis
36	Building Investment	$		Line 30*Line 35

UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

Development of Investment

State	Florida
Work Paper	300
Page	2 of 2
Date	May 96

		A	B	C
Ln	Description	Result	FRC	Source
1	**Material Price**			
2	POTS Plug-Ins	$	357C	Network
3				
4	**Telephone Plant Index**	1.00	357C	Network
5	POTS Plug-In Material Cost-Base Year	$	357C	Line 2*Line 4
6				
7	**In-Plant-Factors**			
8	Deferrable Plug-Ins	1.17	357C	Economic Analysis
9				
10	**Installed Investment**			
11	POTS	$	357C	Line 5*Line 8
12				
13	**Levelization Factor (Inflation)**	0.970	357C	Economic Analysis
14	Inflated Investment	$	357C	Line 11*Line 13
15				
16	**Utilization Factor**	1.00	357C	Tariff Structure
17	Utilized/Inflated Circuit	$	357C	(Line 14)/Line 16
18				
19	**Spare Stock Factor**	0.0925	357C	Economic Analysis
20	Deferrable POTS Plugs	$	357C	Line 19*Line 17
21				
22	**Misc. Common Equipment & Power Factor**	0.1202	357C	Economic Analysis
23	MCE&P Investment in CKT	$	357C	(Line 17+Line 20)*Line 22
24	Total Investment in CKT	$	357C	Line 17+Line 20+Line 23
25				
26	**Land Factor**	0.003	20C	Economic Analysis
27	Land Investment	$	20C	Line 26*Line 24
28				
29	**Building Factor**	0.0404	10C	Economic Analysis
30	Building Investment	$	10C	Line 29*Line 24

SECTION 5

SECTION 5

FLORIDA UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

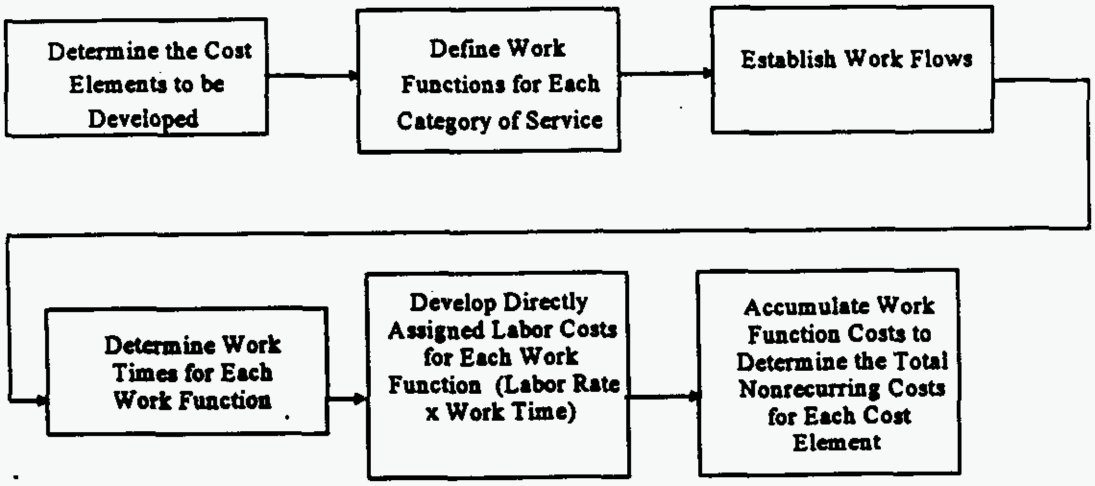
COST DEVELOPMENT - NONRECURRING

Nonrecurring costs are one-time costs incurred as a result of provisioning, installing, disconnecting and completion of orders initiated by a customer request for the Unbundled Loop Channelization System and Central Office Channel Interface. The Nonrecurring Cost Study is performed to determine the service order, provisioning and disconnect costs associated with the cost element listed above. Calculations for the nonrecurring costs are included in this section.

Figure 5-1 shows a generalized flow of the steps necessary for developing nonrecurring costs. Each part of this flow will be explained in more detail in this section.

Figure 5-1

Generalized Flow Diagram for Developing Nonrecurring Costs



The first step in developing nonrecurring costs is to determine the cost elements to be studied. Each cost element is then described by all of the individual work functions required to provision the element. An example of a work function is the designing of a circuit in the Circuit Provisioning Group.

The work functions required to provide the Unbundled Loop Channelization System and Central Office Channel Interface can be grouped into four categories. These are:

1) Service Order
2) Engineering
3) Connect and Test
4) Technician Travel Time

Work functions included in these categories range from clerical activities to installation activities.

The next step in developing nonrecurring costs requires that Company subject matter experts identify the work functions involved in the provisioning of the Unbundled Loop Channelization System and Central Office Channel Interface (an example of a work function is making a cross-connect in the central office). These work functions are then used to describe the flow of work within the various work centers involved in provisioning the element.

The next step in the development of nonrecurring costs is to determine work times for each work function associated with the nonrecurring costs for the Unbundled Loop Channelization System and Central Office Channel Interface. The work times of the various work groups are determined from Subject Matter Expert inputs. Each work time estimate is made by a subject matter expert who thoroughly understands how each activity is done.

A spreadsheet model is used to incorporate the specific work functions and labor rates. In order to arrive at the nonrecurring cost for the element studied, the work times for each work function required is multiplied by the appropriate labor rate. The labor inflation factors (LIF) are used to bring the labor rate to the study period. The levelized labor rate is expressed on a per minute basis on workpapers 750 and 850, as are the worktimes. The labor rates and the labor inflation factors are shown in Section 7. Next, the individual work function costs are accumulated into the total cost for the cost element studied.

To recognize cost reductions on orders with multiple systems and/or interfaces, costs are calculated separately for the first and additional system and/or interface. "First" refers to the first item on a service order. "Additional" costs are the incremental costs of providing one or more duplicates of the item on the same service order at the same time as the first.

The basic process by which nonrecurring costs are calculated consists of combining unit work times with hourly costs of each specific service category. These labor times, and service order related work times, are multiplied by the directly assigned labor rates for the work groups performing the activities.

Utilizing work functions, work times, and labor rates, disconnect costs are calculated in the same manner as the installation costs. Since the labor costs will occur in the future, the current labor rates are inflated to that future period in time and then discounted to the present. The discounted disconnect cost is added to the installation cost and gross receipts tax is applied to develop the total nonrecurring cost.

The following workpapers reflect the cost development.

SUMMARY OF NONRECURRING COSTS

STATE: FLORIDA
WORKPAPER: 700
PAGE: 1 OF 1
DATE: Aug-96

UNBUNDLED LOOP CHANNELIZATION SYSTEM

(1996-1998 Level Incremental Costs)

1	DESCRIPTION	SOURCE	A FIRST	B ADDTL
2				
3	Service Order	WP750 Col G LN7 THRU LN19	[redacted]	[redacted]
4				
5	Engineering	WP750 Col G LN22 and LN24	[redacted]	[redacted]
6				
7	Connect & Test	WP750 Col G LN27	[redacted]	[redacted]
8				
9	Technician Travel Time	NA	NA	NA
10				
11				
12	Total Nonrecurring Cost	Sum of L3, L5, L7, L9	[redacted]	[redacted]
13				
14				
15				
16				
17				
18				
19				
20				

DEVELOPMENT OF NONRECURRING COSTS
UNBUNDLED LOOP CHANNELIZATION SYSTEM

STATE: FLORIDA
WORKPAPER: 750
PAGE: 1 OF 1
DATE: Aug-96

LEVEL 1996 – 1998

DIRECTLY ASSIGNED

		(A)		(B)		(C)	(D)		(E)		(F)		(G)	
1											DISCOUNTED			
2														
3		INSTALL		DISCONNECT		LEVELIZED	INSTALL		DISCONNECT		DISCONNECT		(D+F)*(1+GRT)	
4		WORKTIMES (HRS)		WORKTIMES (HRS)		LABOR	COST (A*C)		COST (B*C)		COST (E*DDF)		TOTAL	TOTAL
5	DESCRIPTION	FIRST	ADDTL	FIRST	ADDTL	RATE	FIRST	ADDTL	FIRST	ADDTL	FIRST	ADDTL	FIRST	ADDTL
6	SERVICE ORDER													
7	CUSTOMER POINT OF CONTACT–ICSC					$40.90								
8														
9	ISC TEAM MEMBER					$42.06								
10														
11	ISC CLERICAL SUPPORT					$31.47								
12														
13	CIRCUIT PROVISIONING CENTER–CPC					$36.65								
14														
15	NETWORK ADMINISTRATION					$35.03								
16														
17	CO INSTALL & MTCE–CKT & FAC–NTEL					$41.64								
18														
19	NETWORK & ENGINEERING PLANNING					$58.43								
20														
21	ENGINEERING													
22	NETWORK PLUG–IN ADMINISTRATION–PICS					$44.56								
23														
24	CIRCUIT PROVISIONING CENTER–CPC					$36.65								
25														
26	CONNECT & TEST													
27	CO INSTALL & MTCE–CKT & FAC–NTEL					$41.64								
28														
29														
30	TOTAL NONRECURRING COST													

SUMMARY OF NONRECURRING COSTS

STATE: FLORIDA
WORKPAPER: 800
PAGE: 1 OF 1
DATE: Aug-96

UNBUNDLED LOOP CHANNELIZATION SYSTEM
CENTRAL OFFICE CHANNEL INTERFACE – VOICE

(1996–1998 Level Incremental Costs)

			A	B
1	DESCRIPTION	SOURCE	FIRST	ADDTL
2				
3	Service Order	WP850 Col G LN9		
4				
5	Engineering	WP850 Col G LN13		
6				
7	Connect & Test	WP850 Col G LN17 and LN19		
8				
9	Technician Travel Time	NA	NA	NA
10				
11				
12	Total Nonrecurring Cost	Sum of L3, L5, L7, L9		
13				
14				
15				
16				
17				
18				
19				
20				

DEVELOPMENT OF NONRECURRING COSTS
UNBUNDLED LOOP CHANNELIZATION SYSTEM
CENTRAL OFFICE CHANNEL INTERFACE – VOICE

STATE: FLORIDA
WORKPAPER: 850
PAGE: 1 OF 1
DATE: Aug–96

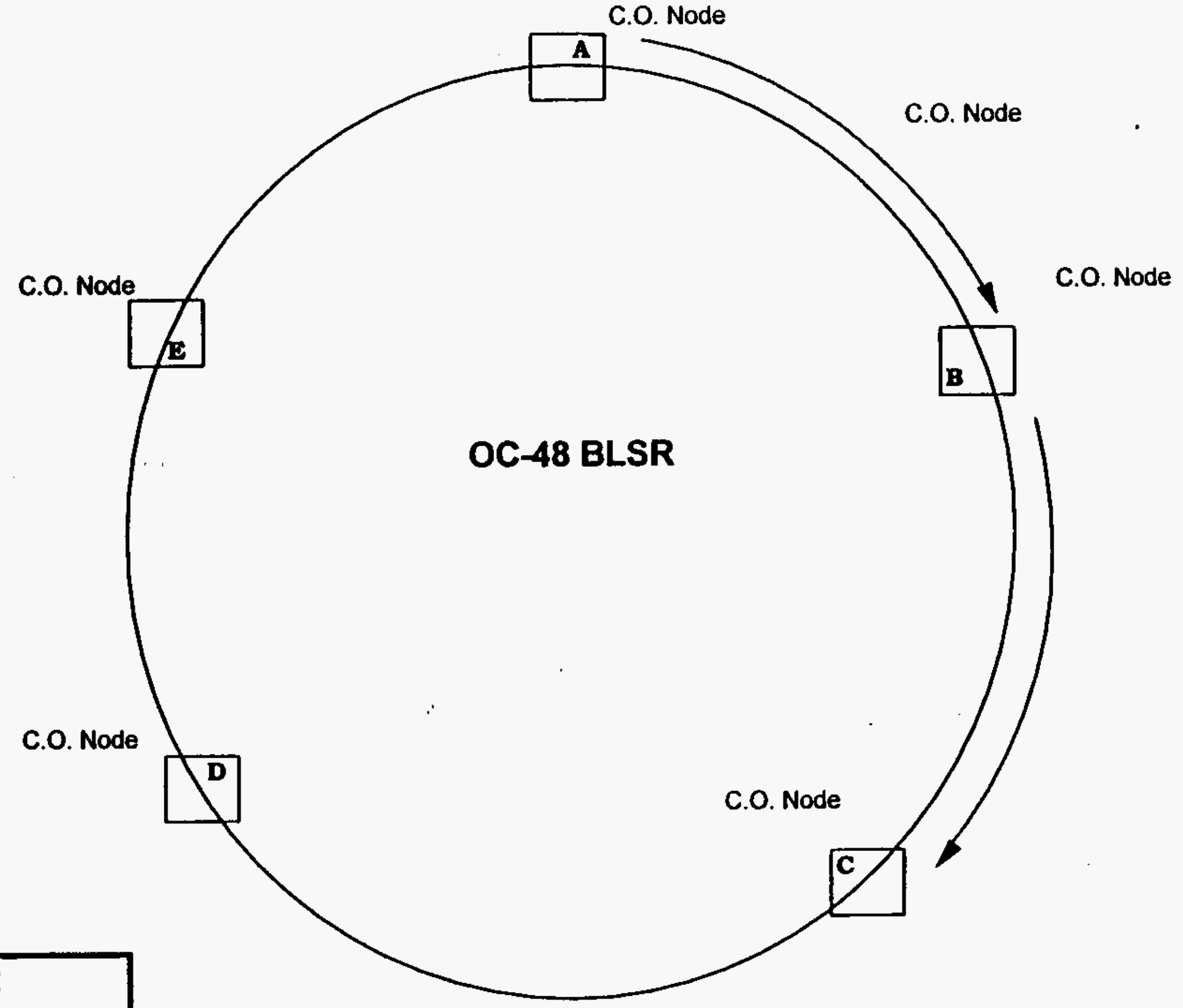
LEVEL 1996 – 1998

DIRECTLY ASSIGNED

		(A)		(B)		(C)	(D)		(E)		(F)		(G)	
1											DISCOUNTED			
2		INSTALL		DISCONNECT		LEVELIZED	INSTALL		DISCONNECT		DISCONNECT		(D+F)*(1+GRT)	
3		WORKTIMES (HRS)		WORKTIMES (HRS)		LABOR	COST (A*C)		COST (B*C)		COST (E*DDF)		TOTAL	TOTAL
5	DESCRIPTION	FIRST	ADDTL	FIRST	ADDTL	RATE	FIRST	ADDTL	FIRST	ADDTL	FIRST	ADDTL	FIRST	ADDTL
6														
7														
8	SERVICE ORDER													
9	NETWORK PLUG–IN ADMINISTRATION–PICS					$44.56	$							
10														
11														
12	ENGINEERING													
13	NETWORK PLUG–IN ADMINISTRATION–PICS					$44.56								
14														
15														
16	CONNECT & TEST													
17	NETWORK ADMINISTRATION					$35.03								
18														
19	CO INSTALL & MTCE–CKT & FAC–NTEL					$41.64								
20														
21														
22	TOTAL NONRECURRING COST													
23														
24														
25														

DESIGN #1

FLORIDA



Equipment

OC-48 (BLSR) C.O. Node
OC-48 (BLSR) C.O. Node Intermediate
C.O. Interface
Data Communications Equipment
Fiber

Nodes = 5
Circumference = 40 mi
No. Traffic Segments = 2
Avg. Segment Distanc = 8 mi

SECTION 6

SECTION 6

FLORIDA UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

SPECIFIC STUDY ASSUMPTIONS

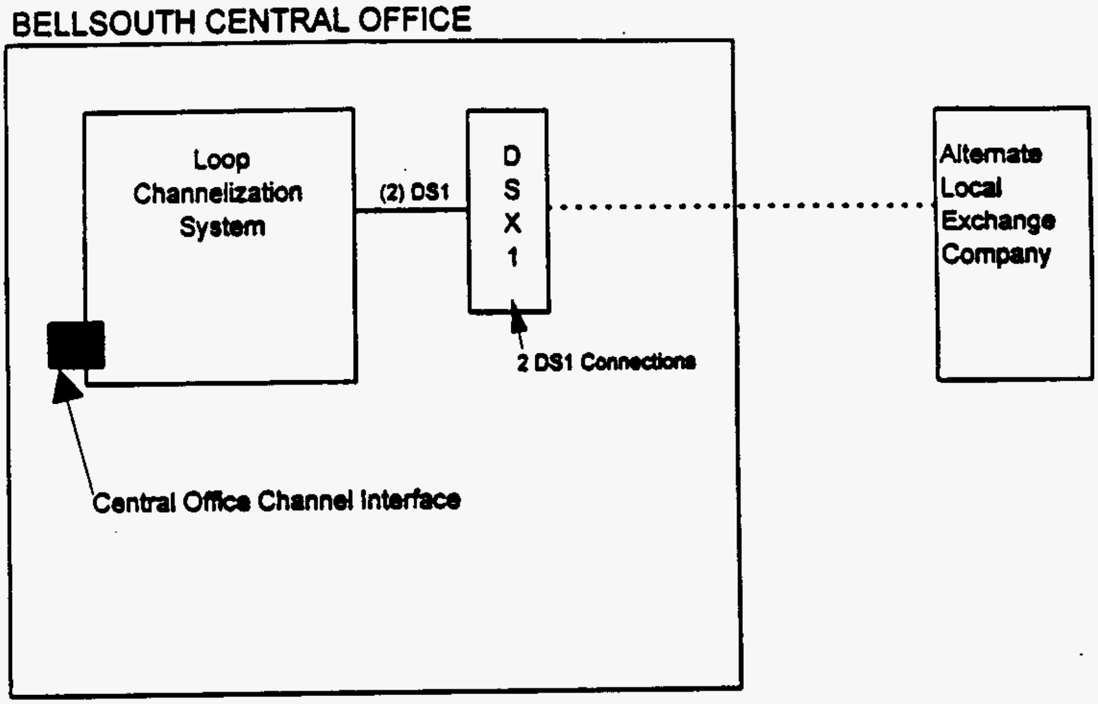
The cost study for the Unbundled Loop Channelization System and Central Office Channel Interface for the state of Florida is based on incremental economic theory and assumptions, plus specific Network deployment strategies, first choice provisioning guidelines, and equipment purchasing information.

Cost study assumptions are as follows.

1. The cost of money is 13.2%, the forward-looking incremental cost to the firm.
2. The equipment that will be deployed is an AT&T TR303, 96 capacity.
3. Only connection to Unbundled Exchange Access Loops, voice grade, will be allowed. Therefore, the deferrable plug-in is a voice grade Plain Old Telephone (POTS) plug-in.
4. Since the remote terminal is located in the central office, bulk power is not required.
5. The equipment will be predominantly concentrated at a 2:1 ratio. Two DSX-1 panel terminations are included.

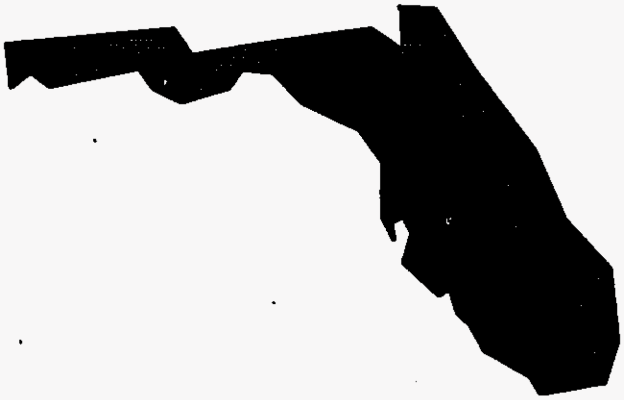
A diagram of the architecture is found on the following page.

UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE



FPSC Docket No. 960833-TP
Exhibit No. DDC-11

FLORIDA



SPECIAL ACCESS
VOICE GRADE SERVICE

INTEROFFICE CHANNEL VOICE-UNBUNDLED EXCHANGE ACCESS

COST STUDY DOCUMENTATION

SECTIONS A THRU 7

FLORIDA

SPECIAL ACCESS VOICE GRADE SERVICE
INTEROFFICE CHANNEL VOICE - UNBUNDLED EXCHANGE ACCESS

COST STUDY DOCUMENTATION

CONTENTS

SECTION A	PROPRIETARY RATIONALE
SECTION 1	INTRODUCTION AND OVERVIEW
SECTION 2	DESCRIPTION OF STUDY PROCEDURES
SECTION 3	SUMMARY OF RESULTS
SECTION 4	COST DEVELOPMENT - RECURRING
SECTION 5	COST DEVELOPMENT - NONRECURRING
SECTION 6	SPECIFIC STUDY ASSUMPTIONS
SECTION 7	FACTORS AND LOADINGS

SECTION A

SECTION A

FLORIDA SPECIAL ACCESS VOICE GRADE SERVICE INTEROFFICE CHANNEL VOICE - UNBUNDLED EXCHANGE ACCESS

PROPRIETARY RATIONALE

The Florida Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access Cost Study contains actual unit cost information for discrete cost elements. These costs reflect BellSouth's long run incremental cost of providing this element on a going forward basis. Public disclosure of this information would provide BellSouth's competitors with an advantage. The data is valuable to competitors and potential competitors in formulating strategic plans for entry, pricing, marketing and overall business strategies. This information relates to the competitive interests of BellSouth and disclosure would impair the competitive business of BellSouth.

Additionally, the study contains information which reflects vendor-specific prices negotiated by BellSouth. Public disclosure of this information would impair BellSouth's ability to contract for goods and/or services on favorable terms. For these reasons, the Florida Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Access Cost Study is considered proprietery.

SECTION 1

FLORIDA SPECIAL ACCESS VOICE GRADE SERVICE INTEROFFICE CHANNEL VOICE - UNBUNDLED EXCHANGE ACCESS

INTRODUCTION AND OVERVIEW

This Long Run Incremental Cost study is being provided to support the Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access in the state of Florida.

The Long Run Incremental Costs presented in this study are volume sensitive costs. The Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access has no volume insensitive costs.

The Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access is an arrangement offered to Alternative Local Exchange Companies (ALECs) for the purpose of providing a dedicated voice grade transmission path between two or more switching offices and/or serving wire centers of BellSouth. This is for connecting an Unbundled Exchange Access loop to another central office that is not the central office of the end user. The facility includes transmission equipment in both end offices, as well as the circuit equipment in the intermediate central offices. The per mile cost consists of aerial, buried and underground fiber cable as well as the associated pole and conduit support investments.

Recurring costs presented in this study are directly assigned, incremental and levelized so as to be appropriate for the 1996-1998 study period. Nonrecurring costs follow the same convention and represent 1996-1998 level costs also. These Long Run Incremental Costs are developed by using 1995 level incremental loadings, annual cost factors, and directly assigned labor rates.

SECTION 2

SECTION 2

FLORIDA SPECIAL ACCESS VOICE GRADE SERVICE INTEROFFICE CHANNEL VOICE - UNBUNDLED EXCHANGE ACCESS

DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of costs supporting the Florida Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access.

In determining costs, BellSouth uses direct incremental costing techniques that are in accordance with accepted economic theory. Direct incremental costs are based on cost causation and include all of the costs directly caused by expanding production, or, alternatively, costs that would be saved if the production levels were reduced. The production unit may be an entire service or a unit of the service depending on the cost object involved. Costs for a service may include volume sensitive and/or volume insensitive costs. Costs are forward looking in nature because only future costs can be saved. Incremental costs are long run to assure that the time period studied is sufficient to capture all forward looking costs affected by the business decision. Shared and common costs are not incremental and, therefore, are not included. Incremental costs include both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs. Incremental costs account for the expected change in cost to the firm resulting from a new service offering or from a change in demand for an existing service.

DEVELOPMENT OF RECURRING COSTS

The monthly costs to BellSouth Telecommunications, Inc., resulting from the capital investments necessary to provide a service are called recurring costs. Recurring costs include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs are the expenses for maintenance, ad valorem and other taxes. These expenses contribute to the ongoing cost to the company associated with the initial capital investment. Recurring costs are developed using incremental economic study applications, representing a forward-looking view of technology and deployment.

The first step in developing an incremental recurring cost study for the Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access is to determine the forward-looking network architecture. Material prices for the equipment are defined. Next, account specific Telephone Plant Indices are applied, when necessary, to trend investments to the base study period. In-plant factors are applied to material prices to develop installed investments which include engineering and installation labor. The deployment probabilities, capacity, spare stock and utilization of the equipment are also considered.

Plant account specific Investment Inflation Factors are applied to the installed investments to trend the base year, or study year, investments to levelized amounts that are valid for a three to five year planning period. Appropriate loadings for land, building, and miscellaneous common equipment and power are then applied to the electronic equipment. Support structure loadings are applied for poles and conduit to the aerial and underground fiber investments, respectively.

Next, 1995 level Incremental Annual Cost Factors are used to calculate the direct cost of capital, ongoing maintenance and other operating expenses and taxes. Account specific factors for each Uniform System of Accounts - Field Reporting Code (USOA-FRC) are applied to levelized investments by account code, yielding an annual cost per account code. Annual costs by account codes are then summed. These costs are then divided by twelve to arrive at a monthly cost per cost element.

DEVELOPMENT OF NONRECURRING COSTS

Nonrecurring costs are "one-time" costs incurred as a result of provisioning, installing, and disconnecting the Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access. The first step in developing nonrecurring costs is to determine the cost elements related to the study. These cost elements are then described by all of the individual work functions required to provision the cost element. The work functions can be grouped into four categories. These are service order, engineering, connect and test, and technician travel time. The work function times, identified by subject matter experts, are used to describe the flow of work within the various work centers involved. Installation and provisioning costs are developed by multiplying the work time for each work function by the directly assigned labor rate for the work group performing the function.

Utilizing work functions, work times, and labor rates, disconnect costs are calculated in the same manner as the installation costs. Since the labor costs will occur in the future, the current labor rates are inflated to that future period in time and then discounted to the present. The discounted disconnect cost is added to the installation cost and gross receipts tax is applied to develop the total nonrecurring cost.

SECTION 3

SECTION 3

FLORIDA SPECIAL ACCESS VOICE GRADE SERVICE INTEROFFICE CHANNEL VOICE - UNBUNDLED EXCHANGE ACCESS

SUMMARY OF RESULTS

This section contains a cost summary for both recurring and nonrecurring cost elements studied for the 1996-1998 Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access.

FLORIDA SPECIAL ACCESS VOICE GRADE SERVICE
INTEROFFICE CHANNEL VOICE - UNBUNDLED EXCHANGE ACCESS

SUMMARY OF RESULTS

		A	B
		Monthly Cost	
		Fixed	Per Mile
	Interoffice Channel Voice Unbundled Exchange Access		
8	1 thru 8 miles		
9	9 thru 25 miles		
10	Over 25 miles		

		Nonrecurring Cost	
		First	Additional
	Interoffice Channel Voice Unbundled Exchange Access		
15	1 thru 8 miles		
16	9 thru 25 miles		
17	Over 25 miles		

SECTION 4

SECTION 4

FLORIDA SPECIAL ACCESS VOICE GRADE SERVICE
INTEROFFICE CHANNEL VOICE - UNBUNDLED EXCHANGE ACCESS

COST DEVELOPMENT - RECURRING

This section defines the cost development of the recurring costs for the Florida Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access.

Generally, economic cost development is outlined in Section 2. Network architecture is determined, the necessary equipment is identified, material prices are obtained, factors, utilization and loadings are applied and the result is levelized for the study period. Annual cost factors are applied to convert the investment to cost.

Recurring costs are developed for the fixed and per mile component of the interoffice transmission facility provided on SONET ring architecture which is the forward looking technology. Designs for the SONET rings were obtained from the Florida Network Department.

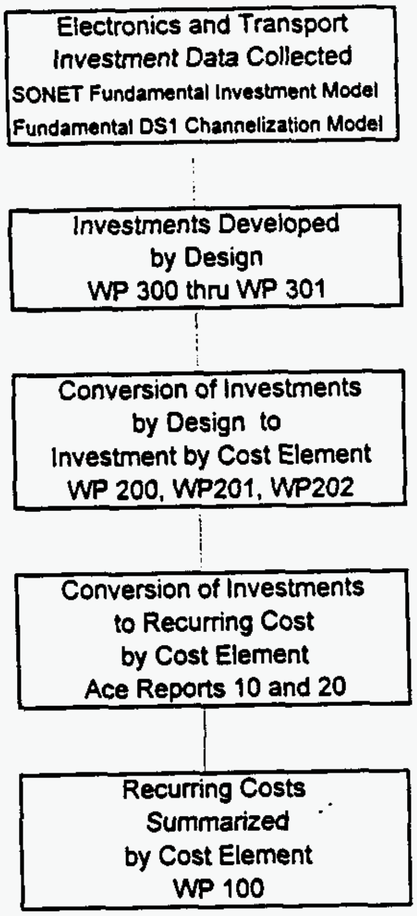
The fixed component includes the SONET multiplexer, the DS1 channelization card, a fiber splicing terminal, DSX-1 panel, a D4 Channel Bank and a voice grade activation plug-in at each end of the facility. Also included in the fixed component is the circuit equipment in the intermediate central office. The intermediate central office equipment includes the SONET multiplexer and a fiber splicing terminal. The per mile cost consists of aerial, buried and underground fiber cable as well as the associated pole and conduit support investments.

The SONET Fundamental Investment Model was used to develop the investments for the SONET lightwave multiplexing equipment, the DS1 channelization card, the fiber splicing terminal, the DSX-1 panel and per mile per strand investments for aerial, buried and underground fiber cable.

The Fundamental DS1 Channelization Model was used to develop the investments for the channel banks and associated plug-ins.

The following workpapers develop the investment, convert the investment to monthly costs, and summarize the results.

INTEROFFICE CHANNEL VOICE - UNBUNDLED EXCHANGE ACCESS



Interoffice Channel Voice - Unbundled Exchange Access
Interoffice
Voice Grade

State: FLORIDA
Workpaper: 100
Page: 1 of 1
Date: 5-Jul-96

Monthly Recurring Costs

A

Fixed	Source
1 thru 8 miles	Ace Report 20 Page 1
9 thru 25 miles	Ace Report 20 Page 3
Over 25 miles	Ace Report 20 Page 5
Per Mile	
1 thru 8 miles	Ace Report 20 Page 2
9 thru 25 miles	Ace Report 20 Page 4
Over 25 miles	Ace Report 20 Page 6

1 USOC ANNU. ,OST DETAILS
2 CSNUMBER:
3 CSNAME:
4 TARIFF ELEMENT: :

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1 of 6
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6	State	Tariff Ref	USOC	Modifier	Technology	Volume Sensitivity	Economic Type	Investment Basis
	FL		1	VG	SONET	VS	DIR	VG

9			INVESTMENT DATA		ANNUAL COST FACTORS							ANNUAL EXPENSES						
10			NOTE 1.									NOTE 2.			NOTE 3.			NOTE 4.
			A	B								C	D	E	F	G	H	I
11 12 13 14	Field Code A	State B	Capital Investment C	Operating Investment D	Dep. Factor E	Levelized C.O.M. F	Inc Tax Factor G	Mtce Factor H	Other Factor I	AdVal Factor J	GRT K	Depr. Expense L (C*E)	C.O.M. Expense M (C*F)	Inc Tax Expense N (C*G)	Mtce Expense O (D*H)	Other Expense P (D*I)	Adval Expense Q (D*J)	GRT Expense R
	10C	FL			.0302	.0986	.0452	.0069	0.0000	.0113	.0152							
	20C	FL			0.0000	.1118	.0514	0.0000	0.0000	.0113	.0152							
	357C	FL			.1134	.0638	.0297	.0086	.0052	.0113	.0152							

15 TOTALS
16
17
18 TOTAL ANNUAL COST......................... TOTAL MONTHLY COST.....................
19
20

NOTES:
1. Capital and Operating Investments are the INVESTMENTS from ACE Report 10
2. Depreciation, Cost of Money and Income Tax Expense = Capital Investment multiplied by the corresponding Annual Cost Factor
3. Maintenance, Other and Ad Valorem Expenses = Operating Investment multipled by the corresponding Annual Cost Factor
4. Gross Receipts Tax = Gross Receipts Tax Factor multipled by the sum of the Capital Costs and Operating Expenses

PRIVATE/PROPRIETARY: NO DISCLOSURE OUTSIDE BELLSOUTH EXCEPT BY WRITTEN AGREEMENT

1 USOC ANNU. OST DETAILS
2 CSNUMBER:
3 CSNAME:
4 TARIFF ELEMENT: ;

ACE ORT 20
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7/26/96

6 State	Tariff Ref	USOC	Modifier	Technology	Volume Sensitivity	Economic Type	Investment Basis
FL		2	VG	SONET	VS	DIR	VG

9 INVESTMENT DATA ANNUAL COST FACTORS ANNUAL EXPENSES

10 NOTE 1. NOTE 2. NOTE 3. NOTE 4.

		A	B								C	D	E	F	G	H	I
11 12 13 14 Field Code A	State B	Capital Investment C	Operating Investment D	Dep. Factor E	Levelized C.O.M. F	Inc Tax Factor G	Mtce Factor H	Other Factor I	AdVal Factor J	GRT K	Depr. Expense L (C*E)	C.O.M. Expense M (C*F)	Inc Tax Expense N (C*G)	Mtce Expense O (D*H)	Other Expense P (D*I)	Adval Expense Q (D*J)	GRT Expense R
1C	FL			.0671	.0725	.0325	.0279	0.0000	.0113	.0152							
4C	FL			.0242	.0877	.0401	.0028	0.0000	.0113	.0152							
822C	FL			.0667	.0784	.0347	.0139	0.0000	.0113	.0152							
845C	FL			.0585	.0816	.0367	.0144	0.0000	.0113	.0152							
85C	FL			.0626	.0800	.0358	.0135	0.0000	.0113	.0152							

15 TOTALS
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17
18 TOTAL ANNUAL COST.......................... TOTAL MONTHLY COST......................
19
20

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1 USOC ANNU, OST DETAILS

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2 CSNUMBER:
3 CSNAME:
4 TARIFF ELEMENT: :

6 State	Tariff Ref	USOC	Modifier	Technology	Volume Sensitivity	Economic Type	Investment Basis
FL		3	VG	SONET	VS	DIR	VG

9 INVESTMENT DATA — ANNUAL COST FACTORS — ANNUAL EXPENSES

10 NOTE 1. — NOTE 2. — NOTE 3. — NOTE 4.

			A	B								C	D	E	F	G	H	I
11 12 13 14	Field Code A	State B	Capital Investment C	Operating Investment D	Dep. Factor E	Levelized C.O.M. F	Inc Tax Factor G	Mtce Factor H	Other Factor I	AdVal Factor J	GRT K	Depr. Expense L (C*E)	C.O.M. Expense M (C*F)	Inc Tax Expense N (C*G)	Mtce Expense O (D*H)	Other Expense P (D*I)	Adval Expense Q (D*J)	GRT Expense R
	10C	FL			.0302	.0986	.0452	.0069	0.0000	.0113	.0152							
	20C	FL			0.0000	.1118	.0514	0.0000	0.0000	.0113	.0152							
	357C	FL			.1134	.0638	.0297	.0086	.0052	.0113	.0152							

15 TOTALS
16
17
18 TOTAL ANNUAL COST.........................

TOTAL MONTHLY COST.......................
19
20

NOTES:

1. Capital and Operating Investments are the INVESTMENTS from ACE Report 10
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1 USOC ANNU/ OST DETAILS
2 CSNUMBER:
3 CSNAME:
4 TARIFF ELEMENT: :

6	State	Tariff Ref	USOC	. Modifier	Technology	Volume Sensitivity	Economic Type	Investment Basis
	FL		4	VG	SONET	VS	DIR	VG

9			INVESTMENT DATA			ANNUAL COST FACTORS							ANNUAL EXPENSES					
10			NOTE 1.										NOTE 2.			NOTE 3.		NOTE 4.
			A	B								C	D	E	F	G	H	I
11	Field		Capital	Operating	Dep.	Levelized	Inc Tax	Mtce	Other	AdVal	GRT	Depr.	C.O.M.	Inc Tax	Mtce	Other	Adval	GRT
12	Code	State	Investment	Investment	Factor	C.O.M	Factor	Factor	Factor	Factor		Expense	Expense	Expense	Expense	Expense	Expense	Expense
13	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
14												(C*E)	(C*F)	(C*G)	(D*H)	(D*I)	(D*J)	
	1C	FL			.0671	.0725	.0325	.0279	0.0000	.0113	.0152							
	4C	FL			.0242	.0877	.0401	.0028	0.0000	.0113	.0152							
	822C	FL			.0667	.0784	.0347	.0139	0.0000	.0113	.0152							
	845C	FL			.0585	.0816	.0367	.0144	0.0000	.0113	.0152							
	85C	FL			.0626	.0800	.0358	.0135	0.0000	.0113	.0152							

15 TOTALS
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17
18 TOTAL ANNUAL COST.......................... TOTAL MONTHLY COST.......................
19
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CSNUMBER:

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TARIFF ELEMENT: ;

State	Tariff Ref	USOC	Modifier	Technology	Volume Sensitivity	Economic Type	Investment Basis
FL		5	VG	SONET	VS	DIR	VG

INVESTMENT DATA — ANNUAL COST FACTORS — ANNUAL EXPENSES

NOTE 1. — NOTE 2. — NOTE 3. — NOTE 4.

		A	B								C	D	E	F	G	H	I
Field Code A	State B	Capital Investment C	Operating Investment D	Dep. Factor E	Levelized C.O.M. F	Inc Tax Factor G	Mtce Factor H	Other Factor I	AdVal Factor J	GRT K	Depr. Expense L (C*E)	C.O.M. Expense M (C*F)	Inc Tax Expense N (C*G)	Mtce Expense O (D*H)	Other Expense P (D*I)	Adval Expense Q (D*J)	GRT Expense R
10C	FL			.0302	.0986	.0452	.0069	0.0000	.0113	.0152							
20C	FL			0.0000	.1118	.0514	0.0000	0.0000	.0113	.0152							
357C	FL			.1134	.0638	.0297	.0086	.0052	.0113	.0152							

TOTALS

TOTAL ANNUAL COST..........................

TOTAL MONTHLY COST.......................

NOTES:

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TARIFF ELEMENT: :

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State	Tariff Ref	USOC	Modifier	Technology	Volume Sensitivity	Economic Type	Investment Basis
FL		6	VG	SONET	VS	DIR	VG

INVESTMENT DATA   ANNUAL COST FACTORS   ANNUAL EXPENSES

			NOTE 1.										NOTE 2.			NOTE 3.		NOTE 4.
			A	B								C	D	E	F	G	H	I
1 2 3 4	Field Code A	State B	Capital Investment C	Operating Investment D	Dep. Factor E	Levelized C.O.M. F	Inc Tax Factor G	Mtce Factor H	Other Factor I	AdVal Factor J	GRT K	Depr. Expense L (C*E)	C.O.M. Expense M (C*F)	Inc Tax Expense N (C*G)	Mtce Expense O (D*H)	Other Expense P (D*I)	Adval Expense Q (D*J)	GRT Expense R
	1C	FL			.0671	.0725	.0325	.0279	0.0000	.0113	.0152							
	4C	FL			.0242	.0877	.0401	.0028	0.0000	.0113	.0152							
	622C	FL			.0667	.0784	.0347	.0139	0.0000	.0113	.0152							
	845C	FL			.0585	.0816	.0367	.0144	0.0000	.0113	.0152							
	85C	FL			.0626	.0800	.0358	.0135	0.0000	.0113	.0152							

15 TOTALS
16
17
18 TOTAL ANNUAL COST......................... TOTAL MONTHLY COST......................
19
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NOTES:
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3. Maintenance, Other and Ad Valorem Expenses = Operating Investment multiplied by the corresponding Annual Cost Factor
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1 USOC INVESTMENT DETAILS

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2 CSNUMBER :

3 CSNAME :

4 5 TARIFF ELEMENT :

	State	Tariff Ref	USOC	Modifier	Technology	Vol. Sen.	Economic Type	Investment Basis
6	State	Tariff Ref	USOC	Modifier	Technology	Vol. Sen.	Economic Type	Investment Basis
7	FL		1	VG	SONET	VS	DIR	VG

8	PRIMARY INVESTMENT DATA					INVESTMENT LOADING FACTORS				SUPPORT STRUCTURE LOADINGS			INVESTMENT	
			A	B									C	D
9 10	Field Code	Description	Capital Investment	Operating Investment	Date	FC Factor	InPlant Factor	InPlant Type	CP&E Factor	Loading Factor	Loading Type	Field Code	Capital Investment	Operating Investment
11	357C	Circuit Equipment			7/3/96	1.0000			1.1202					
12	357C	~ Support Loading----->								0.0404	circuit_bldg	10C		
13	357C	~ Support Loading----->								0.0030	circuit_land	20C		
14	*Initial Total Investment*									Adjusted Total Investment				

NOTES: 1. The *Investment for Primary Investments* is calculated by multiplying the primary investment by the applicable investment loading factors.
2. The Investment for Support Structure Loadings is calculated by multiplying the applicable loading factor by the sum of investments *for each primary* Field Code.
3. InPlant Factor types: T = Telco, C = Material Composite, H = Material Hardwire, P = Material Plugin
4. The FC factor is the levelized inflation factor for investments.
5. Capital Investment and Operating Investment source is Workpaper 200 series.

PRIVATE/PROPRIETARY: NO DISCLOSURE OUTSIDE BELLSOUTH EXCEPT BY WRITTEN AGREEMENT.

USOC INVESTMENT DETAILS
CSNUMBER :
CSNAME :
TARIFF ELEMENT :

ACE REPORT 10
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7/26/96

State	Tariff Ref	USOC	Modifier	Technology	Vol. Sen.	Economic Type	Investment Basis
FL		2	VG	SONET	VS	DIR	VG

	PRIMARY INVESTMENT DATA					INVESTMENT LOADING FACTORS				SUPPORT STRUCTURE LOADINGS			INVESTMENT	
	Field Code	Description	A Capital Investment	B Operating Investment	Date	FC Factor	InPlant Factor	InPlant Type	CP&E Factor	Loading Factor	Loading Type	Field Code	C Capital Investment	D Operating Investment
1	822C	Aerial Cable - Fiber			7/3/96	1.0000								
2	822C	~ Support Loading----->								0.2522	pole_fib	1C		
3	845C	Buried Cable-Fiber			7/3/96	1.0000								
4	85C	Underground Cable-Fiber			7/3/96	1.0000								
5	85C	~ Support Loading----->								0.3895	cond_fib	4C		

6 Initial Total Investment

Adjusted Total Investment

NOTES:
1. The Investment for Primary Investments is calculated by multiplying the primary investment by the applicable investment loading factors.
2. The Investment for Support Structure Loadings is calculated by multiplying the applicable loading factor by the sum of investments for each primary Field Code.
3. InPlant Factor types: T = Telco, C = Material Composite, H = Material Hardwire, P = Material Plugin
4. The FC factor is the levelized inflation factor for investments.
5. Capital Investment and Operating Investment source is Workpaper 200 series.

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USOC INVESTMENT DETAILS
CSNUMBER :
CSNAME :
TARIFF ELEMENT :

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7/26/96

State	Tariff Ref	USOC	Modifier	Technology	Vol. Sen.	Economic Type	Investment Basis
FL		3	VG	SONET	VS	DIR	VG

	PRIMARY INVESTMENT DATA					INVESTMENT LOADING FACTORS				SUPPORT STRUCTURE LOADINGS			INVESTMENT	
			A	B									C	D
	Field Code	Description	Capital Investment	Operating Investment	Date	FC Factor	InPlant Factor	InPlant Type	CP&E Factor	Loading Factor	Loading Type	Field Code	Capital Investment	Operating Investment
1	357C	Circuit Equipment			7/3/96	1.0000			1.1202					
2	357C	~ Support Loading----->								0.0404	circuit_bldg	10C		
3	357C	~ Support Loading----->								0.0030	circuit_land	20C		

4 Initial Total Investment

Adjusted Total Investment

NOTES: 1. The Investment for Primary Investments is calculated by multiplying the primary investment by the applicable investment loading factors.
2. The Investment for Support Structure Loadings is calculated by multiplying the applicable loading factor by the sum of investments for each primary Field Code.
3. InPlant Factor types: T = Telco, C = Material Composite, H = Material Hardwire, P = Material Plugin
4. The FC factor is the levelized inflation factor for investments.
5. Capital Investment and Operating Investment source is Workpaper 200 series.

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USOC INVESTMENT DETAILS

CSNUMBER :

CSNAME :

TARIFF ELEMENT :

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State	Tariff Ref	USOC	Modifier	Technology	Vol. Sen.	Economic Type	Investment Basis
FL		4	VG	SONET	VS	DIR	VG

	PRIMARY INVESTMENT DATA					INVESTMENT LOADING FACTORS				SUPPORT STRUCTURE LOADINGS			INVESTMENT	
			A	B									C	D
	Field Code	Description	Capital Investment	Operating Investment	Date	FC Factor	InPlant Factor	InPlant Type	CP&E Factor	Loading Factor	Loading Type	Field Code	Capital Investment	Operating Investment
1	822C	Aerial Cable - Fiber			7/3/96	1.0000								
2	822C	~ Support Loading------>								0.2522	pole_fib	1C		
3	845C	Buried Cable - Fiber			7/3/96	1.0000								
4	85C	Underground Cable - Fiber			7/3/96	1.0000								
5	85C	~ Support Loading------>								0.3895	cond_fib	4C		

6 Initial Total Investment

Adjusted Total Investment

NOTES:
1. The Investment for Primary Investments is calculated by multiplying the primary investment by the applicable investment loading factors.
2. The Investment for Support Structure Loadings is calculated by multiplying the applicable loading factor by the sum of investments for each primary Field Code.
3. InPlant Factor types: T = Telco, C = Material Composite, H = Material Hardwire, P = Material Plugin
4. The FC factor is the levelized inflation factor for investments.
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USOC INVESTMENT DETAILS
CSNUMBER :
CSNAME :
TARIFF ELEMENT :

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7/26/96

State	Tariff Ref	USOC	Modifier	Technology	Vol. Sen.	Economic Type	Investment Basis
FL		5	VG	SONET	VS	DIR	VG

		PRIMARY INVESTMENT DATA				INVESTMENT LOADING FACTORS			SUPPORT STRUCTURE LOADINGS				INVESTMENT	
			A	B									C	D
	Field Code	Description	Capital Investment	Operating Investment	Date	FC Factor	InPlant Factor	InPlant Type	CP&E Factor	Loading Factor	Loading Type	Field Code	Capital Investment	Operating Investment
1	357C	Circuit Equipment			7/3/96	1.0000			1.1202					
2	357C	~ Support Loading------>								0.0404	circuit_bldg	10C		
3	357C	~ Support Loading------>								0.0030	circuit_land	20C		
4	Initial Total Investment									Adjusted Total Investment				

NOTES: 1. The Investment for Primary Investments is calculated by multiplying the primary investment by the applicable investment loading factors.
2. The Investment for Support Structure Loadings is calculated by multiplying the applicable loading factor by the sum of investments for each primary Field Code.
3. InPlant Factor types: T = Telco, C = Material Composite, H = Material Hardwire, P = Material Plugin
4. The FC factor is the levelized inflation factor for investments.
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USOC INVESTMENT DETAILS
CSNUMBER :
CSNAME :
TARIFF ELEMENT :

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State	Tariff Ref	USOC	Modifier	Technology	Vol. Sen.	Economic Type	Investment Basis
FL		6	VG	SONET	VS	DIR	VG

		PRIMARY INVESTMENT DATA				INVESTMENT LOADING FACTORS				SUPPORT STRUCTURE LOADINGS			INVESTMENT	
	Field Code	Description	A Capital Investment	B Operating Investment	Date	FC Factor	InPlant Factor	InPlant Type	CP&E Factor	Loading Factor	Loading Type	Field Code	C Capital Investment	D Operating Investment
1	822C	Aerial Cable - Fiber			7/3/96	1.0000								
2	822C	~ Support Loading----->								0.2522	pole_fib	1C		
3	845C	Buried Cable - Fiber			7/3/96	1.0000								
4	85C	Underground Cable Fiber			7/3/96	1.0000								
5	85C	~ Support Loading----->								0.3895	cond_fib	4C		

6 Initial Total Investment

Adjusted Total Investment

NOTES: 1. The Investment for Primary Investments is calculated by multiplying the primary investment by the applicable investment loading factors.
2. The Investment for Support Structure Loadings is calculated by multiplying the applicable loading factor by the *sum of investments* for each primary Field Code.
3. InPlant Factor types: T = Telco, C = Material Composite, H = Material Hardwire, P = Material Plugin
4. The FC factor is the levelized inflation factor for investments.
5. Capital Investment and Operating Investment source is Workpaper 200 series.
PRIVATE/PROPRIETARY: NO DISCLOSURE OUTSIDE BELLSOUTH EXCEPT BY WRITTEN AGREEMENT.

Interoffice Channel Voice - Unbundled Exchange Access
Interoffice
Voice Grade

State: FLORIDA
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1	Fixed	Investment Per DS1		A	B	C	Source
2							
3				357C			
4		Design 1					WP300, Ln37
5		Design 2					WP301, Ln45
6							
7							
8	Band 0 - 8 Miles Investment Per Voice Grade						
9		Design 1	$				Ln 4 / 24 VG per DS1
10		Probability of Occurrence		0.18			Network Area Staff
11		Total Investment					Ln9 * Ln10
12							
13		Design 2	$				Ln 5 / 24 VG per DS1
14		Probability of Occurrence		0.82			Network Area Staff
15		Total Investment	$				Ln13 * Ln14
16							
17							
18							
19							
20							
21		Band 0 - 8 Miles Investment	$				Ln11 + Ln15
22		DS0 Utilization		0.85			VG Utilization
23		Utilized Investment	$				Ln21 / Ln22
24		D4 Chan. Bnk & Cm. Plgs +DSX-1 Termination +FX Plug	$				Fundamental DS1 Channelization Model
25		Total Investment	$				Ln 23 + Ln24
26							
27	Per Mile	Investment Per DS1					Source
28				822C	845C	85C	
29		Design 1	$				WP300, Ln38, Ln39, Ln40
30		Design 2	$				WP301, Ln46, Ln47, Ln48
31							
32							
33	Band 0 - 8 Miles Investment Per Voice Grade						
34		Design 1	$				Ln 29/24 VG per DS1
35		Probability of Occurrence		0.18	0.18	0.18	Network Area Staff
36		Total Investment - Route Distance	$				Ln34 * Ln35
37							
38		Design 2	$				Ln 30/24 VG per DS1
39		Probability of Occurrence		0.82	0.82	0.82	Network Area Staff
40		Total Investment - Route Distance	$				Ln38 * Ln39
41							
42							
43							
44							
45							
46		Band Total Investment - Route Miles	$				Ln36 + Ln40
47		Average Distance - Air Miles		23.58	23.58	23.58	1995 Annual Filing
48		Investment Per Air Mile	$				Ln46 / Ln47
49		DS0 Utilization		0.85	0.85	0.85	VG Utilization
50		Utilized Investment	$				Ln48 / Ln49

Interoffice Channel Voice - Unbundled Exchange Access
Interoffice
Voice Grade

State: FLORIDA
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A

				Source
1	Fixed	Investment Per DS1	357C	
2				
3		Design 1		WP300, Ln37
4		Design 2		WP301, Ln45
5				
6				
7				
8				
9	Band 9 - 25 Miles Per Voice Grade			
10		Design 2		Ln 4 / 24 VG Per DS1
11		Probability of Occurrence	1.00	Network Area Staff
12		Total Investment	$	Ln10 * Ln11
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30		Band 9-25 Miles Investment	$	Ln12
31		DS0 Utilization	0.85	VG Utilization
32		Utilized Investment		Ln 30 / Ln31
33		D4 Chan. Bnk & Cm. Plgs +DSX-1 Termination +FX Plug		Fundamental DS1 Channelization Model
34		Total Investment		Ln32 + Ln33
35				
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				

Interoffice Channel Voice - Unbundled Exchange Access
Interoffice
Voice Grade

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			A	B	C	
			822C	845C	85C	
1	Per Mile Investment Per DS1					
2						
3						
4	Design 1					WP300, Ln38, Ln39, Ln40
5	Design 2					WP301, Ln46, Ln47, Ln48
6						
7						
8						
9	Band 9 - 25 Miles Per Voice Grade					
10						
11						
12						
13						
14						
15	Design 2	$				Ln 5/24 VG Per DS1
16	Probability of Occurrence		1.00	1.00	1.00	Network Area Staff
17	Total Investment	$				Ln15 * Ln16
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31	Band Total - Route Miles	$				Ln17
32	Average Distance - Air Miles		23.58	23.58	23.58	1995 Annual Filing
33	Investment Per Air Mile	$				Ln31 / Ln32
34	Utilization		0.85	0.85	0.85	VG Utilization
35	Utilized Investment	$				Ln33/ Ln34
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

Interoffice Channel Voice - Unbundled Exchange Access
Interoffice
Voice Grade

State: FLORIDA
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1	**Fixed**	Investment Per DS1	A			Source
2			357C			
3		Design 1				WP300, Ln37
4		Design 2				WP301, Ln45
5						
6						
7	Band >25 Miles Investment Per Voice Grade					
8		Design 2				Ln 4 / 24 VG Per DS1
9		Probability of Occurrence	1			Network Area Staff
10		Total Investment				Ln8 * Ln9
11						
12						
13						
14						
15						
16						
17						
18						
19						
20		Band > 25 Miles Investment				Ln10
21		Utilization	0.85			VG Utilization
22		Utilized Investment	$			Ln20 / Ln 21
23		D4 Chan. Bnk & Cm. Plgs +DSX-1 Termination +FX Plug	$			Fundamental DS1 Channelization Model
24		Total Investment	$			Ln22 + Ln23
25						
26						
27				B	C	
28	**Per Mile**	Investment Per DS1				
29			822C	845C	85C	
30		Design 2	$			WP301, Ln46, Ln47, Ln48
31						
32						
33						
34						
35		Design 2				Ln30/24 VG Per DS1
36		Probability of Occurrence	1.00	1.00	1.00	Network Area Staff
37		Total Investment	$			Ln35 * Ln36
38						
39						
40						
41						
42						
43						
44						
45						
46						
47		Band Total -Route Miles				Ln37
48		Average Distance - Air Miles	23.58	23.58	23.58	1995 Annual Filing
49		Investment Per Air Mile				Ln47 / Ln48
50		DS0 Utilization	0.85	0.85	0.85	VG Utilization
51		Utilized Investment	$			Ln49 / Ln50

Interoffice Channel Voice - Unbundled Exchange Access
Interoffice
Voice Grade

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Design 1

	A	B	C	
Line	Description	FRC	Equipment Investment	Source
1				
2	C.O. Node - OC-48 BLSR	357C	$	SONET Fundamental Investment Model
3	Number Required		2	Network
4	Total Investment		$	Line 2 * Line 3
5				
6	C.O. Node - OC-48 (BLSR) Intermediate	357C	$	SONET Fundamental Investment Model
7.	Number Required		1	Network
8	Total Investment		$	Line 6 * Line 7
9				
10	C.O. Interface DS1 on OC-48-Mux & Protect	357C	$	SONET Fundamental Investment Model
11	Number Required		2	Network
12	Total Investment		$	Line 10 * Line 11
13				
14	C.O. Interface DS1 on OC-48-Working	357C	$	SONET Fundamental Investment Model
15	Number Required		2	Network
16	Total Investment		$	Line 14 * Line 15
17				
18	Data Communications - OC-48	357C	$	SONET Fundamental Investment Model
19	Number Required		1	Network
20	Total Investment		$	Line 18 * Line 19
21				
22	Fiber - OC-48 BLSR Per Mile Per Strand	822C	$	SONET Fundamental Investment Model
23	Number Strands		3	Network
24	Number Miles		16	Network
25	Total Investment		$	Line 22 * (Line 23 * Line 24)
26				
27	Fiber - OC-48 BLSR Per Mile Per Strand	845C	$	SONET Fundamental Investment Model
28	Number Strands		3	Network
29	Number Miles		16	Network
30	Total Investment		$	Line 27 * (Line 28 * Line 29)
31				
32	Fiber - OC-48 BLSR Per Mile Per Strand	85C	$	SONET Fundamental Investment Model
33	Number Strands		3	Network
34	Number Miles		16	Network
35	Total Investment		$	Line 32 * (Line 33 * Line 34)
36				
37	Total Investment - Design 1	357C	$	Ln4 + Ln8 + Ln12 + Ln16 + Ln20
38		822C	$	Line 25
39		845C	$	Line 30
40		85C	$	Line 35
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				

Interoffice Channel Voice - Unbundled Exchange Access
Interoffice
Voice Grade

State: FLORIDA
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Design 2 - OC-48 Ring

	A	B	C	
Line	Description	FRC	Equipment Investment	Source
1				
2	C.O. Node - OC-48 BLSR	357C	$	SONET Fundamental Investment Model
3	Number Required		4	Network
4	Total Investment		$	Line 2 * Line 3
5				
6	C.O. Node - OC-48 (BLSR) Intermediate	357C		SONET Fundamental Investment Model
7	Number Required		2	Network
8	Total Investment		$	Line 6 * Line 7
9				
10	C.O. Interface DS1 on OC-48-Mux & Protect	357C	$	SONET Fundamental Investment Model
11	Number Required		2	Network
12	Total Investment			Line 10 * Line 11
13				
14	C.O. Interface DS1 on OC-48-Working	357C	$	SONET Fundamental Investment Model
15	Number Required		2	Network
16	Total Investment		$	Line 14 * Line 15
17				
18	Data Communications - OC-48	357C	$	SONET Fundamental Investment Model
19	Number Required		2	Network
20	Total Investment		$	Line 18 * Line 19
21				
22	C.O. Connection STS-1 on OC-48-Mux & Protect	357C	$	SONET Fundamental Investment Model
23	Number Required		2	Network
24	Total Investment		$	Line 22 * Line 23
25				
26	C.O. Connection STS-1 on OC-48-Working	357C		SONET Fundamental Investment Model
27	Number Required		2	Network
28	Total Investment		$	Line 26 * Line 27
29				
30	Fiber - OC-48 BLSR Per Mile Per Strand	822C	$	SONET Fundamental Investment Model
31	Number Strands		3	Network
32	Number Miles		32	Network
33	Total Investment		$	Line 30 * (Line 31 * Line 32)
34				
35	Fiber - OC-48 BLSR Per Mile Per Strand	845C	$	SONET Fundamental Investment Model
36	Number Strands		3	Network
37	Number Miles		32	Network
38	Total Investment			Line 35 * (Line 36 * Line 37)
39				
40	Fiber - OC-48 BLSR Per Mile Per Strand	85C	$	SONET Fundamental Investment Model
41	Number Strands		3	Network
42	Number Miles		32	Network
43	Total Investment		$	Line 40 * (Line 41 * Line 42)
44				
45	Design 2 - OC-48 Ring Total Investment	357C	$	Ln4+Ln8+Ln12+Ln16+Ln20+Ln24+Ln28
46		822C	$	Line 33
47		845C	$	Line 38
48		85C	$	Line 43
49				
50				

SECTION 5

SECTION 5

FLORIDA SPECIAL ACCESS VOICE GRADE SERVICE INTEROFFICE CHANNEL VOICE - UNBUNDLED EXCHANGE ACCESS

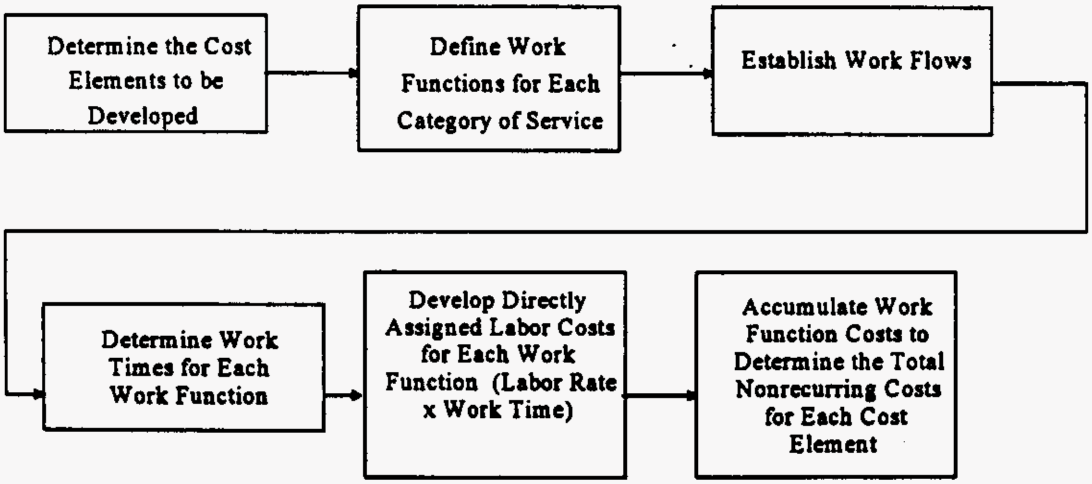
COST DEVELOPMENT - NONRECURRING

Nonrecurring costs are one-time costs incurred as a result of provisioning, installing, disconnecting and completion of orders initiated by a customer request for the Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access. The Nonrecurring Cost Study is performed to determine the service order, provisioning and disconnect costs associated with the cost element listed above. Calculations for the nonrecurring costs are included in this section.

Figure 5-1 shows a generalized flow of the steps necessary for developing nonrecurring costs. Each part of this flow will be explained in more detail in this section.

Figure 5-1

Generalized Flow Diagram for Developing Nonrecurring Costs



The first step in developing nonrecurring costs is to determine the cost elements to be studied. Each cost element is then described by all of the individual work functions required to provision the element.

The work functions required to provide the Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access can be grouped into four categories. These are:

1) Service Order
2) Engineering
3) Connect and Test
4) Technician Travel Time

Work functions included in these categories range from clerical activities to installation activities.

The next step in developing nonrecurring costs requires that Company Subject Matter Experts identify the work functions and work times involved in the provisioning of the Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access. These work functions and work times are then used to describe the flow of work within the various work centers involved in provisioning the element.

A spreadsheet model is used to incorporate the specific work functions and labor rates. In order to arrive at the nonrecurring cost for the element studied, the work times for each work function required is multiplied by the appropriate levelized labor rate. The labor inflation factors (LIF) are used to bring the labor rate to the appropriate study period. The labor rates and the labor inflation factors are shown in Section 7. Next, the individual work function costs are accumulated into the installation cost for the element studied.

Utilizing work functions, work times, and labor rates, disconnect costs are calculated in the same manner as the installation costs. Since the labor costs will occur in the future, the current labor rates are inflated to that future period in time and then discounted to the present. The discounted disconnect cost is added to the installation cost and gross receipts tax is applied to develop the total nonrecurring cost.

Nonrecurring costs are calculated separately on a first and additional basis. "First" refers to the first item on a service order. "Additional" costs are the incremental costs of providing one or more duplicates of the first item on the same service order at the same time as the first.

The following workpapers reflect the cost development.

SUMMARY OF NONRECURRING COSTS

STATE: FLORIDA
WORKPAPER: 700
PAGE: 1 OF 3
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SPECIAL ACCESS VOICE GRADE SERVICE
INTEROFFICE CHANNEL VOICE-UNBUNDLED EXCHANGE ACCESS
1 - 8 MILES

(1996-1998 Level Incremental Costs)

			A	B
1	DESCRIPTION	SOURCE	FIRST	ADDTL
2				
3	Service Order	WP750P1 Col G LN6 and LN8		
4				
5	Engineering	WP750P1 Col G LN10		
6				
7	Connect & Test	WP750P1 Col G LN12 and LN14		
8				
9	Technician Travel Time	NA	NA	NA
10				
11				
12	Total Nonrecurring Cost	Sum of L3, L5, L7		
13				
14				
15				
16				
17				
18				
19				
20				

SUMMARY OF NONRECURRING COSTS

STATE: FLORIDA
WORKPAPER: 700
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SPECIAL ACCESS VOICE GRADE SERVICE
INTEROFFICE CHANNEL VOICE-UNBUNDLED EXCHANGE ACCESS
9 - 25 MILES

(1996-1998 Level Incremental Costs)

			A	B
1	DESCRIPTION	SOURCE	FIRST	ADDTL
2				
3	Service Order	WP750P2 Col G LN6 and LN8		
4				
5	Engineering	WP750P2 Col G LN10		
6				
7	Connect & Test	WP750P2 Col G LN12 and LN14		
8				
9	Technician Travel Time	NA	NA	NA
10				
11				
12	Total Nonrecurring Cost	Sum of L3, L5, L7	$	
13				
14				
15				
16				
17				
18				
19				
20				

SUMMARY OF NONRECURRING COSTS

STATE: FLORIDA
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SPECIAL ACCESS VOICE GRADE SERVICE
INTEROFFICE CHANNEL VOICE-UNBUNDLED EXCHANGE ACCESS
> 25 MILES

(1996-1998 Level Incremental Costs)

			A	B
1	DESCRIPTION	SOURCE	FIRST	ADDTL
2				
3	Service Order	WP750P3 Col G LN6 and LN8		
4				
5	Engineering	WP750P3 Col G LN10		
6				
7	Connect & Test	WP750P3 Col G LN12 and LN14		
8				
9	Technician Travel Time	NA	NA	NA
10				
11				
12	Total Nonrecurring Cost	Sum of L3, L5, L7		
13				
14				
15				
16				
17				
18				
19				
20				

DEVELOPMENT OF NONRECURRING COST
SPECIAL ACCESS VOICE GRADE SERVICE
1 – 8 MILES

INTEROFFICE CHANNEL VOICE–UNBUNDLED EXCHANGE ACCESS

STATE: FLORIDA
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LEVEL 1996 – 1998

DIRECTLY ASSIGNED

1		(A)		(B)		(C)	(D)		(E)		J (F)	K	(G)	
2		A	B	C	D	E	F	G	H	I	DISCOUNTED		L	M
3		INSTALL		DISCONNECT		LEVELIZED	INSTALL		DISCONNECT		DISCONNECT		(D+F)*(1+GRT)	
4		WORKTIMES (HRS)		WORKTIMES (HRS)		LABOR	COST (A*C)		COST (B*C)		COST (E*DDF)		TOTAL	TOTAL
5	DESCRIPTION	FIRST	ADDTL	FIRST	ADDTL	RATE	FIRST	ADDTL	FIRST	ADDTL	FIRST	ADDTL	FIRST	ADDTL
6	CUSTOMER POINT OF CONTACT–ICSC					$40.80								
7														
8	NETWORK PLUG–IN ADMINISTRATION–PICS					$44.56								
9														
10	CIRCUIT PROVISIONING CENTER–CPC					$36.65								
11														
12	NETWORK ADMINISTRATION					$35.03								
13														
14	CO INSTALL & MTCE–CKT&FAC–NTEL					$41.64								
15														
16	TOTAL NONRECURRING COST													
17														
18														
19														
20														

DEVELOPMENT OF NONRECURRING COST
SPECIAL ACCESS VOICE GRADE SERVICE
9 – 25 MILES

INTEROFFICE CHANNEL VOICE–UNBUNDLED EXCHANGE ACCESS

STATE: FLORIDA
WORKPAPER: 750
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LEVEL 1996 – 1998

DIRECTLY ASSIGNED

1			~~(A)~~		~~(B)~~	(C)		~~(D)~~		~~(E)~~	J	~~(F)~~ K	(G)	
2		A	B	C	D	E	F	G	H	I	DISCOUNTED		L	M
3			INSTALL		DISCONNECT	LEVELIZED		INSTALL	DISCONNECT		DISCONNECT		(D+F)*(1+GRT)	
4		WORKTIMES (HRS)		WORKTIMES (HRS)		LABOR		COST (A*C)	COST (B*C)		COST (E*DDF)		TOTAL	TOTAL
5	DESCRIPTION	FIRST	ADDTL	FIRST	ADDTL	RATE	FIRST	ADDTL	FIRST	ADDTL	FIRST	ADDTL	FIRST	ADDTL
6	CUSTOMER POINT OF CONTACT–ICSC					$40.80								
7														
8	NETWORK PLUG–IN ADMINISTRATION–PICS					$44.56								
9														
10	CIRCUIT PROVISIONING CENTER–CPC					$36.65								
11														
12	NETWORK ADMINISTRATION					$35.03								
13														
14	CO INSTALL & MTCE–CKT&FAC–NTEL					$41.64								
15														
16	TOTAL NONRECURRING COST													
17														
18														
19														
20														

DEVELOPMENT OF NONRECURRING COST
SPECIAL ACCESS VOICE GRADE SERVICE
> 25 MILES

INTEROFFICE CHANNEL VOICE-UNBUNDLED EXCHANGE ACCESS

STATE: FLORIDA
WORKPAPER: 750
PAGE: 3 OF 3
DATE: Jul-96

LEVEL 1996 - 1998

DIRECTLY ASSIGNED

		(A)		(B)		(C)	(D)		(E)		(F)		(G)	
1		A	B	C	D	E	F	G	H	I	J	K	L	M
2		INSTALL WORKTIMES (HRS)		DISCONNECT WORKTIMES (HRS)		LEVELIZED LABOR	INSTALL COST (A*C)		DISCONNECT COST (B*C)		DISCOUNTED DISCONNECT COST (E*DDF)		(D+F)*(1+GRT) TOTAL	TOTAL
5	DESCRIPTION	FIRST	ADDTL	FIRST	ADDTL	RATE	FIRST	ADDTL	FIRST	ADDTL	FIRST	ADDTL	FIRST	ADDTL
6	CUSTOMER POINT OF CONTACT-ICSC					$40.80								
7														
8	NETWORK PLUG-IN ADMINISTRATION-PICS					$44.56								
9														
10	CIRCUIT PROVISIONING CENTER-CPC					$36.65								
11														
12	NETWORK ADMINISTRATION					$35.03								
13														
14	CO INSTALL & MTCE-CKT&FAC-NTEL					$41.64								
15														
16	TOTAL NONRECURRING COST													
17														
18														
19														
20														

SECTION 6

SECTION 6

FLORIDA SPECIAL ACCESS VOICE GRADE SERVICE INTEROFFICE CHANNEL VOICE - UNBUNDLED EXCHANGE ACCESS

SPECIFIC STUDY ASSUMPTIONS

The cost study for the Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access for the state of Florida is based on direct incremental costing techniques that are in accordance with accepted economic theory, in addition to specific Network deployment strategies, first choice provisioning guidelines, and equipment purchasing information.

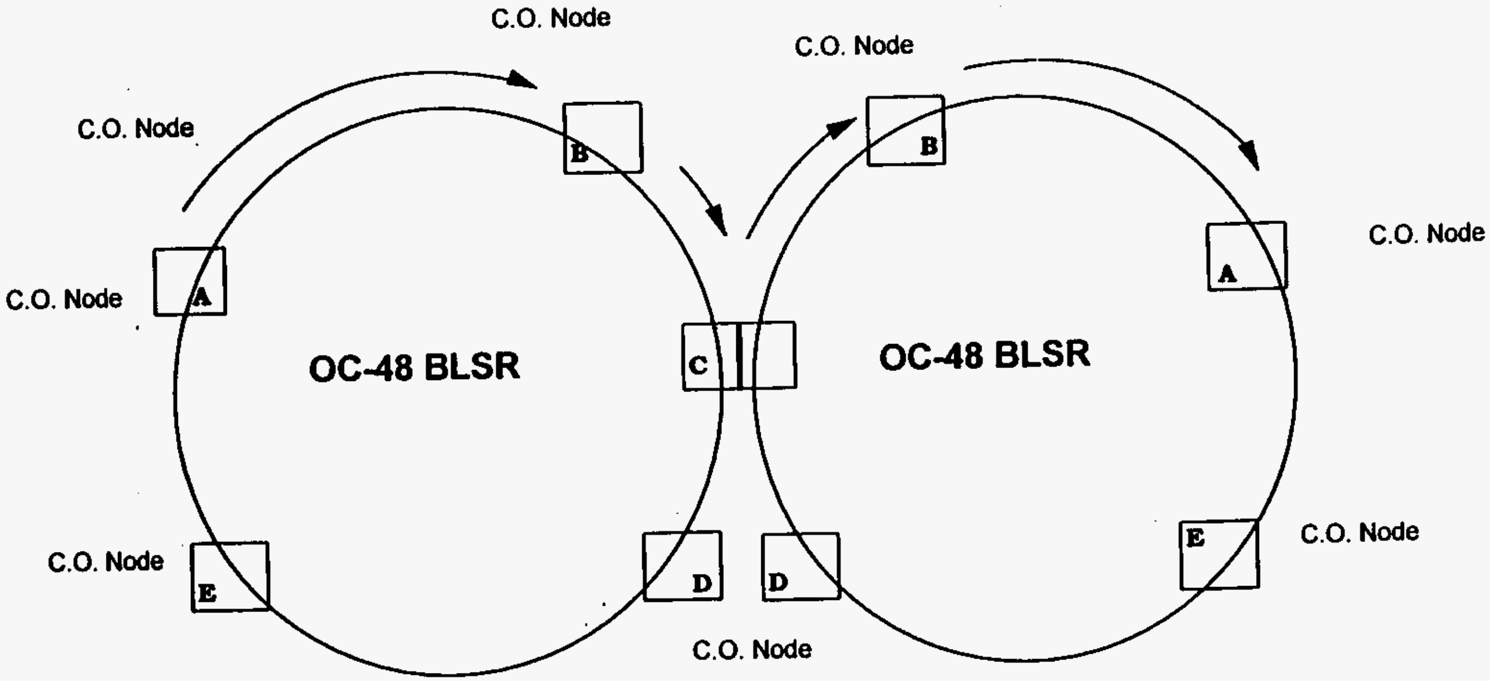
Cost study assumptions are as follows.

1. Two architectures are studied to develop these costs. The 0 through 8 mile band includes Design 1 and 2 weighted 18 percent and 82 percent, respectively. The 9 through 25 mile band and the Greater than 25 mile band include Design 2 only.

Diagrams of the two architectures are found on the following pages.

DESIGN #2

FLORIDA



Equipment

OC-48(BLSR) C.O. Node
OC-48(BLSR) C.O. Node Intermediate
C.O. Interface
Data Communications Equipment
Fiber
Ring Connection

Nodes = 5
Circumference = 40 mi
No. Traffic Segments = 2
Avg. Segment Distanc = 8 mi

Nodes = 5
Circumference = 40 mi
No. Traffic Segments = 2
Avg. Segment Distanc = 8 mi

SECTION 7

SECTION 7

FLORIDA SPECIAL ACCESS VOICE GRADE SERVICE INTEROFFICE CHANNEL VOICE - UNBUNDLED EXCHANGE ACCESS

FACTORS AND LOADINGS

Following are the incremental annual cost factors, miscellaneous loadings and labor rates used in the Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access cost study for Florida.

FLORIDA SPECIAL ACCESS VOICE GRADE SERVICE
INTEROFFICE CHANNEL VOICE - UNBUNDLED EXCHANGE ACCESS

FACTORS AND LOADINGS

Telephone Plant Index	357C	1.00
	822C	1.00
	845C	1.00
	85C	1.00
In-Plant Factors	357C	
Hardwired		1.870
Common Plug-ins		1.060
Deferrable Plug-ins		1.060
Levelization Factor	357C	0.970
	822C	1.003
	845C	1.041
	85C	1.000
Misc. Common Equipment and Power Factor	357C	1.1202
Gross Receipts Tax (Gross-up Factor)		0.0152
Discounted Disconnect (DDF)		0.9080
Land Loading	20C	0.0030
Building Loading	10C	0.0404
Pole Loading	1C	0.2522
Conduit Loading	4C	0.3895
Gross Receipts Tax Factor		0.0152
Annual Cost Factors:		
Digital Circuit	357C	
Depreciation		0.1134
Cost of Money		0.0638
Income Tax		0.0297
Maintenance		0.0086
Ad Valorem Tax		0.0113
TIRKS Expense		0.0052
Gross Receipts Tax		0.0035

FLORIDA SPECIAL ACCESS VOICE GRADE SERVICE
INTEROFFICE CHANNEL VOICE - UNBUNDLED EXCHANGE ACCESS

FACTORS AND LOADINGS

Aerial Fiber	822C	
Depreciation		0.0667
Cost of Money		0.0784
Income Tax		0.0347
Maintenance		0.0139
Ad Valorem Tax		0.0113
Gross Receipts Tax		0.0031
Buried Fiber	845C	
Depreciation		0.0585
Cost of Money		0.0816
Income Tax		0.0367
Maintenance		0.0144
Ad Valorem Tax		0.0113
Gross Receipts Tax		0.0031
Underground Fiber	85C	
Depreciation		0.0626
Cost of Money		0.0800
Income Tax		0.0358
Maintenance		0.0135
Ad Valorem Tax		0.0113
Gross Receipts Tax		0.0031
Land	20C	
Depreciation		0.0000
Cost of Money		0.1118
Income Tax		0.0514
Maintenance		0.0000
Ad Valorem Tax		0.0113
Gross Receipts Tax		0.0027
Pole	1C	
Depreciation		0.0671
Cost of Money		0.0725
Income Tax		0.0325
Maintenance		0.0279
Ad Valorem Tax		0.0113
Gross Receipts Tax		0.0032
Conduit	4C	
Depreciation		0.0242
Cost of Money		0.0877
Income Tax		0.0401
Maintenance		0.0028
Ad Valorem Tax		0.0113
Gross Receipts Tax		0.0025

FLORIDA SPECIAL ACCESS VOICE GRADE SERVICE
INTEROFFICE CHANNEL VOICE - UNBUNDLED EXCHANGE ACCESS

FACTORS AND LOADINGS

Building	10C	
Depreciation		0.0302
Cost of Money		0.0986
Income Tax		0.0452
Maintenance		0.0069
Ad Valorem Tax		0.0113
Gross Receipts Tax		0.0029

Directly Assigned Hourly Labor Rates

	1995	Levelized
Customer Point of Contact (ICSC) - Interexchange Carrier Service Ctr	$38.30	$40.80
CO Install & Mtce - Ckt & Fac (NTEL) Network Terminal Eqpt Installation	$39.09	$41.64
Circuit Provisioning Center (CPC)	$34.41	$35.65
Network Plug-In Administration (PICS) - Plug-In Control System	$41.65	$44.56
Network Administration	$32.89	$35.03

To create a Levelized labor rate from a 1995 Labor Rate:

1995 Labor Rate * [((1+InflYr1)/(1+com)^1) + ((1+InflYr2)/
(1+com)^2)+((1+InflYr3)/(1+com)^3)]/(1/(1+com)^1)+
(1/(1+com)^2)+(1/(1+com)^3)

NOTE: Infl = Labor Inflation COM = Cost of Money

Example:

$38.30 * [(1.032/1.132^1)+((1.032*1.035)/1.132^2)+
(1.032*1.035*1.034)/(1.132^3)]/((1/1.132^1)+
(1/1.132^2)+(1/1.132^3)) = $40.80

Labor Inflation

Telco Eng.	
Year 1	3.4%
Year 2	3.8%
Year 3	3.6%
Telco COE	
Year 1	3.2%
Year 2	3.5%
Year 3	3.4%

BellSouth Telecommunications, Inc.
FPSC Docket No. 960833-TP
Exhibit No. DDC-12

FLORIDA

OPERATOR PROVIDED AND FULLY AUTOMATED CALL HANDLING SERVICE

COST STUDY DOCUMENTATION

SECTIONS A THRU 6

FLORIDA

OPERATOR PROVIDED AND FULLY AUTOMATED CALL HANDLING SERVICES

COST STUDY DOCUMENTATION

CONTENTS

SECTION A	PROPRIETARY RATIONALE
SECTION 1	INTRODUCTION AND OVERVIEW
SECTION 2	DESCRIPTION OF STUDY PROCEDURES
SECTION 3	SUMMARY OF RESULTS
SECTION 4	COST DEVELOPMENT - RECURRING LRIC AND TSLRIC
SECTION 5	SPECIFIC STUDY ASSUMPTIONS
SECTION 6	FACTORS AND LOADINGS

TAB A

SECTION A

OPERATOR PROVIDED AND FULLY AUTOMATED CALL HANDLING SERVICES

PROPRIETARY RATIONALE

The Operator Provided and Fully Automated Call Handling Services Study contains actual unit cost information for discrete cost elements. These costs reflect BellSouth's long run incremental cost of providing these elements on a going forward basis. Public disclosure of this information would provide BellSouth's competitors with an advantage. The data is valuable to competitors and potential competitors in formulating strategic plans for entry, pricing, marketing and overall business strategies. This information relates to the competitive interests of BellSouth and disclosure would impair the competitive business of BellSouth.

Additionally, the study contains information which reflects vendor-specific prices negotiated by BellSouth. Public disclosure of this information would impair BellSouth's ability to contract for goods and/or services on favorable terms. For these reasons, the Operator Provided and Fully Automated Call Handling Services Cost Study is considered proprietary.

TAB 1

SECTION 1

OPERATOR PROVIDED AND FULLY AUTOMATED CALL HANDLING SERVICES

INTRODUCTION AND OVERVIEW

This cost study develops the Long Run Incremental Cost (LRIC) and the Total Service Long Run Incremental Cost (TSLRIC) per minute for Operator Provided Call Handling and per call for Fully Automated Call Handling Services. LRIC is the volume sensitive incremental unit cost. TSLRIC is the volume sensitive and volume insensitive incremental unit cost, the average incremental unit cost. These costs are comprised of: (1) Operator Labor; (2) the operators' position hardware, software, and dedicated circuits associated with the Operator Service Center (OSC); (3) the software providing Operator Service functionality in the Operator Service System (OSS); (4) switching and transport, (5) the Automated Alternative Billing Services system which provides functionality for automated call handling; and (6) the Line Identification DataBase system providing calling card verification, and screening on collect and bill-to-third calls. The OSS software, the AABS software, the Gateway portion of the AABS hardware and the non-investment related LIDB expenses are volume insensitive. The remaining components are a function of demand and are, accordingly, volume sensitive.

Operator Provided Call Handling Service is labor intensive. The study is a capacity cost study in that the operator labor varies directly with the number of calls and the operators' tours can be rescheduled on a relatively short interval. The primary cost, the operator labor expense, is continuously adjusted to meet demand.

The study is based on directly assigned labor costs, current vendor prices for hardware and software, and incremental annual cost factors.

TAB 2

SECTION 2

OPERATOR PROVIDED AND FULLY AUTOMATED CALL HANDLING SERVICES

DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of costs supporting Operator Provided and Fully Automated Call Handling Services.

In determining costs, BellSouth uses direct incremental costing techniques that are in accordance with accepted economic theory. Direct incremental costs are based on cost causation and include all of the costs directly caused by expanding production, or, alternatively, costs that would be saved if the production levels were reduced. The production unit may be an entire service or a unit of the service depending on the cost object involved. Costs for a service may include volume sensitive and/or volume insensitive costs. Costs are forward looking in nature because only future costs can be saved. Incremental costs are long run to assure that the time period studied is sufficient to capture all forward looking costs affected by the business decision. Shared and common costs are not incremental and, therefore, are not included. Incremental costs include both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs. There are no nonrecurring costs associated with Operator Provided and Fully Automated Call Handling Services. Incremental costs account for the expected change in cost to the firm resulting from a new service offering or a change in demand for an existing service.

THE DEVELOPMENT OF RECURRING COSTS

The monthly costs to BellSouth Telecommunications, Inc., resulting from the capital investments necessary to provide a service are called recurring costs. Recurring costs include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs are the expenses of maintenance and ad valorem and other taxes. These expenses contribute to the ongoing cost to the company associated with the initial capital investment. Recurring costs may also be non-investment related, such as operator labor, feature specific software and contract expenses. Recurring costs are developed using incremental economic study applications, representing a forward-looking view of technology and deployment.

The first step in developing an incremental study of recurring costs for Operator Provided and Fully Automated Call Handling Services is to determine the forward-looking network architecture. Prices for the software and equipment are defined. Next, account specific Telephone Plant Indexes are applied, when necessary, to trend investments to the base study period. In-plant factors are applied to material prices to develop installed investments which include engineering and installation labor.

Appropriate loadings for land, building and miscellaneous common equipment and power are then applied to the electronic equipment. Support structure loadings are applied for poles and conduit to the aerial and underground fiber investments respectively.

Next, 1995 level Incremental Annual Cost Factors are used to calculate the direct cost of capital, ongoing maintenance and other operating expenses and taxes. These factors (specific factors for each Uniform System of Account Field Reporting Code) are applied to levelized investments by account code, yielding an annual cost per account code. Both the investment and non-investment related annual costs are summed and then divided by annual demand to arrive at a unit cost for each component.

TAB 3

SECTION 3

FLORIDA

OPERATOR PROVIDED AND FULLY AUTOMATED CALL HANDLING SERVICES

SUMMARY OF RESULTS

This section contains a cost summary for the volume sensitive Long Run Incremental Cost and Total Service Long Run Incremental Cost for Operator Provided and Fully Automated Call Handling Services.

A

OPERATOR PROVIDED COST PER MINUTE

9 LRIC, Volume Sensitive Unit Cost
10 TSLRIC, Average Incremental Unit Cost

11 AUTOMATED COST PER CALL

12 LRIC, Volume Sensitive Unit Cost [redacted]
13 TSLRIC, Average Incremental Unit Cost

TAB 4

SECTION 4

OPERATOR PROVIDED AND FULLY AUTOMATED CALL HANDLING SERVICES

COST DEVELOPMENT

This section defines the cost development for Operator Provided and Fully Automated Call Handling Services.

Generally, economic cost development is outlined in Section 2. Network architecture is determined; the necessary equipment is identified; material prices are obtained; utilization and loading factors are applied. Annual cost factors are applied to convert the investment to cost. Labor expense is directly identified.

Workpaper 1

The volume sensitive (LRIC) and volume insensitive unit costs are summarized, and the average incremental cost (TSLRIC) is calculated. These unit costs are per minute for operator handled and per call for fully automated.

Workpaper 2

The volume sensitive and volume insensitive costs per call are summarized for each individual call type. Where costs for individual components are developed per minute, they are converted to a cost per minute using the Actual Work Time (shown in seconds) or Facility Work Seconds (for automated calls).

Workpaper 3

The operator cost per minute is developed using the directly assigned labor cost per productive hour. The cost per hour is divided by 60 minutes and then adjusted by the ratio of productive hours to call processing hours.

Workpaper 4

The Operator Service Center (OSC) software cost per minute is derived by multiplying the equivalent annual cost per position times the number of positions and dividing it by the projected demand in minutes for 1995.

The hardware investment per position is loaded for incremental common equipment, power, land, and building investment. The investments are multiplied by the number of positions and their corresponding annual cost factors to calculate the associated annual cost. The annual cost is divided by the projected annual minutes for 1995 to develop the hardware cost per minute. The circuit and mileage quantities for the message and data circuits from the positions were multiplied by their fixed and mileage sensitive unit investments, and associated annual cost factors to calculate the annual cost. The mileage for each route was calculated from the vertical and horizontal coordinates of the Operator Service Center locations and the host Operator Service System. As with the hardware, the annual cost was divided by the 1995 annual minutes to product the cost per minute.

The total cost per minute for the Operator Service Center (OSC) is the sum of the software, hardware and circuit cost per minute.

Workpaper 5

The equivalent annual cost for the software in the Operator Service Systems is divided by the projected 1995 calls to develop the OSS cost per call.

Workpaper 6

The fundamental switching and transport cost per minute is used to develop usage costs to the Host Tandem.

The cost for the verification and emergency interrupt calls from the operator to the line to be monitored are developed using the switching and transport cost per minute and the estimated time required for the verification and emergency interrupt functions.

Workpaper 7

The Automated Alternative Billing Service (AABS) System is comprised of Gateway Switches for routing and control, Interactive Voice Systems for voice prompts and recording, and associated circuits. This System provides automated call processing functionality for 0+ Calling Card, Collect and Billed-to-Third calls.

The hardware investment for the Gateway switches to the Interactive Voice Systems (IVS) and the Systems themselves were multiplied by the associated annual cost factor. The annual costs for the data circuits, the Gateway and IVS hardware were summed along with the annual software expense. These costs were divided by the systems engineered capacity to calculate the cost per automated call.

The Gateway hardware and system software is volume insensitive.

AABS is a Regional study.

Workpaper 8

The cost of calling card validation and billed number screening is developed by weighting the costs to BellSouth's Line Identification DataBases (LIDBs) with the charges from foreign LIDBs (e.g., to Bell Atlantic to validate their Calling Card).

As with AABS, this is a Regional study of Regional Systems.

The following workpapers detail this development.

FLORIDA

OPERATOR PROVIDED AND FULLY AUTOMATED CALL HANDLING SERVICES

SUMMARY

A

OPERATOR PROVIDED COST PER MINUTE
- LRIC, VOLUME SENSITIVE UNIT COST
- VOLUME INSENSITIVE UNIT COST
- TSLRIC, AVERAGE INCREMENTAL UNIT COST

AUTOMATED COST PER CALL
- LRIC, VOLUME SENSITIVE UNIT COST
- VOLUME INSENSITIVE UNIT COST
- TSLRIC, AVERAGE INCREMENTAL UNIT COST

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FLORIDA

AUTOMATED COST PER CALL AND OPERATOR HANDLED COST PER MINUTE

SUMMARY

	AWT/ FWS 6-95	COST PER CALL	CALLS 6-95	TOTAL MINUTES	TOTAL COST	UNIT COST
OPERATOR HANDLED						
	A	B	C	D	E	F
STATION-TO-STATION						
0+ CALLING CARD - VOLUME SENSITIVE						
0+ CALLING CARD - VOLUME INSENSITIVE						
0- CALLING CARD - VOLUME SENSITIVE						
0- CALLING CARD - VOLUME INSENSITIVE						
0- BILL-TO-THIRD - VOLUME SENSITIVE						
0- BILL-TO-THIRD - VOLUME INSENSITIVE						
0- COLLECT - VOLUME SENSITIVE						
0- COLLECT - VOLUME INSENSITIVE						
0- NO ATTEMPT - VOLUME SENSITIVE						
0- NO ATTEMPT - VOLUME INSENSITIVE						
0+ BILL-TO-THIRD - VOLUME SENSITIVE						
0+ BILL-TO-THIRD - VOLUME INSENSITIVE						
0+ COLLECT - VOLUME SENSITIVE						
0+ COLLECT - VOLUME INSENSITIVE						
SENT PAID - VOLUME SENSITIVE						
SENT PAID - VOLUME INSENSITIVE						
VERIFICATION - VOLUME SENSITIVE						
VERIFICATION -VOLUME INSENSITIVE						
VERIFICATION-NON REVENUE-VOL. SENS.						
VERIFICATION-NON REVENUE-VOL.INSENS						
VERIFICATION & INTERRUPT-VOL.SENS.						
VERIFICATION & INTERRUPT-VOL.INSENS.						
PERSON-TO-PERSON						
0- CALLING CARD - VOLUME SENSITIVE						
0- CALLING CARD - VOLUME INSENSITIVE						
0- BILL-TO-THIRD - VOLUME SENSITIVE						
0- BILL-TO-THIRD - VOLUME INSENSITIVE						
0- COLLECT - VOLUME SENSITIVE						
0- COLLECT - VOLUME INSENSITIVE						
0+ CALLING CARD - VOLUME SENSITIVE						
0+ CALLING CARD - VOLUME INSENSITIVE						
0+ BILL-TO-THIRD - VOLUME SENSITIVE						
0+ BILL-TO-THIRD - VOLUME INSENSITIVE						
0+ COLLECT - VOLUME SENSITIVE						
0+ COLLECT - VOLUME INSENSITIVE						
COST PER MINUTE - VOLUME SENSITIVE						
COST PER MINUTE - VOLUME INSENSITIVE						
AVERAGE INCREMENTAL UNIT COST						
FULLY AUTOMATED						
CALLING CARD - VOLUME SENSITIVE						
CALLING CARD - VOLUME INSENSITIVE						
BILL-TO-THIRD - VOLUME SENSITIVE						
BILL-TO-THIRD - VOLUME INSENSITIVE						
COLLECT- VOLUME SENSITIVE						
COLLECT - VOLUME INSENSITIVE						
COST PER CALL - VOLUME SENSITIVE						
COST PER CALL - VOLUME INSENSITIV						
AVERAGE INCREMENTAL UNIT COST						

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2.
3. OPERATOR PROVIDED AND
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5.
6.

7.–10. SUMMARY OF COST BY CALL TYPE	AWT/ FWS 6/95	OPR. LABOR	OSC	OSS	SWITCHING AND TRANSPORT	AABS	LIDB	GROSS RECEIPTS (.0152)	COST PER CALL
	A	B	C	D	E	F	G	H	I
11. **0+CALLING CARD**									
12. 0+ CALLING CARD - VOLUME SENSITIVE									
13. 0+ CALLING CARD - VOLUME INSENSITIVE									
14. AUTOMATED CALLING CARD - VOLUME SENSITIVE									
15. AUTOMATED CALLING CARD - VOLUME INSENSITIVE									
16.									
17. **STATION-TO-STATION**									
18. 0- CALLING CARD - VOLUME SENSITIVE									
19. 0- CALLING CARD - VOLUME INSENSITIVE									
20. 0- BILL-TO-THIRD - VOLUME SENSITIVE									
21. 0- BILL-TO-THIRD - VOLUME INSENSITIVE									
22. 0- COLLECT - VOLUME SENSITIVE									
23. 0- COLLECT - VOLUME INSENSITIVE									
24. 0- NO ATTEMPT - VOLUME SENSITIVE									
25. 0- NO ATTEMPT - VOLUME INSENSITIVE									
26. 0+ BILL-TO-THIRD - VOLUME SENSITIVE									
27. 0+ BILL-TO-THIRD - VOLUME INSENSITIVE									
28. AUTOMATED BILL-TO-THIRD - VOLUME SENSITIVE									
29. AUTOMATED BILL-TO-THIRD - VOLUME INSENSITIVE									
30. 0+ COLLECT - VOLUME SENSITIVE									
31. 0+ COLLECT - VOLUME INSENSITIVE									
32. AUTOMATED COLLECT - VOLUME SENSITIVE									
33. AUTOMATED COLLECT - VOLUME INSENSITIVE									
34. SENT PAID - VOLUME SENSITIVE									
35. SENT PAID - VOLUME INSENSITIVE									
36. VERIFICATION - VOLUME SENSITIVE									
37. VERIFICATION -VOLUME INSENSITIVE									
38. VERIFICATION-NON REVENUE-VOL. SENS.									
39. VERIFICATION-NON REVENUE-VOL.INSENS.									
40. VERIFICATION & INTERRUPT-VOL.SENS.									
41. VERIFICATION & INTERRUPT-VOL.INSENS.									
42.									
43.									
44. **PERSON-TO-PERSON**									
45. 0- CALLING CARD - VOLUME SENSITIVE									
46. 0- CALLING CARD - VOLUME INSENSITIVE									
47. 0- BILL-TO-THIRD - VOLUME SENSITIVE									
48. 0- BILL-TO-THIRD - VOLUME INSENSITIVE									
49. 0- COLLECT - VOLUME SENSITIVE									
50. 0- COLLECT - VOLUME INSENSITIVE									
51. 0+ CALLING CARD - VOLUME SENSITIVE									
52. 0+ CALLING CARD - VOLUME INSENSITIVE									
53. 0+ BILL-TO-THIRD -VOLUME SENSITIVE									
54. 0+ BILL-TO-THIRD - VOLUME INSENSITIVE									
55. 0+ COLLECT - VOLUME SENSITIVE									
56. 0+ COLLECT - VOLUME INSENSITIVE									

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1.	FLORIDA		
2.	OPERATOR PROVIDED AND		
3.	FULLY AUTOMATED CALL HANDLING SERVICES		
4.			
5.	OPERATOR LABOR		
6.			A
7.	OPERATOR LABOR PER PRODUCTIVE HOUR - 1996-1998		$26.01
8.			
9.	RATIO PRODUCTIVE TO CALL PROCESSING HOURS		
10.			
11.	OPERATOR COST PER MINUTE - VOLUME SENSITIVE	(LN7/60) x (LN9)	

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1.	FLORIDA				
2.					
3.	OPERATOR PROVIDED AND				
4.	FULLY AUTOMATED CALL HANDLING SERVICES				
5.					
6.	OPERATOR SERVICE CENTER (OSC)				
7.					
8.	POSITIONS				
9.	DEMAND - MINUTES, 1995				
10.					
11.	SOFTWARE				
12.	WORKSTATION SOFTWARE, PER POSITION				
13.	OPEN POSITION PROTOCOL, PER POSITION				
14.	ANNUITY FACTOR				0.2857
15.	EQUIVALENT ANNUAL COST		((LN8xLN14) x (LN12+LN13))		
16.	SOFTWARE COST PER MINUTE		(LN15)/(LN9)		
17.					
18.	HARDWARE				
19.	INVESTMENT PER POSITION				
20.	MCE&P FACTOR				1.0962
21.	LAND FACTOR				0.0030
22.	BUILDING FACTOR				0.0404
23.	ANNUAL COST FACTOR - DIGITAL SWITCH				0.2482
24.	ANNUAL COST FACTOR - LAND				0.1745
25.	ANNUAL COST FACTOR - BUILDING				0.1922
26.	ANNUAL COST - POSITION		LN8xLN9xLN20xLN23		
27.	ANNUAL COST - LAND		LN8xLN19xLN21xLN24		
28.	ANNUAL COST - BUILDING		LN8xLN19xLN22xLN25		
29.	TOTAL ANNUAL COST		LN26+LN27+LN28		
30.	HARDWARE COST PER MINUTE		LN29/LN9		
31.					
32.	VOICE AND DATA CIRCUITS				
33.		CIRCUITS/	UNIT	ANNUAL	ANNUAL
34.	CIRCUIT TERMINATION	MILES	INVESTMENT	COST FACTOR	COST
35.					
36.	CIRCUIT	272	$116.80	0.2268	$7,205
37.	LAND	272	$0.37	0.1745	$18
38.	BUILDING	272	$5.04	0.1922	$263
39.					
40.	CIRCUIT MILEAGE				
41.	AERIAL	28,119	$0.11	0.2050	$634
42.	BURIED	28,119	$0.32	0.2025	$1,822
43.	UNDERGROUND	28,119	$0.14	0.2032	$800
44.	POLE	28,119	$0.02	0.2113	$119
45.	CONDUIT	28,119	$0.09	0.1661	$420
46.	CIRCUIT	28,119	$1.45	0.2268	$9,247
47.	BUILDING	28,119	$0.06	0.1922	$324
48.					
49.	CIRCUIT ANNUAL COST		SUM LN36..LN47		$20,850
50.					
51.	COST PER MINUTE		LN49/LN9		
52.					
53.	TOTAL COST PER MINUTE - VOLUME SENSITIVE		LN16+LN30+LN51		

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1.	**FLORIDA**			
2.	**OPERATOR PROVIDED AND**			
3.	**FULLY AUTOMATED CALL HANDLING SERVICES**			
4.				
5.	OPERATOR SERVICE SYSTEM (OSS)			
6.				
7.	DEMAND - CALLS, 1995		A	B
8.	TOLL AND ASSIST			
9.				
10.	SOFTWARE PER TANDEM		A:HOST (1)	B:REMOTE(8)
11.	BASIC			
12.	AABS			
13.	TOTAL	LN11+LN12		
14.				
15.	ANNUITY FACTOR			0.2857
16.				
17.	TOTAL COST	(LN15A+(8xLN15B))		
18.				
19.	ANNUALIZED COST	LN17 x LN21		
20.				
21.	COST PER CALL - VOLUME INSENSITIVE	LN23/LN8		

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1.	**FLORIDA**	
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4.		
5.	SWITCH AND TRANSPORT	
6.	COST PER MINUTE - VOLUME SENSITIVE	
7.		
8.	VERIFY/INTERRUPT FUNCTIONS	
9.		
10.	VERIFICATION FUNCTION - MINUTES	
11.		
12.	VERIFICATION & INTERRUPT FUNCTION - MINUTES	
13.		
14.	COST PER CALL - VERIFICATION	
15.	VOLUME SENSITIVE	LN6xLN10
16.		
17.	COST PER CALL - VERIFICATION & INTERRUPT	
18.	VOLUME SENSITIVE	LN6xLN12

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FLORIDA
OPERATOR PROVIDED AND FULLY AUTOMATED CALL HANDLING SERVICES

AABS - REGIONAL

A

DATA CIRCUITS	CIRCUITS/ MILES	UNIT INVESTMENT	ANNUAL COST FACTOR	ANNUAL COST
CIRCUIT TERMINATION				
CIRCUIT	2,875	$139.23	0.2292	$91,746
LAND	2,875	$0.34	0.1745	$171
BUILDING	2,875	$5.68	0.1893	$3,091
CIRCUIT MILEAGE				
AERIAL	483,925	$0.12	0.2021	$11,736
BURIED	483,925	$0.39	0.1989	$37,539
UNDERGROUND	483,925	$0.15	0.2017	$14,641
POLE	483,925	$0.03	0.2137	$3,102
CONDUIT	483,925	$0.08	0.1658	$6,419
CIRCUIT	483,925	$1.45	0.2292	$160,828
BUILDING	483,925	$0.06	0.1893	$5,496
TOTAL ANNUAL COST, DATA CIRCUITS - VOLUME SENSITIVE				$334,769
INVESTMENT - GATEWAY AND IVS				
VOLUME SENSITIVE				
VOLUME INSENSITIVE				
ANNUAL COST FACTOR				0.2527
ANNUAL COST - GATEWAY AND IVS				
VOLUME SENSITIVE				
VOLUME INSENSITIVE				
ANNUAL SOFTWARE EXPENSE				
GATEWAY AND IVS - VOLUME INSENSITIVE				
CAPACITY, ANNUAL CALLS				238,750,000
AABS COST PER AUTOMATED CALL				
VOLUME SENSITIVE				
VOLUME INSENSITIVE				

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4.
5.
6. **LIDB - REGIONAL**

			A
7.			
8.			
9.	RATIO BST OSS QUERIES TO BST LIDB PER MONTH		0.57
10.	RATIO BST OSS QUERIES TO FOREIGN LIDB PER MONTH		0.43
11.			
12.	AVERAGE COST PER QUERY, BST LIDB - VOLUME SENSITIVE		$0.0006
13.	AVERAGE COST PER QUERY, BST LIDB - VOLUME INSENSITIVE		$0.0084
14.	AVERAGE CHARGE PER QUERY, FOREIGN LIDB - VOLUME SENSITIVE		
15.			
16.	WEIGHTED AVERAGE, VOLUME SENSITIVE	(LN9xLN12)+(LN10xLN14)	
17.	WEIGHTED AVERAGE, VOLUME INSENSITIVE	LN9xLN13	

TAB 5

SECTION 5

OPERATOR PROVIDED AND AUTOMATED CALL HANDLING SERVICES

SPECIFIC STUDY ASSUMPTIONS

The cost study for the Operator Provided and Automated Call Handling Services is based on direct incremental costing techniques that are in accordance with accepted economic theory, plus specific Network deployment strategies, first choice provisioning guidelines, and equipment purchasing information.

Cost study assumptions are as follows:

Software expenses were projected to the 1996-1998 study period using the telephone plant indexes and investment inflation factors of the associated (377C) investment.

Software expenses such as Right-To-Use fees are amortized over five years to develop an equivalent annual cost.

TAB 6

SECTION 6

FLORIDA

OPERATOR PROVIDED AND AUTOMATED CALL HANDLING SERVICES

FACTORS AND LOADINGS

Following are the incremental annual cost factors, miscellaneous loadings and labor rates used in the Florida Operator Provided and Automated Call Handling Services cost study.

1996 - 1998 Directly Assigned Hourly Labor Rates: (Florida) Operator, JFC 2120		$26.01
Operator Labor Inflation Rate From 1995		1.0618
Hardware Inflation Rate 377C (Florida)		1.012
Ratio Productive to Call Processing Hours (Regional)		1.50
Amortization Factor (5 Years @ 13.2%)		0.2857
Miscellaneous Common Equipment and Power Factor	377C (Florida)	1.0962
Gross Receipts Tax Factor (Florida)		1.0152
Land Loading	20C (Florida)	0.0030
Building Loading	10C (Florida)	0.0404

Annual Cost Factors (Florida & Regional see following spreadsheets)

Rev 10-May-96

Image Table: ACFCURRENT

1995 FLORIDA
ACCOUNT AVERAGE ANNUAL COST FACTORS
INCREMENTAL

* FOR USE IN SERVICE COST STUDIES ONLY

	field_code	depreciation a	acfc_com b	acfc_inc tax c	cap_exp d	acfc_mtce e	acfc_adval tax f	admin_dir g	acfc_oper_exp h	tot_combined i
			13.2%		(a+b+c)				(e+f+g)	(d+h)
LAND	20C	0.0000	0.1118	0.0514	0.1632	0.0000	0.0113	0.0000	0.0113	0.1745
BUILDINGS	10C, 110C, 810C	0.0302	0.0986	0.0452	0.1740	0.0069	0.0113	0.0000	0.0182	0.1922
ANALOG ELEC SWITCH	77C, 877C, 977C	0.2629	0.0680	0.0306	0.3615	0.0217	0.0113	0.0000	0.0330	0.3945
DIGITAL ELEC SWITCH	377C, 887C	0.1134	0.0651	0.0302	0.2087	0.0282	0.0113	0.0000	0.0395	0.2482
OPERATOR SYSTEMS	117C,417C	0.1083	0.0751	0.0404	0.2238	0.0040	0.0113	0.0000	0.0153	0.2391
RADIO	167C, 67C, 867C, 967C	0.1434	0.0750	0.0348	0.2532	0.0763	0.0113	0.0000	0.0876	0.3408
DIGTL CIRC-DDS	157C	0.1810	0.0675	0.0305	0.2790	0.0073	0.0113	0.0000	0.0186	0.2976
DIGTL CIRC-PAIR GAIN	257C,D257C,F257C	0.1134	0.0636	0.0288	0.2058	0.0089	0.0113	0.0000	0.0202	0.2260
DIGTL CIRC-OTHER	357C,T357C,F357C,857C,957C	0.1134	0.0638	0.0297	0.2069	0.0086	0.0113	0.0000	0.0199	0.2268
ANALOG CIRC-PAIR GAIN	457C	0.1689	0.0636	0.0248	0.2573	0.0000	0.0113	0.0000	0.0113	0.2686
ANALOG CIRC-OTHER	57C	0.1689	0.0639	0.0282	0.2610	0.0206	0.0113	0.0000	0.0319	0.2929
PBX	158C, 258C	0.2296	0.0771	0.0346	0.3413	0.0145	0.0113	0.0000	0.0258	0.3671
PUBLIC-COIN	198C, 188C	0.1483	0.0763	0.0348	0.2594	0.2084	0.0113	0.0000	0.2197	0.4791
PUBLIC-COINLESS	298C, 288C	0.1483	0.0763	0.0348	0.2594	0.1248	0.0113	0.0000	0.1361	0.3955
PUBLIC-OTHER	998C, 988C	0.1483	0.0763	0.0348	0.2594	0.1062	0.0113	0.0000	0.1175	0.3769
OTHER TERMINAL EQPT	358C,D758C,858C,558C, 828C,928C,F958C	0.1733	0.0812	0.0359	0.2904	0.0548	0.0113	0.0000	0.0661	0.3565
SUBSCRIBER PAIR GAIN	758C,D758C,F758C	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
POLES	1C, 811C	0.0671	0.0725	0.0325	0.1721	0.0279	0.0113	0.0000	0.0392	0.2113
AERIAL CA - METAL	22C, 12C, 802C	0.0917	0.0797	0.0338	0.2052	0.0571	0.0113	0.0000	0.0684	0.2736
AERIAL CA - FIBER	822C, 812C, 882C, 982C,D22C, F22C,T22C,D12C,F12C,T12C	0.0667	0.0784	0.0347	0.1798	0.0139	0.0113	0.0000	0.0252	0.2050
UNGROUND CA - METAL	5C, 805C	0.1036	0.0813	0.0342	0.2191	0.0291	0.0113	0.0000	0.0404	0.2595
UNGROUND CA - FIBER	85C,885C,985C,D5C,F5C,T5C	0.0626	0.0800	0.0358	0.1784	0.0135	0.0113	0.0000	0.0248	0.2032
BURIED CA - METAL	45C, 846C	0.0876	0.0809	0.0354	0.2039	0.0543	0.0113	0.0000	0.0656	0.2695
BURIED CA - FIBER	845C,856C,956C,D45C, F45C,T45C	0.0585	0.0816	0.0367	0.1768	0.0144	0.0113	0.0000	0.0257	0.2025
SUBMARINE CA-METAL	6C, 806C	0.0860	0.0814	0.0366	0.2040	0.0150	0.0113	0.0000	0.0263	0.2303
SUBMARINE CA-FIBER	86C,886C,D6C,F6C,T6C	0.0860	0.0814	0.0355	0.2029	0.0150	0.0113	0.0000	0.0263	0.2292
INTRBLD NTWK-METAL	52C	0.0661	0.0785	0.0340	0.1786	0.0320	0.0113	0.0000	0.0433	0.2219
INTRBLD NTWK-FIBER	852C,D52C,F52C,T52C	0.0661	0.0785	0.0340	0.1786	0.0320	0.0113	0.0000	0.0433	0.2219
CONDUIT SYSTEMS	4C, 84C, 94C	0.0242	0.0877	0.0401	0.1520	0.0028	0.0113	0.0000	0.0141	0.1661

Image Table: ACFCURRENT

1995 BELLSOUTH TELECOMMUNICATIONS
ACCOUNT AVERAGE ANNUAL COST FACTORS
INCREMENTAL

Rev 10-May-96

* FOR USE IN SERVICE COST STUDIES ONLY

	field_code	depreciation a	acfc_com b	acfc_inc tax c	cap_exp d	acfc_misc e	acfc_adval tax f	admin_dir g	acfc_oper_exp h	tot_combined i
			13.2%		(a+b+c)				(e+f+g)	(d+h)
LAND	20C	0.0000	0.1118	0.0514	0.1632	0.0000	0.0113	0.0000	0.0113	0.1745
BUILDINGS	10C, 110C, 810C	0.0302	0.0986	0.0452	0.1740	0.0040	0.0113	0.0000	0.0153	0.1893
ANALOG ELEC SWITCH	77C, 877C, 977C	0.2629	0.0680	0.0306	0.3615	0.0210	0.0113	0.0000	0.0323	0.3938
DIGITAL ELEC SWITCH	377C, 887C	0.1134	0.0651	0.0302	0.2087	0.0327	0.0113	0.0000	0.0440	0.2527
OPERATOR SYSTEMS	117C,417C	0.1083	0.0751	0.0404	0.2238	0.0067	0.0113	0.0000	0.0180	0.2418
RADIO	167C, 67C, 867C, 967C	0.1434	0.0750	0.0348	0.2532	0.0142	0.0113	0.0000	0.0255	0.2787
DIGTL CIRC-DDS	157C	0.1810	0.0675	0.0305	0.2790	0.0145	0.0113	0.0000	0.0258	0.3048
DIGTL CIRC-PAIR GAIN	257C,D257C,F257C	0.1134	0.0636	0.0288	0.2058	0.0104	0.0113	0.0000	0.0217	0.2275
DIGTL CIRC-OTHER	357C,T357C,F357C,857C,957C	0.1134	0.0638	0.0297	0.2069	0.0110	0.0113	0.0000	0.0223	0.2292
ANALOG CIRC-PAIR GAIN	457C	0.1689	0.0636	0.0248	0.2573	0.0033	0.0113	0.0000	0.0146	0.2719
ANALOG CIRC-OTHER	57C	0.1689	0.0639	0.0282	0.2610	0.0140	0.0113	0.0000	0.0253	0.2863
PBX	158C, 258C	0.2296	0.0771	0.0346	0.3413	0.0368	0.0113	0.0000	0.0481	0.3894
PUBLIC-COIN	198C, 188C	0.1483	0.0763	0.0348	0.2594	0.1972	0.0113	0.0000	0.2085	0.4679
PUBLIC-COINLESS	298C, 288C	0.1483	0.0763	0.0348	0.2594	0.1076	0.0113	0.0000	0.1189	0.3783
PUBLIC-OTHER	998C, 988C	0.1483	0.0763	0.0348	0.2594	0.0582	0.0113	0.0000	0.0695	0.3289
OTHER TERMINAL EQPT	358C,D758C,858C,558C, 828C,928C,F958C	0.1733	0.0812	0.0359	0.2904	0.0585	0.0113	0.0000	0.0698	0.3602
SUBSCRIBER PAIR GAIN	758C,D758C,F758C	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
POLES	1C, 811C	0.0671	0.0725	0.0325	0.1721	0.0303	0.0113	0.0000	0.0416	0.2137
AERIAL CA - METAL	22C, 12C, 802C	0.0917	0.0797	0.0338	0.2052	0.0413	0.0113	0.0000	0.0526	0.2578
AERIAL CA - FIBER	822C, 812C, 882C, 982C,D22C, F22C,T22C,D12C,F12C,T12C	0.0667	0.0784	0.0347	0.1798	0.0110	0.0113	0.0000	0.0223	0.2021
UNGROUND CA - METAL	5C, 805C	0.1036	0.0813	0.0342	0.2191	0.0255	0.0113	0.0000	0.0368	0.2559
UNGROUND CA - FIBER	85C,885C,985C,D5C,F5C,T5C	0.0626	0.0800	0.0358	0.1784	0.0120	0.0113	0.0000	0.0233	0.2017
BURIED CA - METAL	45C, 845C	0.0876	0.0809	0.0354	0.2039	0.0417	0.0113	0.0000	0.0530	0.2569
BURIED CA - FIBER	845C,856C,956C,D45C, F45C,T45C	0.0585	0.0816	0.0367	0.1768	0.0108	0.0113	0.0000	0.0221	0.1989
SUBMARINE CA-METAL	6C, 806C	0.0860	0.0814	0.0366	0.2040	0.0106	0.0113	0.0000	0.0219	0.2259
SUBMARINE CA-FIBER	86C,886C,D6C,F6C,T6C	0.0860	0.0814	0.0355	0.2029	0.0106	0.0113	0.0000	0.0219	0.2248
INTRBLD NTWK-METAL	52C	0.0661	0.0785	0.0340	0.1786	0.0265	0.0113	0.0000	0.0378	0.2164
INTRBLD NTWK-FIBER	852C,D52C,F52C,T52C	0.0661	0.0785	0.0340	0.1786	0.0265	0.0113	0.0000	0.0378	0.2164
CONDUIT SYSTEMS	4C, 84C, 94C	0.0242	0.0877	0.0401	0.1520	0.0025	0.0113	0.0000	0.0138	0.1658

BellSouth Telecommunications, In
FPSC Docket No. 960833-TP
Exhibit No. DDC-13

FLORIDA

VERIFICATION AND EMERGENCY INTERRUPT SERVICE

COST STUDY DOCUMENTATION

SECTIONS A THRU 6

FLORIDA

VERIFICATION AND EMERGENCY INTERRUPT SERVICE

COST STUDY DOCUMENTATION

CONTENTS

SECTION A	PROPRIETARY RATIONALE
SECTION 1	INTRODUCTION AND OVERVIEW
SECTION 2	DESCRIPTION OF STUDY PROCEDURES
SECTION 3	SUMMARY OF RESULTS
SECTION 4	COST DEVELOPMENT - RECURRING LRIC AND TSLRIC
SECTION 5	SPECIFIC STUDY ASSUMPTIONS
SECTION 6	FACTORS AND LOADINGS

TAB A

SECTION A

VERIFICATION AND EMERGENCY INTERRUPT

PROPRIETARY RATIONALE

The Verification and Emergency Interrupt Service Study contains actual unit cost information for discrete cost elements. These costs reflect BellSouth's long run incremental cost of providing these elements on a going forward basis. Public disclosure of this information would provide BellSouth's competitors with an advantage. The data is valuable to competitors and potential competitors in formulating strategic plans for entry, pricing, marketing and overall business strategies. This information relates to the competitive interests of BellSouth and disclosure would impair the competitive business of BellSouth.

Additionally, the study contains information which reflects vendor-specific prices negotiated by BellSouth. Public disclosure of this information would impair BellSouth's ability to contract for goods and/or services on favorable terms. For these reasons, the Verification and Emergency Interrupt Service Cost Study is considered proprietary.

TAB 1

SECTION 1

VERIFICATION AND EMERGENCY INTERRUPT SERVICE

INTRODUCTION AND OVERVIEW

This cost study develops the Long Run Incremental Cost (LRIC) and the Total Service Long Run Incremental Cost (TSLRIC) per call for Verification and Emergency Interrupt Service. LRIC is the volume sensitive incremental unit cost. TSLRIC is the volume sensitive and volume insensitive incremental unit cost, the average incremental unit cost. These costs are comprised of: (1) Operator Labor; (2) the operators' position hardware, software, and dedicated circuits associated with the Operator Service Center (OSC); (3) the software providing Operator Service functionality in the Operator Service System (OSS); and, (4) the Verification/Interrupt calls. Operator labor, positions, circuits to the positions and the Verification/Interrupt calls are a function of demand and are, accordingly, volume sensitive. The software in the OSS is insensitive to demand.

Verification and Emergency Interrupt Service is labor intensive. The study is a capacity cost study in that the operator labor varies directly with the number of calls and the operators' tours can be rescheduled on a relatively short interval. The primary cost, the operator labor expense, is continuously adjusted to meet demand.

The Operator Service System is a software package that allows a tandem switch to provide directory assistance functionality. Its essential function is to act as an automated call distributor and directs Operator calls to the active operator position that has been idle the longest.

The operator position is a workstation that ties the operator to both the customer and the line called for verification/interrupt.

The study is based on directly assigned labor costs, current vendor prices for hardware and software, and incremental annual cost factors.

TAB 2

SECTION 2

VERIFICATION AND EMERGENCY INTERRUPT SERVICE

DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of costs supporting Verification and Emergency Interrupt Service.

In determining costs, BellSouth uses direct incremental costing techniques that are in accordance with accepted economic theory. Direct incremental costs are based on cost causation and include all of the costs directly caused by expanding production, or, alternatively, costs that would be saved if the production levels were reduced. The production unit may be an entire service or a unit of the service depending on the cost object involved. Costs for a service may include volume sensitive and/or volume insensitive costs. Costs are forward looking in nature because only future costs can be saved. Incremental costs are long run to assure that the time period studied is sufficient to capture all forward looking costs affected by the business decision. Shared and common costs are not incremental and, therefore, are not included. Incremental costs include both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs. There are no nonrecurring costs associated with Verification and Emergency Interrupt Service. Incremental costs account for the expected change in cost to the firm resulting from a new service offering or a change in demand for an existing service.

THE DEVELOPMENT OF RECURRING COSTS

The monthly costs to BellSouth Telecommunications, Inc., resulting from the capital investments necessary to provide a service are called recurring costs. Recurring costs include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs are the expenses of maintenance and ad valorem and other taxes. These expenses contribute to the ongoing cost to the company associated with the initial capital investment. Recurring costs may also be non-investment related, such as operator labor, feature specific software and contract expenses. Recurring costs are developed using incremental economic study applications, representing a forward-looking view of technology and deployment.

The first step in developing an incremental study of recurring costs for Verification and Emergency Interrupt Service is to determine the forward-looking network architecture. Prices for the software and equipment are defined. Next, account specific Telephone Plant Indices are applied, when necessary, to trend investments to the base study period. In-plant factors are applied to material prices to develop installed investments which include engineering and installation labor.

Indexes are applied, when necessary, to trend investments and non-investment related expenses to the 1996-1998 base study period. In-plant factors are applied to material prices to develop installed investments which include engineering and installation labor.

Appropriate loadings for land, building and miscellaneous common equipment and power are then applied to the electronic equipment. Support structure loadings are applied for poles and conduit to the aerial and underground fiber investments respectively.

Next, 1995 level Incremental Annual Cost Factors are used to calculate the direct cost of capital, ongoing maintenance and other operating expenses and taxes. These factors (specific factors for each Uniform System of Account Field Reporting Code) are applied to levelized investments by account code, yielding an annual cost per account code. Both the investment and non-investment related annual costs are summed and then divided by annual demand to arrive at a unit cost for each component.

TAB 3

SECTION 3

FLORIDA

VERIFICATION AND EMERGENCY INTERRUPT SERVICE

SUMMARY OF RESULTS

This section contains a cost summary for the volume sensitive Long Run Incremental Cost and Total Service Long Run Incremental Cost for Verification and Emergency Interrupt Service.

	A COST PER CALL
VERIFICATION	
LRIC, Volume Sensitive Unit Cost	
TSLRIC, Average Incremental Unit Cost	
EMERGENCY INTERRUPT	
LRIC, Volume Sensitive Unit Cost	
TSLRIC, Average Incremental Unit Cost	

TAB 4

SECTION 4

FLORIDA

VERIFICATION AND EMERGENCY INTERRUPT SERVICE

COST DEVELOPMENT

This section defines the cost development for Verification and Emergency Interrupt Service.

Generally, economic cost development is outlined in Section 2. Network architecture is determined; the necessary equipment is identified; material prices are obtained; utilization and loading factors are applied. Annual cost factors are applied to convert the investment to cost. Labor expense is directly identified.

Workpaper 1

The verification and emergency interrupt volume sensitive (LRIC) and volume insensitive costs per call are summarized, and the average incremental cost (TSLRIC) per call is calculated.

Workpaper 2

The volume sensitive and volume insensitive costs per call are summarized for verification and emergency interrupt. Where costs for individual components are developed per minute, they are converted to a cost per minute using the Actual Work Time (shown in seconds).

Workpaper 3

The operator cost per minute is developed using the directly assigned labor cost per productive hour. The cost per hour is divided by 60 minutes and then adjusted by the ratio of productive hours to call processing hours.

Workpaper 4

The Operator Service Center (OSC) software cost per minute is derived by multiplying the equivalent annual cost per position times the number of positions and dividing it by the projected demand in minutes for 1995.

The hardware investment per position is loaded for incremental common equipment, power, land, and building investment. The investments are multiplied by the number of positions and their corresponding annual cost factors to calculate the associated annual cost. The annual cost is divided by the projected annual minutes for 1995 to develop the hardware cost per minute. The circuit and mileage quantities for the message and data circuits from the positions were multiplied by their fixed and mileage sensitive unit investments, and associated annual cost factors to calculate the annual cost. The mileage for each route was calculated from the vertical and horizontal coordinates of the Operator Service Center locations and the host Operator Service System. As with the hardware, the annual cost was divided by the 1995 annual minutes to product the cost per minute.

The total cost per minute for the Operator Service Center (OSC) is the sum of the software, hardware and circuit cost per minute.

Workpaper 5

The equivalent annual cost for the software in the Operator Service Systems is divided by the projected 1995 calls to develop the OSS cost per call.

Workpaper 6

The cost for the verification and emergency interrupt calls from the operator to the line to be monitored are developed using the switching and transport cost per minute (for access) and the estimated time required for the actual verification and emergency interrupt functions.

WORKPAPER 1
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1. **FLORIDA**
2. **VERIFICATION AND**
3. **EMERGENCY INTERRUPT SERVICE**
4.
5. **SUMMARY OF COST PER CALL**

		A COST PER CALL
10.		
11.		
12.		
13.		
14.	VERIFICATION	
15.	VOLUME SENSITIVE UNIT COST	
16.	VOLUME INSENSITIVE UNIT COST	
17.	TSLRIC; AVERAGE INCREMENTAL UNIT COST	
18.		
19.		
20.	EMERGENCY INTERRUPT	
21.	VOLUME SENSITIVE UNIT COST	
22.	VOLUME INSENSITIVE UNIT COST	
23.	TSLRIC; AVERAGE INCREMENTAL UNIT COST	

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FLORIDA
VERIFICATION AND
EMERGENCY INTERRUPT SERVICE

SUMMARY OF COST BY CALL TYPE

	A	B	C	D	E	F	G
	AWT	OPERATOR LABOR	OSC	OSS	VERIFICATION/ INTERRUPT CALL	GROSS RECEIPTS (.0152)	COST PER CALL
VERIFICATION							
VOLUME SENSITIVE UNIT COST							
VOLUME INSENSITIVE UNIT COST	[redacted]						
TSLRIC,	[redacted]						
AVERAGE INCREMENTAL UNIT COST							
EMERGENCY INTERRUPT							
VOLUME SENSITIVE UNIT COST							3
VOLUME INSENSITIVE UNIT COST							1
TSLRIC,							
AVERAGE INCREMENTAL UNIT COST							[illegible]

WORKPAPER 3
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1. FLORIDA
2. VERIFICATION AND
3. EMERGENCY INTERRUPT SERVICE
4.
5.
6. OPERATOR LABOR
7.
8. A
9.
10. OPERATOR LABOR PER PRODUCTIVE HOUR - 1996-1998 JFC: 2120 $26.01
11.
12. RATIO PRODUCTIVE TO CALL PROCESSING HOURS
13.
14. OPERATOR COST PER MINUTE, VOLUME SENSITIVE (LN10/60) x (LN12)

1.	**FLORIDA**				
2.	**VERIFICATION AND**				WORKPAPER 4
3.	**EMERGENCY INTERRUPT SERVICE**				PAGE 1 OF 1
4.					07/15/96
5.					
6.	OPERATOR SERVICE CENTER (OSC)				
7.					A
8.					
9.	POSITIONS				
10.	DEMAND - MINUTES, 1995				
11.					
12.	SOFTWARE				
13.	WORKSTATION SOFTWARE, PER POSITION				
14.	OPEN POSITION PROTOCOL, PER POSITION				
15.	ANNUITY FACTOR				0.2857
16.	ANNUALIZED COST		(LN13 + LN14) x (LN9)xLN15		
17.	SOFTWARE COST PER MINUTE		(LN16) / LN10		$0.0460
18.					
19.	HARDWARE				
20.	INVESTMENT PER POSITION				
21.	MCE&P FACTOR				1.0962
22.	LAND FACTOR				0.0030
23.	BUILDING FACTOR				0.0404
24.	ANNUAL COST FACTOR (377C)				0.2482
25.	ANNUAL COST FACTOR (20C)				0.1745
26.	ANNUAL COST FACTOR (10C)				0.1922
27.	ANNUAL COST - POSITION		(LN9)(LN20)(LN21)(LN24)		
28.	ANNUAL COST - LAND		(LN9)(LN20)(LN22)(LN25)		
29.	ANNUAL COST - BUILDING		(LN9)(LN20)(LN23)(LN26)		
30.	TOTAL ANNUAL COST		(LN27+LN28+LN29)		
31.	HARDWARE COST PER MINUTE		(LN30)/(LN10)		
32.					
33.	VOICE AND DATA CIRCUITS				
34.		CIRCUITS/	UNIT	ANNUAL	ANNUAL
35.	CIRCUIT TERMINATION	MILES	INVESTMENT	COST FACTOR	COST
36.	CIRCUIT (357C)	272	$137.64	0.2268	$8,491
37.	LAND (20C)	272	$0.35	0.1745	$17
38.	BUILDING (10C)	272	$5.61	0.1922	$293
39.					
40.	CIRCUIT MILEAGE				
41.	AERIAL (822C)	28,119	$0.08	0.2050	$461
42.	BURIED (845C)	28,119	$0.29	0.2025	$1,651
43.	UNDERGROUND (85C)	28,119	$0.27	0.2032	$1,543
44.	POLE (1C)	28,119	$0.02	0.2113	$119
45.	CONDUIT (4C)	28,119	$0.17	0.1661	$794
46.	CIRCUIT (357C)	28,119	$1.44	0.2268	$9,183
47.	BUILDING (10C)	28,119	$0.06	0.1922	$324
48.					
49.	TOTAL ANNUAL COST		SUM LN 36..LN47		$22,877
50.					
51.	CIRCUIT COST PER MINUTE		LN49/LN10		
52.					
53.	TOTAL COST PER MINUTE - VOLUME SENSITIVE		(LN17 + LN31 + LN51)		

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1.	**FLORIDA**			
2.	**VERIFICATION AND**			
3.	**EMERGENCY INTERRUPT SERVICE**			
4.				
5.				
6.	OPERATOR SERVICE SYSTEM (OSS)			
7.			A	B
8.	DEMAND - CALLS, 1995			
9.	TOLL AND ASSIST			
10.				
11.				
12.	SOFTWARE PER TANDEM		A:HOST(1)	B:REMOTE(8)
13.	BASIC			
14.	AABS			
15.	TOTAL			
16.				
17.	ANNUITY FACTOR			0.2857
18.				
19.	ANNUALIZED COST	((LN15A) + (8xLN15B)) x LN17		
20.				
21.	COST PER CALL - VOLUME INSENSITIVE	LN19/LN9		

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1. **FLORIDA**
2. **VERIFICATION AND**
3. **EMERGENCY INTERRUPT SERVICE**
4.
5. **VERIFICATION/INTERRUPT CALLS**
6.
7.

A

8. OSC TO LATA
9.
10. COST PER MINUTE
11. MINUTES PER CALL - VERIFICATION FUNCTION
12. MINUTES PER CALL - VERIFICATION & INTERRUPT FUNCTION
13.
14. COST PER CALL,
15. VERIFICATION - VOLUME SENSITIVE LN10xLN11
16.
17. COST PER CALL,
18. EMERGENCY INTERRUPT - VOLUME SENSITIVE LN10xLN12

TAB 5

SECTION 5

VERIFICATION AND EMERGENCY INTERRUPT SERVICE

SPECIFIC STUDY ASSUMPTIONS

The cost study for the verification and emergency interrupt service for the state is based on direct incremental costing techniques that are in accordance with accepted economic theory, plus specific Network deployment strategies, first choice provisioning guidelines, and equipment purchasing information.

Cost study assumptions are as follows:

Software expenses were projected to the 1996-1998 study period using the telephone plant indexes and investment inflation factors of the associated (377c) investment.

Software expenses such as Right-To-Use fees are amortized over five years to develop an equivalent annual cost.

TAB 6

SECTION 6

FLORIDA

VERIFICATION AND EMERGENCY INTERRUPT SERVICE

FACTORS AND LOADINGS

Following are the incremental annual cost factors, miscellaneous loadings and labor rates used in the Florida verification and emergency interrupt service cost study.

1996 - 1998 Directly Assigned Hourly Labor Rates: (Florida) Operator, JFC 2120		$26.01
Operator Labor Inflation Rate From 1995		1.0618
Hardware Inflation Rate 377C (Florida)		1.012
Ratio Productive to Call Processing Hours (Regional)		1.50
Amortization Factor (5 Years @ 13.2%)		0.2857
Miscellaneous Common Equipment and Power Factor	377C (Florida)	1.0962
Gross Receipts Tax Factor (Florida)		1.0152
Land Loading	20C (Florida)	0.0030
Building Loading	10C (Florida)	0.0404
Annual Cost Factors	(See following spreadsheet)	

Rev 10-May-96

Image Table: ACFCURRENT

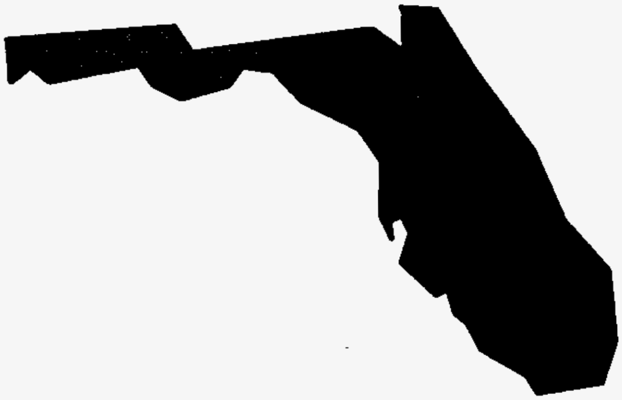
1995 FLORIDA
ACCOUNT AVERAGE ANNUAL COST FACTORS
INCREMENTAL

* FOR USE IN SERVICE COST STUDIES ONLY

	field_code	depreciation a	acfc_com b	acfc_inc tax c	cap_exp d	acfc_mtce e	acfc_adval tax f	admin_dir g	acfc_oper_exp h	tot_combined i
			13.2%		(a+b+c)				(e+f+g)	(d+h)
LAND	20C	0.0000	0.1118	0.0514	0.1632	0.0000	0.0113	0.0000	0.0113	0.1745
BUILDINGS	10C, 110C, 810C	0.0302	0.0986	0.0452	0.1740	0.0069	0.0113	0.0000	0.0182	0.1922
ANALOG ELEC SWITCH	77C, 877C, 977C	0.2629	0.0680	0.0306	0.3615	0.0217	0.0113	0.0000	0.0330	0.3945
DIGITAL ELEC SWITCH	377C, 887C	0.1134	0.0651	0.0302	0.2087	0.0282	0.0113	0.0000	0.0395	0.2482
OPERATOR SYSTEMS	117C,417C	0.1083	0.0751	0.0404	0.2238	0.0040	0.0113	0.0000	0.0153	0.2391
RADIO	167C, 67C, 867C, 967C	0.1434	0.0750	0.0348	0.2532	0.0763	0.0113	0.0000	0.0876	0.3408
DIGTL CIRC-DDS	157C	0.1810	0.0675	0.0305	0.2790	0.0073	0.0113	0.0000	0.0186	0.2976
DIGTL CIRC-PAIR GAIN	257C,D257C,F257C	0.1134	0.0636	0.0288	0.2058	0.0089	0.0113	0.0000	0.0202	0.2260
DIGTL CIRC-OTHER	357C,T357C,F357C,857C,957C	0.1134	0.0638	0.0297	0.2069	0.0086	0.0113	0.0000	0.0199	0.2268
ANALOG CIRC-PAIR GAIN	457C	0.1689	0.0636	0.0248	0.2573	0.0000	0.0113	0.0000	0.0113	0.2686
ANALOG CIRC-OTHER	57C	0.1689	0.0639	0.0282	0.2610	0.0206	0.0113	0.0000	0.0319	0.2929
PBX	158C, 258C	0.2296	0.0771	0.0346	0.3413	0.0145	0.0113	0.0000	0.0258	0.3671
PUBLIC-COIN	198C, 188C	0.1483	0.0763	0.0348	0.2594	0.2084	0.0113	0.0000	0.2197	0.4791
PUBLIC-COINLESS	298C, 288C	0.1483	0.0763	0.0348	0.2594	0.1248	0.0113	0.0000	0.1361	0.3955
PUBLIC-OTHER	998C, 988C	0.1483	0.0763	0.0348	0.2594	0.1062	0.0113	0.0000	0.1175	0.3769
OTHER TERMINAL EQPT	358C,D758C,858C,558C, 828C,928C,F958C	0.1733	0.0812	0.0359	0.2904	0.0548	0.0113	0.0000	0.0661	0.3565
SUBSCRIBER PAIR GAIN	758C,D758C,F758C	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
POLES	1C, 811C	0.0671	0.0725	0.0325	0.1721	0.0279	0.0113	0.0000	0.0392	0.2113
AERIAL CA - METAL	22C, 12C, 802C	0.0917	0.0797	0.0338	0.2052	0.0571	0.0113	0.0000	0.0684	0.2736
AERIAL CA - FIBER	822C, 812C, 882C, 982C,D22C, F22C,T22C,D12C,F12C,T12C	0.0667	0.0784	0.0347	0.1798	0.0139	0.0113	0.0000	0.0252	0.2050
UNGROUND CA - METAL	5C, 805C	0.1036	0.0813	0.0342	0.2191	0.0291	0.0113	0.0000	0.0404	0.2595
UNGROUND CA - FIBER	85C,885C,985C,D5C,F5C,T5C	0.0626	0.0800	0.0358	0.1784	0.0135	0.0113	0.0000	0.0248	0.2032
BURIED CA - METAL	45C, 846C	0.0876	0.0809	0.0354	0.2039	0.0543	0.0113	0.0000	0.0656	0.2695
BURIED CA - FIBER	845C,856C,956C,D45C, F45C,T45C	0.0585	0.0816	0.0367	0.1768	0.0144	0.0113	0.0000	0.0257	0.2025
SUBMARINE CA-METAL	6C, 806C	0.0860	0.0814	0.0366	0.2040	0.0150	0.0113	0.0000	0.0263	0.2303
SUBMARINE CA-FIBER	86C,886C,D6C,F6C,T6C	0.0860	0.0814	0.0355	0.2029	0.0150	0.0113	0.0000	0.0263	0.2292
INTRBLD NTWK-METAL	52C	0.0661	0.0785	0.0340	0.1786	0.0320	0.0113	0.0000	0.0433	0.2219
INTRBLD NTWK-FIBER	852C,D52C,F52C,T52C	0.0661	0.0785	0.0340	0.1786	0.0320	0.0113	0.0000	0.0433	0.2219
CONDUIT SYSTEMS	4C, 84C, 94C	0.0242	0.0677	0.0401	0.1520	0.0028	0.0113	0.0000	0.0141	0.1661

BellSouth Telecommunications, Inc.
FPSC Docket No. 960833-TP
Exhibit No. DDC-14

FLORIDA



DIRECTORY ASSISTANCE ACCESS SERVICE

COST STUDY DOCUMENTATION

SECTIONS A THRU 6

FLORIDA

DIRECTORY ASSISTANCE ACCESS SERVICE

COST STUDY DOCUMENTATION

CONTENTS

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SECTION 2 DESCRIPTION OF STUDY PROCEDURES

SECTION 3 SUMMARY OF RESULTS

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SECTION 5 SPECIFIC STUDY ASSUMPTIONS

SECTION 6 FACTORS AND LOADINGS

TAB A

SECTION A

DIRECTORY ASSISTANCE ACCESS SERVICE

PROPRIETARY RATIONALE

The Directory Assistance Access Study contains actual unit cost information for discrete cost elements. These costs reflect BellSouth's long run incremental cost of providing these elements on a going forward basis. Public disclosure of this information would provide BellSouth's competitors with an advantage. The data is valuable to competitors and potential competitors in formulating strategic plans for entry, pricing, marketing and overall business strategies. This information relates to the competitive interests of BellSouth and disclosure would impair the competitive business of BellSouth.

Additionally, the study contains information which reflects vendor-specific prices negotiated by BellSouth. Public disclosure of this information would impair BellSouth's ability to contract for goods and/or services on favorable terms. For these reasons, the Directory Assistance Access Service Cost Study is considered proprietary.

TAB 1

SECTION 1

DIRECTORY ASSISTANCE ACCESS SERVICE

INTRODUCTION AND OVERVIEW

This cost study develops the Long Run Incremental Cost (LRIC) and the Total Service Long Run Incremental Cost (TSLRIC) per call for Directory Assistance Service Calls. LRIC is the volume sensitive incremental unit cost. TSLRIC is the volume sensitive and volume insensitive incremental unit cost, the average incremental unit cost. These costs are comprised of: (1) Operator Labor; (2) the operators' position hardware, software, and dedicated circuits associated with the Operator Service Center (OSC); (3) the software providing Directory Assistance functionality in the Operator Service System (OSS); and, (4) the Directory Assistance Database System. Operator labor, positions, circuits to the positions and the operations databases are sized as a function of demand and are, accordingly, volume sensitive. The DA software in the OSS and the administrative database are insensitive to demand.

From a cost methodology perspective, the difference in intraLATA DA Service and DA Access Service is that transport is a separate rate element for the latter. This study develops the cost of all components, with the exception of transport, using the total demand for Directory Assistance. The Directory Assistance Transport costs are developed with the Switched Access Studies.

Directory Assistance Access Service is labor intensive. The study is a capacity cost study in that the operator labor varies directly with the number of calls and the operators' tours can be rescheduled on a relatively short interval. The primary cost, the operator labor expense, is continuously adjusted to meet demand.

The Operator Service System is a software package that allows a tandem switch to provide directory assistance functionality. Its essential function is to act as an automated call distributor and direct a DA call to the active operator position that has been idle the longest.

The operator position is a workstation that ties the operator to both the customer and the DA Database.

The DA Database System and associated equipment holds the customer records (name, telephone number and address). An administrative database monitors the pair of operations databases and downloads listing changes to both.

The study is based on directly assigned labor costs, current vendor prices for hardware and software, and incremental annual cost factors.

TAB 2

SECTION 2

DIRECTORY ASSISTANCE ACCESS SERVICE

DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of costs supporting Directory Assistance Access Service.

In determining costs, BellSouth uses direct incremental costing techniques that are in accordance with accepted economic theory. Direct incremental costs are based on cost causation and include all of the costs directly caused by expanding production, or, alternatively, costs that would be saved if the production levels were reduced. The production unit may be an entire service or a unit of the service depending on the cost object involved. Costs for a service may include volume sensitive and/or volume insensitive costs. Costs are forward looking in nature because only future costs can be saved. Incremental costs are long run to assure that the time period studied is sufficient to capture all forward looking costs affected by the business decision. Shared and common costs are not incremental and, therefore, are not included. Incremental costs include both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs. Incremental costs account for the expected change in cost to the firm resulting from a new service offering or a change in demand for an existing service.

THE DEVELOPMENT OF RECURRING COSTS

The monthly costs to BellSouth Telecommunications, Inc., resulting from the capital investments necessary to provide a service are called recurring costs. Recurring costs include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs are the expenses of maintenance and ad valorem and other taxes. These expenses contribute to the ongoing cost to the company associated with the initial capital investment. Recurring costs may also be non-investment related, such as operator labor expense and feature specific software. Recurring costs are developed using incremental economic study applications, representing a forward-looking view of technology and deployment.

The first step in developing an incremental study of recurring costs for Directory Assistance is to determine the forward-looking network architecture. Prices for the equipment are defined. Next, account specific Telephone Plant Indices are applied, when necessary, to trend investments and non-investment related expenses to the base study period. In-plant factors are applied to material prices to develop installed investments which include engineering and installation labor. The deployment probabilities, capacity, spare stock and utilization of the equipment are also considered.

Appropriate loadings for land, building and miscellaneous common equipment and power are then applied to the electronic equipment. Support structure loadings are applied for poles and conduit to the aerial and underground fiber investments respectively.

Next, 1995 level Incremental Annual Cost Factors are used to calculate the direct cost of capital, ongoing maintenance and other operating expenses and taxes. These factors (specific factors for each Uniform System of Account Field Reporting Code) are applied to levelized investments by account code, yielding an annual cost per account code. Both the investment and non-investment related annual costs are summed and then divided by annual demand to arrive at a unit cost for each component.

TAB 3

SECTION 3

FLORIDA

DIRECTORY ASSISTANCE ACCESS SERVICE

SUMMARY OF RESULTS

This section contains a cost summary for the volume sensitive Long Run Incremental Cost and Total Service Long Run Incremental Cost per Directory Assistance call.

	COST PER CALL
DIRECTORY ASSISTANCE SERVICE CALLS	A
LRIC, Volume Sensitive Unit Cost	
TSLRIC, Average Incremental Unit Cost	

TAB 4

SECTION 4

DIRECTORY ASSISTANCE ACCESS SERVICE

COST DEVELOPMENT

This section defines the cost development for Directory Assistance Access Service.

Generally, economic cost development is outlined in Section 2. Network architecture is determined; the necessary equipment is identified; material prices are obtained; utilization and loading factors are applied. Annual cost factors are applied to convert the investment to cost. Operator labor expense is directly identified.

Workpaper 1

Provides the summary of LRIC and TSLRIC costs per Directory Assistance Service Calls.

Workpaper 2

Cost components on a per minute basis are converted to a per call basis using the Actual Work Time (AWT), the average call processing time in seconds.

Workpaper 3

The operator cost per minute is developed using the directly assigned labor cost per productive hour. The cost per hour is divided by 60 minutes and then adjusted by the ratio of productive hours to call processing hours.

Workpaper 4

The Operator Service Center (OSC) software cost per minute is derived by multiplying the equivalent annual cost per position times the number of positions and dividing it by the demand in minutes for 1995.

The hardware investment per position was loaded for incremental common equipment, power, land, and building investment. These investments were multiplied by the number of positions and their corresponding annual cost factors to calculate the associated annual cost. This annual cost was divided by the annual minutes for 1995 to develop the hardware cost per minute. The circuit and mileage quantities for the message and data circuits from the positions were multiplied by their fixed and mileage sensitive unit investments, and associated annual cost factors to calculate the annual cost. The mileage for each route was calculated from the vertical and horizontal coordinates of the Operator Service Center locations and the host Operator Service System. As with the hardware, this annual cost was divided by the 1995 annual minutes to produce the cost per minute.

The total cost per minute for the Operator Service Center (OSC) is the sum of the software, hardware and circuit cost per minute.

Workpaper 5

The equivalent annual cost for the DA software in the Operator Service Systems is divided by the 1995 calls to develop the OSS cost per call. The expense for this software is volume insensitive.

Workpaper 6

The individual hardware and software components for the Regional Directory Assistance DataBase System are developed.

Cost for the volume insensitive Administrative Database is developed separately from the Operations Databases and the 1.544 MBit per second links from the Operator Service Centers to the Operations Databases.

The Hardware investment is loaded for land, building, and miscellaneous power and common equipment. These investments are multiplied by their associated annual cost factors to calculate the annual cost.

The software expenses are multiplied by an amortization factor to calculate on equivalent annual cost.

The number of links and the mileages between the OSC and the Operations Database Locations are multiplied by fundamental unit investments and associated annual cost factors to calculate the annual cost.

Volume sensitive and volume insensitive annual costs are divided by the system's engineered capacity to develop the costs per call.

The following Workpapers detail this cost development.

DIRECTORY ASSISTANCE ACCESS SERVICE
SUMMARY OF COSTS

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WORKPAPER 1
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LINE	DESCRIPTION	SOURCE	AMOUNT
1.	DIRECTORY ASSISTANCE SERVICE CALL		A
2.	OPERATOR LABOR		
3 3.	VOLUME SENSITIVE	WP2,LN5	
4.	VOLUME INSENSITIVE		
5.			
6.	OPERATOR SERVICE CENTER		
7.	VOLUME SENSITIVE	WP2,LN9	
8.	VOLUME INSENSITIVE		
9.			
10.	OPERATOR SERVICE SYSTEM		
11.	VOLUME SENSITIVE		
12.	VOLUME INSENSITIVE	WP2,LN12	
13.			
14.	DA DATABASE		
15.	VOLUME SENSITIVE	WP2,LN16	
16 16.	VOLUME INSENSITIVE		
17.			
18.	GROSS RECEIPTS TAX (GRT) FACTOR		1.0152
19.			
20 20.	LRIC, VOLUME SENSITIVE UNIT COST PER CALL W/GRT	(LN3+LN7+LN11+LN15)xLN18	
21.			
22.	TOTAL VOLUME INSENSITIVE UNIT COST PER CALL W/GRT	(LN4+LN8+LN12+LN16)xLN18	
23.			
24 24.	TSLRIC, AVERAGE INCREMENTAL UNIT COST PER CALL W/GRT	LN20+LN22	

DIRECTORY ASSISTANCE ACCESS SERVICE
DEVELOPMENT OF COST PER DA CALL

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WORKPAPER 2
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LINE	DESCRIPTION	SOURCE	AMOUNT
1.	ACTUAL WORK TIME (AWT), SECONDS - 1995		
2.			
3.	OPERATOR LABOR		
4.	COST PER MINUTE	WP3,LN5	
5.	COST PER DA CALL - VOLUME SENSITIVE	(LN1/60)xLN4	
6.			
7.	OSC		
8.	COST PER MINUTE	WP4,LN45	
9.	COST PER DA CALL - VOLUME SENSITIVE	(LN1/60)xLN8	
10.			
11.	OSS		
12.	COST PER DA CALL - VOLUME INSENSITIVE	WP5,LN13	
13.			
14.	DA DATABASE		
15.	COST PER DA CALL - VOLUME SENSITIVE	WP6,LN48	
16.	COST PER DA CALL - VOLUME INSENSITIVE	WP6,LN49	

DIRECTORY ASSISTANCE ACCESS SERVICE
OPERATOR LABOR

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LINE	DESCRIPTION	SOURCE	AMOUNT
			A
1.	OPERATOR LABOR PER PRODUCTIVE HOUR - 1996-1998		$26.35
2.			
3.	RATIO PRODUCTIVE TO CALL PROCESSING HOURS		
4.			
5.	OPERATOR COST PER MINUTE - VOLUME SENSITIVE	(LN1/60) x LN3	

DIRECTORY ASSISTANCE ACCESS SERVICE
OPERATOR SERVICE CENTER (OSC)

FLORIDA
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A

LINE	DESCRIPTION	SOURCE				AMOUNT
1.	POSITIONS, 1995					
2.	DEMAND - MINUTES, 1995					
3.						
4.	SOFTWARE (1996-1998)					
5.	WORKSTATION SOFTWARE, PER POSITION					
6.	OPEN POSITION PROTOCOL, PER POSITION					
7.	AMORTIZATION FACTOR					0.2857
8.	SOFTWARE COST PER MINUTE	((LN1xLN7) x (LN5+LN6))/LN2				
9.						
10.	HARDWARE (1996-1998)					
11.	INVESTMENT PER POSITION					
12.	MCE&P FACTOR					1.0962
13.	LAND FACTOR					0.0030
14.	BUILDING FACTOR					0.0404
15.	ANNUAL COST FACTOR - DIGITAL SWITCH					0.2482
16.	ANNUAL COST FACTOR - LAND					0.1745
17.	ANNUAL COST FACTOR - BUILDING					0.1922
18.	ANNUAL COST - POSITION (377C)	(LN1x(LN11xLN12))xLN15				
19.	ANNUAL COST - LAND (20C)	(LN1x(LN11xLN12xLN13))xLN16				
20.	ANNUAL COST - BUILDING (10C)	(LN1x(LN11xLN12xLN14))xLN17				
21.	TOTAL ANNUAL COST	LN18+LN19+LN20				
22.	HARDWARE COST PER MINUTE	LN21/LN2				
23.						
24.	VOICE AND DATA CIRCUITS (1996-1998)					
25.			CIRCUITS/ MILES	UNIT INVESTMENT	ANNUAL COST FACTOR	ANNUAL COST
26.	CIRCUIT TERMINATION (FRC)					
27.						
28.	CIRCUIT (357C)		1,022	$116.80	0.2268	$27,073
29.	LAND (20C)		1,022	$0.37	0.1745	$66
30.	BUILDING (10C)		1,022	$5.04	0.1922	$990
31.						
32.	CIRCUIT MILEAGE (FRC)					
33.	AERIAL (822C)		90,103	$0.11	0.2050	$2,032
34.	BURIED (845C)		90,103	$0.32	0.2025	$5,839
35.	UNDERGROUND (85C)		90,103	$0.14	0.2032	$2,563
36.	POLE (811C)		90,103	$0.02	0.2113	$381
37.	CONDUIT (84C)		90,103	$0.09	0.1661	$1,347
38.	CIRCUIT (357C)		90,103	$1.45	0.2268	$29,631
39.	BUILDING (10C)		90,103	$0.06	0.1922	$1,039
40.						
41.	TOTAL ANNUAL COST	SUM LN28..LN39				$70,961
42.						
43.	CIRCUIT COST PER MINUTE	LN41/LN2				
44.						
45.	TOTAL COST PER MINUTE - VOLUME SENSITIVE	LN8+LN22+LN43				

DIRECTORY ASSISTANCE ACCESS SERVICE
OPERATOR SERVICE SYSTEM (OSS)

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LINE	DESCRIPTION	SOURCE	AMOUNT
1.	DEMAND - 1995		A
2.	DIRECTORY ASSISTANCE CALLS		
3.			
4.	DA		
5.	SOFTWARE EXPENSE PER TANDEM (1996-1998)		
6.			
7.	TANDEM SWITCHES		
8.			
9.	DA SOFTWARE EXPENSE	LN5 x LN7	
10.			
11.	AMORTIZATION FACTOR		0.2857
12.			
13.	COST PER DA CALL - VOLUME INSENSITIVE	(LN9xLN11)/LN2	

FLORIDA
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DIRECTORY ASSISTANCE ACCESS SERVICE
REGIONAL DA DATABASE SYSTEM

1.	ADMINISTRATIVE DATABASE (1996-1998)	
2.	HARDWARE INVESTMENT - VOLUME INSENSITIVE	
3.	SOFTWARE EXPENSE - VOLUME INSENSITIVE	
4.	OPERATIONS DATABASES (1996-1998)	
5.	HARDWARE INVESTMENT - VOLUME SENSITIVE	
6.	SOFTWARE EXPENSE - VOLUME SENSITIVE	
7.	LAND FACTOR	0.0023
8.	BUILDING FACTOR	0.0382
9.	MISCELLANEOUS POWER & COMMON EQUIP. FACTOR	1.0990
10.	ANNUAL COST FACTOR (377C)	0.2527
11.	ANNUAL COST FACTOR (20C)	0.1745
12.	ANNUAL COST FACTOR (10C)	0.1893
13.	AMORTIZATION FACTOR	0.2857
14.	ANNUAL COST	
15.	ADMINISTRATIVE DATABASE	
16.	HARDWARE	LN2xLN9xLN10
17.	SOFTWARE	LN3xLN13
18.	LAND	LN2xLN9xLN7xLN11
19.	BUILDING	LN2xLN9xLN8xLN12
20.	OPERATIONS DATABASE	
21.	HARDWARE	LN5xLN9xLN10
22.	SOFTWARE	LN6xLN13
23.	LAND	LN5xLN9xLN7xLN11
24.	BUILDING	LN5xLN9xLN8xLN12
25.		

		CIRCUITS/ MILES	UNIT INVESTMENT	ANNUAL COST FACTOR	ANNUAL COST
26.	1.544 MB/S LINKS, ADMIN AND				
27.	OSC TO DATABASE (1996-1998)				
28.					
29.	CIRCUIT TERMINATION (FRC)				
30.	CIRCUIT (357C)	73	$2,784.60	0.2292	$46,591
31.	LAND (20C)	73	$6.80	0.1745	$87
32.	BUILDING (10C)	73	$113.60	0.1893	$1,570
33.					
34.	CIRCUIT MILEAGE (FRC)				
35.	AERIAL (822C)	24,022	$2.40	0.2021	$11,652
36.	BURIED (845C)	24,022	$7.80	0.1989	$37,268
37.	UNDERGROUND (85C)	24,022	$3.00	0.2017	$14,536
38.	POLE (811C)	24,022	$0.60	0.2137	$3,080
39.	CONDUIT (84C)	24,022	$1.60	0.1658	$6,373
40.	CIRCUIT (357C)	24,022	$29.00	0.2292	$159,669
41.	BUILDING (10C)	24,022	$1.20	0.1893	$5,457
42.					
43.	TOTAL ANNUAL COST				$286,282
44.					
45.	ENGINEERED CAPACITY, CALLS				1,225,000,000
46.					
47.	COST PER CALL				
48.	VOLUME SENSITIVE	(LN21+LN22+LN23+LN24+LN43)/LN45			
49.	VOLUME INSENSITIVE	(LN16+LN17+LN18+LN19)/LN45			

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TAB 5

SECTION 5

DIRECTORY ASSISTANCE ACCESS SERVICE

SPECIFIC STUDY ASSUMPTIONS

The cost study for the Directory Assistance Access Service is based on direct incremental costing techniques that are in accordance with accepted economic theory, plus specific Network deployment strategies, first choice provisioning guidelines, and equipment purchasing information.

Cost study assumptions are as follows:

Software expenses were projected to the 1996-1998 study period using the Telephone Plant Indexes and Labor Inflation Rates of its associated (377C) investment.

Software expenses such as Right-To-Use fees are amortized over five years to develop an equivalent annual cost.

SECTION 6

FLORIDA

DIRECTORY ASSISTANCE ACCESS SERVICE

FACTORS AND LOADINGS

Following are the incremental annual cost factors, miscellaneous loadings and labor rates used in the Directory Assistance Access Service cost study.

1996 - 1998 Directly Assigned Hourly Labor Rates: (Florida) Directory Assistance (DA) Operator Job Function Code 2940		$26.01
Operator Labor Inflation Rate From 1995		1.0618
Hardware Inflation Rate 377C (Florida)		1.012
Ratio Productive to Call Processing Hours (Regional)		1.30
Amortization Factor (5 Years @ 13.2%)		0.2857
Miscellaneous Common Equipment and Power Factor	377C (Florida)	1.0962
Miscellaneous Common Equipment and Power Factor	377C (Regional)	1.0990
Gross Receipts Tax Factor (Florida)		1.0152
Land Loading	20C (Florida)	0.0030
Land Loading	20C (Regional)	0.0023
Building Loading	10C (Florida)	0.0404
Building Loading	10C (Regional)	0.0382

Annual Cost Factors (Florida & Regional see following spreadsheets)

Rev 10-May-96

Image Table: ACFCURRENT

1995 FLORIDA
ACCOUNT AVERAGE ANNUAL COST FACTORS
INCREMENTAL

* FOR USE IN SERVICE COST STUDIES ONLY

	field_code	depreciation	acfc_com	acfc_inc tax	cap_exp	acfc_mtce	acfc_adval tax	admin_dir	acfc_oper_exp	tot_combined
		a	b	c	d	e	f	g	h	i
			13.2%		(a+b+c)				(e+f+g)	(d+h)
LAND	20C	0.0000	0.1118	0.0514	0.1632	0.0000	0.0113	0.0000	0.0113	0.1745
BUILDINGS	10C, 110C, 810C	0.0302	0.0966	0.0452	0.1740	0.0069	0.0113	0.0000	0.0182	0.1922
ANALOG ELEC SWITCH	77C, 877C, 977C	0.2629	0.0680	0.0306	0.3615	0.0217	0.0113	0.0000	0.0330	0.3945
DIGITAL ELEC SWITCH	377C, 887C	0.1134	0.0651	0.0302	0.2087	0.0282	0.0113	0.0000	0.0395	0.2482
OPERATOR SYSTEMS	117C,417C	0.1083	0.0751	0.0404	0.2238	0.0040	0.0113	0.0000	0.0153	0.2391
RADIO	167C, 67C, 867C, 967C	0.1434	0.0750	0.0348	0.2532	0.0763	0.0113	0.0000	0.0876	0.3408
DIGTL CIRC-DDS	157C	0.1810	0.0675	0.0305	0.2790	0.0073	0.0113	0.0000	0.0186	0.2976
DIGTL CIRC-PAIR GAIN	257C,D257C,F257C	0.1134	0.0636	0.0288	0.2058	0.0089	0.0113	0.0000	0.0202	0.2260
DIGTL CIRC-OTHER	357C,T357C,F357C,857C,957C	0.1134	0.0638	0.0297	0.2069	0.0086	0.0113	0.0000	0.0199	0.2268
ANALOG CIRC-PAIR GAIN	457C	0.1689	0.0636	0.0248	0.2573	0.0000	0.0113	0.0000	0.0113	0.2686
ANALOG CIRC-OTHER	57C	0.1689	0.0639	0.0282	0.2610	0.0206	0.0113	0.0000	0.0319	0.2929
PBX	158C, 258C	0.2296	0.0771	0.0346	0.3413	0.0145	0.0113	0.0000	0.0258	0.3671
PUBLIC-COIN	198C, 188C	0.1483	0.0763	0.0348	0.2594	0.2084	0.0113	0.0000	0.2197	0.4791
PUBLIC-COINLESS	298C, 288C	0.1483	0.0763	0.0348	0.2594	0.1248	0.0113	0.0000	0.1361	0.3955
PUBLIC-OTHER	998C, 988C	0.1483	0.0763	0.0348	0.2594	0.1062	0.0113	0.0000	0.1175	0.3769
OTHER TERMINAL EQPT	358C,D758C,858C,558C, 828C,928C,F958C	0.1733	0.0812	0.0359	0.2904	0.0548	0.0113	0.0000	0.0661	0.3565
SUBSCRIBER PAIR GAIN	758C,D758C,F758C	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
POLES	1C, 811C	0.0671	0.0725	0.0325	0.1721	0.0279	0.0113	0.0000	0.0392	0.2113
AERIAL CA - METAL	22C, 12C, 802C	0.0917	0.0797	0.0338	0.2052	0.0571	0.0113	0.0000	0.0684	0.2736
AERIAL CA - FIBER	822C, 812C, 882C, 982C,D22C, F22C,T22C,D12C,F12C,T12C	0.0667	0.0784	0.0347	0.1798	0.0139	0.0113	0.0000	0.0252	0.2050
UNGROUND CA - METAL	5C, 805C	0.1036	0.0813	0.0342	0.2191	0.0291	0.0113	0.0000	0.0404	0.2595
UNGROUND CA - FIBER	85C,885C,985C,D5C,F5C,T5C	0.0626	0.0800	0.0358	0.1784	0.0135	0.0113	0.0000	0.0248	0.2032
BURIED CA - METAL	45C, 846C	0.0876	0.0809	0.0354	0.2039	0.0543	0.0113	0.0000	0.0656	0.2695
BURIED CA - FIBER	845C,856C,956C,D45C, F45C,T45C	0.0585	0.0816	0.0367	0.1768	0.0144	0.0113	0.0000	0.0257	0.2025
SUBMARINE CA-METAL	6C, 806C	0.0860	0.0814	0.0366	0.2040	0.0150	0.0113	0.0000	0.0263	0.2303
SUBMARINE CA-FIBER	86C,886C,D6C,F6C,T6C	0.0860	0.0814	0.0355	0.2029	0.0150	0.0113	0.0000	0.0263	0.2292
INTRBLD NTWK-METAL	52C	0.0661	0.0785	0.0340	0.1786	0.0320	0.0113	0.0000	0.0433	0.2219
INTRBLD NTWK-FIBER	852C,D52C,F52C,T52C	0.0661	0.0785	0.0340	0.1786	0.0320	0.0113	0.0000	0.0433	0.2219
CONDUIT SYSTEMS	4C, 84C, 94C	0.0242	0.0877	0.0401	0.1520	0.0028	0.0113	0.0000	0.0141	0.1661

Image Table: ACFCURRENT

1995 BELLSOUTH TELECOMMUNICATIONS
ACCOUNT AVERAGE ANNUAL COST FACTORS
INCREMENTAL

Rev 10-May-96

* FOR USE IN SERVICE COST STUDIES ONLY

	field_code	depreciation a	acfc_com b	acfc_inc tax c	cap_exp d	acfc_mtce e	acfc_adval tax f	admin_dir g	acfc_oper_exp h	tot_combined i
			13.2%		(a+b+c)				(e+f+g)	(d+h)
LAND	20C	0.0000	0.1118	0.0514	0.1632	0.0000	0.0113	0.0000	0.0113	0.1745
BUILDINGS	10C, 110C, 810C	0.0302	0.0986	0.0452	0.1740	0.0040	0.0113	0.0000	0.0153	0.1893
ANALOG ELEC SWITCH	77C, 877C, 977C	0.2629	0.0680	0.0306	0.3615	0.0210	0.0113	0.0000	0.0323	0.3938
DIGITAL ELEC SWITCH	377C, 887C	0.1134	0.0651	0.0302	0.2087	0.0327	0.0113	0.0000	0.0440	0.2527
OPERATOR SYSTEMS	117C,417C	0.1083	0.0751	0.0404	0.2238	0.0067	0.0113	0.0000	0.0180	0.2418
RADIO	167C, 67C, 867C, 967C	0.1434	0.0750	0.0348	0.2532	0.0142	0.0113	0.0000	0.0255	0.2787
DIGTL CIRC-DDS	157C	0.1810	0.0675	0.0305	0.2790	0.0145	0.0113	0.0000	0.0258	0.3048
DIGTL CIRC-PAIR GAIN	257C,D257C,F257C	0.1134	0.0636	0.0288	0.2058	0.0104	0.0113	0.0000	0.0217	0.2275
DIGTL CIRC-OTHER	357C,T357C,F357C,857C,957C	0.1134	0.0638	0.0297	0.2069	0.0110	0.0113	0.0000	0.0223	0.2292
ANALOG CIRC-PAIR GAIN	457C	0.1689	0.0636	0.0248	0.2573	0.0033	0.0113	0.0000	0.0146	0.2719
ANALOG CIRC-OTHER	57C	0.1689	0.0639	0.0282	0.2610	0.0140	0.0113	0.0000	0.0253	0.2863
PBX	158C, 258C	0.2296	0.0771	0.0346	0.3413	0.0368	0.0113	0.0000	0.0481	0.3894
PUBLIC-COIN	198C, 188C	0.1483	0.0763	0.0348	0.2594	0.1972	0.0113	0.0000	0.2085	0.4679
PUBLIC-COINLESS	298C, 288C	0.1483	0.0763	0.0348	0.2594	0.1076	0.0113	0.0000	0.1189	0.3783
PUBLIC-OTHER	998C, 988C	0.1483	0.0763	0.0348	0.2594	0.0582	0.0113	0.0000	0.0695	0.3289
OTHER TERMINAL EQPT	358C,D758C,858C,558C, 828C,928C,F958C	0.1733	0.0812	0.0359	0.2904	0.0585	0.0113	0.0000	0.0698	0.3602
SUBSCRIBER PAIR GAIN	758C,D758C,F758C	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
POLES	1C, 811C	0.0671	0.0725	0.0325	0.1721	0.0303	0.0113	0.0000	0.0416	0.2137
AERIAL CA - METAL	22C, 12C, 802C	0.0917	0.0797	0.0338	0.2052	0.0413	0.0113	0.0000	0.0526	0.2578
AERIAL CA - FIBER	822C, 812C, 882C, 982C,D22C, F22C,T22C,D12C,F12C,T12C	0.0667	0.0784	0.0347	0.1798	0.0110	0.0113	0.0000	0.0223	0.2021
UNGROUND CA - METAL	5C, 805C	0.1036	0.0813	0.0342	0.2191	0.0255	0.0113	0.0000	0.0368	0.2559
UNGROUND CA - FIBER	85C,885C,985C,D5C,F5C,T5C	0.0626	0.0800	0.0358	0.1784	0.0120	0.0113	0.0000	0.0233	0.2017
BURIED CA - METAL	45C, 846C	0.0876	0.0809	0.0354	0.2039	0.0417	0.0113	0.0000	0.0530	0.2569
BURIED CA - FIBER	845C,856C,956C,D45C, F45C,T45C	0.0585	0.0816	0.0367	0.1768	0.0108	0.0113	0.0000	0.0221	0.1989
SUBMARINE CA-METAL	6C, 806C	0.0860	0.0814	0.0366	0.2040	0.0106	0.0113	0.0000	0.0219	0.2259
SUBMARINE CA-FIBER	86C,886C,D6C,F6C,T6C	0.0860	0.0814	0.0355	0.2029	0.0106	0.0113	0.0000	0.0219	0.2248
INTRBLD NTWK-METAL	52C	0.0661	0.0785	0.0340	0.1786	0.0265	0.0113	0.0000	0.0378	0.2164
INTRBLD NTWK-FIBER	852C,D52C,F52C,T52C	0.0661	0.0785	0.0340	0.1786	0.0265	0.0113	0.0000	0.0378	0.2164
CONDUIT SYSTEMS	4C, 84C, 94C	0.0242	0.0677	0.0401	0.1520	0.0025	0.0113	0.0000	0.0138	0.1658

BellSouth Telecommunications, Inc.
FPSC Docket No. 960833-TP
Exhibit No. DDC-15

FLORIDA

DIRECTORY ASSISTANCE DATABASE SERVICE

COST STUDY DOCUMENTATION

SECTIONS A THRU 6

FLORIDA

DIRECTORY ASSISTANCE DATABASE SERVICE (DADS)

COST STUDY DOCUMENTATION

CONTENTS

SECTION A	PROPRIETARY RATIONALE
SECTION 1	INTRODUCTION AND OVERVIEW
SECTION 2	DESCRIPTION OF STUDY PROCEDURES
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SECTION 4	COST DEVELOPMENT - RECURRING LRIC
SECTION 5	SPECIFIC STUDY ASSUMPTIONS
SECTION 6	FACTORS AND LOADINGS

TAB A

SECTION A

DIRECTORY ASSISTANCE DATABASE SERVICE (DADS)

PROPRIETARY RATIONALE

The Directory Assistance Database Service (DADS) contains actual unit cost information for discrete cost elements. These costs reflect BellSouth's long run incremental cost of providing these elements on a going forward basis. Public disclosure of this information would provide BellSouth's competitors with an advantage. The data is valuable to competitors and potential competitors in formulating strategic plans for entry, pricing, marketing and overall business strategies. This information relates to the competitive interests of BellSouth and disclosure would impair the competitive business of BellSouth. For these reasons, the Directory Assistance Database Service (DADS) Cost Study is considered proprietary.

TAB 1

SECTION 1

DIRECTORY ASSISTANCE DATABASE SERVICE (DADS)

INTRODUCTION AND OVERVIEW

This Long Run Incremental Cost Study is being provided to support Directory Assistance Database Service (DADS).

This study develops the incremental cost to provide an initial directory listing file and monthly updates on a per listing basis. It also develops the recurring incremental cost for administration and operation of the service. These costs are volume sensitive, there are no volume insensitive costs associated with the service.

The Long Run Incremental Recurring Costs presented in this study are directly assigned, incremental and levelized so as to be appropriate for the 1996-1998 study period. These Long Run Incremental Costs are developed by using 1995 directly assigned labor rates.

Directory Assistance Database Service is provided on a Regional basis and the study is, accordingly, a Regional Study.

TAB 2

SECTION 2

DIRECTORY ASSISTANCE DATABASE SERVICE (DADS)

DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of costs supporting Directory Assistance Database Service (DADS).

In determining costs, BellSouth uses direct incremental costing techniques that are in accordance with accepted economic theory. Direct incremental costs are based on cost causation and include all of the costs directly caused by expanding production, or, alternatively, costs that would be saved if the production levels were reduced. The production unit may be an entire service or a unit of the service depending on the cost object involved. Costs for a service may include volume sensitive and/or volume insensitive costs. Costs are forward looking in nature because only future costs can be saved. Incremental costs are long run to assure that the time period studied is sufficient to capture all forward looking costs affected by the business decision. Shared and common costs are not incremental and, therefore, are not included. Incremental costs include both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs. There are no nonrecurring costs associated with Directory Assistance Database Service. Incremental costs account for the expected change in cost to the firm resulting from a new service offering or a change in demand for an existing service.

THE DEVELOPMENT OF RECURRING COSTS

The recurring cost associated with Directory Assistance Database Service consists of computer Central Processing Utilization (CPU) time for file extracts and updates, the cost for magnetic tapes and shipping, and labor required to administer and operate the service.

The estimates for both the CPU time and the labor were provided by subject matter experts familiar with Directory Assistance Database Service.

TAB 3

SECTION 3

FLORIDA

DIRECTORY ASSISTANCE DATABASE SERVICE (DADS)

SUMMARY OF RESULTS

This section contains a cost summary for the Long Run Incremental Cost for Directory Assistance Database Service.

A

DADS, Cost per Listing
  LRIC, Volume Sensitive Unit Cost
9 per Listing

DADS, Monthly Recurring Cost
11 LRIC, Volume Sensitive Monthly Cost

TAB 4

SECTION 4

DIRECTORY ASSISTANCE DATABASE SERVICE (DADS)

COST DEVELOPMENT - RECURRING

As outlined in Section 2, the cost of Directory Assistance Database Service is comprised of computer CPU, magnetic tape material and shipping expense, and labor involved with administration and operations.

Workpaper 1 summarizes the volume sensitive, Long Run Incremental Unit Cost per Listing and the Long Run Incremental Cost per Month.

Workpaper 2 develops the per listing and monthly costs.

The per listing cost is based on the average listings in a Number Plan Area, the estimated CPU time for the initial extract and eleven monthly updates, and the tape material and shipping expense.

The result is the cost per average listing for a file extract and eleven monthly updates.

The monthly recurring cost is developed by dividing the forecasted number of customers by the monthly labor cost required for administration, customer inquiries and auditing. An individual customer requesting listings in two different state jurisdictions is shown as two customers.

There are no volume insensitive costs associated with Directory Assistance Database Service.

The following workpapers detail this development.

1.	DIRECTORY ASSISTANCE						FLORIDA	
2.	DATABASE SERVICE (DADS)						WORKPAPER 1	
3.							7/23/96	
4.	SUMMARY OF COST PER LISTING							
5.	AND MONTHLY RECURRING COST							
6.								
7.								
8.								
9.	COST PER LISTING							
10.	LRIC, VOLUME SENSITIVE UNIT COST				WORKPAPER 2 LN18			
11.								
12.								
13.	MONTHLY RECURRING COST							
14.	LRIC, VOLUME SENSITIVE UNIT COST				WORKPAPER 2 LN25			

		A			B
1.	**DIRECTORY ASSISTANCE**			**FLORIDA**	
2.	**DATABASE SERVICE (DADS)**			**WORKPAPER 2**	
3.				**7/23/96**	
4.	**DEVELOPMENT OF COST PER LISTING**				
5.	**AND MONTHLY RECURRING COST**				
6.					
7.					
8.	**COST PER LISTING**				
9.	INITIAL FILE				
10.	CPU PER NPA		$29.44		$
11.	MAG TAPE (2) AND SHIPPING				$ 68.90
12.	FILE UPDATE				
13.	ANNUAL CPU PER NPA		$29.44		$
14.	MAG TAPE (12) AND SHIPPING				$ 429.84
15.	ANNUAL COST	LN10+LN11+LN13+LN14			$
16.	GROSS RECEIPTS TAX FACTOR				1.0152
17.	LISTINGS PER NPA				850,250
18.	COST PER LISTING, VOLUME SENSITIVE	(LN15 x LN16)/LN17			
19.					
20.	**MONTHLY RECURRING COST**				
21.	ADMINISTRATION AND OPERATIONS				
22.	PER MONTH		$ 46.35		
23.	NUMBER OF CUSTOMERS				
24.	MONTHLY RECURRING COST,				
25.	VOLUME SENSITIVE	(LN16 x LN22)/LN23			

TAB 5

SECTION 5

DIRECTORY ASSISTANCE DATABASE SERVICE (DADS)

SPECIFIC STUDY ASSUMPTIONS

The cost study for Directory Assistance Database Service (DADS) is based on direct incremental costing techniques that are in accordance with accepted economic theory.

Cost study assumptions are as follows:

7	Number of Customers	
	Average Listings per Number Plan Area	850,250

TAB 6

SECTION 6

FLORIDA

DIRECTORY ASSISTANCE DATABASE SERVICE (DADS)

FACTORS AND LOADINGS

Following are the labor rates and other factors used in the Directory Assistance Database Service cost study.

1996 - 1998 Directly Assigned Labor Cost per Hour (Regional)

Marketing, Payband 58	$46.35
Fundamental Computer Cost per CPU Hour (Regional)	$29.44
Gross Receipts Tax Factor (Florida)	1.0152

BellSouth Telecommunications, Inc.
FPSC Docket No. 960833-TP
Exhibit No. DDC-16

FLORIDA

DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE

COST STUDY DOCUMENTATION

SECTIONS A THRU 7

FLORIDA

DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE

COST STUDY DOCUMENTATION

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SECTION 4	COST DEVELOPMENT - RECURRING LRIC AND TSLRIC
SECTION 5	COST DEVELOPMENT - NONRECURRING
SECTION 6	SPECIFIC STUDY ASSUMPTIONS
SECTION 7	FACTORS AND LOADINGS

TAB A

SECTION A

DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE

PROPRIETARY RATIONALE

The Direct Access to Directory Assistance Study contains actual unit cost information for discrete cost elements. These costs reflect BellSouth's long run incremental cost of providing these elements on a going forward basis. Public disclosure of this information would provide BellSouth's competitors with an advantage. The data is valuable to competitors and potential competitors in formulating strategic plans for entry, pricing, marketing and overall business strategies. This information relates to the competitive interests of BellSouth and disclosure would impair the competitive business of BellSouth.

Additionally, the study contains information which reflects vendor-specific prices negotiated by BellSouth. Public disclosure of this information would impair BellSouth's ability to contract for goods and/or services on favorable terms. For these reasons, the Florida Direct Access to Directory Assistance Service Cost Study is considered proprietary.

TAB 1

SECTION 1

DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE

INTRODUCTION AND OVERVIEW

This cost study develops the Long Run Incremental Cost (LRIC) and the Total Service Long Run Incremental Cost (TSLRIC) per call for Direct Access to Directory Assistance Service (DADAS). LRIC is the volume sensitive incremental unit cost. TSLRIC is the volume sensitive and volume insensitive incremental unit cost, the average incremental unit cost.

DADAS enables a customer's Operator Service Center to access BellSouth's Directory Assistance Database using its Search Application Software. The customer provides its own switch, operator workstation, audio subsystem (optional) and transport facilities.

The study is a Regional study based on directly assigned labor costs, current vendor prices for hardware and software, and incremental annual cost factors.

TAB 2

SECTION 2

DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE

DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of costs supporting Direct Access to Directory Assistance Service.

In determining costs, BellSouth uses direct incremental costing techniques that are in accordance with accepted economic theory. Direct incremental costs are based on cost causation and include all of the costs directly caused by expanding production, or, alternatively, costs that would be saved if the production levels were reduced. The production unit may be an entire service or a unit of the service depending on the cost object involved. Costs for a service may include volume sensitive and/or volume insensitive costs. Costs are forward looking in nature because only future costs can be saved. Incremental costs are long run to assure that the time period studied is sufficient to capture all forward looking costs affected by the business decision. Shared and common costs are not incremental and, therefore, are not included. Incremental costs include both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs. Incremental costs account for the expected change in cost to the firm resulting from a new service offering or a change in demand for an existing service.

THE DEVELOPMENT OF RECURRING COSTS

The monthly costs to BellSouth Telecommunications, Inc., resulting from the capital investments necessary to provide a service are called recurring costs. Recurring costs include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs are the expenses of maintenance and ad valorem and other taxes. These expenses contribute to the ongoing cost to the company associated with the initial capital investment. Recurring costs may also be non-investment related, such as labor expense and feature specific software. Recurring costs are developed using incremental economic study applications, representing a forward-looking view of technology and deployment.

The first step in developing an incremental study of recurring costs for DADAS is to determine the forward-looking network architecture. Prices for the equipment are defined. Next, account specific Telephone Plant Indices are applied, when necessary, to trend investments and non-investment related expenses to the base study period. In-plant factors are applied to material prices to develop installed investments which include engineering and installation labor. The deployment probabilities, capacity, spare stock and utilization of the equipment are also considered.

Appropriate loadings for land, building and miscellaneous common equipment and power are then applied to the electronic equipment. Support structure loadings are applied for poles and conduit to the aerial and underground fiber investments respectively.

Next, 1995 level Incremental Annual Cost Factors are used to calculate the direct cost of capital, ongoing maintenance and other operating expenses and taxes. These factors (specific factors for each Uniform System of Account Field Reporting Code) are applied to levelized investments by account code, yielding an annual cost per account code. Both the investment and non-investment related annual costs are summed and then divided by annual demand to arrive at a unit cost for each component.

THE DEVELOPMENT OF NONRECURRING COSTS

Nonrecurring costs are "one-time" costs incurred as a result of provisioning, installing, and disconnecting Direct Access to Directory Assistance Service. The first step in developing nonrecurring costs is to determine the cost elements related to the study. These cost elements are then described by all of the individual work functions required to provision the cost element. The work functions can be grouped into two categories - Service Order and Training. The work function times, identified by subject matter experts, are used to describe the flow of work within the various work centers. Installation and provisioning costs are developed by multiplying the work time for each work function by the directly assigned labor rate for the work group performing the function.

Utilizing work functions, work times, and labor rates, disconnect costs are calculated in the same manner as the installation costs. Since the labor costs will occur in the future, the current labor rates are inflated to that future period in time and then discounted to the present. The discounted disconnect cost is added to the installation cost and gross receipts tax is applied to develop the total nonrecurring cost.

TAB 3

SECTION 3

FLORIDA

DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE

SUMMARY OF RESULTS

This section contains a cost summary for the volume sensitive Long Run Incremental Cost and Total Service Long Run Incremental Cost for DADAS.

		A
	DADAS SERVICE CHARGE	
1	TSLRIC, Average Incremental	
2	Cost per Month	
3	DADAS QUERY CHARGE	
4	LRIC, Volume Sensitive Cost	
5	per Query	
6	TSLRIC, Average Incremental Cost	
7	per Query	
8	DADAS SERVICE ESTABLISHMENT CHARGE	
9	Nonrecurring	$816.81

TAB 4

SECTION 4

DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE

COST DEVELOPMENT - RECURRING

This section defines the cost of development for Direct Access to Directory Assistance Service.

Generally, economic cost development is outlined in Section 2. Network architecture is determined; the necessary equipment is identified; material prices are obtained; utilization and loading factors are applied. Annual cost factors are applied to convert the investment to cost. Labor expense is directly identified.

Workpaper 1

Provides the summary of LRIC and TSLRIC costs for the DADAS Service Charge and Query Charge.

Workpaper 2

Develops the DADS Service Charge. The annual labor expenses for the system administor and the two technical support personnel dedicated to the service are divided by the projected number of customers.

This cost is volume insensitive.

Workpaper 3

The individual hardware and software components for the Regional Directory Assistance DataBase System are developed.

Cost for the volume insensitive Administrative DataBase and the 1.544 Mbit per second links from the Administrative to the Operations Databases are developed separately from the volume sensitive Operations Databases.

The Hardware investment is loaded for land, building, and miscellaneous power and common equipment. These investments are multiplied by their associated annual cost factors to caculate the annual cost.

The software expenses are multiplied by an amortization factor to calculate on equivalent annual cost.

The number of links and the mileage between the Administrative and Operations Databases are multiplied by fundamental unit investments and associated annual cost factors to calculate the annual cost.

These volume sensitive and volume insensitive annual costs are divided by the system's engineered capacity.

The volume insensitive, equivalent annual cost of DADAS application software is divided by the expected annual demand.

The system and software volume sensitive and volume insensitive unit costs are then separately summed.

The following Workpapers detail this cost development.

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FLORIDA

DIRECT ACCESS TO DIRECTORY ASSISTANCE

SUMMARY OF RECURRING COSTS

GROSS RECEIPTS TAX FACTOR 1.0152

DADAS DATABASE SERVICE CHARGE

VOLUME INSENSITIVE UNIT COST PER MONTH W/GRT

TSLRIC, AVERAGE INCREMENTAL UNIT COST PER MONTH W/GRT

DADAS QUERY CHARGE

VOLUME SENSITIVE UNIT COST PER QUERY W/GRT

VOLUME INSENSITIVE UNIT COST PER QUERY W/GRT

TSLRIC, AVERAGE INCREMENTAL UNIT COST PER QUERY W/GRT

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9. DADAS ADMINISTRATION (1-PG4)
10.
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12.
13. DADAS CUSTOMERS
14.
15. VOLUME INSENSITIVE MONTHLY COST (LN9+LN11)/(LN13)/12

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1. **FLORIDA**
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3. **DIRECT ACCESS TO DIRECTORY**
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6. **REGIONAL DA DATABASE SYSTEM**
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9.	ADMINISTRATIVE DATABASE (1996-1998)		
10.	HARDWARE INVESTMENT - VOLUME INSENSITIVE		
11.	SOFTWARE EXPENSE - VOLUME INSENSITIVE		
12.	OPERATIONS DATABASES (1996-1998)		
13.	HARDWARE INVESTMENT - VOLUME SENSITIVE		
14.	SOFTWARE EXPENSE - VOLUME SENSITIVE		
15.	LAND FACTOR		.0023
16.	BUILDING FACTOR		.0382
17.	MISCELLANEOUS POWER & COMMON EQUIP.FACTOR		1.0990
18.	ANNUAL COST FACTOR (377C)		.2527
19.	ANNUAL COST FACTOR (20C)		.1745
20.	ANNUAL COST FACTOR (10C)		.1893
21.	AMORTIZATION FACTOR		.2857
22.	ANNUAL COST		
23.	ADMINISTRATIVE DATABASE		
24.	HARDWARE	LN10xLN17xLN18	
25.	SOFTWARE	LN11xLN21	
26.	LAND	LN10xLN17xLN15xLN19	
27.	BUILDING	LN10xLN17xLN16xLN20	
28.	OPERATIONS DATABASE		
29.	HARDWARE	LN13xLN17xLN18	
30.	SOFTWARE	LN14xLN21	
31.	LAND	LN13xLN17xLN15xLN19	
32.	BUILDING	LN13xLN17xLN16xLN20	
33.			

34. 35.	1.544 MB/S ADMINISTRATIVE LINKS (1996-1998)	CIRCUITS/ MILES	UNIT INVESTMENT	ANNUAL COST FACTOR	ANNUAL COST
36.	CIRCUIT TERMINATION (FRC)				
37.	CIRCUIT (357C)	8	$2,784.60	0.2292	$5,106
38.	LAND (20C)	8	$6.80	0.1745	$9
39.	BUILDING (10C)	8	$113.60	0.1893	$172
40.					
41.	CIRCUIT MILEAGE (FRC)				
42.	AERIAL (822C)	2,560	$2.40	0.2021	$1,242
43.	BURIED (845C)	2,560	$7.80	0.1989	$3,972
44.	UNDERGROUND (85C)	2,560	$3.00	0.2017	$1,549
45.	POLE (811C)	2,560	$0.60	0.2137	$328
46.	CONDUIT (84C)	2,560	$1.60	0.1658	$679
47.	CIRCUIT (357C)	2,560	$29.00	0.2292	$17,016
48.	BUILDING (10C)	2,560	$1.20	0.1893	$582
49.					
50.	TOTAL ANNUAL COST - VOLUME INSENSITIVE				$30,654
51.	ENGINEERED CAPACITY, CALLS				1,225,000,000
52.					
53.	DADAS APPLICATION SOFTWARE				
54.	ANNUAL CALLS				
55.					
56.	COST PER CALL				
57.	VOLUME SENSITIVE	(LN29+LN30+LN31+LN32)/LN51			
58.	VOLUME INSENSITIVE	(LN24+LN25+LN26+LN27+LN50)/LN51+(LN53xLN21)/LN54			

—PRIVATE—
THE INFORMATION CONTAINED HEREIN IS PROPRIETARY AND SHOULD NOT BE DISCLOSED TO UNAUTHORIZED PERSONS. IT IS MEANT SOLELY FOR USE BY AUTHORIZED EMPLOYEES OF THE BELLSOUTH COMPANIES.

TAB 5

SECTION 5

DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE

COST DEVELOPMENT - NONRECURRING

Nonrecurring costs are one-time costs incurred as a result of the provisioning, installing, disconnecting and completion of orders initiated by a customer request for Direct Access to Directory Assistance Service (DADAS). The Nonrecurring Cost Study is performed to determine the service order, provisioning and disconnect costs associated with DADAS Service Establishment. Calculations for the nonrecurring costs are included in this section.

The first step in developing nonrecurring costs is to determine the cost elements to be studied. Each cost element is then described by all of the individual work functions required to provision the element. An example of a work function is the training of the customer's operators.

The work functions required to provide DADAS Service Establishment can be grouped into two categories. These are:

1) Service Order
2) Training

The next step in the development of nonrecurring costs is to determine work times for each work function associated with the nonrecurring costs of DADAS Service Establishment. The work times of the various work groups are determined from subject matter expert inputs. Each work time estimate is made by a subject matter expert who thoroughly understands how each activity is done.

A spreadsheet model is used to incorporate the specific work functions and labor rates. In order to arrive at the nonrecurring cost for the element studied, the work times for each work function required are multiplied by the appropriate labor rate.

The basic process by which nonrecurring costs are calculated consists of combining unit work times with hourly costs of each specific service category. These labor times and service order related work times are multiplied by the directly assigned labor rates for the work groups performing the activities. Utilizing work functions, work times, and labor rates, disconnect costs are calculated in the same manner as installation costs. Since the labor costs will occur in the future, the current labor rates are inflated to that future period in time and then discounted to the present. The discounted disconnect cost is added to the installation cost and gross receipts tax is applied to develop the total nonrecurring cost.

The following workpaper details the cost development.

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8.	DADAS SERVICE ESTABLISHMENT		
9.			
10.	LABOR COST PER HOUR		
11.	SERVICE ORDER (JFC2300)		$40.67
12.	TRAINING (PB4)		$46.35
13.			
14.	HOURS		
15.	SERVICE ORDER CONNECT		1.55
16.	SERVICE ORDER DISCONNECT		1.42
17.	TRAINING		15.00
18.			
19.	DISCONNECT FACTOR		.8014
20.			
21.	GROSS RECEIPTS TAX FACTOR		1.0152
22.			
23.	COST		
24.	SERVICE ORDER - CONNECT	LN11xLN15xLN21	$64.00
25.	SERVICE ORDER - DISCONNECT	LN11xLN16xLN19xLN21	$46.99
26.	TRAINING	LN12xLN17xLN21	$705.82
27.			
28.	NONRECURRING COST		
29.	DADAS SERVICE ESTABLISHMENT	LN24+LN25+LN26	$816.81

TAB 6

SECTION 6

DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE

SPECIFIC STUDY ASSUMPTIONS

The cost study for the Direct Access to Directory Assistance Service is based on direct incremental costing techniques that are in accordance with accepted economic theory, plus specific Network deployment strategies, first choice provisioning guidelines, and equipment purchasing information.

Cost study assumptions are as follows:

Software expenses were projected to the 1996-1998 study period using the Telephone Plant Indexes of its associated (377C) investment.

Software expenses such as Right-To-Use fees are amortized over five years to develop an equivalent annual cost.

TAB 7

SECTION 7

FLORIDA

DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE

FACTORS AND LOADINGS

Following are the incremental annual cost factors, miscellaneous loadings and labor rates used in the Florida Direct Access to Directory Assistance Service cost study.

1996 - 1998 Directly Assigned Annual Labor Rates: (Regional)	
IT, Administration, Pay Grade 4,	$82,601
IT Technical Support, Pay Grade 1	$65,472
1996 - 1998 Directly Assigned Hourly Labor Rates: (Regional)	
Service Representative, JFC 2300	$40.67
Marketing - Training, Pay Grade 4	$46.35
Labor Inflation Rate From 1995	1.0618
Hardware Inflation Rate (Regional 377C)	1.011
Amortization Factor (5 Years @ 13.2%)	0.2857
Miscellaneous Common Equipment and Power Factor (Regional) 377C	1.0990
Gross Receipts Tax Factor (Florida)	1.0152
Land Loading (Regional) 20C	0.0023
Building Loading (Regional) 10C	0.0382

Annual Cost Factors (Regional) (See following spreadsheet)

Image Table: ACFCURRENT

1995 BELLSOUTH TELECOMMUNICATIONS
ACCOUNT AVERAGE ANNUAL COST FACTORS
INCREMENTAL

Rev 10-May-96

* FOR USE IN SERVICE COST STUDIES ONLY

	field_code	depreciation a	acfc_com b	acfc_inc tax c	cap_exp d	acfc_mice e	acfc_adval tax f	admin_dir g	acfc_oper_exp h	tot_combined i
			13.2%		(a+b+c)				(e+f+g)	(d+h)
LAND	20C	0.0000	0.1118	0.0514	0.1632	0.0000	0.0113	0.0000	0.0113	0.1745
BUILDINGS	10C, 110C, 810C	0.0302	0.0986	0.0452	0.1740	0.0040	0.0113	0.0000	0.0153	0.1893
ANALOG ELEC SWITCH	77C, 877C, 977C	0.2629	0.0680	0.0306	0.3615	0.0210	0.0113	0.0000	0.0323	0.3938
DIGITAL ELEC SWITCH	377C, 887C	0.1134	0.0651	0.0302	0.2087	0.0327	0.0113	0.0000	0.0440	0.2527
OPERATOR SYSTEMS	117C,417C	0.1083	0.0751	0.0404	0.2238	0.0067	0.0113	0.0000	0.0180	0.2418
RADIO	167C, 67C, 867C, 967C	0.1434	0.0750	0.0348	0.2532	0.0142	0.0113	0.0000	0.0255	0.2787
DIGTL CIRC-DDS	157C	0.1810	0.0675	0.0305	0.2790	0.0145	0.0113	0.0000	0.0258	0.3048
DIGTL CIRC-PAIR GAIN	257C,D257C,F257C	0.1134	0.0636	0.0288	0.2058	0.0104	0.0113	0.0000	0.0217	0.2275
DIGTL CIRC-OTHER	357C,T357C,F357C,857C,957C	0.1134	0.0638	0.0297	0.2069	0.0110	0.0113	0.0000	0.0223	0.2292
ANALOG CIRC-PAIR GAIN	457C	0.1689	0.0636	0.0248	0.2573	0.0033	0.0113	0.0000	0.0146	0.2719
ANALOG CIRC-OTHER	57C	0.1689	0.0639	0.0282	0.2610	0.0140	0.0113	0.0000	0.0253	0.2863
PBX	158C, 258C	0.2296	0.0771	0.0346	0.3413	0.0368	0.0113	0.0000	0.0481	0.3894
PUBLIC-COIN	198C, 188C	0.1483	0.0763	0.0348	0.2594	0.1972	0.0113	0.0000	0.2085	0.4679
PUBLIC-COINLESS	298C, 288C	0.1483	0.0763	0.0348	0.2594	0.1076	0.0113	0.0000	0.1189	0.3783
PUBLIC-OTHER	998C, 988C	0.1483	0.0763	0.0348	0.2594	0.0582	0.0113	0.0000	0.0695	0.3289
OTHER TERMINAL EQPT	358C,D758C,858C,558C, 828C,928C,F958C	0.1733	0.0812	0.0359	0.2904	0.0585	0.0113	0.0000	0.0698	0.3602
SUBSCRIBER PAIR GAIN	758C,D758C,F758C	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
POLES	1C, 811C	0.0671	0.0725	0.0325	0.1721	0.0303	0.0113	0.0000	0.0416	0.2137
AERIAL CA - METAL	22C, 12C, 802C	0.0917	0.0797	0.0338	0.2052	0.0413	0.0113	0.0000	0.0526	0.2578
AERIAL CA - FIBER	822C, 812C, 882C, 982C,D22C, F22C,T22C,D12C,F12C,T12C	0.0667	0.0784	0.0347	0.1798	0.0110	0.0113	0.0000	0.0223	0.2021
UNGROUND CA - METAL	5C, 805C	0.1036	0.0813	0.0342	0.2191	0.0255	0.0113	0.0000	0.0368	0.2559
UNGROUND CA - FIBER	85C,885C,985C,D5C,F5C,T5C	0.0626	0.0800	0.0358	0.1784	0.0120	0.0113	0.0000	0.0233	0.2017
BURIED CA - METAL	45C, 846C	0.0876	0.0809	0.0354	0.2039	0.0417	0.0113	0.0000	0.0530	0.2569
BURIED CA - FIBER	845C,856C,956C,D45C, F45C,T45C	0.0585	0.0816	0.0367	0.1768	0.0108	0.0113	0.0000	0.0221	0.1989
SUBMARINE CA-METAL	6C, 806C	0.0860	0.0814	0.0366	0.2040	0.0106	0.0113	0.0000	0.0219	0.2259
SUBMARINE CA-FIBER	86C,886C,D6C,F6C,T6C	0.0860	0.0814	0.0355	0.2029	0.0106	0.0113	0.0000	0.0219	0.2248
INTRBLD NTWK-METAL	52C	0.0661	0.0785	0.0340	0.1786	0.0265	0.0113	0.0000	0.0378	0.2164
INTRBLD NTWK-FIBER	852C,D52C,F52C,T52C	0.0661	0.0785	0.0340	0.1786	0.0265	0.0113	0.0000	0.0378	0.2164
CONDUIT SYSTEMS	4C, 84C, 94C	0.0242	0.0877	0.0401	0.1520	0.0025	0.0113	0.0000	0.0138	0.1658

BellSouth Telecommunications, Inc.
FPSC Docket No. 960833-TP
Exhibit No. DDC-17

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DACC
ACCESS SERVICE

COST STUDY DOCUMENTATION

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DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

COST STUDY DOCUMENTATION

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SECTION A

SECTION A

FLORIDA
DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

PROPRIETARY RATIONALE

The Florida Directory Assistance Call Completion Access Cost Study contains costs which reflect BellSouth's long run incremental cost of providing this service on a going forward basis. Public disclosure of this information would provide BellSouth's competitors with an advantage. The data is valuable to competitors and potential competitors in formulating strategic plans for entry, pricing, marketing and overall business strategies. This information relates to the competitive interests of BellSouth and disclosure would impair the competitive business of BellSouth.

For these reasons the Florida Directory Assistance Call Completion Access Service Cost Study is considered proprietary.

SECTION 1

SECTION 1

FLORIDA
DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

INTRODUCTION AND OVERVIEW

These Long Run Incremental Cost (LRIC) and Total Service Long Run Incremental Cost (TSLRIC) studies are being provided to support Directory Assistance Call Completion (DACC) Access Service in the state of Florida.

LRIC is the volume sensitive incremental cost. TSLRIC is expressed as a unit incremental cost. It is developed by dividing the volume insensitive incremental cost by demand, and then adding the resultant value to the volume sensitive incremental cost.

Directory Assistance Call Completion Access Service is an arrangement offered to Alternative Local Exchange Carriers (ALECs) for the purpose of allowing the end user calls originating from central offices belonging to ALECs to automatically (i.e., without having to dial the number) complete his/her call after obtaining the desired number from Directory Assistance.

A standard announcement is made following a request by the end user to Directory Assistance for a Local Exchange Subscriber telephone number. This announcement advises the customer of the option to have the call completed automatically for a specified charge. It also instructs the customer on how to select whether or not he/she wishes to use the service.

The charge to the ALEC for this service is in addition to other applicable Directory Assistance charges to the ALEC.

SECTION 2

SECTION 2

FLORIDA
DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of costs supporting Florida Directory Assistance Call Completion Access Service.

In determining costs, BellSouth uses direct incremental costing techniques that are in accordance with accepted economic theory. Direct incremental costs are based on cost causation and include all of the costs directly caused by expanding production, or, alternatively, costs that would be saved if the production levels were reduced. The production unit may be an entire service or a unit of the service depending on the cost object involved. Costs for a service may include volume sensitive and/or volume insensitive costs. Costs are forward looking in nature because only future costs can be saved. Incremental costs are long run to assure that the time period studied is sufficient to capture all forward looking costs affected by the business decision. Shared and common costs are not incremental and, therefore, are not included. Incremental costs in this study are recurring (capital and operating expenses) costs. Incremental costs account for the expected change in cost to the firm resulting from a new service offering or a change in demand for an existing service.

THE DEVELOPMENT OF RECURRING COSTS

Annual costs to BellSouth Telecommunications, Inc., resulting from the capital investments necessary to provide a service are called recurring costs. Recurring costs include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs are the expenses of maintenance and ad valorem and other taxes. These expenses contribute to the ongoing cost to the company associated with the initial capital investment. Recurring costs are developed using incremental economic study applications, representing a forward-looking view of technology and deployment.

FLORIDA
DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

DESCRIPTION OF STUDY PROCEDURES (Cont'd)

The first step in developing an incremental study of recurring costs for Directory Assistance Call Completion Access is to determine the forward-looking network architecture. Material prices for the equipment are defined.

Next, 1995 Incremental Annual Cost Factors are used to calculate the direct cost of capital, ongoing maintenance and other operating expenses and taxes. These factors (specific factors for each USOA FRC) are applied to investments by account code, yielding an annual cost per account code.

LRIC is the volume sensitive incremental cost. The average volume insensitive incremental unit cost is developed by dividing the total annual volume insensitive costs by annual demand. The TSLRIC Unit Cost is developed by adding the LRIC Volume Sensitive Unit Cost and the Average Volume Insensitive Incremental Unit Cost.

SECTION 3

SECTION 3

FLORIDA
DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

SUMMARY OF RESULTS

This section contains a cost summary for the Long Run Incremental Cost (LRIC) and Total Service LRIC Unit Cost for providing this service.

DACC Access Service

A

LRIC Unit Cost per Call Attempt
Total Volume Insensitive Cost
TSLRIC Unit Cost per Call Attempt

SECTION 4

SECTION 4

FLORIDA
DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

COST DEVELOPMENT - RECURRING

This section defines the cost development of the recurring costs for Florida Directory Assistance Call Completion Access Service.

Generally, economic cost development is outlined in Section 2. Network architecture is determined; the necessary equipment is identified; and material prices are obtained. Annual cost factors are applied to convert the investment to cost.

The following workpapers develop the volume sensitive costs, which include hardware and software expenses associated with Interactive Voice Systems, and volume insensitive software costs. These results are then summarized and converted to an average cost per call attempt.

Workpaper 2 develops volume sensitive costs for DACC Access Service on a per call attempt basis. Volume sensitive costs for this service are investment related costs and software costs associated with the Interactive Voice System (IVS).

To develop the investment related cost, the Miscellaneous Common Equipment & Power factor is applied to the Interactive Voice System (IVS) investment per IVS. The time in seconds per DACC call attempt and the Digital Electronic Switch annual cost factor are then applied to the hardware investment per IVS divided by the annual engineered traffic volume per IVS to develop a Digital Electronic Switch Cost per call attempt. Land and Building Loading factors are applied to the investment to develop land and building investment. Land and Building annual cost factors are then applied to develop Land and Building costs.

To develop the volume sensitive software cost, an annuity factor is applied to the IVS software expense to amortize the software costs over a five-year period. The Gross Receipts Tax Factor is applied to the IVS software expense per call attempt.

Workpaper 3 develops the volume insensitive costs. Volume insensitive costs for this service are software costs for the Operator Service System switch and Gateway. These software costs are amortized over a five-year period. The Gross Receipts Tax factor is also applied. The annual volume insensitive costs are then divided by the annual demand to develop an average volume insensitive cost per call attempt.

DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE
FLORIDA

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SUMMARY OF COSTS

(A)	(B)	(C)	(D)
Line	**Description**	**Source**	**Amount**
1.	**DACC Cost per Call Attempt - Volume Sensitive Cost**	WP2 Ln36	
2.			
3.	**DACC Cost per Call Attempt - Avg Volume Insensitive Cost**	WP3 Ln14	
4.			
5.	**TSLRIC Unit DACC Access Cost per Call Attempt**	Ln 1 + Ln 3	[

DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE
FLORIDA

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COST PER CALL ATTEMPT
DEVELOPMENT OF VOLUME SENSITIVE COSTS

(A) Line	(B) Description	(C) Source	(D) Amount
1.	**Volume Sensitive Investment Related Cost per Call Attempt**		
2.			
3.	Interactive Voice System (IVS) Investment per IVS	Fundamental IVS Inv & Exp Study	
4.	Misc. Common Eqpt. & Power Factor	BST Fundamental Cost	1.0938
5.	Total Investment w/MCE&P per IVS	Ln 3 * Ln 4	
6.	Annual Engineered Traffic Volume per IVS (seconds)	Fundamental IVS Inv & Exp Study	545,512,474
7.	Seconds per DACC call attempt	Operator Services	15
8.	Dig Elec Switch Annual Cost Factor	BST Fundamental Cost	0.2539
9.	**Dig Elec Switch Cost per call attempt**	(Ln 5/Ln 6) * Ln 7 * Ln 8	
10.			
11.			
12.	Land Loading Factor	BST Fundamental Cost	0.0025
13.	Land Investment per IVS	Ln 5 * Ln 12	
14.	Land Annual Cost Factor	BST Fundamental Cost	0.1716
15.	**Land Cost per call attempt**	(Ln 13/Ln 6) * Ln 7 * Ln 14	
16.			
17.			
18.	Building Loading Factor	BST Fundamental Cost	0.0319
19.	Building Investment per IVS	Ln 5 * Ln 18	
20.	Building Annual Cost Factor	BST Fundamental Cost	0.1864
21.	**Building Cost per call attempt**	(Ln 19/Ln 6) * Ln 7 * Ln 20	
22.			
23.			
24.	**Investment Related Cost per Call Attempt**	Ln 9 + Ln 15 + Ln 21	
25.			
26.			
27.	**Volume Sensitive Software Cost per Call Attempt**		
28.			
29.	RTU IVS software expense per IVS	Fundamental IVS Inv & Exp Study	
30.	Annuity Factor	BST Fundamental Cost	0.2857
31.	RTU IVS software expense per call attempt	(Ln 29/Ln 6) * Ln 7 * Ln 30	
32.	Gross Receipts Tax Factor	BST Fundamental Cost	1.0152
33.	**Software Cost per Call Attempt**	Ln31 * Ln32	
34.			
35.			
36.	**Volume Sensitive Cost per Call Attempt**	Ln 24 + Ln 33	

DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE
FLORIDA

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COST PER CALL ATTEMPT
DEVELOPMENT OF VOLUME INSENSITIVE COSTS

(A)	(B)	(C)	(D)
Line	**Description**	**Source**	**Amount**
1.	**Volume Insensitive Costs**		
2.			
3.	**DACC Software**		
4.	RTU software for Switch	Operator Services	
5.	RTU software for Gateway	Operator Services	
6.	**Total Volume Insensitive Software Cost**	Ln4 + Ln5	
7.			
8.	Annuity Factor	BST Fundamental Cost	0.2857
9.	Gross Receipts Tax Factor	BST Fundamental Cost	1.0152
10.	**Annual Volume Insensitive Cost**	Ln6 * Ln8 * Ln9	
11.			
12.	Annual Demand - DACC Call Attempts	Operator Services	20,500,000
13.			
14.	**Average Vol Insensitive Cost per Call Attempt**	Ln 10 / Ln 12	

SECTION 5

SECTION 5

FLORIDA
DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

COST DEVELOPMENT - NONRECURRING

Not Applicable

SECTION 6

SECTION 6

FLORIDA
DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

SPECIFIC STUDY ASSUMPTIONS

The cost study for Directory Assistance Call Completion Access Service for the state of Florida is based on direct incremental costing techniques that are in accordance with accepted economic theory, in addition to specific Network deployment strategies and equipment purchasing information.

Cost study assumptions are as follows:

> Directory Assistance Call Completion Access Service is available to ALECs complying with specific requirements. The following conditions must be satisfied prior to the offer of DACC:

- ANI must be available.
- The requested listing must be a published number.
- The number retrieved from the data base must be intraLATA with respect to the originating line number.
- The originating caller must be released to an audio announcement including the offer of call completion.
- Originating callers must indicate via Dual Tone Multi-Frequency (DTMF) input the desire to complete or the ALEC must agree that all intraLATA calls should attempt to complete.

SECTION 7

FLORIDA
DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

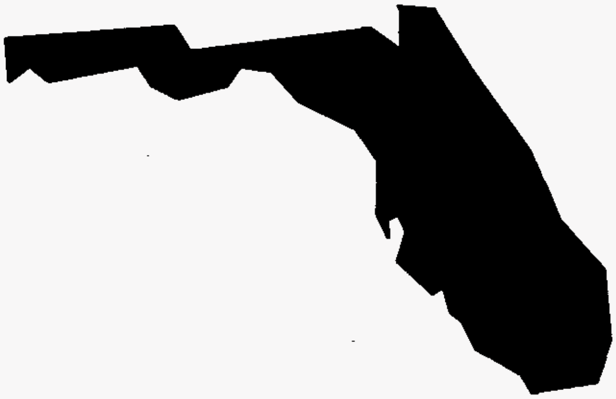
FACTORS AND LOADINGS

Following are the factors and loadings used in the Directory Assistance Call Completion Access cost study for Florida. Because DACC equipment is located in Charlotte, North Carolina, the following is based on North Carolina's Annual Cost Factors and Loadings and Florida's Gross Receipts Tax Factor:

Gross Receipts Tax Factor	0.0152
Annuity Factor (based on 5 yrs. & 13.2% COM)	0.2857
Miscellaneous Common Equipment & Power	1.0938
Annual Cost Factors:	
Digital Electronic Switch	0.2539
Land	0.1716
Building	0.1864
Loading Factors:	
Land	0.0025
Building	0.0319

BellSouth Telecommunications, Inc.
FPSC Docket No. 960833-TP
Exhibit No. DDC-18

FLORIDA



DIRECTORY TRANSPORT

COST STUDY DOCUMENTATION

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DIRECTORY TRANSPORT

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SECTION A

SECTION A

FLORIDA
DIRECTORY TRANSPORT

PROPRIETARY RATIONALE

The Florida Directory Transport Cost Study contains costs which reflect BellSouth's long run incremental cost of providing this service on a going forward basis. Public disclosure of this information would provide BellSouth's competitors with an advantage. The data is valuable to competitors and potential competitors in formulating strategic plans for entry, pricing, marketing and overall business strategies. This information relates to the competitive interests of BellSouth and disclosure would impair the competitive business of BellSouth.

For these reasons the Florida Directory Transport Cost Study is considered proprietary.

SECTION 1

SECTION 1

FLORIDA
DIRECTORY TRANSPORT

INTRODUCTION AND OVERVIEW

This Long Run Incremental Cost (LRIC) study is being provided to support Directory Transport for Directory Assistance Access Service in the state of Florida.

The Long Run Incremental Costs (LRIC) presented in this study are volume sensitive costs. Directory Transport for Directory Assistance Access Service has no volume insensitive costs.

Directory Transport provides for the transport facilities and termination between the Alternative Local Exchange Carrier's (ALEC's) premises and the Directory Assistance location as part of providing Directory Assistance Access Service. The charge to the ALEC for Directory Transport is in addition to other applicable Directory Assistance charges to the ALEC.

SECTION 2

SECTION 2

FLORIDA
DIRECTORY TRANSPORT

DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of costs supporting Florida Directory Transport as part of providing Directory Assistance Access Service.

In determining costs, BellSouth uses direct incremental costing techniques that are in accordance with accepted economic theory. Direct incremental costs are based on cost causation and include all of the costs directly caused by expanding production, or, alternatively, costs that would be saved if the production levels were reduced. The production unit may be an entire service or a unit of the service depending on the cost object involved. Costs may be volume sensitive and/or volume insensitive. Costs are forward looking in nature because only future costs can be saved. Incremental costs are long run to assure that the time period studied is sufficient to capture all forward looking costs affected by the business decision. Shared and common costs are not incremental and, therefore, are not included. Incremental costs in this study are recurring (capital and operating expenses) costs. Incremental costs account for the expected change in cost to the firm resulting from a new service offering or a change in demand for an existing service.

THE DEVELOPMENT OF RECURRING COSTS

Annual costs to BellSouth Telecommunications, Inc., resulting from the capital investments necessary to provide a service are called recurring costs. Recurring costs include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs are the expenses of maintenance and ad valorem and other taxes. These expenses contribute to the ongoing cost to the company associated with the initial capital investment. Recurring costs are developed using incremental economic study applications, representing a forward-looking view of technology and deployment.

Costs for Directory Transport are developed using costs for Switched Common Transport - Facilities Termination Cost per Minute, Switched Common Transport Cost per Minute per Mile and Access Tandem Switching Cost per Minute from the Network Interconnection Service Cost Study. Directory Transport costs have been developed on a per call and per mile basis.

SECTION 3

SECTION 3

FLORIDA
DIRECTORY TRANSPORT

SUMMARY OF RESULTS

This section contains a cost summary for the Long Run Incremental Cost (LRIC) for providing Directory Transport.

Directory Transport

A

Switched Common Transport per DA Service Call
Switched Common Transport per DA Service Call Mile
Access Tandem Switching per DA Service Call

SECTION 4

SECTION 4

FLORIDA
DIRECTORY TRANSPORT

COST DEVELOPMENT - RECURRING

This section defines the cost development of the recurring costs for Florida Directory Transport.

Generally, economic cost development is outlined in Section 2. Network architecture is determined; the necessary equipment is identified; and material prices are obtained. Annual cost factors are applied to convert the investment to cost.

The following workpapers develop the volume sensitive costs for Directory Transport on a per call and per mile basis. The results are summarized in Workpaper 1.

Workpaper 2 develops costs for Directory Transport for Switched Common Transport per DA Service Call, Switched Common Transport per DA Service Call Mile and Access Tandem Switching per DA Service Call. These costs were developed using costs for Switched Common Transport - Facilities Termination Cost per Minute, Switched Common Transport Cost per Minute per Mile and Access Tandem Switching Cost per Minute from the Network Interconnection Service Cost Study. Directory Transport costs have been developed on a per call and per mile basis using a 42-second holding time per DA call as obtained from Operator Services.

DIRECTORY TRANSPORT
FLORIDA

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SUMMARY OF COSTS

(A)	(B)		(C)
Line	**Description**	**Source**	**Amount**
1.	Switched Common Transport per DA Service Call	WP 2 Ln 13	
2.			
3.	Switched Common Transport per DA Service Call Mile	WP 2 Ln 15	
4.			
5.	Access Tandem Switching per DA Service Call	WP 2 Ln 17	

DIRECTORY TRANSPORT
FLORIDA

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DEVELOPMENT OF COSTS

(A) **Line**	(B) **Description**	(C) **Source**	(D) **Amount**
1.	Switched Common Transport - Facilities Term Cost per Min.	Ntwk Interconnection Svc Cost Study	
2.			
3.	Switched Common Transport Cost per Min. per Mile	Ntwk Interconnection Svc Cost Study	
4.			
5.	Access Tandem Switching Cost per Min.	Ntwk Interconnection Svc Cost Study	
6.			
7.			
8.	Holding Time (in seconds) per DA Call	Operator Services	42
9.			
10.	Holding Time as a percent of a minute	Ln 8 / 60	70%
11.			
12.			
13.	**Switched Common Transport per DA Service Call**	Ln 1 * Ln 10	
14.			
15.	**Switched Common Transport per DA Service Call Mile**	Ln 3 * Ln 10	
16.			
17.	**Access Tandem Switching per DA Service Call**	Ln 5 * Ln 10	

SECTION 5

SECTION 5

FLORIDA
DIRECTORY TRANSPORT

COST DEVELOPMENT - NONRECURRING

Not Applicable

SECTION 6

SECTION 6

FLORIDA
DIRECTORY TRANSPORT

SPECIFIC STUDY ASSUMPTIONS

The cost study for Directory Transport for the state of Florida is based on direct incremental costing techniques that are in accordance with accepted economic theory, in addition to specific Network deployment strategies and equipment purchasing information.

Cost study assumptions are as follows:

Holding Time (in seconds) per DA Call	42

SECTION 7

SECTION 7

FLORIDA
DIRECTORY TRANSPORT

FACTORS AND LOADINGS

Following are incremental annual cost factors and loadings used in the development of costs for Directory Transport Cost Study for Florida:

Annual Cost Factors:

10C	0.19510	
20C	0.17720	
357C	0.23550	(includes TIRKS expense)
377C	0.25200	
811C	0.21450	
822C	0.20810	
845C	0.20560	
84C	0.16860	
85C	0.20630	

In-Plant Factor:

Telco	377C	1.12360

Miscellaneous Common Equipment and Power Loadings:

377C	1.09770

Land and Building COE Loadings:

10C	0.04040
20C	0.00300

BellSouth Telecommunications, Inc.
FPSC Docket No. 960833-TP
Exhibit No. DDC-19

FLORIDA

NUMBER SERVICES INTERCEPT ACCESS SERVICE

COST STUDY DOCUMENTATION

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NUMBER SERVICES INTERCEPT ACCESS SERVICE

COST STUDY DOCUMENTATION

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SECTION 5	Cost Development - Nonrecurring
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SECTION A

SECTION A

FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE

PROPRIETARY RATIONALE

The Florida Number Services Intercept Access Cost Study contains costs which reflect BellSouth's long run incremental costs of providing this service on a going forward basis. Public disclosure of this information would provide BellSouth's competitors with an advantage. The data is valuable to competitors and potential competitors in formulating strategic plans for entry, pricing, marketing and overall business strategies. This information relates to the competitive interests of BellSouth and disclosure would impair the competitive business of BellSouth.

For these reasons, the Florida Number Services Intercept Access Service Cost Study is considered proprietary.

SECTION 1

SECTION 1

FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE

INTRODUCTION AND OVERVIEW

These Long Run Incremental Cost (LRIC) and Total Service Long Run Incremental Cost (TSLRIC) studies are provided in support of Number Services Intercept Access Service in the state of Florida.

LRIC is the volume sensitive incremental cost. TSLRIC is expressed as a unit incremental cost. It is developed by dividing the volume insensitive incremental cost by demand, and then adding the resultant value to the volume sensitive incremental cost.

Number Services Intercept Access Service is an arrangement offered to Alternative Local Exchange Carriers (ALECs) for the purpose of providing a recorded announcement for calls placed to discontinued or non-working numbers originating from central offices belonging to ALECs.

Standard trunk signaling is used to send the intercepted number to the Number Services switch and a database retrieval is performed to obtain the referral number. The referral number is provided to the calling party by a mechanized audio announcement. The subscribing ALEC must provide the updates to the Intercept database to support the service.

SECTION 2

SECTION 2

FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE

DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of costs supporting Florida Number Services Intercept Access Service.

In determining costs, BellSouth uses direct incremental costing techniques that are in accordance with accepted economic theory. Direct incremental costs are based on cost causation and include all of the costs directly caused by expanding production, or, alternatively, costs that would be saved if the production levels were reduced. The production unit may be an entire service or a unit of the service depending on the cost object involved. Costs for a service may include volume sensitive and/or volume insensitive costs. Costs are forward looking in nature because only future costs can be saved. Incremental costs are long run to assure that the time period studied is sufficient to capture all forward looking costs affected by the business decision. Shared and common costs are not incremental and, therefore, are not included. Incremental costs in this study are recurring (capital and operating expenses) costs. Incremental costs account for the expected change in cost to the firm resulting from a new service offering or a change in demand for an existing service.

THE DEVELOPMENT OF RECURRING COSTS

Annual costs to BellSouth Telecommunications, Inc., resulting from the capital investments necessary to provide a service are called recurring costs. Recurring costs include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs are the expenses of maintenance and ad valorem and other taxes. These expenses contribute to the ongoing cost to the company associated with the initial capital investment. Recurring costs are developed using incremental economic study applications, representing a forward-looking view of technology and deployment.

FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE

DESCRIPTION OF STUDY PROCEDURES (Cont'd)

The first step in developing an incremental study of recurring costs for Number Services Intercept Access is to determine the forward-looking network architecture. Material prices for the equipment are defined. A Miscellaneous Common Equipment and Power Factor is applied to material prices to develop investments which include miscellaneous common equipment and power.

Next, 1995 Incremental Annual Cost Factors are used to calculate the direct cost of capital, ongoing maintenance and other operating expenses and taxes. These factors (specific factors for each USOA FRC) are applied to investments by account code, yielding an annual cost per account code.

LRIC is the volume sensitive incremental cost. The average volume insensitive incremental unit cost is developed by dividing the total annual volume insensitive costs by annual demand. The TSLRIC Unit Cost is developed by adding the LRIC volume sensitive unit cost and the average volume insensitive incremental unit cost.

SECTION 3

SECTION 3

FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE

SUMMARY OF RESULTS

This section contains a cost summary for the Long Run Incremental Cost (LRIC) and Total Service LRIC unit cost for providing this service.

Number Services Intercept Access Service

A

LRIC Unit Cost per Intercept Query
Total Volume Insensitive Cost
TSLRIC Unit Cost per Intercept Query

SECTION 4

SECTION 4

FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE

COST DEVELOPMENT - RECURRING

This section defines the cost development of the recurring costs for Florida Number Services Intercept Access.

Generally, economic cost development is outlined in Section 2. Network architecture is determined; the necessary equipment is identified; and material prices are obtained. Annual cost factors are applied to convert the investment to cost.

Recurring costs are developed for the fixed and per mile component of the facilities. The following workpapers develop the volume sensitive costs and volume insensitive costs. These results are then summarized and converted to an average cost per Intercept query.

Workpaper 2 develops volume sensitive costs for Number Services Intercept Access Service on a per Intercept Query basis.

To develop the investment related cost, the Miscellaneous Common Equipment & Power factor is applied to the Interactive Voice System (IVS) Investment per IVS. The time in seconds per Intercept query and the Digital Electronic Switch Annual Cost Factor are then applied to the hardware investment per IVS divided by the annual engineered traffic volume per IVS to develop a Digital Electronic Switch Cost per Query. Land and Building Loading factors are applied to the investment to develop land and building investment. Land and Building annual cost factors are then applied to develop Land and Building costs.

To develop the volume sensitive software cost, an annuity factor is applied to the IVS software expense to amortize the software costs over a five-year period. The Gross Receipts Tax Factor is applied to the IVS software expense per query to develop the IVS software cost per query.

Workpaper 3 develops the Average Volume Insensitive Costs on a per Intercept Query basis. The cost components are Line Information for Open Network (LION) hardware and software, Central Administrative and Maintenance (CAM) hardware and software, and expenses for data links and voice links. The annual volume insensitive costs are summed and then divided by annual demand to develop an average volume insensitive cost per intercept query.

FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE

COST DEVELOPMENT - RECURRING (Cont'd)

Workpaper 4 develops volume insensitive costs related to the LION system.

To develop the investment related annual cost, the Miscellaneous Common Equipment & Power factor and Digital Electronic Switch Annual Cost Factor are applied to the hardware investment. Land and Building Loading factors are applied to the investment to develop land and building investment. Land and Building annual cost factors are then applied to develop Land and Building annual costs.

To develop the volume insensitive software cost, the RTU expense for software is amortized over a five-year period. The Gross Receipts Tax Factor is also applied.

Workpaper 5 develops volume insensitive costs related to the Central Administrative and Maintenance (CAM) system.

To develop the investment related cost associated with CAMS, the Miscellaneous Common Equipment & Power factor and Digital Electronic Switch Annual Cost Factor are applied to the hardware investment. Land and Building Loading factors are applied to the investment to develop land and building investment. Land and Building annual cost factors are then applied to develop Land and Building annual costs.

To develop the software cost, the RTU expense for software is amortized over a five-year period. The Gross Receipts Tax Factor is also applied.

Workpaper 6 develops the annual cost for data links between the TOPS and LION systems and between the LION and IVS system. The investments, by component, are multiplied by their associated annual cost factors and are summed to calculate the annual cost for these facilities.

Workpaper 7 develops the annual cost for voice links between the TOPS and IVS systems. The investments, by component, are multiplied by their associated annual cost factors and are summed to calculate the annual cost for these facilities.

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NUMBER SERVICES INTERCEPT ACCESS SERVICE
FLORIDA

SUMMARY OF COSTS

	A	B	C
Line	**Description**	**Source**	**Amount**
1.	**Volume Sensitive Cost per Intercept Query**	WP2 Ln35	
2.			
3.	**Volume Insensitive Cost per Intercept Query**	WP3 Ln 14	
4.			
5.	**TSLRIC Unit Intercept Access Cost per Query**	Ln 1 + Ln 3	

NUMBER SERVICES INTERCEPT ACCESS SERVICE
FLORIDA

WORKPAPER 2
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COST PER INTERCEPT QUERY
DEVELOPMENT OF VOLUME SENSITIVE COSTS
Development of Cost for Interactive Voice System (IVS)

(A) Line	(B) Description	(C) Source	(D) Amount
1.	**Volume Sensitive Inv & Related Cost per Query**		
2.			
3.	Interactive Voice System (IVS) Investment per IVS	Fundamental IVS Inv & Exp Study	
4.	Misc. Common Eqpt. & Power Factor	BST Fundamental Cost	1.0938
5.	Total Investment w/MCE&P per IVS	Ln 3 * Ln 4	
6.	Annual Eng Traffic volume per IVS (seconds)	Fundamental IVS Inv & Exp Study	545,512,474
7.	Seconds per Intercept query	Operator Services	15
8.	Dig Elec Switch Annual Cost Factor	BST Fundamental Cost	0.2539
9.	**Dig Elec Switch Cost per Query**	(Ln 5/Ln 6) * Ln 7 * Ln 8	
10.			
11.			
12.	Land Loading Factor	BST Fundamental Cost	0.0025
13.	Land Investment per IVS	Ln 5 * Ln 12	
14.	Land Annual Cost Factor	BST Fundamental Cost	0.1716
15.	**Land Cost per Query**	(Ln 13/Ln 6) * Ln 7 * Ln 14	
16.			
17.			
18.	Building Loading Factor	BST Fundamental Cost	0.0319
19.	Building Investment per IVS	Ln 5 * Ln 18	
20.	Bulding Annual Cost Factor	BST Fundamental Cost	0.1864
21.	**Building Cost per Query**	(Ln 19/Ln 6) * Ln 7 * Ln 20	
22.			
23.			
24.	**Total Investment Related Cost per Query**	Ln9 + Ln15 + Ln21	
25.			
26.			
27.	**Volume Sensitive Software Cost per Query**		
28.	RTU IVS software expense per IVS	Fundamental IVS Inv & Exp Study	
29.	Annuity Factor	BST Fundamental Cost	0.2857
30.	RTU IVS software expense per query	(Ln 28/Ln 6) * Ln 7 * Ln 29	
31.	Gross Receipts Tax Factor	BST Fundamental Cost	1.0152
32.	**Software Cost for IVS per Query**	Ln30*Ln31	
33.			
34.			
35.	**Volume Sensitive Cost per Intercept Query**	Ln24 + Ln32	

NUMBER SERVICES INTERCEPT ACCESS SERVICE
FLORIDA

WORKPAPER 3
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SUMMARY OF VOLUME INSENSITIVE COSTS

(A) Line	(B) Description	(C) Source	(D) Amount
1.	**Annual Cost**		
2.			
3.	LION Hardware	WP 4 Ln 24	
4.	LION Software	WP 4 Ln 32	
5.	CAMS Hardware	WP 5 Ln 24	
6.	CAMS Software	WP 5 Ln 32	
7.	TOPS/LION Data Links	WP 6 Ln 17	
8.	LION/IVS Data Links	WP 6 Ln 36	
9.	TOPS/IVS Voice Links	WP 7 Ln 17	
10.	**Annual Volume Insensitive Cost**	Sum Ln 3..Ln 9	
11.			
12.	Annual Demand - Intercept Queries	Operator Services	232,500,000
13.			
14.	**Avg Vol Insensitive Cost per Intercept Query**	Ln 10 / Ln 12	

NUMBER SERVICES INTERCEPT ACCESS SERVICE
FLORIDA

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COST PER CALL
DEVELOPMENT OF VOLUME INSENSITIVE COSTS
Development of Cost for LION System

(A) Line	(B) Description	(C) Source	(D) Amount
1.	**Hardware**		
2.	FDDI Investment - Installed	Operator Services	
3.	LION Investment - Installed	Operator Services	
4.	Misc. Common Eqpt. & Power Factor	BST Fundamental Cost	1.0938
5.	Total Investment w/MCE&P	(Ln 2 + Ln 3) * Ln 4	
6.			
7.			
8.	Dig Elec Switch Annual Cost Factor	BST Fundamental Cost	0.2539
9.	**Dig Elec Switch Annual Cost**	Ln 5 * Ln 8	
10.			
11.			
12.	Land Loading Factor	BST Fundamental Cost	0.0025
13.	Land Investment	Ln 5 * Ln 12	
14.	Land Annual Cost Factor	BST Fundamental Cost	0.1716
15.	**Land Annual Cost**	Ln 13 * Ln 14	
16.			
17.			
18.	Building Loading Factor	BST Fundamental Cost	0.0319
19.	Building Investment	Ln 5 * Ln 18	
20.	Bulding Annual Cost Factor	BST Fundamental Cost	0.1864
21.	**Building Annual Cost**	Ln 19 * Ln 20	
22.			
23.			
24.	**Total Investment Related Annual Cost - LION**	Ln9 + Ln15 + Ln21	
25.			
26.			
27.	**Software**		
28.			
29.	Software Expense - Installed	Operator Services	
30.	Annuity Factor	BST Fundamental Cost	0.2857
31.	Gross Receipts Tax Factor	BST Fundamental Cost	1.0152
32.	**Annual Software Cost for LION**	Ln29*Ln30*Ln31	

NUMBER SERVICES INTERCEPT ACCESS SERVICE
FLORIDA

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COST PER CALL
DEVELOPMENT OF VOLUME INSENSITIVE COSTS
Development of Cost for CAMS

(A)	(B)	(C)	(D)
Line	Description	Source	Amount
1.	**Hardware**		
2.			
3.	Investment - Installed	Operator Services	
4.	Misc. Common Eqpt. & Power Factor	BST Fundamental Cost	1.0938
5.	Total Investment w/MCE&P	Ln 3 * Ln 4	
6.			
7.			
8.	Dig Elec Switch Annual Cost Factor	BST Fundamental Cost	0.2539
9.	**Dig Elec Switch Annual Cost**	Ln 5 * Ln 8	
10.			
11.			
12.	Land Loading Factor	BST Fundamental Cost	0.0025
13.	Land Investment	Ln 5 * Ln 12	
14.	Land Annual Cost Factor	BST Fundamental Cost	0.1716
15.	**Land Annual Cost**	Ln 13 * Ln 14	
16.			
17.			
18.	Building Loading Factor	BST Fundamental Cost	0.0319
19.	Building Investment	Ln 5 * Ln 18	
20.	Bulding Annual Cost Factor	BST Fundamental Cost	0.1864
21.	**Building Annual Cost**	Ln 19 * Ln 20	
22.			
23.			
24.	**Total Investment Related Annual Cost - CAMS**	Ln9 + Ln15 + Ln21	
25.			
26.			
27.	**Software**		
28.			
29.	Software Expense - Installed	Operator Services	
30.	Annuity Factor	BST Fundamental Cost	0.2857
31.	Gross Receipts Tax Factor	BST Fundamental Cost	1.0152
32.	**Annual Software Cost for CAMS**	Ln29*Ln30*Ln31	

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NUMBER SERVICES INTERCEPT ACCESS SERVICE
FLORIDA

COST PER CALL
DEVELOPMENT OF VOLUME INSENSITIVE COSTS
Development of Annual Cost for Data Links

(A)	(B)	(C)	(D)	(E)	(F)
Line	Data Links	Links/Miles a	Unit Investment b	Annual Cost Factor c	Annual Cost d=a*b*c
1.	TOPS/LION DATA LINKS				
2.					
3.	Termination				
4.	Circuit	18		0.2380	
5.	Land	18		0.1772	
6.	Building	18		0.1922	
7.					
8.	Mileage				
9.	Aerial Fiber	1,720		0.2052	
10.	Buried Fiber	1,720		0.2019	
11.	Underground Fiber	1,720		0.2048	
12.	Pole	1,720		0.2169	
13.	Conduit	1,720		0.1683	
14.	Circuit	1,720		0.2380	
15.	Building	1,720		0.1922	
16.					
17.	**Total Annual Cost - TOPS/LION Data Links**				
18.					
19.					
20.	LION/IVS DATA LINKS				
21.					
22.	Termination				
23.	Circuit	18		0.2380	
24.	Land	18		0.1772	
25.	Building	18		0.1922	
26.					
27.	Mileage				
28.	Aerial Fiber	1,570		0.2052	
29.	Buried Fiber	1,570		0.2019	
30.	Underground Fiber	1,570		0.2048	
31.	Pole	1,570		0.2169	
32.	Conduit	1,570		0.1683	
33.	Circuit	1,570		0.2380	
34.	Building	1,570		0.1922	
35.					
36.	**Total Annual Cost - LION/IVS Data Links**				

NUMBER SERVICES INTERCEPT ACCESS SERVICE
FLORIDA

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COST PER CALL
DEVELOPMENT OF VOLUME INSENSITIVE COSTS
Development of Annual Cost for Voice Links

(A) Line	(B) DS1 Voice Links	(C) Links/Miles a	(D) Unit Investment b	(E) Annual Cost Factor c	(F) Annual Cost d=a*b*c
1.	**TOPS/IVS VOICE LINKS**				
2.					
3.	Termination				
4.	Circuit	25		0.2380	
5.	Land	25		0.1772	
6.	Building	25		0.1922	
7.					
8.	Mileage				
9.	Aerial Fiber	3,125		0.2052	
10.	Buried Fiber	3,125		0.2019	
11.	Underground Fiber	3,125		0.2048	
12.	Pole	3,125		0.2169	
13.	Conduit	3,125		0.1683	
14.	Circuit	3,125		0.2380	
15.	Building	3,125		0.1922	
16.					
17.	**Total Annual Cost - TOPS/IVS Voice Links**				

SECTION 5

SECTION 5

FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE

COST DEVELOPMENT - NONRECURRING

Not Applicable

SECTION 6

FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE

SPECIFIC STUDY ASSUMPTIONS

The cost study for Number Services Intercept Access for the state of Florida is based on direct incremental costing techniques that are in accordance with accepted economic theory, in addition to specific Network deployment strategies and equipment purchasing information.

Cost study assumptions are as follows:

1. The equipment that will be deployed is Nortel equipment.
2. The Line Information for Open Network (LION) is the database for Number Services Intercept. This database contains the non-working numbers along with information on referrals.
3. The Central Administrative and Maintenance (CAM) is the monitoring system which monitors the LION and IVS.
4. The Interactive Voice System (IVS) provides the audio response to the calling party.
5. Voice and data links interconnect the Traffic Operator Position System, the LION system, the CAMS and the IVS.

SECTION 7

SECTION 7

FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE

FACTORS AND LOADINGS

Following are the factors and loadings used for IVSs, CAMS and LION system in the Number Services Intercept Access cost study for Florida. Because the equipment is located in Charlotte, North Carolina, the following is based on North Carolina's Annual Cost Factors and Loadings and Florida's Gross Receipts Tax Factor:

Misc. Common Equipment & Power Factor	1.0938
Gross Receipts Tax Factor	0.0152
Annuity Factor (based on 5 yrs. & 13.2% COM)	0.2857
Annual Cost Factors:	
Digital Electronic Switch	0.2539
Land	0.1716
Building	0.1864
Loadings Factors:	
Land	0.0025
Building	0.0319

****

Following are the annual cost factors used for the TOPS/LION data links, LION/IVS data links and TOPS/IVS voice links in the Number Services Intercept Access cost study for Florida. Because the links cross state boundaries, the following is based on BellSouth Regional Annual Cost Factors and Florida's Gross Receipts Tax Factor:

Gross Receipts Tax Factor	0.0152
Annual Cost Factors:	
Digital Circuit 357C (w/TIRKS expense)	0.2380
Land	0.1772
Building	0.1922
Aerial Cable Fiber	0.2052
Buried Cable Fiber	0.2019
Underground Cable Fiber	0.2048
Poles	0.2169
Conduit	0.1683

BellSouth Telecommunications, Inc.
FPSC Docket No. 960833-TP
Exhibit No. DDC-20

FLORIDA

CCS7 SIGNALING TRANSPORT SERVICE

COST STUDY DOCUMENTATION

SECTIONS A THRU 7

FLORIDA

CCS7 SIGNALING TRANSPORT SERVICE

COST STUDY DOCUMENTATION

CONTENTS

SECTION A	PROPRIETARY RATIONALE
SECTION 1	INTRODUCTION AND OVERVIEW
SECTION 2	DESCRIPTION OF STUDY PROCEDURES
SECTION 3	SUMMARY OF RESULTS
SECTION 4	COST DEVELOPMENT - RECURRING LRIC AND TSLRIC
SECTION 5	COST DEVELOPMENT - NONRECURRING
SECTION 6	SPECIFIC STUDY ASSUMPTIONS
SECTION 7	FACTORS AND LOADINGS

TAB A

SECTION A

CCS7 SIGNALING TRANSPORT

PROPRIETARY RATIONALE

The CCS7 Signaling Transport contains actual unit cost information for discrete cost elements. These costs reflect BellSouth's long run incremental cost of providing these elements on a going forward basis. Public disclosure of this information would provide BellSouth's competitors with an advantage. The data is valuable to competitors and potential competitors in formulating strategic plans for entry, pricing, marketing and overall business strategies. This information relates to the competitive interests of BellSouth and disclosure would impair the competitive business of BellSouth.

Additionally, the study contains information which reflects vendor-specific prices negotiated by BellSouth. Public disclosure of this information would impair BellSouth's ability to contract for goods and/or services on favorable terms. For these reasons, the CCS7 Signaling Transport Access Service Cost Study is considered proprietary.

TAB 1

SECTION 1

CCS7 SIGNALING TRANSPORT SERVICE

INTRODUCTION AND OVERVIEW

This cost study develops the recurring incremental cost for a Common Channel Signaling/System Signaling 7 (CCS7) Signaling Connection (a signaling link), Signaling Termination and Signaling Usage. The latter is developed on both a per signaling message and per signaling connection basis. The study also develops the nonrecurring cost for establishment of the Signaling Connection.

The service provides access to the Common Channel Signaling Network and transport of signaling messages used for call set-up and database query/response. The primary components of the network are Signal Transfer Points (STPs) and Signaling Links. The STPs are packet switches which route signaling messages through the network. The Signaling Links connect end and tandem office switches to the STPs, and the STPs to Service Control Points (SCPs). The SCPs are databases used for specific services such as Line Identification DataBase service.

The study has been developed on a Regional basis. The service is ordered through a Regional Service Center and the architecture is common throughout the Region.

TAB 2

SECTION 2

COMMON CHANNEL SIGNALING TRANSPORT SERVICE

DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of costs supporting Florida Common Channel Signaling Transport Service.

In determining costs, BellSouth uses direct incremental costing techniques that are in accordance with accepted economic theory. Direct incremental costs are based on cost causation and include all of the costs directly caused by expanding production, or, alternately, costs that would be saved if the production levels were reduced. The production unit may be an entire service or a unit of the service depending on the cost object involved. Costs may be volume sensitive and/or volume insensitive. Costs are forward looking in nature because only future costs can be saved. Incremental costs are long run to assure that the time period studied is sufficient to capture all forward looking costs affected by the business decision. Shared and common costs are not incremental and, therefore, are not included. Incremental costs include both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs. Incremental costs account for the expected change in cost to the firm resulting from a new service offering or a change in demand for an existing service.

THE DEVELOPMENT OF RECURRING COSTS

The monthly costs to BellSouth Telecommunications, Inc. resulting from the capital investments necessary to provide a service are called recurring costs. Recurring costs include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs are the expenses of maintenance and ad valorem and other taxes. These expenses contribute to the ongoing cost to the company associated with the initial capital investment. Recurring costs may also be non-investment related, such as advertising, feature specific software and contract expenses. Recurring costs are developed using incremental economic study applications, representing a forward-looking view of technology and deployment.

The first step in developing an incremental study of recurring costs for Common Channel Signaling Transport Service is to determine the forward-looking network architecture. Prices for the software and equipment are defined. Next, account specific Telephone Plant Indexes are applied, when necessary, to trend investments and non-investment related expenses to the base study period. In-plant factors are applied to material prices to develop installed investments which include engineering and installation labor.

Appropriate loadings for land, building and miscellaneous common equipment and power are then applied to the electronic equipment. Support structure loadings are applied for poles and conduit to the aerial and underground fiber investments respectively.

Next, 1995 level Incremental Annual Cost Factors are used to calculate the direct cost of capital, ongoing maintenance and other operating expenses and taxes. These factors (specific factors for each Uniform System of Account Field Reporting Code) are applied to levelized investments by account code, yielding an annual cost per account code. Both the investment and non-investment related annual costs are summed and then divided by annual demand to arrive at a unit cost for each component.

THE DEVELOPMENT OF NONRECURRING COSTS

Nonrecurring costs are "one-time" costs incurred as a result of provisioning, installing, and disconnecting the CCS7 Signaling Transport Service. The first step in developing nonrecurring costs is to determine the cost elements related to the study. These cost elements are then described by all of the individual work functions required to provision the cost element. The work functions can be grouped into five categories. These are service order, initiate/administer circuit orders, develop circuit specifications, develop software translations and update the circuit database. The work function times, identified by subject matter experts, are used to describe the flow of work within the various work centers. Installation and provisioning costs are developed by multiplying the work time for each work function by the directly assigned labor rate for the work group performing the function.

Utilizing work functions, work times, and labor rates, disconnect costs are calculated in the same manner as the installation costs. Since the labor costs will occur in the future, the current labor rates are inflated to that future period in time and then discounted to the present. The discounted disconnect cost is added to the installation cost and gross receipts tax is applied to develop the total nonrecurring cost.

TAB 3

SECTION 3

FLORIDA

CCS7 SIGNALING TRANSPORT SERVICE

SUMMARY OF RESULTS

This section contains a cost summary for the Long Run Incremental Cost and Total Service Long Run Incremental Cost for CCS7 Signaling Transport Service.

		A
7	CCS7 SIGNALING CONNECTION	
	Per 56 Kbps Facility, Per Month	
	LRIC, Volume Sensitive Unit Cost	$ 4.05
10	Per 56 Kbps Facility, Non-Recurring	$394.51
	CCS7 SIGNALING TERMINATION	
	Per STP Port, Per Month	
13	LRIC, Volume Sensitive Unit Cost	
	CCS7 SIGNALING USAGE	
	Per Call Setup Message-	
	LRIC, Volume Sensitive Unit Cost	
	TSLRIC, Average Incremental Unit Cost	
	Per TCAP Message	
	LRIC, Volume Sensitive Unit Cost	
	TSLRIC, Average Incremental Unit Cost	
	CCS7 SIGNALING USAGE SURROGATE	
	Per 56 Kbps Facility, Per Month	
	LRIC, Volume Sensitive Unit Cost	
24	TSLRIC, Average Incremental Unit Cost	

TAB 4

SECTION 4

CCS7 SIGNALING TRANSPORT SERVICE

COST DEVELOPMENT - RECURRING

This section defines the recurring cost development for Common Channel Signaling/System Signaling 7 (CCS7) Signaling Transport Service.

Generally, economic cost development is outlined in Section 2. Network architecture is determined; the necessary equipment is identified; software and material prices are obtained; and, utilization and loading factors are applied. Annual cost factors are applied to convert the investment to cost. Labor expense is directly identified.

The signaling connection and termination costs are comprised of an access link facility from a customer's location and the termination of that facility at the Signal Transfer Point (STP - a packet switch in the common channel signaling network).

For the access link on Workpaper 2, the investment for each facility component in the link is multiplied by its associated annual cost factor and summed to determine the annual cost. The annual cost is multiplied by the gross receipts tax factor and divided by twelve to derive the monthly cost.

For the termination of the access link on Workpaper 3, the annual cost of each vendor's hardware and the equivalent annual cost of the software (where applicable) for the termination of the access facility at the STP is developed using current vendor prices. These costs are divided by twelve and the resulting monthly costs are averaged in proportion to the relative number of ports.

The signaling usage is developed by first developing the CCS7 Signaling Transport cost per octet, followed by per signal message and finally per 56 Kbps Common Channel Signaling Access Facility per month.

An octet is an eight bit binary word. It is the basic element that composes the Signal Units that are used to convey information over the Common Channel Signaling network.

The cost per octet is based on the network infrastructure that provides signaling transport:

- The Signal Transfer Points (STPs), the packet switches that route signal units from one signaling link to another.
- The Cross Links and associated Port Terminations that connect mated STP pairs.
- The Access Links and associated Port Terminations that connect Service Switching Points (SSP) end offices to their home pair of STPs.

This study excludes the cost of network facilities and software feature packages that are specific to an individual service, e. g., Advanced Intelligent Network Services, 800 DataBase Service, etc.

On Workpaper 7, the capacity of a signaling link in octets per month and the expected monthly octets carried by Common Channel Signaling Access (CCSAC) Links during calendar year 1995 are estimated.

Then on Workpaper 6, the cost per octet for Local STP Cross Links and SSP Access Links is calculated. The mileage-related investment for each facility component was multiplied by the average miles per link and added to the fixed investments. Fundamental unit investments for 56 kilobit per second interoffice facilities were used. The investments were then multiplied by their associated annual cost and summed to determine the annual cost.

The monthly cost divided by the link's capacity in octets produces the cost per octet for the link.

Next on Workpaper 5, the cost per octet for the Port Termination of a link is developed. The annual cost of each vendor's hardware prices and the equivalent annual cost of the software prices (where applicable) are first calculated. The monthly costs are then averaged in proportion to the relative number of ports. The resulting average port cost is divided by the link's monthly capacity in octets to develop the cost per octet.

The STP costs on Workpaper 4 are developed similarly to the Port costs. The investment and software expense for each vendor is first calculated per link pair. An octet will be received over one link and then transmitted over another. An STP's octet capacity is then a function of the number of link pairs and the capacity of a signaling link.

The vendor specific investments and software expense per link pair are averaged in proportion to the relative number of STPs.

The capitalized (Company) engineering, installation, common equipment and power are added to the investment and the land and building investments are calculated. These are multiplied by their associated annual cost factors, summed and divided by the monthly capacity in octets for a link pair.

The software expense is annualized and a cost per octet is also calculated.

The monthly cost of the average Cross Links and Ports for an STP are calculated similarly. These C Links and Ports tie STPs together for administrative communication.

Among the CCS7 Transport Service Components, the STP software expense and the C Links/Ports are volume insensitive. The quantities and cost of the other components are a function of demand, and are volume sensitive.

On Workpaper 1, using the average octets per message, the Integrated Service Digital Network - User Part (ISUP, trunk set-up signaling messages) and the Transactions Capabilities Application Part (TCAP, information transfer messages) costs per message are developed.

The cost per octet and the average octets per 56 Kbps CCSAC facility are then used to develop the monthly signaling usage per facility.

The following Workpapers detail the cost development.

1	**CCS7 SIGNALING**		**FLORIDA**
2	**TRANSPORT SERVICE COST SUMMARY**		**WORKPAPER 1**
3	**RECURRING COST**		**PAGE 1 OF 1**
4			
5			A
6	**DESCRIPTION**	**SOURCE**	**AMOUNT**
7			
8	**CCS7 Signaling Connection**		
9	- Per 56 Kbps Facility, per mo - Volume Sensitive	WP2, Ln31	**$4.05**
10			
11			
12			
13	**CCS7 Signaling Termination**		
14	- Per STP Port, per mo. - Volume Sensitive	WP3, Ln35	[redacted]
15			
16	**CCS7 Signaling Usage**		
17	STP, C Links & Port - Volume Sensitive	WP4, P1, Ln32	[redacted]
18	STP, C Links & Port - Volume Insensitive	WP4, P1, Ln33	[redacted]
19			
20			
21	A Links and Ports -Volume Sensitive	WP5,Ln35 + WP6,Ln21	[redacted]
22			
23	Gross Receipts Tax Factor		1.0152
24			
25	Cost Per Octet, Volume Sensitive	(Ln17+Ln21)xLn23	[redacted]
26	Cost Per Octet, Volume Insensitive	(Ln18)xLn23	[redacted]
27			
28	Average Octets per setup(ISUP) Message		24.5
29	Average Octets per TCAP Message		84.5
30			
31	**CCS7 Usage Per Call SetUp (ISUP)Message**		
32	LRIC, Volume Sensitive Incremental Unit Cost	Ln25 x Ln 28	[redacted]
33	Volume Insensitive Incremental Unit Cost	Ln26 x Ln 28	[redacted]
34	TSLRIC, Average Incremental Unit Cost	Ln32 + Ln33	[redacted]
35			
36	**CCS7 Usage Per TCAP Message**		
37	LRIC, Volume Sensitive Incremental Unit Cost	Ln25 x Ln29	[redacted]
38	Volume Insensitve Incremental Unit Cost	Ln26 x Ln29	[redacted]
39	TSLRIC, Average Incremental Unit Cost	Ln37 + Ln38	[redacted]
40			
41	Average Monthly Octets per 56 Kbps Facility	Workpaper 7 Ln 27	260,462,704
42			
43	CCS7 Signaling Usage Surrogate		
44	LRIC, Volume Sensitive Incremental Unit Cost	Ln25 x Ln41	[redacted]
45	Volume Insensitive Incremental Unit Cost	Ln26 x Ln41	[redacted]
46	TSLRIC, Average Incremental Unit Cost	Ln44 + Ln45	[redacted]
	PRIVATE/PROPRIETARY		
	Contains Private and/or Proprietary Information		
	May not be used or Disclosed Outside The BellSouth Companies		
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1	CCS7 SIGNALING		
2	CONNECTION		FLORIDA WORKPAPER 2
3			PAGE 1 OF 1
4			
5			
6	DESCRIPTION	SOURCE	AMOUNT
7			
8	Investment		
9	Land		$0.34
10	Building		$7.48
11	Digital Circuit		$182.73
12	Aerial		$3.60
13	Buried		$11.70
14	Underground		$4.50
15	Poles		$0.90
16	Conduit		$2.40
17	Total Cost		$213.65
18			
19	Annual Cost Factor		
20	Land 20C		0.1745
21	Building 10C		0.1893
22	Digital Circuit 357C		0.2292
23	Aerial 822C		0.2021
24	Buried 845C		0.1989
25	Underground 85C		0.2017
26	Poles 811C		0.2137
27	Conduit 84C		0.1658
28			
29	Annual Cost	Algorithm 1	$47.91
30	Gross Receipts Tax Factor		1.0152
31	Total Monthly Cost	(Ln29xLn30)/12	$4.05
	Algorithm 1: (L9xL20)+(Ln10xLn21)+(Ln11xLn22)+(Ln12xLn23)+(Ln13xLn24)+(Ln14xLn25)+		
	(Ln15xLn26)+(Ln16xLn27)		
	PRIVATE/PROPRIETARY		
	Contains Private and/or Proprietary Information		
	May not be used or Disclosed Outside The BellSouth Companies		
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1	**CCS7 SIGNALING**		**FLORIDA**
2	**TERMINATION**		**WORKPAPER 3**
3			**PAGE 1 OF 1**
4			
5		A	B.
6	**DESCRIPTION**	**SOURCE**	**AMOUNT**
7			
8	**VENDOR A**		
9	Investment per Port		
10	Hardware Discount Factor	[redacted]	
11	Total Investment	Ln 9 x Ln 10	
12	Annual Cost Factor (377C)		0.2527
13	Monthly Cost Per Port	(Ln 11 x Ln 12)/12	
14			
15	**VENDOR B**		
16	Investment per Port		
17	Hardware Discount Factor	[redacted]	
18	Total Investment	Ln 16 x Ln 17	
19	Annual Cost Factor (377C)		0.2527
20	Monthly Cost Per Port	(Ln 18 x Ln 19)/12	
21			
22	Software per Port		
23	Software Discount Factor	[redacted]	
24	Total Software Expense	Ln 22 x Ln 23	
25	Annuity Factor		0.2857
26	Equivalent Monthly Cost per Port	(Ln 24 x Ln 25)/12	
27	Total Monthly Cost per Port	Ln 20 + 26	
28			
29	Port Ratio, Vendor A		0.62
30	Port Ratio, Vendor B		0.38
31	Average Monthly Cost per Port	(Ln13xLn29)+(Ln27xLn30)	
32			
33	Gross Receipts Tax Factor		1.0152
34			
35	**Total Average Monthly Cost per Port**	**Ln 31 x Ln 33**	
	Note : There is no software Port expense associated with Vendor A		
	PRIVATE/PROPRIETARY		
	Contains Private and/or Proprietary Information		
	May not be used or Disclosed Outside The BellSouth Companies		
	Except Pursuant to a Written Agreement		

1	DEVELOPMENT OF CCS7 SIGNALING COST		FLORIDA
2	PER OCTET FOR STP'S AND C LINKS		WORKPAPER 4
3			PAGE 1 OF 3
4			
5			A
6	DESCRIPTION	SOURCE	AMOUNT
7	STP		
8	Investment per Link Pair (Excluding Port Term.)	WP 4 Pg 3 Ln 33	
9	Company Engineering and Installation		1.1652
10	Miscellaneous Common Equipment and Power		1.0990
11	Total Investment per Link Pair (Hardware)	Ln8xLn9xLn10	
12	Land Factor		0.0023
13	Building Factor		0.0382
14	Annual Cost Factor, Hardware (377C)		0.2527
15	Annual Cost Factor, Land (20C)		0.1745
16	Annual Cost Factor, Building (10C)		0.1893
17	Annual Cost Hardware	Ln 11 x Ln 14	
18	Annual Cost Land	Ln 11 x Ln 12 x Ln 15	
19	Annual Cost Building	Ln 11 x Ln 13 x Ln 16	
20	Annual Cost per Link Pair (Hardware) (VS)	Ln 17+Ln18+Ln19	
21	Software Expense per Link Pair (Excluding Port Termination)	WP 4 Pg 3 Ln 34	
22	Annuity Factor		0.2857
23	Equivalent Annual Cost per Link Pair (Software) (VIS)	Ln 21 x Ln 22	
24	Monthly Cost per Link Pair		
25	-Hardware, Land & Building - Volume Sensitive	Ln 20 / 12	
26	-Software - Volume Insensitive	Ln 23 / 12	
27			
28	Average Pair Links		112
29	Monthly Cost per Port Pair & C Link	(2x WP 5 Ln31)+(1xWP 6 Ln 19)	
30	Monthly Cost per Link Pair, (Volume Insensitive)	Ln 29 / Ln 28	
31	Octets per month per Link Pair	WP 7 Ln 18	2,206,310,400
32	Cost per Octet - Volume Sensitive	Ln 25/Ln 31	
33	Cost per Octet - Volume Insensitive	(Ln 26 + Ln 30)/Ln 31	
34	Cost per Octet	Ln 32 + Ln 33	
	PRIVATE/PROPRIETARY		
	Contains Private and/or Proprietary Information		
	May not be used or Disclosed Outside The BellSouth Companies		
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1	**DEVELOPMENT OF CCS7 SIGNALING COST**		**FLORIDA**
2	**PER LINK PAIR FOR STP'S**		**WORKPAPER 4**
3			**PAGE 2 OF 3**
4			
5		A	B
6	**DESCRIPTION**	**SOURCE**	**AMOUNT**
7	**VENDOR A**		
8	Number of Switches		42
9	Ratio to Total		0.55
10	Link Pairs (Excluding C Links)		126
11			
12	Hardware Investment		
13	Capitalized Software		
14	Engineering Investment		
15	Installation Investment		
16	Hardware Discount Factor		
17	Software Discount Factor		
18	Engineering Discount Factor		0
19	Installation Discount Factor		0
20	Total Hardware Investment	Ln 12 x Ln 16	
21	Total Software Investment	Ln 13 x Ln 17	
22	Total Engineering Investment	Ln 14	
23	Total Installation Investment	Ln 15	
24	**Total Investment**	Sum(Ln20-Ln 23)	
25			
26	Software Expense		
27	Software Discount Factor		
28	**Total Software Expense**	Ln 26 x Ln 27	
29			
30	**Investment per Link Pair (Volume Sensitive)**	Ln 24/ Ln 10	
31	**Software Expense per Link Pair (Volume Insensitive)**	Ln 28 / Ln 10	
	PRIVATE/PROPRIETARY		
	Contains Private and/or Proprietary Information		
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1	**DEVELOPMENT OF CCS7 SIGNALING COST**		**FLORIDA**
2	**PER LINK PAIR FOR STP'S**		**WORKPAPER 4**
3			**PAGE 3 OF 3**
4		A	
5			B
6	**DESCRIPTION**	**SOURCE**	**AMOUNT**
7	**VENDOR B**		
8	Number of Switches'		34
9	Ratio to Total		0.45
10	Link Pairs (Excluding C Links)		94
11			
12	Hardware Investment		
13	Software Investment		
14	Engineering Investment		
15	Installation Investment		
16	Hardware Discount Factor		
17	Software Discount Factor		
18	Engineering Discount Factor		0
19	Installation Discount Factor		0
20	Total Hardware Investment	Ln 12 x Ln 16	
21	Total Software Investment	Ln 13 x Ln 17	
22	Total Engineering Investment	Ln 14	
23	Total Installation Investment	Ln 15	
24	**Total Investment**	Sum(Ln20-Ln23)	
25			
26	Software Expense		
27	Software Discount Factor		
28	**Total Software Expense**	Ln 26 x Ln 27	
29			
30	**Investment per Link Pair (Volume Sensitive)**	Ln 24/ Ln 10	
1	**Software Expense per Link Pair (Volume Insensitive)**	Ln 28 / Ln 10	
2			
3	**Weighted Avg Investment per Link Pair (Volume Sensitive)**	(WP4 pg 2 Ln30xLn9)+(Ln30xLn9)	
34	**Weighted Avg Software Expense per Link Pair (Volume Insensitive)**	(WP4 pg 2 Ln31xLn9)+(Ln31xLn9)	
	PRIVATE/PROPRIETARY		
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1	**DEVELOPMENT OF CCS7 SIGNALING COST**		**FLORIDA**
2	**PER OCTET FOR STP PORTS**		**WORKPAPER 5**
3			**PAGE 1 OF 1**
4			
5			
6	**DESCRIPTION**	**SOURCE**	**AMOUNT**
7			
8	**VENDOR A**	A	B
9	Investment per Port		
10	Hardware Discount Factor		
11	Total Investment	Ln 9 x Ln 10	
12	Annual Cost Factor 377C		0.2527
13	Monthly Cost Per Port	(Ln 11 x Ln 12)/12	
14			
15	**VENDOR B**		
16	Investment per Port		
17	Hardware Discount Factor		
18	Total Investment	Ln 16 x Ln 17	
19	Annual Cost Factor 377C		0.2527
20	Monthly Cost Per Port	(Ln 18 x Ln 19)/12	
21			
22	Software per Port		
23	Software Discount Factor		
24	Total Software Expense	Ln 22 x Ln 23	
25	Annuity Factor		0.2857
26	Equivalent Monthly Cost per Port	(Ln 24 x Ln 25)/12	
27	Total Monthly Cost per Port	Ln 20 + 26	
28			
29	Port Ratio, Vendor A		0.62
30	Port Ratio, Vendor B		0.38
31	Average Monthly cost per Port	(Ln13xLn29)+(Ln27xLn30)	
32			
33	Octets per Month per Port	WP 7 Ln 18	2,206,310,400
34			
35	Cost per Octet per Port -Volume Sensitive	Ln 31/ Ln 33	
	NOTE: There is no software Port expense associated with Vendor A.		
	PRIVATE/PROPRIETARY		
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1	CCS7 COST						FLORIDA
2	PER OCTET FOR C LINKS AND SSP A LINKS						WORKPAPER 6
3							PAGE: 1 OF 1
4							
5							
6	<u>C LINK/SSP A LINK, 30 AIR MILES</u>						
7							
8			PER			REG	TOTAL
9		FIXED	MILE	MILES	INVESTMENT	ACF	ANNUAL COST
10	LAND 20C	0.34	0	30	$0.34	0.1745	$0.06
11	BUILDING 10C	5.68	0.06	30	$7.48	0.1893	$1.42
12	CIRCUIT 357C	139.23	1.45	30	$182.73	0.2292	$41.88
13	AERIAL 822C		0.12	30	$3.60	0.2021	$0.73
14	BURIED 845C		0.39	30	$11.70	0.1989	$2.33
15	UNDERGROUND 85C		0.15	30	$4.50	0.2017	$0.91
16	POLES 811C		0.03	30	$0.90	0.2137	$0.19
17	CONDUIT 84C		0.08	30	$2.40	0.1658	$0.40
18	TOTAL COST				$213.65		$47.91
19	TOTAL MO. COST						$3.99
20	OCTETS/MO						2,206,310,400
21	COST PER OCTET (VOLUME SENSITIVE)						$0.0000000018
	PRIVATE/PROPRIETARY						
	Contains Private and/or Proprietary Information						
	May not be used or Disclosed Outside The BellSouth Companies						
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1	CCS7 SIGNALING TRANSPORT SERVICE		FLORIDA
2			WORKPAPER 7
3	DEMAND		PAGE: 1 OF 1
4			
5			
6			
7	DESCRIPTION	SOURCE	AMOUNT
8			
9	LINK OCTET CAPACITY		
10	CCS7 bits per second		56,000
11	Bits per Octet		8
12	Total octets per second	Ln 10 / Ln 11	7,000
13	Engineered Capacity		0.32
14	Total Engineered Octets per sec	Ln 12 x Ln 13	2,240
15	Seconds per busy hour		3,600
16	Total octets per busy hour	Ln 14 x Ln 15	8,064,000
17	Ratio, Avg. Calendar day to busy hour		9
18	Total Octets per month per link	Ln 16xLn17x30.4	2,206,310,400
19			
20	OCTETS - CCSAC LINKS		
21	SS7 Access MOU - 1995		78,945,825,664
22	CCSAC Links - 1995		854
23	Monthly MOU per CCSAC Link	(Ln 21/ Ln 22)/12	7,703,535
24	MOU per Message		3.7
25	Monthly Messages per CCSAC Link	Ln 23 / Ln 24	2,082,036
26	Octets per Message		125.1
27	Monthly Octets per CCSAC Link	Ln 25 x Ln 26	260,462,704
	PRIVATE/PROPRIETARY		
	Contains Private and/or Proprietary Information		
	May not be used or Disclosed Outside The BellSouth Companies		
	Except Pursuant to a Written Agreement		

TAB 5

SECTION 5

CCS7 SIGNALING TRANSPORT SERVICE

COST DEVELOPMENT - NONRECURRING

Nonrecurring costs are one-time costs incurred as a result of the provisioning, installing, disconnecting and completion of orders initiated by a customer request for the CCS7 Signaling Transport Service. The Nonrecurring Cost Study is performed to determine the service order, provisioning and disconnect costs associated with CCS7 Signaling Connection. Calculations for the nonrecurring costs are included in this section.

The first step in developing nonrecurring costs is to determine the cost elements to be studied. Each cost element is then described by all of the individual work functions required to provision the element. An example of a work function is developing software translations for a switch routing database.

The work functions required to provide CCS7 Signaling Connection can be grouped into five categories. These are:

1) Service Order
2) Initiate/Administer Circuit Orders
3) Develop Circuit Specifications
4) Develop Software Translations
5) Update Circuit Database

Work functions included in these categories range from clerical activities to installation activities.

The next step in the development of nonrecurring costs is to determine work times for each work function associated with the nonrecurring costs of CCS7 Signaling Connection. The work times of the various work groups are determined from subject matter expert inputs. Each work time estimate is made by a subject matter expert who thoroughly understands how each activity is done.

A spreadsheet model is used to incorporate the specific work functions and labor rates. In order to arrive at the nonrecurring cost for the element studied, the work times for each work function required are multiplied by the appropriate labor rate.

The basic process by which nonrecurring costs are calculated consists of combining unit work times with hourly costs of each specific service category. These labor times and service order related work times are multiplied by the directly assigned labor rates for the work groups performing the activities. Utilizing work functions, work times, and labor rates, disconnect costs are calculated in the same manner as the installation costs. Since the labor costs will occur in the future, the current labor rates are inflated to that future period in time and then discounted to the present. The discounted disconnect cost is added to the installation cost and gross receipts tax is applied to develop the total nonrecurring cost.

The following workpaper details the cost development.

1	CCS7 SIGNALING CONNECTION		FLORIDA
2			WORKPAPER 1
3	NON-RECURRING COST		PAGE 1 OF 1
4			
5			
6	<u>DESCRIPTION</u>	<u>SOURCE</u>	<u>AMOUNT</u>
7			
8	<u>SERVICE ORDER/PROVISIONING - HOURS</u>		
9	Service Order Processing		0.60
10	Initiate/Administer Circuit Orders		4.50
11	Develop Circuit Specifications		2.20
12	Software Translations		1.00
13	Update Circuit Database		0.50
14			
15	Service Order Processing - Disconnect		0.60
16	Initiate/Administer Circuit Orders - Disconnect		1.50
17	Update Circuit Database - Disconnect		0.15
18			
19	<u>SERVICE ORDER/PROVISIONING - LABOR COST PER HOUR 1996-1998</u>		
20	Service Order Processing - JFC 2300		$40.67
21	Initiate/Administer Circuit Orders - JFC 470X		$35.75
22	Develop Circuit Specifications - JFC 470X		$35.75
23	Software Translations - JFC 432X		$42.05
24	Update Circuit Database - JFC 27XX		$32.40
25			
26	Disconnect Factor		0.8014
27			
28	<u>SERVICE ORDER/PROVISIONING - COST</u>		
29	Service Order Processing	Ln 9 x Ln 20	$24.40
30	Initiate/Administer Circuit Orders	Ln 10 x Ln 21	$160.88
31	Develop Circuit Specifications	Ln 11 x Ln 22	$78.65
32	Software Translations	Ln 12 x Ln 23	$42.05
33	Update Circuit Database	Ln 13 x Ln 24	$16.20
34			
35	Service Order Processing - Disconnect	Ln 15 x Ln 20 x Ln 26	$19.56
36	Initiate/Administer Circuit Orders - Disconnect	Ln16 x Ln 21 x Ln 26	$42.98
37	Update Circuit Database - Disconnect	Ln 17 x Ln 24 x Ln 26	$3.89
38			
39	Gross Receipts Tax Factor		1.0152
40			
41	Total Nonrecurring Cost	Sum(Ln29-Ln37) x Ln 39	$394.51
	PRIVATE/PROPRIETARY		
	Contains Private and/or Proprietary Information		
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	Except Pursuant to a Written Agreement		

TAB 6

SECTION 6

CCS7 SIGNALING TRANSPORT SERVICE

SPECIFIC STUDY ASSUMPTIONS

The cost study for CCS7 Transport Service is based on direct incremental costing techniques that are in accordance with accepted economic theory, and equipment purchasing information.

Cost study assumptions are as follows:

> Software expenses were projected to the 1996-1998 study period using Telephone Plant Indexes and investment inflation factors for their associated Digital Switching Equipment (377C).
>
> Software expenses such as Right-To-Use fees are amortized over five years to develop an equivalent annual cost.

TAB 7

SECTION 7

FLORIDA

CCS7 SIGNALING TRANSPORT SERVICE

FACTORS AND LOADINGS

Following are the incremental annual cost factors, miscellaneous loadings and labor rates used in the Common Channel Signaling Transport Service cost study.

1996 - 1998 Directly Assigned Hourly Labor Rates (Regional):

	JFC	
Customer Point of Contact (ICSC)	2300	$40.67
Circuit Provisioning Center	470X	$35.75
Installation and Maintenance - Software	432X	$42.05
Network Services Clerical	27XX	$32.40

Labor Inflation Rate From 1995		1.0618
Hardware Inflation Rate From 1995 (Regional)		1.011
Amortization Factor (5 Years @ 13.2%)		0.2857
Engineering & Installation Factor 377C (Regional)		1.1652
Land Factor 20C (Regional)		0.0023
Building Factor 10C (Regional)		0.0382
Miscellaneous Common Equipment and Power Factor	377C (Regional)	1.0990
Gross Receipts Tax Factor (Florida)		1.0152
Disconnect Factor, 5 Years		0.8014
Annual Cost Factors	(See following spreadsheet)	

Image Table: ACFCURRENT

1995 BELLSOUTH TELECOMMUNICATIONS
ACCOUNT AVERAGE ANNUAL COST FACTORS
INCREMENTAL

Rev 10-May-96

* FOR USE IN SERVICE COST STUDIES ONLY

	field_code	depreciation a	acfc_com b	acfc_inc tax c	cap_exp d	acfc_misc e	acfc_adval tax f	admin_dir g	acfc_oper_exp h	tot_combined i
			13.2%		(a+b+c)				(e+f+g)	(d+h)
LAND	20C	0.0000	0.1118	0.0514	0.1632	0.0000	0.0113	0.0000	0.0113	0.1745
BUILDINGS	10C, 110C, 810C	0.0302	0.0966	0.0452	0.1740	0.0040	0.0113	0.0000	0.0153	0.1893
ANALOG ELEC SWITCH	77C, 877C, 977C	0.2629	0.0680	0.0306	0.3615	0.0210	0.0113	0.0000	0.0323	0.3938
DIGITAL ELEC SWITCH	377C, 887C	0.1134	0.0651	0.0302	0.2087	0.0327	0.0113	0.0000	0.0440	0.2527
OPERATOR SYSTEMS	117C,417C	0.1083	0.0751	0.0404	0.2238	0.0067	0.0113	0.0000	0.0180	0.2418
RADIO	167C, 67C, 867C, 967C	0.1434	0.0750	0.0348	0.2532	0.0142	0.0113	0.0000	0.0255	0.2787
DIGTL CIRC-DDS	157C	0.1810	0.0675	0.0305	0.2790	0.0145	0.0113	0.0000	0.0258	0.3048
DIGTL CIRC-PAIR GAIN	257C,D257C,F257C	0.1134	0.0636	0.0288	0.2058	0.0104	0.0113	0.0000	0.0217	0.2275
DIGTL CIRC-OTHER	357C,T357C,F357C,857C,957C	0.1134	0.0638	0.0297	0.2069	0.0110	0.0113	0.0000	0.0223	0.2292
ANALOG CIRC-PAIR GAIN	457C	0.1689	0.0636	0.0248	0.2573	0.0033	0.0113	0.0000	0.0146	0.2719
ANALOG CIRC-OTHER	57C	0.1689	0.0639	0.0282	0.2610	0.0140	0.0113	0.0000	0.0253	0.2863
PBX	158C, 258C	0.2296	0.0771	0.0346	0.3413	0.0368	0.0113	0.0000	0.0481	0.3894
PUBLIC-COIN	198C, 188C	0.1483	0.0763	0.0348	0.2594	0.1972	0.0113	0.0000	0.2085	0.4679
PUBLIC-COINLESS	298C, 288C	0.1483	0.0763	0.0348	0.2594	0.1076	0.0113	0.0000	0.1189	0.3783
PUBLIC-OTHER	998C, 988C	0.1483	0.0763	0.0348	0.2594	0.0582	0.0113	0.0000	0.0695	0.3289
OTHER TERMINAL EQPT	358C,D758C,858C,558C, 828C,928C,F958C	0.1733	0.0812	0.0359	0.2904	0.0585	0.0113	0.0000	0.0698	0.3602
SUBSCRIBER PAIR GAIN	758C,D758C,F758C	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
POLES	1C, 811C	0.0671	0.0725	0.0325	0.1721	0.0303	0.0113	0.0000	0.0416	0.2137
AERIAL CA - METAL	22C, 12C, 802C	0.0917	0.0797	0.0338	0.2052	0.0413	0.0113	0.0000	0.0526	0.2578
AERIAL CA - FIBER	822C, 812C, 882C, 982C,D22C, F22C,T22C,D12C,F12C,T12C	0.0667	0.0784	0.0347	0.1798	0.0110	0.0113	0.0000	0.0223	0.2021
UNGROUND CA - METAL	5C, 805C	0.1036	0.0813	0.0342	0.2191	0.0255	0.0113	0.0000	0.0368	0.2559
UNGROUND CA - FIBER	85C,885C,985C,D5C,F5C,T5C	0.0626	0.0800	0.0358	0.1784	0.0120	0.0113	0.0000	0.0233	0.2017
BURIED CA - METAL	45C, 845C	0.0876	0.0809	0.0354	0.2039	0.0417	0.0113	0.0000	0.0530	0.2569
BURIED CA - FIBER	845C,856C,956C,D45C, F45C,T45C	0.0585	0.0816	0.0367	0.1768	0.0108	0.0113	0.0000	0.0221	0.1989
SUBMARINE CA-METAL	6C, 806C	0.0860	0.0814	0.0366	0.2040	0.0106	0.0113	0.0000	0.0219	0.2259
SUBMARINE CA-FIBER	86C,886C,D6C,F6C,T6C	0.0860	0.0814	0.0355	0.2029	0.0106	0.0113	0.0000	0.0219	0.2248
INTRBLD NTWK-METAL	52C	0.0661	0.0785	0.0340	0.1786	0.0265	0.0113	0.0000	0.0378	0.2164
INTRBLD NTWK-FIBER	852C,D52C,F52C,T52C	0.0661	0.0785	0.0340	0.1786	0.0265	0.0113	0.0000	0.0378	0.2164
CONDUIT SYSTEMS	4C, 84C, 94C	0.0242	0.0877	0.0401	0.1520	0.0025	0.0113	0.0000	0.0138	0.1658