#### **ATTACHMENT B**

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# FLORIDA



# DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE

TELRIC COST STUDY DOCUMENTATION

SECTIONS A THRU 7

#### FLORIDA

### DIRECT ACCESS TO DIRECTORY ASSISTANCE 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 TELRIC
SECTION 5	COST DEVELOPMENT - NONRECURRING TELRIC
SECTION 6	SPECIFIC STUDY ASSUMPTIONS
SECTION 7	FACTORS AND LOADINGS

### **SECTION A**

#### SECTION A

#### **FLORIDA**

### DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE PROPRIETARY RATIONALE

The Direct Access to Directory Assistance Study contains actual unit cost information for discrete cost elements. 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 Direct Access to Directory Assistance Service Cost Study is considered proprietary.

#### FLORIDA

### DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE INTRODUCTION AND OVERVIEW

This Total Element Long Run Incremental Cost (TELRIC) study is being provided to support Direct Access to Directory Assistance Service (DADAS). The costs presented in this study are based on the TELRIC methodology established by the Federal Communication Commission's (FCC) First Report and Order in CC Docket 96-98 (FCC Order) released August 8, 1996.

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.

A long run analysis is performed to ensure that the time period studied is sufficient to capture all forward looking costs affected by the business decision.

The recurring and nonrecurring costs presented in this study are levelized so as to be appropriate for the 1997 - 1999 study period. These costs are developed by using 1996 level TELRIC loadings, annual cost factors and labor rates designed to produce TELRIC results. The study is a Regional study.

#### **FLORIDA**

#### DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE

#### **DESCRIPTION OF STUDY PROCEDURES**

This section describes the general principles for the development of the Total Element Long Run Incremental Costs (TELRIC) supporting Direct Access to Directory Assistance Service (DADAS).

The purpose of the TELRIC methodology established by the FCC order, is to set the rates for interconnection and unbundled network elements. The basis for a TELRIC study is forward looking long run economic cost methodology. Volume sensitive and volume insensitive costs are identified to develop the direct costs caused by providing the particular network element being studied. TELRIC methodology anticipates pricing of elements in a wholesale network company. Many costs regarded as common or shared would be included as directly attributable in a TELRIC study. The FCC pricing methodology also specifies that, over and above TELRIC, the additional portion of forward looking common costs that cannot be directly attributed to any particular network element will be allocated among the cost elements. TELRIC includes both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs.

#### THE DEVELOPMENT OF RECURRING COSTS

The per unit costs to BellSouth Telecommunications, Inc. resulting from the capital investments necessary to provide a service are called recurring costs. Recurring costs represent a forward looking view of technology and deployment and include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs consist of plant specific expenses and ad valorem taxes. These expenses contribute to the ongoing cost to the Company associated with the initial capital investment. Recurring costs may also be noninvestment related, such as expensed labor, feature specific software and contract expenses. Also included in the recurring TELRIC are shared and common costs directly attributable to the network element. Gross receipts tax is calculated on the TELRIC.

The first step in developing a TELRIC study for DADAS is to determine the forward looking network architecture. Prices for the equipment are defined. Next, account specific Telephone Plant Indexes are applied, when necessary, to trend investments and noninvestment related expenses to the 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. Next, 1996 level TELRIC Annual Cost Factors are used to calculate the direct cost of capital, plant specific 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 which includes directly attributable shared and common costs. Annual Total Element Long Run Incremental Costs by account codes are then summed and divided by the associated demand to arrive at a cost per cost element.

The directly attributable shared and common cost components of the annual TELRIC factors are calculated as follows. First, a detailed analysis of the forward looking directly assigned costs associated with the interconnect or unbundled network element is performed. The remaining costs of doing business are then analyzed to determine whether they are directly attributable shared and common costs that can be reasonably attributed to network elements.

Next, the directly attributable shared and common costs are projected forward and segregated by the functional areas to which they are related. The functional areas are wholesale operations, retail services operations, and combined wholesale and retail services operations. Attribution factors based on the specific wholesale functional area, such as central office equipment (COE) investment, COE salary and wages, etc. are then developed and applied to the respective costs. These attributed costs are accumulated by related network investment category, such as pair gain equipment, buried cable, etc. and attributed shared cost factors are developed. These attributed shared cost factors are then included as a component of the TELRIC annual cost factors by investment category. All directly attributed costs related to retail services operations are excluded.

The common cost allocation factor is applied to TELRIC to produce the forward looking economic cost, as defined in the FCC Order, Appendix B, Section 51.505, which includes an appropriate share of common costs. The common cost allocation factor is calculated by summing all wholesale costs that cannot be reasonably attributed to specific elements, services or functions and dividing by the sum of the directly assignable and directly attributable wholesale costs.

#### 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 labor rate for the work group performing the function.

The TELKIC labor rates are calculated as follows. Salary and wages, as used in the determination of annual TELRIC cost factors, are accumulated on a basis consistent with specific

force groups. Shared costs attributable to salaries and wages are then accumulated on a basis consistent with the development of the respective force group's labor rate. A factor is then developed for each force group by dividing the attributed shared costs (human resources, office equipment, motor vehicles, land and building space, etc.) by the related salaries and wages. This factor is then applied to the salary and wage portion of the incremental labor rate for each force group, and the result is added to the incremental labor rate to determine the TELRIC labor rate.

Utilizing work functions, work times, and TELRIC 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 TELRIC 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 nonrecurring cost.

The common cost allocation factor is applied to the nonrecurring TELRIC to produce the forward looking economic cost, as defined in the FCC Order, Appendix B, Section 51.505, which includes an appropriate share of common costs.

#### **FLORIDA**

#### DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE **SUMMARY OF RESULTS**

This section contains a cost summary for the Total Element Long Run Incremental Cost (TELRIC) for DADAS.

#### DADAS SERVICE CHARGE, PER MONTH

TELRIC	\$6,772.64
Common Cost Allocation Factor	1.0804
Total Cost	\$7,317.16
DADAS QUERY CHARGE, PER QUERY	\$0.0048
Common Cost Allocation Factor	1.0804
Total Cost	\$0.0052

DADAS SERVICE ESTABLISHMENT CHARGE, NONRECURRING

**IN PROGRESS** 

#### FLORIDA

### DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE COST DEVELOPMENT - RECURRING

This section defines the cost 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 TELRIC factors are applied to convert the investment to cost. Labor expense is directly identified.

#### Workpaper 1

Provides the summary of Total Element Long Run Incremental Cost (TELRIC) for the DADAS Service Charge and Query Charge.

#### Workpaper 2

Develops the DADAS DataBase Service Charge. The annual labor expenses for the system administrator and the two technical support personnel dedicated to the service are divided by the projected number of customers.

#### Workpaper 3

The individual hardware and software components for the Regional Directory Assistance DataBase System are developed.

Cost for the Administrative DataBase and the 1.544 Mbit per second links from the Administrative to the Operations Databases are developed separately from 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 an 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 annual costs are divided by the annual DA calls.

The equivalent annual cost of DADAS application software is divided by the expected annual calls.

The system and software unit costs are then separately summed.

The following Workpapers detail this cost development.

1.	FLORIDA		FLORIDA
2.			WORKPAPER 1
3.	DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE		PAGE 1 OF 1
4.			10/07/96
5.	SUMMARY OF RECURRING COSTS		
6.			
7.			
8.	DADAS DATABASE SERVICE CHARGE, PER MONTH		
9.			
10.	DIRECT COST	WP2,PG1,LN17	\$4,676.34
11.	DIRECTLY ATTRIBUTED SHARED & COMMON COST	WP2,PG2,LN17	\$2,096.30
12.	TELRIC	LN10+LN11	\$6,772.64
13.			
14.			
15.	DADAS QUERY CHARGE, PER QUERY		
16.			
17.	DIRECT COST	WP3,PG1,LN61	\$0.0045
18.	DIRECTLY ATTRIBUTED SHARED & COMMON COST	WP3,PG2,LN55	\$0.0003
19.	TELRIC	LN17+LN18	\$0.0048
10.			

1.	FLORIDA	FLORIDA
2.		WORKPAPER 2
3.	DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE	PAGE 1 OF 2
4.		10/07/96
5.	DEVELOPMENT OF DADAS DATABASE SERVICE CHARGE	
6.		
7.	DIRECT COST	•
8.		
9.	DADAS ADMINISTRATION (1-PB58), 1997-1999	\$85,516
10.		
11.	DADAS TECHNICAL SUPPORT (2-PB56), 1997-1999	\$135,566
12.		
13.	DADAS CUSTOMERS	
14.		
15.	GROSS RECEIPTS TAX FACTOR	1.0153
16.		
17.	DIRECT MONTHLY COST (LN	9+LN11)(LN15)/(LN13)/(12) \$4,676.34

1.	FLORIDA		FLORIDA
2.			WORKPAPER 2
3.	DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE		PAGE 2 OF 2
4.			10/07/96
5.	DEVELOPMENT OF DADAS DATABASE SERVICE CHARGE		
6.			
7.	DIRECTLY ATTRIBUTED SHARED AND COMMON COST		-
8.			
9.	DADAS ADMINISTRATION (1-PB58), 1997-1999		\$28,184
10.			
11.	DADAS TECHNICAL SUPPORT (2-PB56), 1997-1999		\$70,922
12.			
13.	DADAS CUSTOMERS		
14.			
15.	GROSS RECEIPTS TAX FACTOR		1.0153
16.			
17.	DIRECTLY ATTRIBUTED SHARED & COMMON MONTHLY COST	(LN9+LN11)(LN15)(LN13)(12)	\$2,096.30

1.	FLORIDA				FLORIDA
2.	DIRECT ACCESS TO DIRECTORY				WORKPAPER 3
3.	ASSISTANCE SERVICE (DADAS)				PAGE 1 OF 2
4.					10/07/96
5.	REGIONAL DA DATABASE SYSTEM				
6.					
7.	DIRECT COST				
8.	DIRECT COC.				
9.	ADMINISTRATIVE DATABASE (1997-1999)				
-	HARDWARE INVESTMENT - VOLUME INSENSITIV				
10.					
11.	SOFTWARE EXPENSE - VOLUME INSENSITIVE				
12.	OPERATIONS DATABASES (1997-1999)				
13.					
14.					.0042
15.					.0706
16.					
17.		CTOR			1.0980
18.					.2412
19.	DIRECT ANNUAL COST FACTOR (20C)				.1486
20.	DIRECT ANNUAL COST FACTOR (10C)				.1679
21.	AMORTIZATION FACTOR				.2723
22.	ANNUAL COST				
23.	ADMINISTRATIVE DATABASE				
24.	HARDWARE	LN10xLN17xLN18			
25.	SOFTWARE	LN11xLN21			
26.	LAND	LN10xLN17xLN15xLN	19		
27.	BUILDING	LN10xLN17xLN16xLN	20		
28.	OPERATIONS DATABASE				
29.	HARDWARE	LN13xLN17xLN18			
30.	SOFTWARE	LN14xLN21			
31.	LAND	LN13xLN17xLN15xLN	19		
32.	BUILDING	LN13xLN17xLN16xLN	20		
33.					
34.	1.544 MB/S ADMINISTRATIVE LINKS (1996-1998)	CIRCUITS/	UNIT	ANNUAL	ANNUAL
35.	1.544 MDIS ADMINISTRATIVE ENVIRON (1889-1889)	MILES	INVESTMENT	COST FACTOR	COST
	CURCUIT TERMINATION (ERC)	Commence of the last of the la	A DESCRIPTION OF THE PERSON OF		
36.	CIRCUIT TERMINATION (FRC)	8	\$1,748.56	.2327	\$3,255
37.	CIRCUIT (357C)	8	\$4.34	.1486	\$5
38.	LAND (20C)	8	\$72.48	.1679	\$97
39.	BUILDING (10C)	•	\$12.40	.1079	407
40.					
41.	CIRCUIT MILEAGE (FRC)	0.500	** **	1040	\$880
42.	AERIAL (822C)	2,560	\$1.86	.1849 .1747	\$2.947
43.	BURIED (845C)	2,560	\$6.59		\$848
44.	UNDERGROUND (85C)	2,560	\$1.86	.1781	
45.	POLE (1C)	2,560	\$0.44	.1922	\$216
46.	CONDUIT (4C)	2,560	\$1.10	.1395	\$393
47.	CIRCUIT (357C)	2,560	\$29.84 \$1.24	.2327 .1679	\$17,776 \$533
		0 000		.10/1	
48.	BUILDING (10C)	2,560	\$1.24		4000
48. 49.			\$1.24		
48. 49. 50.	TOTAL ANNUAL COST - VOLUME INSENSITIVE	2,560 SUM LN37LN48	\$1.24		\$26,950
48. 49. 50. 51.			-1.24		\$26,950
48. 49. 50. 51. 52.	TOTAL ANNUAL COST - VOLUME INSENSITIVE ANNUAL DA CALLS, 1996		\$1.24		\$26,950
48. 49. 50. 51. 52. 53.	TOTAL ANNUAL COST - VOLUME INSENSITIVE ANNUAL DA CALLS, 1996 DADAS APPLICATION SOFTWARE		91.29		
48. 49. 50. 51. 52. 53. 54.	TOTAL ANNUAL COST - VOLUME INSENSITIVE ANNUAL DA CALLS, 1996		11.24		\$26,950
48. 49. 50. 51. 52. 53.	TOTAL ANNUAL COST - VOLUME INSENSITIVE ANNUAL DA CALLS, 1996 DADAS APPLICATION SOFTWARE EXPECTED ANNUAL DADAS CALLS		11.24		\$26,950 1,034,062,104
48. 49. 50. 51. 52. 53. 54.	TOTAL ANNUAL COST - VOLUME INSENSITIVE ANNUAL DA CALLS, 1996 DADAS APPLICATION SOFTWARE		\$1.24		\$26,950 1,034,062,104
48. 49. 50. 51. 52. 53. 54. 55.	TOTAL ANNUAL COST - VOLUME INSENSITIVE ANNUAL DA CALLS, 1996 DADAS APPLICATION SOFTWARE EXPECTED ANNUAL DADAS CALLS		•11.24		\$26,950 1,034,062,104
48. 49. 50. 51. 52. 53. 54. 55.	TOTAL ANNUAL COST - VOLUME INSENSITIVE ANNUAL DA CALLS, 1996 DADAS APPLICATION SOFTWARE EXPECTED ANNUAL DADAS CALLS GROSS RECEIPTS TAX FACTOR COST PER CALL	SUM LN37LN48			\$26,950 1,034,062,104 1.0153
48. 49. 50. 51. 52. 53. 54. 55. 56.	TOTAL ANNUAL COST - VOLUME INSENSITIVE ANNUAL DA CALLS, 1996  DADAS APPLICATION SOFTWARE EXPECTED ANNUAL DADAS CALLS  GROSS RECEIPTS TAX FACTOR  COST PER CALL VOLUME SENSITIVE	SUM LN37LN48	2)/LN51)xLN56		\$26,950 1,034,062,104 1.0153 0.0017
48. 49. 50. 51. 52. 53. 54. 55. 56. 57.	TOTAL ANNUAL COST - VOLUME INSENSITIVE ANNUAL DA CALLS, 1996 DADAS APPLICATION SOFTWARE EXPECTED ANNUAL DADAS CALLS GROSS RECEIPTS TAX FACTOR COST PER CALL	SUM LN37LN48	2)/LN51)xLN56		\$26,950 1,034,062,104 1.0153

1.	FLORIDA				FLORIDA
2.	DIRECT ACCESS TO DIRECTORY				WORKPAPER 3
3.	ASSISTANCE SERVICE (DADAS)				PAGE 2 OF 2
4.	7,0010 17,1102 021(17)02 (27,07.0)				10/07/98
5.	REGIONAL DA DATABASE SYSTEM				10/0/100
6.	REGIONAL DA DATABAGE GIOTEM				
7.	DIRECTLY ATTRIBUTED SHARED AND CO	MMON COST (DASCC)			_
8.	DIRECTLY ATTRIBUTED STRAKED AND ON				
9.	ADMINISTRATIVE DATABASE (1997-1999)				
10.	HARDWARE INVESTMENT - VOLUME INSENSITION	JR .			
11.					
12.					.0042
13.			*		.0706
14.					
15.		CTOR			1.0980
16.	그 그리고 하는데 가지 않아요. [60] [60] [60] [60] [60] [60] [60] [60]				.0434
17.	그러지 하다 하다 가게 되었다면 하다 하는데				.0000
18.	4 - '' - '' - '' - '' - '' - '' - '' -				.0014
19.	ANNUAL COST				
20.					
21.	HARDWARE	LN10xLN15xLN16			
22.	LAND	LN10xLN15xLN13xL			
23.	BUILDING	LN10xLN15xLN14xL	N18		
24.					
25.	HARDWARE	LN12xLN15xLN16			
26.	LAND	IN12xLN15xLN13xLN			
27.	BUILDING	LN12xLN15xLN14xL	N18		
28.					
29.	1.544 MB/S ADMINISTRATIVE LINKS (1996-1998)	CIRCUITS/	UNIT	ANNUAL	ANNUAL
30.		MILES	INVESTMENT	COST FACTOR	COST
31.	CIRCUIT TERMINATION (FRC)				
32.	CIRCUIT (357C)	8	\$1,748.56	.0372	\$520
33.	LAND (20C)	8	\$4.34	.0000	\$0
34.	BUILDING (10C)	8	\$72.48	.0014	\$1
35.					
36.	CIRCUIT MILEAGE (FRC)				
37.					
	AERIAL (822C)	2,560	\$1.86	.0299	\$142
38.	AERIAL (822C) BURIED (845C)	2,560 2,560	\$1.86 \$6.59	.0299 .0235	\$142 \$396
-	^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^	STATE OF THE PARTY			
38.	BURIED (845C)	2,560	\$6.59	.0235	\$396
38. 39.	BURIED (845C) UNDERGROUND (85C)	2,560 2,560	\$6.59 \$1.86	.0235 .0220	\$396 \$105 \$33 \$41
38. 39. 40.	BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C)	2,560 2,560 2,560	\$6.59 \$1.86 \$0.44	.0235 .0220 .0294	\$396 \$105 \$33
38. 39. 40. 41.	BURIED (845C) UNDERGROUND (85C) POLE (1C)	2,560 2,560 2,560 2,560	\$6.59 \$1.86 \$0.44 \$1.10	.0235 .0220 .0294 .0146	\$396 \$105 \$33 \$41
38. 39. 40. 41. 42.	BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C)	2,560 2,560 2,560 2,560 2,560	\$6.59 \$1.86 \$0.44 \$1.10 \$29.84	.0235 .0220 .0294 .0146 .0372	\$396 \$105 \$33 \$41 \$2,842
38. 39. 40. 41. 42. 43.	BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C)	2,560 2,560 2,560 2,560 2,560	\$6.59 \$1.86 \$0.44 \$1.10 \$29.84	.0235 .0220 .0294 .0146 .0372	\$396 \$105 \$33 \$41 \$2,842
38. 39. 40. 41. 42. 43. 44.	BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C) BUILDING (10C)	2,560 2,560 2,560 2,560 2,560	\$6.59 \$1.86 \$0.44 \$1.10 \$29.84	.0235 .0220 .0294 .0146 .0372	\$396 \$105 \$33 \$41 \$2,842 \$4
38. 39. 40. 41. 42. 43. 44. 45.	BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C) BUILDING (10C)  TOTAL ANNUAL COST - VOLUME INSENSITIVE	2,560 2,560 2,560 2,560 2,560	\$6.59 \$1.86 \$0.44 \$1.10 \$29.84	.0235 .0220 .0294 .0146 .0372	\$396 \$105 \$33 \$41 \$2,842 \$4
38. 39. 40. 41. 42. 43. 44. 45. 46.	BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C) BUILDING (10C)  TOTAL ANNUAL COST - VOLUME INSENSITIVE ANNUAL DA CALLS, 1996	2,560 2,560 2,560 2,560 2,560	\$6.59 \$1.86 \$0.44 \$1.10 \$29.84	.0235 .0220 .0294 .0146 .0372	\$396 \$105 \$33 \$41 \$2,842 \$4
38. 39. 40. 41. 42. 43. 44. 45. 46. 47.	BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C) BUILDING (10C)  TOTAL ANNUAL COST - VOLUME INSENSITIVE ANNUAL DA CALLS, 1996	2,560 2,560 2,560 2,560 2,560	\$6.59 \$1.86 \$0.44 \$1.10 \$29.84	.0235 .0220 .0294 .0146 .0372	\$396 \$105 \$33 \$41 \$2,842 \$4
38. 39. 40. 41. 42. 43. 44. 45. 46.	BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C) BUILDING (10C)  TOTAL ANNUAL COST - VOLUME INSENSITIVE ANNUAL DA CALLS, 1996  GROSS RECEIPTS TAX FACTOR	2,560 2,560 2,560 2,560 2,560	\$6.59 \$1.86 \$0.44 \$1.10 \$29.84	.0235 .0220 .0294 .0146 .0372	\$396 \$105 \$33 \$41 \$2,842 \$4
38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48.	BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C) BUILDING (10C)  TOTAL ANNUAL COST - VOLUME INSENSITIVE ANNUAL DA CALLS, 1996  GROSS RECEIPTS TAX FACTOR	2,560 2,560 2,560 2,560 2,560	\$6.59 \$1.86 \$0.44 \$1.10 \$29.84 \$1.24	.0235 .0220 .0294 .0146 .0372	\$396 \$105 \$33 \$41 \$2,842 \$4
38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50.	BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C) BUILDING (10C)  TOTAL ANNUAL COST - VOLUME INSENSITIVE ANNUAL DA CALLS, 1996  GROSS RECEIPTS TAX FACTOR  COST PER CALL	2,560 2,560 2,560 2,560 2,560 2,560	\$6.59 \$1.86 \$0.44 \$1.10 \$29.84 \$1.24	.0235 .0220 .0294 .0146 .0372	\$396 \$105 \$33 \$41 \$2,842 \$4 \$4.084
38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50.	BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C) BUILDING (10C)  TOTAL ANNUAL COST - VOLUME INSENSITIVE ANNUAL DA CALLS, 1996  GROSS RECEIPTS TAX FACTOR  COST PER CALL VOLUME SENSITIVE	2,560 2,560 2,560 2,560 2,560 2,560 2,560	\$6.59 \$1.86 \$0.44 \$1.10 \$29.84 \$1.24	.0235 .0220 .0294 .0146 .0372	\$396 \$105 \$33 \$41 \$2,842 \$4 \$4.084 1.0153
38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51.	BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C) BUILDING (10C)  TOTAL ANNUAL COST - VOLUME INSENSITIVE ANNUAL DA CALLS, 1996  GROSS RECEIPTS TAX FACTOR  COST PER CALL VOLUME SENSITIVE VOLUME INSENSITIVE	2,560 2,560 2,560 2,560 2,560 2,560 2,560	\$6.59 \$1.86 \$0.44 \$1.10 \$29.84 \$1.24	.0235 .0220 .0294 .0146 .0372	\$396 \$105 \$33 \$41 \$2,842 \$4 \$4.084 1.0153

#### **FLORIDA**

### DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE COST DEVELOPMENT - NONRECURRING

**IN PROGRESS** 

#### **FLORIDA**

### DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE SPECIFIC STUDY ASSUMPTIONS

Cost study assumptions are as follows:

Software expenses were projected to the 1997 - 1999 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.

#### FLORIDA

#### DIRECT ACCESS TO DIRECTORY ASSISTANCE SERVICE

#### **FACTORS AND LOADINGS**

Following are the annual cost factors, miscellaneous loadings and labor rates used in the Direct Access to Directory Assistance Service cost study.

Directly Assigned Annual Labor	1996	1997 - 1999	
IT Administration, Pay Band 58	\$80,049	\$85,516	
IT Technical Support, Pay Band 56		\$63,449	\$67,783
Directly Attributed Shared and Com	mon		
Annual Labor Rates: (Regional)			
IT Administration, Pay Band 58		\$26,382	\$28,184
IT Technical Support, Pay Band 56		\$33,194	\$35,461
Labor Inflation Rate From 1996 (At	tached)	1.0683	
Hardware Inflation Rate (Regional 377C)		1.000	)
Amortization Factor (5 Years @ 11.25%)		0.2723	1
Miscellaneous Common Equipment			
and Power Factor (Regional) 3770		1.0980	)
Gross Receipts Tax Factor (Florida)		1.0153	
Land Loading (Regional) 20C		0.0042	
Building Loading (Regional) 10C		0.0706	5

Annual TELRIC Factors, Regional (See following spreadsheet)

#### Labor Levelization Factor Base Year 1996

#### Labor Inflation Factors

1. 1997	1.034
2. 1998	1.035
3. 1999	1.036
Present Worth Factors @ 11.25%	
4. 1997	0.8989
5. 1998	0.8080
6. 1999	0.7263
Labor Levelization Factor ((LN1 x LN4) + (LN1 x LN2 x LN5) + (LN1 x LN2 x LN3 x LN6))/	1.0683
(LN4 + LN5 + LN6)	1.0083

#### 1996 BELLSOUTH TELECOMMUNICATIONS ACCOUNT AVERAGE ANNUAL COST FACTORS

\* FOR USE IN SERVICE COST STUDIES ONLY \*

	Field Code	Depreciation	ACFC COM	ACFC Inc Tax	Сар Ежр	ACFC Pit Specific Exp	ACFC Adval	Directly Attributed Shared and Common	TELRIC
			ь	С	d	•	f	9	ı
			11.25%		(a+b+c)				(d+e+f+g)
LAND - COE	20C	0.0000	0.0947	0.0426	0.1373	0.0000		0.0000	0.1486
BUILDINGS - COE	10C, 110C	0.0330	0.0826		0.1525	0.0041	0.0113	0.0014	0.1693
DIGITAL ELEC SWITCH	377C, 587C	0.1157	0.0555	The second secon	0.1966	0.0333	0.0113	0.0434	0.2846
OPERATOR SYSTEMS	117C,417C	0.1157	0.0647	0.0296	0.2100	0.0071	0.0113	0.0500	0.2784
DIGTL CIRC-DDS	157C	0.1608	0.0575	0.0256	0.2439	0.0060	0.0113	0.0394	0.3006
DIGTL CIRC-PAIR GAIN	257C,D257C,F257C	0.1314	0.0564	0.0249	0.2127	0.0082	0.0113	0.0366	0.2688
DIGTL CIRC-OTHER	357C,T357C,F357C,557C	0.1314	0.0564	0.0252	0.2130	0.0084	0.0113	0.0372	0.2699
POLES	10	0.0721	0.0599	0.0254	0.1574	0.0235	0.0113	0.0294	0.2216
AERIAL CA - METAL	22C, 12C	0.1023	0.0679	The second secon	0.1956	0.0461	. 0.0113		0.3149
AERIAL CA-FIBER	822C, 812C,D22C, F22C,T22C,D12C,F12C,T12C	0.0746		Oliver and the last transfer of the last transfer of the	0.1689	THE RESERVE OF THE PARTY OF THE			0.2148
UNGROUND CA - METAL	5C	0.1184	0.0681	0.0263	0.2128	0.0172	0.0113	0.0351	0.2764
UNGROUND CA - FIBER	85C,D5C,F5C,T5C	0.0686	. 0.0655	0.0284	0.1625	0.0043			0.2001
BURIED CA - METAL	45C	0.0885		0.0277	0.1840	0.0391	0.0113	0.0468	0.2812
BURIED CA-FIBER	845C, D45C, F45C, T45C	0.0613	0.0670	0.0295	0.1578			0.0235	0.1982
SUBMARINE CA-METAL	6C	0.0937	0.0688	0.0307	0.1932	0.0026	0.0113	0.0206	0.2277
SUBMARINE CA-FIBER	86C,D6C,F6C,T6C	0.0937			0.1935	0.0026	0.0113	0.0209	0.2283
INTRBLD NTWK-METAL	52C	0.0751	0.0669		0.1711		0.0113	0.0315	0.2277
INTRBLD NTWK-FIBER	852C,D52C,F52C,T52C	0.0751			0.1712				0.2136
CONDUIT SYSTEMS	4C	0.0205	0.0727	0.0325	0.1257	0.0025	0.0113	0.0146	0.1541

# FLORIDA



### **UNBUNDLED LOOPS**

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

TELRIC
COST STUDY
DOCUMENTATION

SECTIONS A THRU 7

#### FLORIDA

#### UNBUNDLED 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

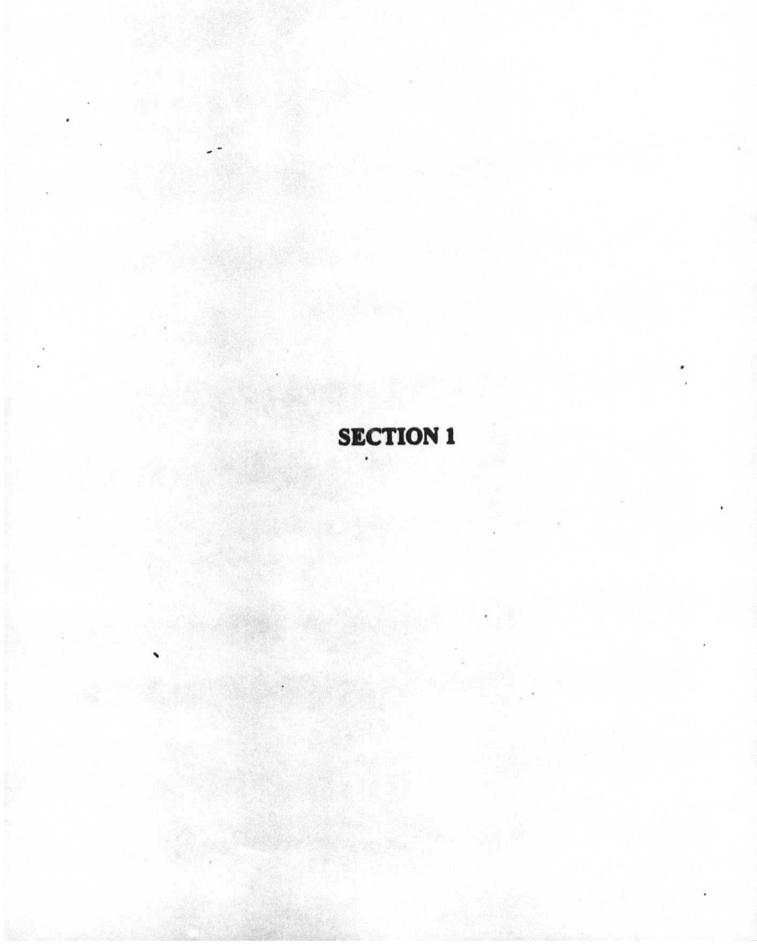


#### SECTION A

#### FLORIDA UNBUNDLED LOOP

#### PROPRIETARY RATIONALE

The Unbundled Loop Cost Study for the 2-Wire Analog Voice Grade Loop, the 4-Wire Analog Voice Grade Loop and the 2-Wire ISDN Digital Grade Loop contains actual unit cost information for discrete cost elements. 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 Unbundled Loop Cost Study is considered proprietary.



#### FLORIDA UNBUNDLED LOOP

#### INTRODUCTION AND OVERVIEW

This Total Element Long Run Incremental Cost (TELRIC) study is being provided to support 2-Wire Analog Voice Grade Loop, the 4-Wire Analog Voice Grade Loop and the 2-Wire ISDN Digital Grade Loop. The costs presented in this study are based on the TELRIC methodology established by the FCC's First Report and Order in CC Docket 96-98 (FCC Order) released August 8, 1996.

The Unbundled cost elements referred to as a 2-Wire Analog Voice Grade Loop, the 4-Wire Analog Voice Grade Loop and the 2-Wire ISDN Digital Grade Loop represent the cost of the physical transmission facilities (or channel or group of channels on such facility) which extend from the main distributing frame connection in 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 distributing 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 Alternative Local Exchange Carrier (ALEC).

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

A long run analysis is performed to ensure that the time period is sufficient to capture all forward looking costs affected by the business decision. The recurring costs presented in this study are levelized so as to be appropriate for the 1997 - 1999 study period. Nonrecurring costs follow the same convention and represent 1997 - 1999 level costs also. These costs are developed by using 1996 level TELRIC loadings, annual cost factors and labor rates designed to produce TELRIC results.



#### PLORIDA UNBUNDLED LOOP

#### DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of Total Element Long Run Incremental Costs (TELRIC) supporting the Unbundled 2-Wire Analog Voice Grade Loop, the 4-Wire Analog Voice Grade Loop and the 2-Wire ISDN Digital Grade Loop.

The purpose of the TELRIC methodology established by the FCC order is to set the rates for interconnection and unbundled network elements. The basis for a TELRIC study is forward-looking long run economic cost methodology. TELRIC methodology anticipates pricing of elements in a wholesale network company. Many costs regarded as common or shared would be included as directly attributable in a TELRIC study. The FCC pricing methodology also specifies that, over and above TELRIC, the additional portion of forward looking common costs that cannot be directly attributed to any particular network element will be allocated among the cost elements. This TELRIC study includes both recurring (capital and operating expenses) and nonrecurring (provisioning) costs.

### DEVELOPMENT OF RECURRING COSTS

The monthly costs to BellSouth Telecommunications, Inc., resulting from the capital investments necessary to provide a cost element are called recurring costs. Recurring costs represent a forward-looking view of technology and deployment and include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs consist of plant specific expenses and ad valorem taxes. These expenses contribute to the ongoing cost to the Company associated with the initial capital investment. Also included in the recurring TELRIC are shared and common costs directly attributable to the network element. Gross receipts tax is calculated on the TELRIC.

The first step in developing a TELRIC recurring cost study for the Unbundled Loop 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 a reasonable projection of the actual fill utilization 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 year planning period. Miscellaneous loadings are then applied.

Next, 1996 level TELRIC Annual Cost Factors are used to calculate the direct cost of capital, plant specific 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 which includes directly attributable shared and common costs. Annual Total Element Long Run Incremental Costs by account codes are then summed and divided by twelve to arrive at a monthly cost per cost element.

The directly attributable shared and common cost components of the TELRIC annual cost factors are calculated as follows. First, a detailed analysis of the forward-looking directly assigned costs associated with the unbundled network elements is performed. The remaining costs of doing business are then analyzed to determine whether they are directly attributable shared and common costs that cannot be reasonably attributed to network elements.

Next, the directly attributable shared and common costs are projected forward and segregated by the functional areas to which they are related. The functional areas are wholesale operations, retail services operations, and combined wholesale and retail services operations. Attribution factors based on the specific wholesale functional area, such as central office equipment (COE) investment, COE salary and wages, etc. are then developed and applied to the respective costs. These attributed costs are accumulated by related network investment category, such as pair gain equipment, buried cable, etc. and attributed shared cost factors are developed. These attributed shared cost factors are then included as a component of the TELRIC annual cost factors by investment category. All directly attributed costs related to retail services operations are excluded.

The common cost allocation factor is applied to TELRIC to produce the forward-looking economic cost, as defined by the FCC Order, which includes an appropriate share of common costs. The common cost allocation factor is calculated by summing all wholesale costs that cannot be reasonably attributed to specific elements, services or functions and dividing by the sum of the directly assignable and directly attributable wholesale costs.

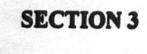
### DEVELOPMENT OF NONRECURRING COSTS

Nonrecurring costs are "one-time" costs incurred as a result of provisioning, installing, and disconnecting the Unbundled 2-Wire Analog Voice Grade Loop, the 4-Wire Analog Voice Grade Loop and the 2-Wire ISDN 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, as identified by individuals knowledgeable about and/or responsible for performing these functions, 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 TELRIC labor rate for the work group performing the function.

The TELRIC labor rates are calculated as follows. Salary and wages, as used in the determination of TELRIC annual cost factors; are accumulated on a basis consistent with specific force groups. Shared costs attributable to salaries and wages are then accumulated on a basis consistent with the development of the respective force group's labor rate. A factor is then developed for each force group by dividing the attributed shared costs (human resources, office equipment, motor vehicles, land and building space, etc.) by the related salaries and wages. This factor is then applied to the salary and wage portion of the incremental labor rate for each force group, and the result is added to the incremental labor rate to determine the TELRIC labor rate.

Utilizing work functions, work times, and TELRIC 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 TELRIC 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 nonrecurring cost.

The common cost allocation factor is applied to the nonrecurring TELRIC to produce the forward-looking nonrecurring economic cost, as defined by the FCC Order, which includes an appropriate share of common costs.



### FLORIDA UNBUNDLED LOOP

### SUMMARY OF RESULTS

This section contains a cost summary for the 1997-1999 Total Element Long Run Incremental Costs (TELRIC) for both recurring and nonrecurring cost elements studied for the Unbundled 2-Wire Analog Voice Grade Loop, the 4-Wire Analog Voice Grade Loop and the 2-Wire ISDN Digital Grade Loop.

# FLORIDA UNBUNDLED LOOP

# SUMMARY OF RESULTS

	Monthly Cost	Nonrect First	arring Cost Additional
2-Wire Analog Voice Grade Loop			
TELRIC	\$22.35	In	Progress
Common Cost Allocation Factor	1.0804		
Total	\$24.15		•
4-Wire Analog Voice Grade Loop			
TELRIC	\$40.76	In	Progress
Common Cost Allocation Factor	1.0804		
Total	\$44.04		
2-Wire ISDN Digital Grade Loop			•
TELRIC	\$35.68	In	Progress
Common Cost Allocation Factor	1.0804		
Total	\$38.55		



### FLORIDA UNBUNDLED LOOP

### COST DEVELOPMENT - RECURRING

This section describes the development of the recurring Total Element Long Run Incremental Costs(TELRIC) for the Unbundled 2-Wire Analog Voice Grade Loop, the 4-Wire Analog Voice Grade Loop and the 2-Wire ISDN Digital Grade Loop.

Generally, 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. TELRIC annual cost factors are then applied to convert the investment to cost.

The following workpapers show how a typical loop 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

Circuit : 3053409149 SVC Cat.: RESIDENCE

W.C.: DRBHFLMA

SVC Ca	t.: RESIDENCE					บ็	soc:	1FR
	F1 Informat	ion	IF2	Infor	ation		IF3 I	nformation
Cable Pair Addr	P628 3930 5751 WINSTON F	ARKBLU	110	51WPB 54 5440 I	W SSTH BI	LVD		
FRC	Facility	Sec.	Size	6a-	Lensth	Plat		7
12376	PETENHAAIRE	F						anyx
	CHOLE	Ē.	:60		971			
FSL	CHOUE	F	60		345			
! Fisc	CHOUS	F	60		931			
	CABLE	F	-60		3256			
FIL	CHOU=	F	20		3386			
	CAOLE	F	36		3148			
Fac	CABUE	F	36		とうづり			
Fix	CHOUZ	F	1 36		4653			
Fix		F	_3e_		_CCCE_			
FSC	CABLE	_F_	36		67			
Fix	(NOUE	F	30		2860			
File	CABLE	E	30		1600			
FSL	CAOLE	F	30		740			
Fish	CHOLE	_E_	18		1818			
-263L	CASIE.	_F	18		165 C			
FASE		F.	18		700			
ruc	CABLE	E.	18		2232			
FLLC	CHALL !	=	18		309			

ı

FRC	Facility	Sec.	: Size	Ga.	: Length	: Plat	1
FASC	CABLE	F	18		512		
FSC.	CABUE	F	12	i 	692		
F454	CABUE	F	12		2604		
FLLC	CABLE	F	12		7934		
FASIC	CABLE	7	12		909	: 	
FASC	CHOLE	F	12		790		
Fác	CHBLE	- F	18		5276		
7576	REGEN ENATOR					CLLI	MIK AT RT
54	CHOUS	_E	600	26	40		.
<u>غد</u>	CABLE	F	600	74	25		.
454	X BOX	エ	3600				!
	•						: :
			:	:			
- :							
· - :							

..

"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,","

TAB B

# LOCIP COST STUDY - CA AATERIAL INVESTMENTS FLORIDA LOUP SAMPLE 8: 2

LOOP #:200 STATE: FL SVC THESC Florida Loop Survey Circuit CIRCUIT TYPE: V CHICUIT LEVILLE DS0 DESIGN: 7 CLASS OF SVC: RESIDENCE

CIRCUIT ID: 3053609149

CLLI: DRBHFLMA

DLC & MUX LOADENGS: B

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

hem	Category	Field Code	Pid	Description	Feeder/D	ا منا	ize				
	Fiber Fiber	BC	FOCALL SECTION	CABLE FB-OPT ALL 40DB 60	F	-	_	Gauge/Mode	Picment/DB	Units	Unit In
	Fiber	PSC	<b>POCALLADOR</b>	CABLE IB-OPT ALL 60DB 60		6	_	Sgl.	.40db	971.00	_
_		PSC	POCALLABOR	CABLE FB-OPT ALL 40D8 60	F	64		Sgl	.40db		
	Fiber	PSC	POCALLANDE	CABLE FB-OPT ALL 40D8 60	F	60		Sgl	.40db	845.00	\$1.6
	Fiber	FSC	POCALLABOR	CABLE FB-OPT ALL 40DB 60	F	60		Sgl	.40db	951.00	\$1.6
_	Fiber	PSC	POCALLORES	CARLE UR OFF ALL GIDS 60		60		Sgl	.40db	3,256.80	\$1.6
_	Fiber	PSC	POCALLARDES.	CABLE FB-OPT ALL 40DB 36	F	36		Sgl	.40db	3,886.00	\$1.6
	Fiber	PSC	POCALLATIONS.	CABLE FB-OPT ALL 40D8 36	F	36		Sgl		3,148.00	\$0.4
1	Fiber	PSC	ROCALLANDERS	CABLE FB-OPT ALL 40DB 36	F	36		Sgl	.40db	2,359.00	\$0.4
1	Fiber	PSC	POCALLARDINA	CABLE FB-OPT ALL 40DB 36	F	36	_	Sgl	.40db	4,653.00	\$0.4
1	Fiber		ROCALLABORRA	CABLE FB-OPT ALL 40D8 36	F	36		Sgl	.40db	3,757.00	\$0.45
1	Fiber		CALLACTER	CABLE FB-OPT ALL 40DB 30	F	30	_		.40db	62.00	\$0.4
1	Fiber		POCALLATERINA	CABLE FB-OPT ALL GODE 30	F	30		gl	.40db	2,860.00	\$0.50
_			-	CABLE FB-OPT ALL 48DR 30	F	30		gl	40db	1,600.00	\$0.50
1			OCALLADOR	CABLE FB-OPT ALL 40DR 18	F	_		gl	40db	260.00	\$0.50
		- '	OCALLADES	CABLE FB-OPT ALL ANDR 18	F	18			40db	1,818.00	\$0.48
_			OCALLADONS	CABLE FB-OPT ALL SOOR 18	F	18		81	40db	1,652.00	\$0.48
			OCALLANDS IN	CABLE PS-OPT ALL 40DR 18	F	18			40db	700.00	\$0.48
			CCALLADONS	CABLE FE-OPT ALL 40DR 18	F	18			40db	2.232.00	\$0.48
_		1-	OCALLADOROS	CABLE FB-OFT ALL 40DB 18	F	18			10db	509.00	
-			OCALLADORE	CABLE FB-OPT ALL 40DB 18		18	S		10db	482.00	\$0.48
-			OCALLADDER	CABLE PS-OPT ALL 60DS 12	F	18	S	pl .	lOdb	572.00	\$0.48
			OCMLI40Denz	CABLE FB-OPT ALL 40DB 12	F	12	S	gl /	Odb	692.00	\$0.48
			OCMIL40Date	CABLE PB-OPT ALL 40DB 12	F	12	S		0db		\$0.48
_			OCALLADORES	CABLE FS-OPT ALL 40DS 12	F	12	S		Odb	2,604.00	\$0.48
3 F			DCMLL40DB02	CABLE FB-OPT ALL 40DB 12	F	12	S		Odb	2,834.00	\$0.48
3 F		SC R	CALLADOSIS	CARLE ED COTT ALL GIDS 12	F	12	S		0db	909.00	\$0.48
3 F		SC 85	CAVG	CABLE FB-OPT ALL 40DB 18	F	18	Se		ldb	790.80	\$0.48
1 F		45C 84	SCAWG I	Sinderground Fiber Cable - Aver	F	60	Sg		ldb	5,276.00	\$0.48
3 G				Barried Fiber Cable - Average Siz	F	30	Sg			40.00	\$1.69
I G	pper @		2	Gange Cable - TELRIC	_	600	26		ldb	25.00	\$0.50
III Ca	pper 6	_	-	Gauge Cable - TELRIC		900	26	В	dilamas - Inter	20.00	\$2.92
I C	pper 6			Gauge Cable - TELRIC		400	26	В		950.00	\$4.29
1 G	pper 13	C Sa		is Gauge Cable - TELRIC		200	26	В		325.00	\$2.07
-	1-		3			50		В		1,700.00	\$1.04
							26	R		190.00	\$0.38

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, Inc. currently pays for each cable type. The investments are maintained at a "sheath foot" level and must be converted to a circuit-level (DS0-equivalent) 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 state-specific projected actual utilization percentages to the cable size (# of pairs or strands):

Cable Type	Placement	<b>Utilization Percentages</b>
Copper	Feeder	65.7%
Copper	Distribution	38.8%
Fiber	Feeder	74.0%

### For example:

394 pairs will typically be utilized in a 600 pair copper cable when it is placed as feeder.

233 pairs will typically be utilized in a 600 pair copper cable when it is placed as distribution.

44.4 strands will typically be utilized in a 60 strand fiber cable when it is placed as feeder.

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:

Cable Type	Placement	2-wire DS0-equivalent Circuits
Copper	Feeder	1.0
Copper	Distribution	1.0
Fiber	Feeder	165.0

## For example:

394 pairs will support 394 DS0-equivalent circuits in a copper feeder cable.
44.4 strands will support 7,326 DS0-equivalent circuits in a fiber feeder cable.

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:

600 pair buried copper distribution cable:

# of DS0-equivalent circuits:

Conversion from sheath to circuit investment:

# of cable feet:

Total circuit-level cable investment:

\$ 2.92 per sheath foot

600 \* 38.8% = 232.8 DS0-equivalent circuits

\$ 2.92/232.8 = \$ .012543 per circuit foot

20

20 \* \$.012543 = \$ .25

{Loop segment #31, Item #1 in the sample circuit data and results, Tab E}

60 strand underground fiber feeder cable:

# of DS0-equivalent circuits:

Conversion from sheath to circuit investment:

# of cable feet:

Total circuit-level cable investment:

\$ 1.69 per sheath foot

60 \* 74% \* 165 = 7,326 DS0-equivalent circuits

\$ 1.69/7,326 = \$.000231 per circuit foot

971

971 \* \$.000231 - \$ .22

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

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 in-plant factors which are state and field reporting code specific.

### For example:

Field Code	Investment Description	In-plant Factor
45C	Telco Installation Labor -	
	buried copper cable	
45C	Telco Engineering Labor-	
	buried copper cable	
45C	Contractor Installation Labor-	
	buried copper cable	
45C	Exempt Material-	
	buried copper cable	
45C	Support Loading	
	Right of Way (ROW)	

Circuit-level cable investment: \$ .25 {20ft of 600 pair buried copper distribution cable; Loop segment #31, item #1 in the sample circuit data and results, Tab E}

#### Calculations:

Compute the Total Material Investment: \$ .25 / (1-exempt material factor) = \$ .25

Exempt Material Investment:

Total material investment - Cable investment =

Telco Installation Labor Investment:

Total material investment \* Telco installation factor =

Telco Engineering Labor Investment:

Total material investment \* Telco engineering factor =

Contractor Installation Labor Investment:

Total material investment \* Contractor installation factor =

Support Loading Investment:

Total material investment \* ROW factor =

## TOTAL INVESTMENTS FOR THIS CABLE SEGMENT:

45C \$ 2.00

### **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 (see Tab H for a description of these investment models). 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 feeder cable segments (copper/fiber, presence of a building terminal, presence of intermediate muxing, etc.) The fourteen possible designs are listed below:

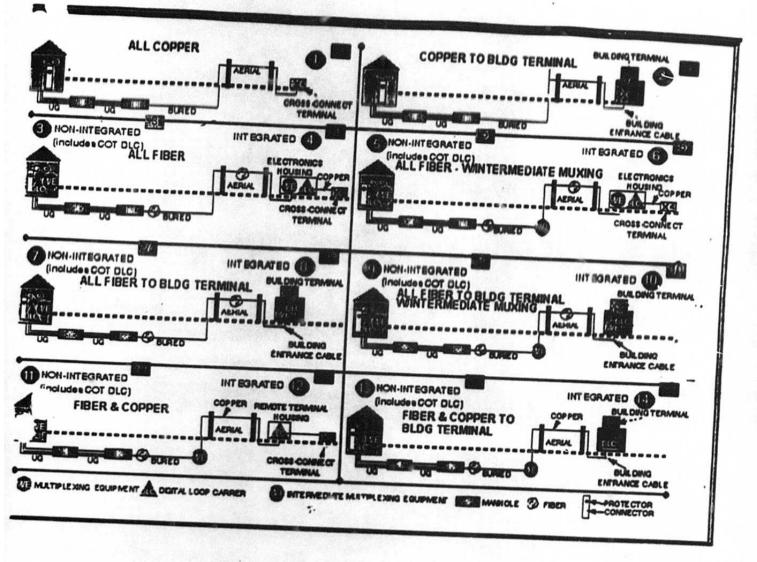
- 1 All copper loop (no electronic equipment)
- 2 Ail copper loop which terminates in a building terminal (no electronic equipment)
- 3 All fiber in the feeder route non-integrated digital loop carrier
- 4 All fiber in the feeder route integrated digital loop carrier
- 5 #3 with intermediate muxing
-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

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# 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 # 3. The electronic investments shown for this circuit are in Tab E, page 5, Segments #35 and #36. See page 4 (Tab D) for a diagram of these designs.



TAB E

-				POCALLACD.	DV	CABLE FB-OPT ALL 40DB 60	P	60	Sgl	404	971	\$.0002	50.22
1 .	1	М	F5C	FOCALLA0D			F	n/a	n/a	n/a	1		
1	2	М.	F5C	EXEMPT_MA	DV	Exempt materials loadings	-	-	n/a	n/a	1		
1	3	В	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a		n/a	1		
1	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a				
1	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
1	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1	5.0002	\$0.19
2	1	М	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 60	F	60	Sgl	.40d	845	5.0002	30.19
2	2	М	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
2	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	P	n/a	n/a	0/4	1		
2	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	11/4	n/a	- 1		
2	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
2	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	P	n/a	n/a	n/a	1		
3	1	М	F5C	FOCALLA0D	DV	CABLE FB-OPT ALL 40DB 60	F	60	Sgl	.404	951	\$.0002	\$0.22
3	2	М	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
3	_	В	4C	SUPPORT_L	DV	Conduit ldg for undg	P	n/a	n/a	n/a	1		
3		L	F5C	INPLANT_E	DV	Telco engineering labor	P	n/a	n/a	n/a	1		
3	5		F5C	INPLANT_IN		Telco installation labor	P	n/a	n/a	n/a	1		
4	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
	1	М	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40D8 60	F	60	Sgl	.404	3,256	5.0002	\$0.75
+		M	F5C	EXEMPT_MA		Exempt materials loadings	F	n/a	n/a	n/a	1.		
4	3	В	4C	SUPPORT_L	DV	Conduit ldg for undg	P	n/a	n/a	n/a	1		
1		-	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
7	4		F5C	INPLANT_IN		Telco installation labor	F	n/a	n/a	n/a	1		
4		L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	P	n/a	n/a	n/a	1		
4	6		F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 60	F	60	Sgi	.404	3,886	\$.0002	\$0.90
5	1	M		EXEMPT_MA	100	Exempt materials loadings	F	n/a	n/a	n/a	1		
5	2		F5C	SUPPORT_L	DV	Conduit idg for undg	F	n/a	n/a	n/a	1		
5		В	4C		DV	Telco engineering labor	P	n/a	n/a	n/a	1		
5	4		F5C	INPLANT_E	720 C	Telco installation labor	F	n/a	n/a	n/a	1		
5	5	_	F5C	Application That		Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
5		L	F5C	INPLANT_C	DV	CABLE FB-OPT ALL 40DB 36	F	36	Sgi	.40d	3,148	\$.0001	\$0.32
6	1		F5C	FOCALLADD EXEMPT_MA	0.000000	Exempt materials loadings	F	n/a	n/a	n/a	1		
6		М	F5C		1000	Conduit ldg for undg	F	n/a	n/a	n/a	1		
6		В	4C	SUPPORT_L	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
6	-	L	F5C	INPLANT_E	DV	Telco installation labor	F	n/a	n/a	n/a	1		
6		L	F5C	INPLANT_IN	1200.00	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
6	- 12	L	F5C	INPLANT_C		CABLE FB-OPT ALL 40DB 36	F	36	Sgl	.40d	2,359	5.0001	\$0.24
7		М	F5C	FOCALLADD	10 SEP. Sec.	Exempt materials loadings	F	n/a	n/a	n/a	1		
			F5C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1	-	
-	3		4C F5C	INPLANT_E	THE PERSON NAMED IN	Telco engineering labor	F	n/a	n/a	n/a	1	-	
7		L	F5C	INPLANT_IN	10 10	Telco installation labor	F	n/a	n/a	n/a	1		

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7	. 6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
8	1	M.	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 36	P	36	Sgl	40d	4,653	\$.0001	50.48
8	2	М	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
8	3	B	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1		
8	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
8	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	Γ	
8	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	P	n/a	n/a	n/a	1		
9	1	М	FSC	POCALL40D	DV	CABLE FB-OPT ALL 40DB 36	F	36	Sgi	.40d	3,757	\$.0001	\$0.36
9	2	М	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
9	3	В	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1		
9	4	L	F5C	INPLANT_E	DV	Teles engineering labor	1	n/a	n/a	n/a	1		
9	5	L	F5C	INPLANT_IN	DV	Teleo installation labor	F	n/a	n/a	n/a	1		
9	6	L.	F5C	INPLANT_C	DV	Contractor engineering & installation labor	1	n/a	n/a	n/a	1		
10	1	М	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 36	F	36	Sgi	.40d	62	\$.0001	- \$0.01
10		M	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	-	
10		В	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1	T	
10			F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1	T	
-		L	F5C		DV	Telco installation labor	F	n/a	n/a	n/a	1	T	
ŀ	- 6		F5C	INPLANT_C	DV	Contractor engineering & installation labor	P	n/a	n/a	n/a	1	Γ.	
11		M	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 30	F	30	Sgi	.40d	2,860	5.0001	\$0.39
11		М	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
11		В	4C	SUPPORT_L	DV	Conduit ldg for undg	P	n/a	n/a	n/a	1		
11		L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
11		L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
11		L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1	Γ.	
12		М	F22C	FOCALL40D	DV	CABLE FB-OPT ALL 40D8 30	F	30	Sgl	.40d	1,600	\$.0001	\$0.22
12		М	F22C	EXEMPT_MA	DV	Exempt materials loadings	P	n/a	n/a	n/a	1		
12		В	1C	SUPPORT_L	DV	Pole idg for serial	P	n/a	n/a	n/a	1	Г	
12		L	F22C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
12		L	F22C	INPLANT_IN	DV	Teico installation labor	F	n/a	n/a	n/a	1	Γ	
12		L	F22C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
13		М	F5C	FOCALLA0D	DV	CABLE FB-OPT ALL 40D8 30	F	30	Sgl	.40d	240	\$.0001	\$0.03
13	2	М	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
13	3	В	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1		
13	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1	L	
13	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	1	
13	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		60.40
1	1	М	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 18	F	18	Sgl	.404	1,818	\$.0002	50.40
	2	М	F5C	EXEMPT_MA		Exempt materials loadings	F	n/a	n/a	n/a	1	-	
14	3	В	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1	-	
14	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	<u> </u>		

14	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	H/4	n/a	fi/#	- 1		
14		L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
15	1	М	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 18	F	18	Sgi	.40d	1,652	5.0002	50.36
15	2	М	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	_	21 12
15	3	В	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1	2 9	
15	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
15	5	_	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
15	6	_	F5C	INPLANT_C	DV	Contractor engineering & installation labor	P	n/a	n/a	n/a	1		
16		М	F45C	FOCALLAOD	DV	CABLE F8-OPT ALL 40D8 18	F	18	Sgl	404	700	\$.0002	\$0.15
16		М	F45C	EXEMPT_MA		Exempt materials loadings	F	n/a	n/a	n/a	. 1		
	-	В	F45C	SUPPORT_L	DV	Pole idg for aerial	1	n/a	n/a	n/a	1		
16	inniana)	HILL THE		INPLANT_E	DV	Teleo engineering labor	1	H/A	H/8	H/A	T		
16		L	F45C		DV	Telco installation labor	1	n/a	R/a	n/a	accounty of		
16		L	F45C		STATE OF	Contractor engineering & installation labor	F	n/a	n/a	n/a	and the same of		
16		L	F45C	INPLANT_C	DV	CABLE FB-OPT ALL 40D8 18	F	18	Sgl	404	2,232	\$.0002	\$0.49
17		М	F22C	FOCALLA0D		Exempt materials loadings	P	n/a	n/a	n/a	1		
17	2	М	F22C	EXEMPT_MA	DV	Pole idg for aerial	F	n/a	n/a	n/a	1		
17		В	1C	SUPPORT_L	DV	A CONTROL OF THE CONT	F	n/a	n/a	n/a	1		
1		L	F22C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
	5	L	F22C		1000	Telco installation labor	F	n/a	n/a	n/a			
17	6	L	F22C	INPLANT_C	DV	Contractor engineering & installation labor				404	509	\$.0002	\$0.11
18	1	М	F22C	FOCALL40D	DV	CABLE FB-OPT ALL (1DB 18	F	18	Sgl	n/a	1	2,0002	
18	2	М	F22C	EXEMPT_MA	ď	Exempt materials loadings	F	n/a	n/a				
18	3	В	1C	SUPPORT_L	DV	Pole ldg for serial	F	n/a	n/a	n/a	1		
18	4	L	F22C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a			
18	5	L	F22C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
18	6	L	F22C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	482	5.0002	\$0.11
19	1	М	F22C	FOCALLAOD	DV	CABLE FB-OPT ALL 40DB 18	P	18	Sgi	.40ci		3.0002	
19	2	М	F22C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a '	n/a			
19	3	В	1C	SUPPORT_L	DV	Pole ldg for aerial	F	n/a	n/a	n/a	1		
19	4	L	F22C	ACCUMULATION OF THE PROPERTY OF	Personal Control	Telco engineering labor	F	n/a	n/a	n/a			
19	5	L	F22C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
19	6	L	F22C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	572	\$.0002	50.12
20	1	М	F45C		DV	CABLE FB-OPT ALL 40D8 18	F	18	Sgi	.40d		3.0002	
20	2	М	F45C	EXEMPT_MA	ARCHED THE	Exempt materials loadings	F	n/a	n/a	n/a	1		
20	3	В	F45C	SUPPORT_L	DV	Pole idg for aerial	F	n/a	n/a	n/a	1		
20	100	L	F45C	The state of the s	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
20		L	F45C	INPLANT_IN	100000000000000000000000000000000000000	Telco installation labor	F	n/a	n/a	n/a	1		
70	6	L	F45C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a .40d	692	5.0003	50 23
-	1		F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 12	F	12	Sgi	n/a	1	3.000	
21		М	F5C	EXEMPT_MA	-	Exempt materials loadings	F	n/a	n/a	n/a	1		
21	3	В	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	1.74	<u>.                                    </u>		

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21	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
21	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
21	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	1	n/a	n/a	n/a	T		,
22	1	М	F45C	FOCALL40D	DV	CASLE FB-OPT ALL 40DB 12	1	12	Sgi	.40d	2,604	\$.0003	50.85
22	2	М	F45C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
22	3	В	F45C	SUPPORT_L	DV	Pole idg for serial	F	n/a	n/a	n/a	1	-	
22	4	L	F45C	INPLANT_E	DV	Telco engineering labor	F	R/4	R/a	n/a	1	80	
22	5	L	F45C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	-	
22	6	L	F45C	INPLANT_C	DV	Contractor engineering & installation labor	F	R/A	n/a	n/a	1		
23	1	М	F22C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 12	1	12	Sgi	404	2,634	5.0003	50.93
23	2	М	F22C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	-	
23		B	1C	SUPPORT_L	DV	Pole idg for serial	F	n/a	n/a	n/a	1	-	
23		L	F22C	INPLANT_E	DV	Telco engineering labor	P	11/4	n/a	n/a	1	-	,
23		L	F22C	INPLANT_IN	1000	Telco installation labor	F	n/a	n/a	n/a	1	•	
23	_	L	F22C	INPLANT_C	DV	Contractor engineering & installation labor	1	n/a	n/a	n/a	1	•	
24	1	М	F45C	FOCALLAOD	DV	CABLE FB-OPT ALL 40DB 12	F	12	Sgi	404	909	\$.0003	<b> \$0.30</b>
24		M	F45C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
		В	F45C	SUPPORT_L	DV	Pole idg for serial	F	n/a	n/a	n/a	1	•	
	-4	L	F45C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1	•	
24	5	L	F45C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1.		
24	6		F45C	INPLANT_C	DV	Contractor engineering & installation labor	P	n/a	n/a	n/a	1		
25	1	М	F45C	FOCALL40D	DV	CABLE FB-OPT ALL 40'DB 12	F	12	Sgl	.404	790	5.0003	\$0.26
25	2	М	F45C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		
25	3		F45C	SUPPORT_L	DV	Pole ldg for aerial	F	n/a	n/a	n/a	1		
25	4	L	F45C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
25	5	L	F45C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	•	
25	6	L	F45C	INPLANT_C	DV	Contractor engineering & installation labor	F	rt/a	n/a	n/a	1		
26	1	М	F5C	FOCALL40D	DV	CABLE FB-OPT ALL 40DB 18	F	18	Sgl	.404	5,276	\$.0002	\$1.15
26	2	М	F5C	EXEMPT_MA	DV	Exempt materials loadings	P	n/a	n/a	n/a	1		T. W.
26	3	В	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1		"m 1 /
26	4	L	F5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1		
26	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1		
26	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	P	n/a	n/a	n/a	1	F .	
28	1	М	F5C	85CAVG	DV	Underground Fiber Cable - Average Size	F	60	Sgi	.40d	40	5.0002	50.01
28	2	М	F5C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1	_	
28	3	В	4C	SUPPORT_L	DV	Conduit ldg for undg	F	n/a	n/a	n/a	1		
28	4	L	P5C	INPLANT_E	DV	Telco engineering labor	F	n/a	n/a	n/a	1	_	
78	5	L	F5C	INPLANT_IN	DV	Telco installation labor	F	n/a	n/a	n/a	1	_	
	6	L	F5C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		60.00
29	1	М	F45C	845CAVG	DV	Buried Fiber Cable - Average Size	F	30	Sgl	.40d	25	5.0001	\$0.00
29	2	М	. F45C	EXEMPT_MA	DV	Exempt materials loadings	F	n/a	n/a	n/a	1		

29	3	В	F45C	SUPPORT_L	DV	Pole idg for aerial	P	n/a	n/a	n/a	1		1.5
29	1	I.	F45C	INPLANT_E	DV	Teleo engineering labor	F	n/a	n/a	n/a			
29	5	L	F45C	INPLANT_IN	DV	Telco installation labor	P	n/a	n/a	n/a	1		
29	6	L	F45C	INPLANT_C	DV	Contractor engineering & installation labor	F	n/a	n/a	n/a	1		
35	1	B	187€	DLC Equipm	DV	MCE6P	F	R/a	N/A	CO	1		
35	3	В	20C	DLC Equipm	DV	Land	F	n/a	n/a	CO	1		
35	4	В	10C	DLC Equipm	DV	Building	F	n/a	n/a	co	1		
35	- 5	B	257C	DLC Equipm	DV	26 Gauge Cable - TELRIC	F	H/a	H/4	RT	1		
35	6	8	257C	DLC Equipm	DV	Power	P	n/a	n/a	RT	1		
36	1	В	257C	MUX Equipm	DV	Multiplexer, DSX-1 Panel, fiber terminal	F	n/a	n/a	co	1		
36	2	В	257C	MUX Equipm	DV	MCEAP	P	n/a	n/a	CO	1		
36	3	В	20C	MUX Equipm	DV	Land	1	n/a	n/a	CO	1		
36	4	В	10C	MUX Equipm	DV	Building	P	n/a	n/a	ÇÕ	1		
36	5	B	257C	MUX Equipm	DV	Multiplexer, DSX-1 Panel, fiber terminal	P	n/a	n/a	RT	1		
36	6	В	257C	MUX Equipm	Name and Address of	Power	F	n/a	n/a	RT	1	o a sumali.	

INVESTMENT SUBTOTAL FOR INV TYPE: DV

9282.01

INVESTMENT SUBTOTAL FOR: FEEDER

\$282.01

100	Trem.	M/I	TRC	ra	Турс	Description	1/10	inte.	Co/Md	P1/att-	Units	Unit fay	Intaling
31	1	М	45C	600BTELRIC	DV	26 Gauge Cable - TELRIC	D	600	26	В	20	\$.0125	\$0.25
31	2	М	45C	EXEMPT_MA	DV	Exempt materials localings	D	n/a	n/a	n/a	1		
31	3	В	45C	SUPPORT_L	DV	ROW ldg for buried	D	n/a	n/a	n/a	1		
31	4	L	45C	INPLANT_E	DV	Telco engineering labor	D	n/a	n/a	n/a	1		
31	5	L	45C	INPLANT_IN	DV	Telco installation labor	D	n/a	n/a	n/a	· 1		
31	6	L	45C	INPLANT_C	DV	Contractor engineering & installation labor	D	n/a	n/a	n/a	1		
32	1	М	45C	900BTELRIC	DV	26 Gauge Cable - TELRIC	D	900	26	В	950	\$.0123	\$11.67
32	2	М	45C	EXEMPT_MA	DV	Exempt materials loadings	D	n/a	n/a	n/a	1		
32	3	В	45C	SUPPORT_L	DV	ROW ldg for buried	D	n/a	n/a	n/a	1		
32	4	L	45C	INPLANT_E	DV	Telco engineering labor	D	n/a	n/a	n/a	1		
32	5	L	45C	INPLANT_IN	DV	Telco installation labor	D	n/a	n/a	n/a	1		
32	6	L	45C	INPLANT_C	DV	Contractor engineering & installation labor	D	n/a	n/a	n/a	1		
33	1	М	45C	400BTELRIC	DV	26 Gauge Cable - TELRIC	D	400	26	В	325	\$.0133	\$4.33
33	2	М	45C	EXEMPT_MA	DV	Exempt materials loadings	D	n/a	n/a	n/a	1		
33	3	В	45C	SUPPORT_L	DV	ROW ldg for buried	D	n/a	n/a	n/a	1		
33	4	L	45C	INPLANT_E	DV	Telco engineering labor	D	n/a	n/a	n/a	1		
33	5	L	45C	INPLANT_IN	DV	Telco installation labor	D	n/a	n/a	n/a	1		
••	6	L	45C	INPLANT_C	DV	Contractor engineering & installation labor	D	n/a	n/a	n/a	1		
	1	М	45C	200BTELRIC	DV	26 Gauge Cable - TELRIC	D	200	26	8	1,700	5.0134	522.78
34	2	М	45C	EXEMPT_MA	DV	Exempt materials loadings	D	n/a	n/a	n/a	1	_	
34	3	В	45C	SUPPORT_L	DV	ROW ldg for buried	D	n/a	n/a	n/a	1		

	BES.	17.50			No.			L. Berner	E BOOK N	EAST-DE	Essential S		
34	4	L	45C	INPLANT_E	DV	Telco engineering labor	D	n/a	n/a	n/a	1		
34	5	L	45C	INPLANT_IN	DV	Telco installation labor	D	n/a	n/a	n/a	1	·:	
34	6	L	45C	INPLANT_C	DV	Contractor engineering & installation labor	D	n/a	n/a	n/a	1	•	
35	1	М	12C	50ATELRIC	DV	26 Gauge Cable - TELRIC	D	50	26	R	190	5.0196	\$3.72
35	7	М	12C	EXEMPT_MA	DV	Exempt materials loadings	D	n/a	n/a	n/a	1		
35	8	L	12C	INPLANT_E	DV	Telco engineering labor	D	n/a	n/a	n/a	1	•	
35	9	L	12C	INPLANT_IN	DV	Telco installation labor	D	n/a	n/a	n/a	1		
35	10	L	12C	INPLANT_C	DV	Contractor engineering & installation labor	D	n/a	n/a	n/a	1		

INVESTMENT SUBTOTAL FOR INV TYPE: DV	\$349.20
INVESTMENT SUBTOTAL FOR: DISTRIB	\$349.20

LOGP MAKEUP INVESTMENT TOTAL: \$631.21

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 percent of residence and business lines in service at the time the survey circuits were randomly selected for the loop survey. For example, the resulting average investment for aerial metallic cable (12C & 22C - feeder and distribution) is for the 2-Wire Analog Voice Grade Unbundled Loop.

TAB G

# Overview of Recurring Cost Spreadsheet Methodology

The following spreadsheets reflect the Unbundled 2-wire Analog Voice Grade Loop cost, the 4-Wire Analog Voice Grade Loop cost, and the 2-Wire ISDN Digital Grade Loop cost. The cost methodology is as follows:

### Cost Methodology:

 The average investment (Column D) by Field Reporting Code (FRC) is provided by the loop investment model for Residence and Business. The average investment represents the combined feeder and distribution investment per circuit. The average investment per circuit includes the appropriate state sales tax. The investments are then summed.

The spreadsheet provides a Weighted Average Residential and Business Loop Cost. The average investment (Column D) 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 percentage of access lines in service at the time the circuits were randomly selected for the loop survey.

- Each average investment is multiplied by a levelized investment inflation factor to determine the forward-looking levelized investment over a three year period.
- 3) The annual TELRIC associated with each investment is determined by multiplying the levelized investment by the TELRIC annual cost factors. The annual cost for all FRCs is summed and then divided by 12 to determine the monthly cost.
- 4) The total levelized monthly cost includes loop associated cost additives (i.e., subscriber line testing and distributing frame cost) as well as Gross Receipts Tax.

	A	merenicus 6	0		F	G	н
97	Combined Feeder & Distribution						
98	TELRIC / 100% Nonintegrated - 2 Wire	Analog Voice Grade					
99	Weighted Residential & Business Loc	p Cost					
100							
101	State:	Florida					
102				Levelized			
103				Investment			
104			Average	Inflation	Levelized	TELRIC	
105			Investment	Factor	Investment	ACF	TELRIC
106		CONTROL BASE THE STATE OF THE			(D°E)	11 25%	(F°G)
107					***************************************		
108	Land	20C		1.059		0.1493	
109							
	Buildings	10C		1.059		0.1720	
111	Buildings						
		257C.D257C.F257C		0.953		0.2695	
	Digital Circuit-Pair Gain	2910,02910,72910		0.903		0.2003	
113		1C		1.036		0.2163	
	Poles	10		1.030		0.2103	
115		*** ***		1.022		0.3400	
	Aerial Cable-Metallic	22C, 12C		1.022		0.3400	
117							
	Aerial Cable-Fiber	822C, D22C, F22C, T22C, F22C		0.999		0.2137	
119		812C, D12C,F12C,T12C					
120				116			
	Underground Cable-Metallic	5C		1.019		0.2791	
122							
123	Underground Cable-Fiber	85C, DSC.FSC.TSC		0.980		0.2001	
124							
	Burled Cable-Metallic	45C		1.020		0.2950	
126							
THE OWNER OF THE OWNER OF	Buried Cable-Fiber	845C, D45C, F45C, T45C		1.038		0.1973	
128							
-	Submarine Cable-Metallic	6C		1.013		0.2304	
130							
	Submarine Cable-Fiber	SSC, DSC,FSC, /SC		1.030		0.2310	
132							
133	Intrabidg Ntwk-Metallic	52C		1.012		0.2338	
134							
135	Intrabldg Ntwk-Fiber	852C,D52C,F52C,T52C		0.989		0.2113	
136							
137	Intrabidg Ntwk-Fiber Conduit Systems Aerial Drop	4C		1.050		0.1554	
138							
139	Aerial Drop	22C		1.022		0.3400	
140							
141	Buried Drop	45C		1.020		0.2950	
142	55.00 Disp						
143	Annual Total	Sum(D108.D141)					
	Monthly Total						
	Monthly Subscriber Line Testing Cost						\$0.63
	Monthly Distributing Frame Cost						\$0.23
and the same		Sum(H144.H146)					
	Total Levelized Monthly Cost Gross Receipts Tax (GRT) Factor	Continue (1140)					1.0153
	Total Levelized Monthly Cost (incl GRT)	/L44.479L44.48\					\$22.35

	A	8	D	E	F	G	Н	J
1	Combined Feeder & Distribution							-
2	TELRIC / 100% Nonintegrated - 4 Wire	Analog Voice Grade						
3	BUSINESS LOOP							
4								
	State:	Florida						
6				Levelized				
7				Investment				
8					Loughbord	TEL BIG		
9			Average	Inflation	Levelized	TELRIC		
_			Investment	Factor	Investment	ACF	TELRIC	
10					(D*E)	11 25%	(F*G)	
11								
	Land	20C		1.059		0.1493		
13								
	Buildings	10C		1.059		0.1720		
15								
_	Digital Circuit-Pair Gain	257C,D257C,F257C		0.953		0.2695		
17	Digital Circuit of Cana							
	Poles	10		1.036		0.2163		
_	70103					3.2.100		
19		200 100		1.022		0.3400		
	Aerial Cable-Metallic	22C, 12C		1.022		0.3400		
21								
	Aerial Cable-Fiber	822C, D22C, F22C, T22C, F22C		0.999		0.2137		
23		812C, D12C,F12C,T12C						
24								
25	Underground Cable-Metallic	5C		1.019		0.2791		
26								
_	Underground Cable-Fiber	85C, D5C,F5C,T5C		0.980		0.2001		
28								
	Buried Cable-Metallic	45C		1.020		0.2950		
30	Duried Capie-metanic							
	2 4 4 2 4 5 5 6 6	***C DIEC EIEC TIEC		1.038		0.1973		
-	Buried Cable-Fiber	845C, D45C, F45C, T45C		1.036		0.1973		
32						0.0004		
_	Submarine Cable-Metallic	6C		1.013		0.2304		
34								
	Submarine Cable-Fiber	86C, D6C,F6C,T6C		1.030		0.2310		
36								
37	Intrabidg Ntwk-Metallic	52C		1.012		0.2338		
38								
	Intrabidg Ntwk-Fiber	852C,D52C,F52C,T52C		0.989		0.2113		
40								
40 41	Conduit Systems	4C		1.050		0.1554		
42	Julian Official			,		1000 700		
42	Aeriai Drop	22C		1.022		0.3400		
44	Aenai Urop	•		1.044		3.3100		
44	Burled Drop					0.2050		
45	Buried Drop	46C		1.020		0.2950		
46								
	Annual Total	Sum(D12D45)						
48	Monthly Total							
	Monthly Subscriber Line Testing Cost						\$0.63	
_	Monthly Distributing Frame Cost						\$0.46	
_	Total Levelized Monthly Cost	Sum(H48.H50)						
_	Gross Receipts Tax (GRT) Factor						1.0153	3
	Total Levelized Monthly Cost (incl GRT)	(1849189)					\$40.76	

	A		D	E	F	G	н
_	Combined Feeder & Distribution						
98	TELRIC / 100% Nonintegrated - 2 Wire						
99	Weighted Residential & Business Loc	p Cost					
100							
	State:	Florida					
102				Levelized			
103				Investment			
104			Average	Inflation	Levelized	TELRIC	
105			Investment	Pactor	Investment	ACF	TELRIC
106				629617	(D*E)	11.25%	(F°G)
107							
108	Land	20C		1.059		0.1493	
109							
110	Buildings	10C		1.059		0.1720	
111							
	Digital Circuit-Pair Gain	257C,D257C,F257C		0.953		0.2695	
113							
	Poles	10		1.036		0.2163	
115							
116	Aerial Cable-Metallic	22C, 12C		1.022		0.3400	
117							
	Aerial Cable-Fiber	822C, D22C, F22C, T22C, F22C		0.999		0.2137	
119		812C, D12C,F12C,T12C					
120							
	Underground Cable-Metallic	5C		1.019		0.2791	
122							
	Underground Cable-Fiber	85C, D5C,F5C,T5C		0.980		0.2001	
124							
	Buried Cable-Metallic	45C		1.020		0.2950	
126							
127	Buried Cable-Fiber	845C, D45C, F45C, T45C		1.038		0.1973	
128							
-	Submarine Cable-Metallic	6C		1.013		0.2304	
130							
131	Submarine Cable-Fiber	SEC, DEC,FEC,TEC		1.030		0.2310	
132							
	Intrabidg Ntwk-Metallic	52C		1.012		0.2338	
134							
135	Intrabidg Ntwk-Fiber	852C,D52C,F52C,T52C		0.989		0.2113	
137	Conduit Systems	4C		1.050		0.1554	
138				•			
139	Aerial Drop	22C		1.022		0.3400	
140							
141	Buried Drop	48C		1.020		0.2950	
142							
143	Annual Total	Sum(D108.D141)					
	Monthly Total						
-	Monthly Subscriber Line Testing Cost						10.63
-	Monthly Distributing Frame Cost						\$0.23
	Total Levelized Monthly Cost	Sum(H144.H146)					
-	Gross Receipts Tax (GRT) Factor						1.0153
	Total Levelized Monthly Cost (Incl GRT)	(H147*H148)		S. W. Lawrence			\$35.68

TAB H

### PUNDAMENTAL 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)
         1.7842 In-Plant Factor
     $ 35,684.00 Installed Investment
            200 # Circuits per System
         178.42 Per Circuit Investment
           0.40 Probability of System
          71.37 Weighted Investment
           0.70 Utilization
÷
         101.95 Utilized Investment
          0.955 Levelized Inflation Factor
×
          97.36 Levelized Investment
         0.0117 MCE&P Factor
×
           1.14 MCE&P Investment
          97.36 Levelized Investment
           1.14 MCE&P Investment
          98.50
         0.0042 Land Factor
           0.41 Land Investment
          97.36 Levelized Investment
           1.14 MCE&P Investment
          98.50
         0.0706 Building Factor
           6.95 Building Investment
```

## FUNDAMENTAL DIGITAL LOOP CARRIER INVESTMENT MODEL

	Plug-in		
	\$ -	150.00	Plug-in Material Price
×		1.0604	In-Plant Factor
=	\$	159.06	Installed Investment
+		2	# Channels per Plug-in
=	\$	79.53	Per Circuit Investment
×		0.40	
	\$	31.81	Weighted Investment
×		1.06	
=	\$	33.72	Plug-in Investment
×		0.955	Levelized Inflation Factor
-	\$	32.20	Levelized Investment
×		0.0117	MCE&P Factor
-	\$	0.38	MCEEP Investment
	s	32.20	Levelized Investment
+	\$ \$	0.38	MCE&P Investment
=	\$	32.58	
×		0.0042	Land Factor
=	\$	0.14	Land Investment
	\$	32.20	Levelized Investment
+	\$	0.38	MCE&P Investment
=		32.58	
×	-	0.0706	
=	\$	2.30	Building 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)
+	\$ 0.50	Pigtails (per DS1)
+	\$ 1.00	Fiber Jumpers (per DS1)
=	\$ 454.00	Total Investment per system (per DS1)
×		System probability of occurrence
-	\$ 227.00	Weighted Investment
+	0.70	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
×	0.98	TPI
	\$ 49,000.00	[10] [10] [10] [10] [10] [10] [10] [10]
×	1.7842	In-Plant Factor
	\$ 87,425.80	Installed Investment
×	1.00	
=	\$ 87,425.80	
+	2,000	Unit Capacity
-	\$ 43.71	
×	0.955	
=	\$ 41.75	Levelized Investment
+	0.70	
=	\$ 59.64	Study Period Investment
×	0.50	Probability of Occurrence
-	\$ 29.82	Total Investment
×	0.0117	MCE&P Factor
=	\$ 0.35	MCE&P Investment
	\$ 29.82	Total Investment
+		MCE&P Investment
=	\$ 30.17	
×	0.0042	Land Factor
-	\$ 0.13	Land Investment
	\$ 29.82	Total Investment
+		MCEAP Investment
	\$ 30.17	
×	0.0706	Building Factor
=	\$ 2.13	

# PLORIDA UNBUNDLED LOOP COST DEVELOPMENT - NONRECURRING

In Progress

### FLORIDA UNBUNDLED LOOP

### SPECIFIC STUDY ASSUMPTIONS

The cost study for the Unbundled 2-Wire Analog Voice Grade Loop, the 4-Wire Analog Voice Grade Loop and 2-Wire ISDN Digital Grade Loop is based on the Total Element Long Run Incremental Cost (TELRIC) methodology prescribed by the FCC's First Report and Order in CC Docket 96-98 released August 8, 1996. Network deployment strategies, first choice provisioning guidelines, and equipment purchasing information are used to develop the Total Element Long Run Incremental Cost.

- Forward-looking technology is represented in the following manner:
  - . all loops less than 12,000 feet will be copper placements
  - . all loops greater than 12,000 feet will be fiber feeder placements and copper distribution placements
  - . all copper placements will be 26 gauge copper cable
- Utilization of cable segments is based on projected actual state-specific data and is applied as follows:

### Cable Pair/Strand Utilization

copper (feeder) 65.7% utilization copper (distribution) 38.8% utilization fiber (feeder) 74.0% utilization

### FLORIDA UNBUNDLED LOOP

### FACTORS AND LOADINGS

Following are the Total Element Long Run Incremental Cost (TELRIC) 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 Grade Loop.

# Florida Unbundled Loop Factors and Loadings

Subscriber Line Testing Monthl	y Cost Per Loop	\$0.63
Distributing Frame Weighted Mo	nthly Cost (2-Wire (4-Wire	\$0.23 \$0.46
Sales Tax		0.06
Loadings		
Land	20C	0.0047
Building	10C	0.0657
Pole	10	0.2523
Conduit	4C	0.3894
Misc Common Equip & Power	257C	0.0134
Misc Power Equipment	257C	0.0056
Gross Receipts Tax (Gross-up F	actor)	0.0153

## 1996 FLORIDA ACCOUNT AVERAGE LEVELIZED INFLATION FACTORS FOR FORWARD-LOOKING STUDIES

FOR	PORTVARD-EGORING STODIES	11.25%
. Land	20C	1.059
Building	10C, 110C	1.059
Gen Purpose Computer	530C, 630C, 531C	0.839
Analog Switch	77C, 577C	1.059
Digital Switch	377C, 587C	0.999
Operator Systems	117C, 417C	0.993
Radio	67C, 167C, 527C, 567C	1.039
Circuit-DDS	157C	0.955
Circuit-Digital Pair Gain	257C, D, F257C	0.953
Circuit-Other Digital	357C, F, T357C, 557C	0.955
Circuit- Analog Pair Gain	457C	0.000
Circuit-Other Analog	57C, 597C	1.049
Large PBX	158C, 258NC,458C,468C	0.961
Public	298C, 988C, 998C	1.026
·	198C, 188C, 288C	
Other Terminal	358NC, 378C, 558C	0.987
	828C, 858C, 928C,968NC	
	B, D, F958C, 978NC	
Poles	1C	1.036
Aerial Cable-Copper	22C, 12C	1.022
Aerial Cable-Fiber	822C, D, F, T22C,	0.999
	812C, D, F,T12C	
Underground Cable-Copper	5C	1.019
Underground Cable-Fiber	85C, D, F, T5C	0.980
Buried Cable-Copper	45C	1.020
Buried Cable-Fiber	845C, D, F, T45C	1.038
Submarine Cable-Copper	6C .	1.013
Submarine Cable-Fiber	86C, D, F, T6C	1.030
Introldg Ntwk Cable-Copper	52C	1.012
Introldg Ntwk Cable-Fiber	852C, D, F, T52C	0.989
Conduit	4C	1.050

### 1996 FLORIDA ACCOUNT AVERAGE ANNUAL COST FACTORS

\* FOR USE IN SERVICE COST STUDIES ONLY \*

	Field Code	Degraciation	ACFC COM	ACFC Inc Tax	Сар Ехр	ACFC Pit Specific Exp	ACFC Adval Tax	Directly Attributed Shared and Common	TELRIC
		•	b	c	d	•	t	, 9	
			11.25%	65.	(a+b+c)				(d+a+f+g)
LAND - COE	20C	8 0000	0.0947	0.0426	0.1373	0.0000	0.0120	0.0000	0.1493
BUILDINGS - COE	10C, 110C	0.0330	0.0826	0.0369	0.1525	0.0061	0.0120	0.0014	0.1720
DIGITAL ELEC SWITCH	377C, 587C	0.1157	0.0555	0.0254	0.1966	0.0236	0.0120	0.0434	0.2756
OPERATOR SYSTEMS	117C,417C	0.1157	0.0647	0.0296	0.2100	0.0033	0.0120	0.0500	0.2753
DIGTL CIRC-DOS	157C	0.1608	0.0575	0.0256	0.2439	0.0076	0.0120	0.0394	0.3029
DIGTL CIRC-PAIR GAIN	257C,D257C,F257C	0.1314			0.2127	0.0082		0.0366	0.2695
DIGTL CIRC-OTHER	357C,T357C,F357C,557C	0.1314			0.2130			0.0372	0.2715
POLES	10	0.0721	0.059	0.0254	0.1574	0.0175	0.0120	0.0294	0.2163
AERIAL CA - METAL	22C, 12C	0.1023	20 Ch (27 Ch)(27 Ch (27 Ch)(27 Ch (27	The contract of the contract o	0.1956				0.3400
AERIAL CA - FIBER	822C, 812C,D22C, F22C,T22C,D12C,F12C,T12C	0.0746			0.1689				0.2137
UNGROUND CA - METAL	SC	0.1184	0.068	1 0.0263	0.2128	0.0192	0.0120	0.0351	0.2791
<b>UNGROUND CA-FIBER</b>	85C,D5C,F5C,T5C	0.0686			0.1625	0.0036	0.0120	0.0220	0.2001
BURIED CA - METAL	45C	0.0885		SEASON DOWN BY THE REPORT OF THE PARTY OF TH					0.2950
BURIED CA - FISER	845C, D45C, F45C, T45C	0.0613	COLUMN TO THE PROPERTY OF	THE REAL PROPERTY AND ADDRESS OF THE PARTY O					0.1973
SUBMARINE CA-METAL	<b>6C</b>	0.0937	NAME OF THE PARTY				0.0120	0.0206	0.2304
SUBMARINE CA-FIBER	86C,D6C,F6C,T6C	0.0937							0.2310
INTRBLD NTWK-METAL	52C	0.0751	William Co.	PROPERTY OF THE PROPERTY OF TH					
INTRBLD NTWK-FIBER	852C.D52C.F52C.T52C	0.0751				BEAUTIFUL TO THE PARTY OF THE PARTY PROPERTY.	THE RESIDENCE OF THE PARTY OF THE PARTY.	Control of the second s	
CONDUIT SYSTEMS	4C	0.0205	The second secon		THE RESERVE THE PARTY OF THE PA		STATE OF THE PARTY		0.155

## Input Table.

# **Investment Inplant Factors**

- KC	State	Description	%Nonexempt	%Exempt	WTelco Eng	%Teles Inst	%Labor-Contr	Suppor
12C	FL	Aerial Cable - Metallic (Entrance Cable)			WE GIVE THE			
22C	and the same of	Aerial Cable - Metallic						
45C		Buried Cable - Metallic						
52C	FL	Intrabldg Ntwk Cable - Metallic						
_		Underground - Metallic					*	
6C		Submarine Cable - Metallic						
F12	FL	Aerial Cable - Non-Metallic (Entrance Cable)						
F22	THE OWNER OF THE OWNER,	Aerial Cable - Non-Metallic						
F45	_	Buried Cable - Non-Metallic						
F52		Intrabidg Ntwk Cable - Non-Metallic						
F5C	_	Underground Cable - Non-Metallic						
F6C	-	Submarine Cable - Non-Metallic						

# FLORIDA



UNBUNDLED
4-WIRE DS1
DIGITAL GRADE LOOP

TELRIC
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 Unbundled 4-Wire DS1 Digital Grade Loop Cost Study contains actual unit cost information for discrete cost elements. 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 Unbundled 4-Wire DS1 Digital Grade Loop Cost Study is considered proprietary.

### FLORIDA UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

#### INTRODUCTION AND OVERVIEW

This Total Element Long Run Incremental Cost (TELRIC) study is being provided to support the Unbundled 4-Wire DS1 Digital Grade Loop. The costs presented in this study are based on the TELRIC methodology established by the FCC's First Report and Order in CC Docket 96-98 (FCC Order) released August 8, 1996.

The Unbundled cost element referred to as a 4-Wire DS1 Digital Grade Loop provides for simultaneous two-way transmission of 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 BellSouth central office.

This cost study considers the network architectures and technologies that will be used in the future to provide the service being studied. 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 BellSouth 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 are developed for each design and then weighted by the probability of occurrence to determine the cost for the Unbundled 4-Wire DS1 Digital Grade Loop. A long run analysis is performed to ensure that the time period is sufficient to capture all forward-looking costs affected by the business decision. The recurring costs presented in this study are levelized so as to be appropriate for the 1997-1999 study period. Nonrecurring costs follow the same convention and represent 1997-1999 level costs also. These costs are developed by using 1996 level TELRIC loadings, annual cost factors and labor rates designed to produce TELRIC results.

## FLORIDA UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

### DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of Total Element Long Run Incremental Costs (TELRIC) supporting the Unbundled 4-Wire DS1 Digital Grade Loop.

The purpose of the TELRIC cost methodology established by the FCC order is to set the rates for interconnection and unbundled network elements. The basis for a TELRIC study is forward-looking long run economic cost methodology. Volume sensitive and volume insensitive costs are identified to develop the direct costs caused by providing the particular network element being studied. TELRIC methodology anticipates pricing of elements in a wholesale network company; hence, many costs regarded as common or shared and, therefore, excluded from BellSouth's direct cost methodology would be included as directly attributable in a TELRIC study. The FCC pricing methodology also specifies that, over and above TELRIC, the additional portion of forward-looking common costs that cannot be directly attributed to any particular network element will be allocated among the cost elements. This TELRIC study includes both recurring (capital and operating expenses) and nonrecurring (provisioning) costs.

#### DEVELOPMENT OF RECURRING COSTS

The monthly costs to BellSouth Telecommunications, Inc., resulting from the capital investments necessary to provide a cost element are called recurring costs. Recurring costs represent a forward-looking view of technology and deployment and include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs consist of plant specific expenses and ad valorem taxes. These expenses contribute to the ongoing cost to the Company associated with the initial capital investment. Also included in the recurring TELRIC are shared and common costs directly attributable to the network element. Gross receipts tax is calculated on the TELRIC.

The first step in developing a TELRIC recurring cost study 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 and a reasonable projection of the actual fill utilization are also considered.

Plant account specific Levelized 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 year planning period. Appropriate loadings for land, building, and miscellaneous common equipment and power are then applied.

Next, 1996 level TELRIC Annual Cost Factors are used to calculate the direct cost of capital, plant specific 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, which includes directly attributable shared and common costs. Annual Total Element Long Run Incremental Costs by account codes are then summed and divided by twelve to arrive at a monthly cost per cost element.

The directly attributable shared and common cost components of the TELRIC annual cost factors are calculated as follows. First, a detailed analysis of the forward-looking direct costs is performed. The remaining costs of doing business are then analyzed to determine whether they are directly attributable shared and common costs that cannot be reasonably attributed to network elements.

Next, the directly attributable shared and common costs are projected forward and segregated by the functional areas to which they are related. The functional areas are wholesale operations, retail services operations, and combined wholesale and retail services operations. Attribution factors based on the specific wholesale functional area, such as central office equipment (COE) investment, COE salary and wages, etc. are then developed and applied to the respective costs. These attributed costs are accumulated by related network investment category, such as pair gain equipment, buried cable, etc. and attributed shared cost factors are then included as a component of the TELRIC annual cost factors by investment category. All directly attributed costs related to retail services operations are excluded.

The common cost allocation factor is applied to TELRIC to produce the forward-looking economic cost, as defined by the FCC Order, which includes an appropriate share of common costs. The common cost allocation factor is calculated by summing all wholesale costs that cannot be reasonably attributed to specific elements, services or functions and dividing by the sum of the directly assignable and directly attributable wholesale costs.

### DEVELOPMENT OF NOMRECURRING 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, as identified by individuals knowledgeable about and/or responsible for performing these functions, 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 TELRIC labor rate for the work group performing the function.

The TELRIC labor rates are calculated as follows. Salary and wages, as used in the determination of TELRIC annual cost factors, are accumulated on a basis consistent with specific force groups. Shared costs attributable to salaries and wages are then accumulated on a basis consistent with the development of the respective force group's labor rate. A factor is then developed for each force group by dividing the attributed shared costs (human resources, office equipment, motor vehicles, land and building space, etc.) by the related salaries and wages. This factor is then applied to the salary and wage portion of the incremental labor rate for each force group, and the result is added to the incremental labor rate to determine the TELRIC labor rate.

Utilizing work functions, work times, and TELRIC 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 TELRIC 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 nonrecurring cost.

The common cost allocation factor is applied to the nonrecurring TELRIC to produce the forward-looking nonrecurring economic cost, as defined by the FCC Order, which includes an appropriate share of common costs.

### FLORIDA UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

### SUMMARY OF RESULTS

This section contains a cost summary for the 1997-1999 Total Element Long Run Incremental Costs (TELRIC) for both recurring and nonrecurring cost elements studied for the Unbundled 4-Wire DS1 Digital Grade Loop.

### FLORIDA UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

### SUMMARY OF RESULTS

	Monthly Cost	Nonrect First	rring Cost Additional
4-Wire DS1 Digital Grade Loop			
TELRIC	\$85.77	In pr	rogress
Common Cost Allocation Factor	1.0804		
Total	\$92.67		

### FLORIDA UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

### COST DEVELOPMENT - RECURRING

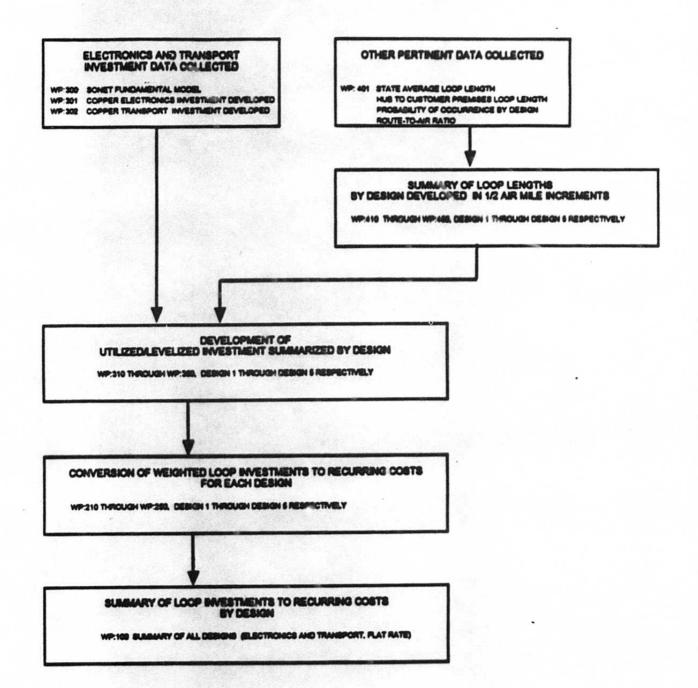
This section describes the development of the recurring Total Element Long Run Incremental Costs (TELRIC) for the Unbundled 4-Wire DS1 Digital Grade Loop.

Generally, 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. TELRIC annual cost factors are then 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 at the central office, at any intermediate hub, and at the customer premises. Also included are the working DS1 cards 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 cost element is flat rated, a cost is developed for each design based on the average length of a local channel. The designs are weighted by probability of occurrence to determine the cost of the Unbundled 4-Wire DS1 Digital Grade Loop.

The workpapers, behind Tab A, show the development of the investments, convert the investments to monthly costs and summarize the results. A description of the SONET Fundamental Investment Model is found in Tab B.



# TAB A

### UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP STUDY YEARS: 1997-1999

STATE: FLORIDA WORKPAPER: 100 PAGE: 1 OF 1 DATE: SEPTEMBER, 1998

MONTHLY TELRIC		SOURCE

LINE 1 2	DESIGN 1 - FLAT RATE SUMMARY	ELECTRONICS TRANSPORT		WP: 101, LINE 41 WP: 101, LINE 42
:	DESIGN 2 - FLAT RATE SUMMARY	ELECTRONICS TRANSPORT		WP: 102, LINE 41 WP: 102, LINE 42
:	DESIGN 3 - FLAT RATE SUMMARY	ELECTRONICS TRANSPORT		WP: 100, LINE 41 WP: 100, LINE 42
7	DESIGN 4 - FLAT RATE SUMMARY	ELECTRONICS TRANSPORT		WP: 104, LINE 41 WP: 104, LINE 42
9 10	DESIGN 5 - FLAT RATE SUMMARY	ELECTRONICS TRANSPORT		WP: 105, LINE 41 WP: 106, LINE 42
11 12 —	TOTAL ALL DESIGNS - FLAT RATE SUMMARY	ELECTRONICS TRANSPORT	\$57.19 \$27.29 \$84.48	WP: 100, LINES 1.8.8.7.8 WP: 100, LINES 2.4.8.8.10 WP: 100, LINES 11.12
14	GROSS RECEIPTS TAX		1.0153	FUNDAMENTAL FACTORS
15	TOTAL ALL DESIGNS - FLAT RATE SUMMARY WITH GROSS RECEIPTS TAX		\$85.77	%P: 100, LINES 13 * 14

# UNBUNDLED 4-WIRE DIGITAL GRADE LOOP MONTHLY RECURRING COST DEVELOPMENT - STUDY LEVEL: 1997-1999

STATE: FLORIDA WORIDAPER 101 PAGE: 1 OF 1 DATE: SEPTEMBER, 1996

1 2 3 4 5				DEPREC	COM	п	CAP. EXP	EIP.	AD VAL	SHARED and COMMON	TELFIC	
3 4				•			d =(a+b+c)		1		hn(d+q+f+g)	SOURCE
3 4	LAND	200		0.0000	0.0947	0.0426	0.1373	0.0000	0.0120	0.0000	0.1493	Fundamental Factors
3	BUILDINGS	100		0.0330	0.0826	0.0360	0.1525	0.0081	0.0120	0.0014	0.1720	Fundamental Factors
4	DIGTL ELEC SWITCH	377C		0.1157	0.0685	0.0254	0.1986	0.0236	0.0120	0.0434	0.2758	Fundamental Fectors
	DIGTL CIRC-PAIR GAIN	257C		0.1314	0.0564	0.0249	0.2127	0.0082	0.0120	0.0366	0.2695	Fundamental Factors
	POLES	10		0.0721	0.0599	0.0254	0.1574	0.0175	0.0120	0.0294	0.2163	Fundamental Factors
6	AERIAL CA - METAL	22/12C		0.1023	0.0679	0.0254	0.1956	0.0706	0.0120	0.0619	0.3400	Fundamental Factors
7	AERIAL CA - FIBER	622/812C		0.0746	0.0862	0.0281	0.1689	0.0029	0.0120	0.0299	0.2137	Fundamonts . Solon
	UNDERGROUND METAL	SC		0.1184	0.0881	0.0263	0.2128	0.0192	0.0120	0.0351	0.2791	Fundamental Factors
	CONDUIT	4C		0.0205	0.0727	0.0325	0.1257	0.0031	0.0120	0.0146	0.1554	Fundamental Festors
-10	BURIED CABLE - METAL	46C		0.0885	0.0678	0.0277	0.1840	0.0522	0.0120	0.0468		Fundamental Feston Fundamental Feston
11	UG CABLE - FIBER	860		0.0686	0.0686	0.0284	0.1625	0.0036	0.0120	0.0220	0.2001	Fundamental Factors
12	BURIED CABLE - FIBER	845C		0.0813	0.0670	0.0295	0.1578	0.0040	0.0120	0.0230	0.19/3	Purpositional Pactors
MONT	THLY RECURRING TE GN 1	ELRIC						ANT SPECI	esc.	DIRECTLY	ANNUAL	MONTHLY
LINE	DESCRIPTION	FRC	INVESTMENT	DEPREC	COM	п	CAP. EXP	EP.	AD VAL	SHARED and COMMON	TELRIC	TELRIC
	,		k = wp 3100	lea'k		n=c'k	0-d'k	p=0'k	q=f*k	Lad.F	a-h-k	1==/12
			Lines 15-19,28-33				(BY FRC)	(BY FRC)	(BY FRC)	(BY FRC)	(BY FRC)	(BY FRC)
					*******		*****	-	606990	000000	888888	02000000000000
-	TRONICS											
13	LAND	20C										
14	BUILDINGS	10C 377C										
15	DIGTL ELEC SWITCH DIGTL CIRC-PAIR GAIN	257C										
16 17	POLES	10										
18	AERIAL CA - METAL	22/12C										
19	AERIAL CA - FIBER	822/012C										
20	UNDERGROUND METAL	6C										
21	CONDUIT	40										
22	BURIED CABLE - METAL	46C										
23	UG CABLE - FIBER	SSC										
24	BURIED CABLE - FIBER	845C										
25	TOTAL ELECTRONICS											
TRANS	SPORT											
26	LAND	20C										
27	BUILDINGS	100										
28	DIGTL ELEC SWITCH	377C										
29	DIGTL CIRC-PAIR GAIN POLES	267C										
30	AERIAL CA - METAL	22/12C										
32	AERIAL CA - FIBER	822/812C										
33	UNDERGROUND METAL	SC										
34	CONDUIT	40										
36	BURIED CABLE - METAL	45C										
36	UG CABLE - FIBER	BSC										
37	BURIED CABLE - FIBER	845C										
30	TOTAL TRANSPORT											
						FLAT R	NATE SUMMARY - DESIGN 1			SOURCE		
39 40							PROBABILITY OF OCCURENCE STATE AVG AIR 1/2 MILES			BBS NETWORK WP: 4100, Line 16		10.00%
41							ELECTRONI			LINE 26 .		
42										BUMMARY - DE		

# MONTHLY RECURRING COST DEVELOPMENT -STUDY LEVEL: 1997-1999

STATE: FLORIDA WORKPAPER: 101A PAGE: 1 OF 1 DATE: SEPTEMBER, 1996

DIR	ECT FACTORS										
				DEPREC	COM	IT	CAP. EXP	ANT SPECI EXP.	AD VAL	ANNUAL DIRECT	
LINE	DESCRIPTION	FRC		DEPREC	COM	"	CAP. EAP	EA.	~ ~~	United !	
					b	•	d =(a+b+c)	•	1	h=(d+e+f)	SOURCE
				0.0000	0.0947	0.0426	0.1373	0.0000	0.0120	0.1493	Fundamental Factors
1	LAND BUILDINGS	100		0.0330	0.0826	0.0369	0.1525	0.0061	0.0120	0.1706	Fundamental Fasters
3	DIGTL ELEC SWITCH	377C		0.1157	0.0555	0.0254	0.1966	0.0238	0.0120	0.2322	Fundamental Fectors
- 1	DIGTL CIRC-PAIR GAIN	257C		0.1314	0.0584	0.0249	0.2127	0.0082	0.0120	0.2329	Fundamental Factors
	POLES	10		0.0721	0.0599	0.0254	0.1574	0.0175	0.0120	0.1889	Fundamental Factors
	AERIAL CA - METAL	22/12C		0.1023	0.0679	0.0254	0.1956	0.0705	0.0120	0.2781 0.1838	Fundamental Factors
7	AERIAL CA - FIBER	822/812C		0.0746	0.0662	0.0281	0.1689	0.0029	0.0120	0.2440	Fundamental Factors Fundamental Factors
	UNDERGROUND METAL	SC.		0.1184	0.0581	0.0263	0.2128	0.0192	0.0120	0.1408	Fundamental Factors
•	CONDUIT	40		0.0205	0.0727	0.0325	0.1257	0.0522	0.0120	0.2482	Fundamental Factors
10	BURIED CABLE - METAL UG CABLE - FIBER	46C 86C		0.0686	0.0655	0.0284	0.1825	0.0036	0.0120	0.1781	Fundamental Factors
11	BURIED CABLE - FIBER	845C		0.0613	0.0670	0.0295	0.1578	0.0040	0.0120	0.1738	Fundamental Factors
	DOINED GRADE TO THE				-						
	YTHLY RECURRING D	RECT									
DE8	IIGN 1						01	ANT SPECI	FIC	ANNUAL	MONTHLY
	DESCRIPTION	FRC	INVESTMENT	DEPREC	COM	IT	CAP. EXP	EOP.	AD VAL	DIRECT	DIRECT
LINE	DESCRIPTION	rnu	MAKEO! MEN!	BETTE							
			k = wp 3100	lee'k	m-p.F	u-c.k	0-4.F	D . 0 . F	q = f * k	s · h · k (BY FRC)	(BY FRC)
			Lines 15-19,29-33	(BY FRC)	(SY FRC)	(BY FRC)	(SY FRC)	(BY FRC)	(BY PRC)	(81 FRC)	(BT PAC)
e. e.	TRONICS		22506403								
13	LAND	200									
14	BUILDINGS	100									
15	DIGTL ELEC SWITCH	377C									
16	DIGTL CIRC-PAIR GAIN	257C									
17	POLES	10									
18	AERIAL CA - METAL	22/12C									
19	AERIAL CA - FIBER	822/812C									
20	UNDERGROUND METAL	60									
21	CONDUIT	4C 46C									
22	BURIED CABLE - METAL UG CABLE - FIBER	8SC									
24	BURIED CABLE - FIBER	845C									
25	TOTAL ELECTRONICS										
TOA	NSPORT										
26	LAND	200									
27	BUILDINGS	100									
28	DIGTL ELEC SWITCH	377C									
29	DIGTL CIRC-PAIR GAIN	267C									
30	POLES	10									
31	AERIAL CA - METAL	22/120									
32 33	AERIAL CA - FIBER UNDERGROUND METAL	622/912C									
34	CONDUIT	40									
36	BURIED CABLE - METAL	46C									
36	UG CABLE - FIBER	86C									
37	BURIED CABLE - FISER	BASC									
38	TOTAL TRANSPORT										
							<u> </u>				
						FLAT R	ATE SUMM	MARY - DE	SIGN 1	SOURCE	
**							PROBABILIT	TY OF OCC	JRENCE	BBS NETWORK	10.00%
40							STATE AVO	AIR 1/2 MIL	ES	WP: 4100, Line 16	4
										LINE 25 * LINE 30	
41							ELECTRON			CLINE 30 " LINE 30) " LINE 40	
42							TRANSPOR			france on raine sal raine an	
							WEIGHTED	AVERAGE	FLAT RATE	SUMMARY - DESIGN 1	
43										The second secon	

### UNBUNDLED 4-WIRE DIGITAL GRADE LOOP MONTHLY RECURRING COST DEVELOPMENT -STUDY LEVEL: 1997-1999

STATE: PLORIDA WORIDAPER: 102 PAGE: 1 OF 1 DATE: SEPTEMBER, 1996

TEL	RIC FACTORS									DIRECTLY		
LINE	DESCRIPTION	FRC		DEPREC	COM	п	CAP. EXP	EXP.	AD VAL	ATTRIBUTED SHARED and COMMON	TELRIC	
							d =(a+b+c)	•			ha(dearieg)	SOURCE
1	LAND BUILDINGS	100		0.0000	0.0947	0.0426	0.1373	0.0000	0.0120	0.0000	0.1493	<b>Fundamental Fectors</b>
;	DIGTL ELEC SWITCH	377C		0.1167	0.0666	0.0254	0.1988	0.0236	0.0120	0.0014	0.1720	Fundamental Factors
4	DIGTL CIRC-PAIR GAIN	257C		0.1314	0.0884	0.0249	0.2127	0.0082	0.0120	0.0386	0.2895	Pundamental Feature Fundamental Feature
	POLES	10		0.0721	0.0869	0.0254	0.1574	0.0176	0.0120	0.0294	0.2163	Fundamental Factors
*	AERIAL CA - METAL	22/12C		0.1023	0.0879	0.0254	0.1966	0.0706	0.0120	0.0819	0.3400	<b>Fundamental Fectors</b>
	AERIAL CA - FIBER UNDERGROUND METAL	822/812C		0.0746	0.0682	0.0261	0.1689	0.0029	0.0120	0.0299	0.2137	Fundamental Feature
	CONDUIT	40		0.0206	0.0727	0.0325	0.1267	0.0031	0.0120	0.0146	0.1854	Pundamental Festers Pundamental Festers
10	BURIED CABLE - METAL	480		0.0885	0.0678	0.0277	0.1840	0.0522	0.0120	0.0468	0.2960	Fundamental Factors
11	UG CABLE - FIBER	860		0.0000	0.0866	0.0284	0.1625	0.0009	0.0120	0.0220	0.2001	<b>Pundamental Factors</b>
. 12	, BURIED CABLE - FIBER	848C		0.0813	0.0870	0.0296	0.1578	0.0040	0.0120	. 0.0235	0.1973	Fundamental Feature
	ITHLY RECURRING TO IGN 2	ELRIC						LANT SPECIFIC		ORECTLY		
LINE	DESCRIPTION	FRC	PRVEDTMENT	DEPREC	COM	п	CAP. EXP	EXP.	ADVAL	SHARED and COMMON	TELRIC	TELFIC
			t = up 2200 Lines 23-26,30-43	(SY FRC)	(BY FRC)	(SY FRC)	(BY FRC)	(BY FRC)	(BY PRC)	(BY FRC)	(BY FRC)	(8Y FRC)
	TROISCS											
13	LAND BUILDINGS	200										
15	DIGTL BLEC SWITCH	10C 377C										
10	DIGTL CIRC-PAIR GAIN	267C										
17	POLES	10										
10	AERIAL CA - METAL	22/120										
19	AERIAL CA - FIBER UNDERGROUND METAL	822/012C										
21	CONDUIT	40										
22	BURNED CABLE - METAL	48C										
23 24	UG CABLE - PIBER BURIED CABLE - FIBER	86C 845C										
25	TOTAL ELECTRONICS											
TRANS	PORT											
20	LAND	20C										
27	BUILDINGS DIGTL ELEC SWITCH	10C 277C										
20	DIGTL CIRC-PAIR GAIN	257C										
30	POLES	10										
_21	AERIAL CA - METAL	22/120										
32 33		122/912C										
34	UNDERGROUND METAL CONDUIT	8C 4C										
36	BURNED CABLE - METAL	48C										
36	UG CABLE - FIBER	<b>SSC</b>										
37	BURIED CABLE - FIBER	848C										
30	TOTAL TRANSPORT											
30						FLAT RATE	SUMMARY	- DESIGN 2	1	SOUR	26	
40							PROBABILITY O		æ	888 NETV WP: 4200, I		35.00% 10
42							ELECTRONICS TRANSPORT			UNE 25 ° U		
43							WEIGHTED AVE	ERAGE FLAT R	ATE SUMM	MY - DESIGN 2		

# MONTHLY RECURRING COST DEVELOPMENT -STUDY LEVEL: 1997-1999

STATE: FLORIDA WORKPAPER: 102A PAGE: 1 OF 1 DATE: SEPTEMBER, 1006

LINE DESCRIPTION PRO DEPREC COM IT CAP EXP EXP. AD VAL. ORIGIT  1 LAND 250 0.0000 0.0000 0.0000 0.0000 0.0000 0.1000 0.1403 P. Annahmoral Favority Cap Exp. AD VAL. DRIED TOTAL LINE STORM CO. 0.0000 0.0000 0.0000 0.0000 0.1403 P. Annahmoral Favority Cap Exp. AD VAL. DRIED TOTAL LINE STORM CO. 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 P. Annahmoral Favority Cap Exp. AD VAL. DRIED TOTAL LINE STORM CO. 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 P. Annahmoral Favority Cap Exp. AD VAL. DRIED TOTAL	DIRE	CT FACTORS										
1						-					ANNUAL	
LIND   20C   0,0000   0,0000   0,0000   0,0000   0,0120   0,1403   Purishmental Fallows   1,0000   1	LINE	DESCRIPTION	FRC		DEPREC	COM	"	CAP. EAP				77.77.20
LIND   20C   0.0000   0.0000   0.0000   0.0000   0.0120   0.1400   0.1400   0.0000   0.0120					•	•			-	*		
2 SILLININGS 1907 2 SILLININGS 1907 3 DOTT, ELECTRONOCS THANBOOK 1977 3 DOTT, ELECTRONOCS THANBOOK 1977 4 DOTT, CRIC-PARI CAMP 397C 4 DOTT, CRIC-PARI CAMP 397C 5 C 1.1577 6 DOTT, CRIC-PARI CAMP 397C 6 C 1.1574 6 DOTT, CRIC-PARI CAMP 397C 7 C 1.1577 6 DOTT, CRIC-PARI CAMP 397C 7 C 1.1577 6 DOTT, CRIC-PARI CAMP 397C 7 C 1.1577 7 C		1440	900		0.0000	0.0947						
3 DOTT, ELEC SWITCH 37TC	100											
## DESCRIPTION   FRC   NVESTMENT   DEPREC   DOM   T   CAP EUP   EUP   ADVAL   DRIECT   DRIECT   DRIECT   STATE   STATE												
PLANE AN -METAL   2015   0.102   0.2294   0.1908   0.0705   0.0720   0.2781   Punismental Feature   Punismen			257C									
PART STORM   STATE   CONTINUE	5	POLES										
1	1.5											
CONDUCT   COND												
10	7										0.1408	
11 UG CASEL FIRER SEC						0.0878	0.0277					Fundamental Fectors
MONTHLY RECURRING DIRECT DESIGN 2  UNE DESCRIPTION FRC INVESTMENT DEPREC COM IT CAP EUP BUP, AD VAL. DIRECT			66C		0.0586							
DESIGN 2  UNIT DESCRIPTION  FIRE BY STATE SUMMARY - DESIGN 2  LINE 23-48,19-43  LINE	7.7		8480		0.0813	0.0670	0.0296	0.1578	0.0040	0.0120	0.1738	Fundamental Fectors
LINE   DESCRIPTION	MON	THLY RECURRING D	RECT									
The content of the	DES	GN 2							LANT SPECIF	IC .	ANNUAL	MONTHLY
Land	LINE	DESCRIPTION	FRC	INVESTMENT	DEPREC	COM	IT					DIRECT
ELECTRONICO  Umb 23-86,59-43  (BY FRC)											****	1==/12
13 LAND 200 15 DIOTA ELEC SWITCH 377C 16 DIOTA CLEC SWITCH 377C 17 POLES 10 CONDIT STREET 2010 20 AERIAL CA - METAL 2010 21 CONDIT 40 CASE - METAL 40 C 21 BURRED CASE - METAL 40 C 22 BURRED CASE - METAL 40 C 23 BURRED CASE - METAL 40 C 24 BURRED CASE - METAL 40 C 25 TOTAL ELECTRONICS  TRANSPORT 20 DIOTA CLEC SWITCH 377C 21 DIOTA CLEC SWITCH 377C 22 DIOTA CLEC SWITCH 377C 23 DIOTA CLEC SWITCH 377C 24 DIOTA CLEC SWITCH 377C 25 DIOTA CLEC SWITCH 377C 26 DIOTA CLEC SWITCH 377C 27 BURLDHOOD 10C 28 DIOTA CLEC SWITCH 377C 29 DIOTA CLEC SWITCH 377C 20 DIOTA CLEC SWI										(BY FRC)	(BY FRC)	(BY FRC)
13 LAND 200 15 DIOTA ELEC SWITCH 377C 16 DIOTA CLEC SWITCH 377C 17 POLES 10 CONDIT STREET 2010 20 AERIAL CA - METAL 2010 21 CONDIT 40 CASE - METAL 40 C 21 BURRED CASE - METAL 40 C 22 BURRED CASE - METAL 40 C 23 BURRED CASE - METAL 40 C 24 BURRED CASE - METAL 40 C 25 TOTAL ELECTRONICS  TRANSPORT 20 DIOTA CLEC SWITCH 377C 21 DIOTA CLEC SWITCH 377C 22 DIOTA CLEC SWITCH 377C 23 DIOTA CLEC SWITCH 377C 24 DIOTA CLEC SWITCH 377C 25 DIOTA CLEC SWITCH 377C 26 DIOTA CLEC SWITCH 377C 27 BURLDHOOD 10C 28 DIOTA CLEC SWITCH 377C 29 DIOTA CLEC SWITCH 377C 20 DIOTA CLEC SWI	ELEC	TRONGCS										
19 DIGTLELEC SWITCH 387C 17 POLES 10 18 AERIAL CA - NETAL 2013C 20 OKORROUND METAL 46 21 OKORROUND METAL 46 22 BURRED CARLE - NETAL 46 23 UA CARLE - PRIER 80 24 BURRED CARLE - PRIER 80 25 TOTAL ELECTRONICS  TRANSPORT 25 DIGTLELEC SWITCH 377C 26 DIGTLELEC SWITCH 377C 27 BURLED MAR AND 20C 28 DIGTLELEC SWITCH 377C 29 DIGTLELEC SWITCH 377C 30 DIGTLELEC SWITCH 377C 30 DIGTLELEC SWITCH 377C 30 DIGTLELEC SWITCH 46 31 DIGTLELEC SWITCH 46 32 DIGTLELEC SWITCH 46 31 DIGTLELEC SWITCH 46 32 DIGTLELEC SWITCH 46 33 DIGTLELEC SWITCH 46 34 COMDUT 46 35 DIGTLELEC SWITCH 46 36 DIGTLELEC SWITCH 46 36 DIGTLELEC SWITCH 46 37 DIGTLELEC SWITCH 46 38 DIGTLELEC SWITCH 46 39 DIGTLELEC SWITCH 46 30 DIGTLELEC SWITCH 46 30 DIGTLELEC SWITCH 46 30 DIGTLELEC SWITCH 46 30 DIGTLELEC SWITCH 46 31 DIGTLELEC SWITCH 46 32 DIGTLELEC SWITCH 46 34 COMDUT 46 35 DIGTLELEC SWITCH 46 36 DIGTLELEC SWITCH 46 36 DIGTLELEC SWITCH 46 37 DIGTLELEC SWITCH 46 38 DIGTLELEC SWITCH 46 39 DIGTLELEC SWITCH 46 40 DIGTLELEC SWITCH 46 41 DIGTLELEC SWITCH 46 42 DIGTLELEC SWITCH 46 43 DIGTLELEC SWITCH 46 44 DIGTLELEC SWITCH 46 45 DIGTLELEC SWITCH 46 46 DIGTLELEC SWITCH 46 47 DIGTLELEC SWITCH 46 48 DIGTLELEC SWITCH 46 49 DIGTLELEC SWITCH 46 40 DIGTLELEC SWITCH 46 40 DIGTLELEC SWITCH 46 41 DIGTLELEC SWITCH 46 41 DIGTLELEC SWITCH 46 41 DIGTLELEC SWITCH 46 42 DIGTLELEC SWITCH 46 43 DIGTLELEC SWITCH 46 44 DIGTLELEC SWITCH 46 45 DIGTLELEC SWITCH 46 46 DIGTLELEC SWITCH 46 46 DIGTLELEC SWITCH 46 47 DIGTLELEC SWITCH 46 48 DIGTLELEC SWITCH 46 49 DIGTLELEC SWITCH 46 40 DIGTLELEC SWITCH 46 40 DIGTLELEC SWITCH 46 41 DIGTLELEC SWITCH 46 42 DIGTLELEC SWITCH 46 43 DIGTLELEC SWITCH 46 44 DIGTLELEC SWITCH 46 45 DIGTLELEC SWITCH 46 46 DIGTLELEC SWITCH 46 46 DIGTLELEC SWITCH 46 47 DIGTLELEC SWITCH 46 48 DIGTLELEC SWITCH 46 48 DIGTLELEC SWITCH 46 48 DIGTLELEC SWITCH 4												
16 DIGTL CIRC-PAIR GAIN 17 POLES 18 AERIAL CA - NETAL 20/13C 19 AERIAL CA - NETAL 20/13C 19 AERIAL CA - NETAL 20/13C 10 CONDUTT 4C 21 DUCABLE - FREER 86C 22 DURIED CARLE - NETRER 86C 23 UU CARLE - FREER 86C 25 TOTAL ELECTRONICS  TRANSPORT 26 LAND 20C 27 BUILDINGS 10C 28 DIGTL ELEC SWITCH 377C 29 DIGTL ELEC SWITCH 377C 20 DIGTL ELEC SWITCH 257C 20 DIGTL ELEC SWITCH 257C 21 LAND 257C 22 DURIED CARLE - NETAL 20/13C 23 LARDA CA - FREER 80C 24 SURIED CARLE - NETAL 46C 25 DURIED CARLE - FREER 86C 26 TOTAL TRANSPORT  FLAT RATE SUMMARY - DESIGN 2 SURCE 26 DIGTL ELEC SWITCH 86C 27 BURRED CARLE - NETAL 46C 28 DURRED CARLE - FREER 86C 29 TOTAL TRANSPORT  FLAT RATE SUMMARY - DESIGN 2 SURCE 41 SURRED CARLE - NETAL 46C 42 SURRED CARLE - FREER 86C 44 SURRED CARLE - NETAL 46C 45 SURRED CARLE - FREER 86C 46 SURRED CARLE - NETAL 46C 47 SURRED CARLE - FREER 86C 48 SURRED CARLE - NETAL 46C 49 SURRED CARLE - FREER 86C 40 SURRED CARLE - FREER 86C 41 SURRED CARLE - FREER 86C 42 SURRED CARLE - NETAL 46C 43 SURRED CARLE - FREER 86C 44 SURRED CARLE - NETAL 46C 45 SURRED CARLE - FREER 86C 46 SURRED CARLE - NETAL 46C 47 SURRED CARLE - FREER 86C 48 SURRED CARLE - NETAL 46C 49 SURRED CARLE - FREER 86C 40 SURRED CARLE - FREER 86C 40 SURRED CARLE - FREER 86C 41 SURRED CARLE - FREER 86C 42 SURRED CARLE - FREER 86C 43 SURRED CARLE - FREER 86C 44 SURRED CARLE - FREER 86C 45 SURRED CARLE - FREER 86C 46 SURRED CARLE - FREER 86C 47 SURRED CARLE - FREER 86C 48 SURRED CARLE - FREER 86C 48 SURRED CARLE - FREER 86C 49 SURRED CARLE - FREER 86C 40 SURRED CARLE - FREER 86C 40 SURRED CARLE - FREER 86C 40 SURRED CARLE - FREER 86C 41 SURRED CARLE - FREER 86C 41 SURRED CARLE - FREER 86C 42 SURRED CARLE - FREER 86C 43 SURRED CARLE - FREER 86C 44 SURRED CARLE - FREER 86C 47 SURRED CARLE - FREER 86C 48 SURRED CARLE	14											
17 POLES 10 18 AERUAL CA - NETAL 2013C 20 UNDERGROUND METAL 50 21 UCONDUT 40 22 BURRED CARLE - FREER 86C 24 BURRED CARLE - FREER 86C 25 TOTAL ELECTRONICS  TTAMSPORT 26 LIAND 20C 27 BULDINGS 10C 28 IOUTH, ELEC SWITCH 377C 29 IOUTH, ELEC SWITCH 377C 20 IOUTH, ELEC SWITCH 377C 20 IOUTH, ELEC SWITCH 377C 21 IOUTH, ELEC SWITCH 377C 22 REAL CA - NETAL 20132 23 AERUAL CA - FREER 822911 24 UCONDUT 4C 25 BURRED CARLE - FREER 822911 26 OKONDUT 4C 27 BURRED CARLE - FREER 86C 28 BURRED CARLE - FREER 86C 29 TOTAL TRANSPORT  FLAT RATE SUMMARY - DESIGN 2 SOURCE  PROBABILITY OF OCCURENCE BSS NETWORK 35 00% 41 ELECTRONICS LINE 39 L												
18 ARRAL CA - HERTAL 22/19C 19 ARRAL CA - HERTAL 8C 10 CONDUT 40 21 CONDUT 877C 22 BURBED CARLE - METAL 46C 23 UU CASLE - FRIER 68C 25 TOTAL ELECTRONICS  TRANSPORT 26 LAND 20C 27 BULDINGS 10C 28 DIGTL ELEC SWITCH 377C 29 DIGTL ELEC SWITCH 377C 20 DIGTL ELEC SWITCH 377C 20 DIGTL ELEC SWITCH 377C 21 DIGTL ELEC SWITCH 377C 22 DIGTL ELEC SWITCH 377C 23 DIGTL ELEC SWITCH 377C 24 DIGTL ELEC SWITCH 377C 25 DIGTL ELEC SWITCH 377C 26 DIGTL ELEC SWITCH 377C 27 BULDINGS 10C 28 DIGTL ELEC SWITCH 4C 29 DIGTL ELEC SWITCH 4C 20 DIGTL ELEC SWITCH 4C 20 DIGTL ELEC SWITCH 4C 21 SWIRED CASLE - METAL 4C 21 SWIRED CASLE - METAL 4C 22 SWIRED CASLE - METAL 4C 23 UG CASLE - METAL 4C 24 DIGTL ELEC SWITCH 50C 25 TOTAL TRANSPORT   FLAT RATE SUMMARY - DESIGN 2  PROBABILITY OF OCCURRINCE SSS NETWORK 35 00% 41 DIGTL ELEC SWITCH 50C 41 DIGT												
19 AERIAL CA-PRER 8238135 20 UNDERGROUND METAL 4C 21 SURIED CASILE METAL 46C 22 SURIED CASILE FREER 68C 23 SURIED CASILE FREER 68C 24 SURIED CASILE FREER 68C 25 TOTAL ELECTRONICS  TTAMSPORT 26 LAND 20C 27 SULDINGS 10C 28 OIGH_ELEC SWITCH 377C 29 IOIGH_ELEC SWITCH 377C 30 IOIGH_ELEC SWITCH 377C 31 IOIGH_GROUND METAL 5C 32 SURIED CASILE METAL 48C 33 UNDERGROUND METAL 5C 34 CONDUIT 4C 35 SURIED CASILE METAL 48C 36 SURIED CASILE METAL 48C 37 SURIED CASILE FREER 88C 37 SURIED CASILE FREER 88C 38 TOTAL TRANSPORT   FLAT RATE SUMMARY - DESIGN 2 SOURCE  PROBABILITY OF OCCUMENCE 88S METAVORK 35 00% 40 TOTAL TRANSPORT LINE 39 * LIN												
20 UNDERGROUND METAL												
22 BURIED CABLE - METAL 48C 23 UG CABLE - FRIBER 68C 25 TOTAL ELECTRONICS  TRANSPORT 26 LIAND 20C 27 SUILDINGS 10C 28 DIGTL ELEC SWITCH 377C 39 DIGTL ELEC SWITCH 377C 30 DIGTL CIRC PAIR GAIN 257C 30 POULS 10C 31 ARRIAL CA - METAL 22/12* 22 ARRIAL CA - FRIBER 622/81: 23 UG CABLE - FRIBER 68C 33 UG CABLE - FRIBER 68C 34 CONDUIT 4C 35 SURIED CABLE - METAL 46C 36 UG CABLE - FRIBER 86C 37 SURIED CABLE - FRIBER 86C 37 SURIED CABLE - FRIBER 86C 38 TOTAL TRANSPORT  FLAT RATE SUMMARY - DESIGN 2 SOURCE  PROBABILITY OF OCCURENCE 858 NETWORK 3.5 00% 40 41 ELECTRONICS LINE 25 * LINE 39 42 LINE 30 * LINE 39 * LIN												
23 UG CABLE - FIBER 646C 24 BURIED CABLE - FIBER 646C 25 TOTAL ELECTRONICS  TRANSPORT 26 LAND 20C 27 SULDINGS 10C 28 DIGTL ELEC SWITCH 37TC 29 DIGTL CIRC-PAIR GAIN 25TC 29 DIGTL CIRC-PAIR GAIN 25TC 30 POLES 10C 31 AERIAL CA - FIBER 822/91; 33 UNDERGROUND METAL 5C 34 CONDUIT 4C 35 BURIED CABLE - METAL 48C 36 UG CABLE - FIBER 64C 37 SURIED CABLE - FIBER 64C 38 TOTAL TRANSPORT  FLAT RATE SUMMARY - DESIGN 2  PROBABILITY OF OCCURENCE SBS METWORK 35 00% 40 CHARLES WP 4200, LINE 18 10 41 ELECTRONICS LINE 28 **UNIE 29 42 LINE 28 **UNIE 29 44 ELECTRONICS LINE 28 **UNIE 29 44 LINE 28 **UNIE 29 45 LINE 28 **UNIE 29 46 LINE 28 **UNIE 29 47 LINE 29 48 LINE 28 **UNIE 29 49 LINE 28 **UNIE 29 40 LINE 28 **UNIE 29 41 LINE 28 **UNIE 29 42 LINE 29 **UNIE 29 44 LINE 28 **UNIE 29 45 LINE 28 **UNIE 29 46 LINE 28 **UNIE 29 47 LINE 29 **UNIE 29 48 LINE 28 **UNIE 29 49 LINE 28 **UNIE 29 40 LINE 28 **UNIE 29 41 LINE 28 **UNIE 29 42 LINE 29 **UNIE 29 44 LINE 28 **UNIE 29 45 LINE 28 **UNIE 29 46 LINE 28 **UNIE 29 47 LINE 29 **UNIE 29 48 LINE 28 **UNIE 29 48 LINE 28 **UNIE 29 49 LINE 28 **UNIE 29 40 LINE 28 **UNIE 29 41 LINE 28 **UNIE 29 42 LINE 28 **UNIE 29 43 LINE 28 **UNIE 29 44 LINE 28 **UNIE 29 45 LINE 28 **UNIE 29 46 LINE 28 **UNIE 29 47 LINE 28 **UNIE 29 48 LINE 28 **UNIE 28 48 LINE 28 **UNI	21											
28 URIED CABLE - FIBER 645G  29 TOTAL ELECTRONICS  TRANSPORT  20 LAND 20C  27 SUILDINOS 10C  28 DIGTL ELEC SWITCH 377C  29 DIGTL ELEC SWITCH 377C  20 DIGTL ELEC SWITCH 377C  20 DIGTL CIRC-PAIR GAIN 287C  30 POLES 1C  31 AERIAL CA - METAL 22/12/2  22 AERIAL CA - METAL 22/12/2  23 UNDERGROUND METAL 9C  30 CONDUIT 4C  30 SURIED CABLE - METAL 48C  30 UN CABLE - FIBER 84C  37 SURIED CABLE - FIBER 84C  38 TOTAL TRANSPORT  FLAT RATE SUMMARY - DESIGN 2  PROBABILITY OF OCCURENCE 858 METWORK 35.00%  40 PROBABILITY OF OCCURENCE 858 METWORK WP. 4300, Line 18 10  41 ELECTRONICS LINE 30 (LINE 30 * LINE												
TRANSPORT  28  LAND												
28 LAND 20C 27 BUILDINGS 10C 28 DIGTL EIRG SWITCH 377C 29 DIGTL CIRC-PAIR QAIN 257C 30 POLES 1C 31 ARRAL CA - METAL 22/12C 32 ARRAL CA - FIBER 822/01C 33 UNDERGROUND METAL 5C 34 CONDUT 4C 35 BURIED CABLE - METAL 48C 36 UG CABLE - FIBER 84C 37 BURIED CABLE - FIBER 84C 38 TOTAL TRANSPORT  FLAT RATE SUMMARY - DESIGN 2  PROBABILITY OF OCCURENCE BBS NETWORK 35.00% 40 41 41 42 42 43 ELECTRONICS LINE 39 * LINE 49	25	TOTAL ELECTRONICS										
28 LAND 20C 27 BUILDINGS 10C 28 DIGTL EIRG SWITCH 377C 29 DIGTL CIRC-PAIR QAIN 257C 30 POLES 1C 31 ARRAL CA - METAL 22/12C 32 ARRAL CA - FIBER 822/01C 33 UNDERGROUND METAL 5C 34 CONDUT 4C 35 BURIED CABLE - METAL 48C 36 UG CABLE - FIBER 84C 37 BURIED CABLE - FIBER 84C 38 TOTAL TRANSPORT  FLAT RATE SUMMARY - DESIGN 2  PROBABILITY OF OCCURENCE BBS NETWORK 35.00% 40 41 41 42 42 43 ELECTRONICS LINE 39 * LINE 49	TRAM	8000T										
27 BUILDINGS 10C 28 DIGTL ELEC SWITCH 377C 29 DIGTL CIRC-PAIR GAIN 25TC 30 POLES 1C 31 AERIAL CA - METAL 22/13' 32 AERIAL CA - FIBER 62291: 33 UNDERGROUND METAL 5C 34 CONDUIT 4C 35 BURIED CABLE - METAL 48C 36 BURIED CABLE - METAL 48C 37 BURIED CABLE - FIBER 64C 37 BURIED CABLE - FIBER 64C 38 TOTAL TRANSPORT   FLAT RATE SUMMARY - DESIGN 2 SOURCE  PROBABILITY OF OCCURENCE BBS METWORK 3.5.00% 40 BTATE AVG ART 12 MELES WP. 4200, Line 15 10 41 ELECTRONICS LINE 39 LINE 39 42 LINE 39 * LINE 39 * LINE 39			200									
29 DIGTL CIRC-PAIR GAIN 257C 30 POLES 10 31 AERIAL CA - METAL 22/12X 32 AERIAL CA - FIBER 82/191; 33 UNDERGROUND METAL 5C 34 CONDUIT 4C 35 BURIED CABLE - METAL 48C 36 UIC CABLE - FIBER 86C 37 BURIED CABLE - FIBER 86C 38 TOTAL TRANSPORT  FLAT RATE SUMMARY - DESIGN 2  PROBABILITY OF OCCURENCE 8BS NETWORK 35.00% 40 PROBABILITY OF OCCURENCE 8TATE AVG ARE 1/2 MILES WP: 4200, Line 16 10 41 ELECTRONICS LINE 20 * LINE 20			100									
30 POLES 1C 31 AERIAL CA - FIBER 822/91; 32 AERIAL CA - FIBER 822/91; 33 UNDERGROUND METAL 8C 34 CONDUIT 4C 35 BURIED CABLE - METAL 48C 36 BURIED CABLE - FIBER 84SC 37 BURIED CABLE - FIBER 84SC 38 TOTAL TRANSPORT  FLAT RATE SUMMARY - DESIGN 2 SOURCE  PROBABILITY OF OCCURENCE BBS NETWORK 3.55.00% 8 TATE AVG ARE 1/2 MILES WP. 4200, Line 16 10  41 ELECTRONICS LINE 20 * LINE 20 * LINE 20 * LINE 40	28		11000000									
31 AERIAL CA - METAL 22/13: 32 AERIAL CA - FIRER 822/81: 33 UNDERGROUND METAL 5C 34 CONDUIT 4C 35 BURIED CASLE - METAL 4SC 36 UG CASLE - FIRER 86C 37 SURIED CASLE - FIRER 86C 38 TOTAL TRANSPORT  SELECTRONICS BURIED CASLE - FIRER 54C 40 PROBABILITY OF OCCURENCE BBS NETWORK 3.5.00% 41 ELECTRONICS LINE 30 LINE 40	1000		A STREET STREET									
22 AERIAL CA - FIBER (2201): 33 UNDERGROUND METAL 5C 34 CONDUIT 4C 35 BURIED CABLE - METAL 4SC 36 UG CABLE - FIBER 6SC 37 BURIED CABLE - FIBER 6SC 38 TOTAL TRANSPORT  FLAT RATE SUMMARY - DESIGN 2  PROBABILITY OF OCCURENCE 8BS NETWORK 35.00% 40 PROBABILITY OF OCCURENCE STATE AVG ARE 1/2 MILES WF: 4200, Line 15 10  41 ELECTRONICS LINE 29 (LINE 39) * LINE 40	1757										,	
33 UNDERGROUND METAL SC CONDUIT 4C 34 UND CABLE - METAL 48C 35 BURIED CABLE - FIBER 86C 37 SURIED CABLE - FIBER 86C 38 TOTAL TRANSPORT  SET TOTAL TRANSPORT  FLAT RATE SUMMARY - DESIGN 2 SOURCE  PROBABILITY OF OCCURENCE SES NETWORK 35.00% WP: 4200, Line 16 10  41 ELECTRONICS LINE 20 * LINE 30 * LINE 40												
34 CONDUIT 4C 35 BURIED CABLE - NETAL 4SC 30 UR CABLE - FIRER 5SC 37 BURIED CABLE - FIRER 5SC 38 TOTAL TRANSPORT  SET TOTAL TRANSPORT  FLAT RATE SUMMARY - DESIGN 2 SOURCE  PROBABILITY OF OCCURENCE BBS NETWORK 35.00% 8TATE AVG ARE 1/2 MLBS WP. 4200, Line 15 10  ELECTRONICS LINE 20 * LINE 30 * LINE 40												
25 BURIED CABLE - METAL 48C 55C 548C 548C 548C 548C 548C 548C 5												
37 SURIED CASLE - FISER \$46C  38 TOTAL TRANSPORT  FLAT RATE SUMMARY - DESIGN 2 SOURCE  PROBABILITY OF OCCURENCE SISS NETWORK 35.00% 8TATE AVG ARE 1/2 MILES WP. 4200, Line 15 10  ELECTRONICS LINE 25 * LINE 30 42 TRANSPORT (LINE 38 * LINE 30) * LINE 40	36	BURIED CABLE - METAL										
FLAT RATE SUMMARY - DESIGN 2  PROBABILITY OF OCCURENCE BBS NETWORK 35.00% 10  PROBABILITY OF OCCURENCE WP. 4200, Line 15 10  ELECTRONICS LINE 29 (LINE 39) * LINE 40												
### FLAT RATE SUMMARY - DESIGN 2 SOURCE  ###################################	37	BURIED CABLE - FIGER	848C									
39 40 PROBABILITY OF OCCURENCE BBS NETWORK 35.00% 40 STATE AVG AIR 1/2 MILES WP. 4200, Line 15 10  41 41 ELECTRONICS LINE 25 * LINE 30 TRANSPORT (LINE 30 * LINE 40	36	TOTAL TRANSPORT										
PROBABILITY OF OCCURENCE BBS NETWORK 35.00% STATE AVG ARE 1/2 MILES WP: 4200, Line 15 10  ELECTRONICS LINE 29 * LINE 39 1 LINE 39 * LINE 39 * LINE 39 * LINE 40							FLAT RAT	TE SUMMAR	Y - DESIGN	12	SOURCE	
41 ELECTRONICS LINE 20 142 TRANSPORT (LINE 30 * LINE 40	7.7									NCE .		
	43									T RATE BUM	MARY - DESIGN 2	

### UNBUNDLED 4-WIRE DIGITAL GRADE LOOP MONTHLY RECURRING COST DEVELOPMENT -STUDY LEVEL: 1997-1999

STATE: PLORIDA WORIDPAPER: 103 PAGE: 1 OF 1 DATE: SEPTEMBER, 1899

TELR	RIC FACTORS									DIRECTLY	ANDIUAL	
LINE	DESCRIPTION	PRC		DEPREC	COM	п	CAP. EXP	EXP.	AD VAL	SHARED and COMMON	TELRIC	
							d =(0+b+0)				ho(d+g+f+g) mannen	BOURCE
	LAND	200		0,0000	0.0947	0.0426	0.1373	0.0000	0.0120	0.0000	0.1493	<b>Pundemontal Factors</b>
,	BUILDINGS	100		0.0330	0.0947	0.0389	0.1525	0.0061	0.0120	0.0014	0.1720	<b>Pundemental Festors</b>
•	DIGTL ELEC SWITCH	377C		0.1157	0.0555	0.0254	0.1966	0.0236	0.0120	0.0434	0.2758	Pundamental Feature
4	DIGTL CIRC-PAIR GAIN	257C		0.1314	0.0564	0.0249	0.2127	0.0082	0.0120	0.0386	0.2695	Fundamental Festers
	POLES	10		0.0721	0.0599	0.0264	0.1574	0.0175	0.0120	0.0294	0.2163	Fundamental Festors
	AERIAL CA - METAL	22/12C		0.1023	0.0679	0.0254	0.1956	0.0706	0.0120	0.0819	0.3400	Pundamental Festions
7	AERIAL CA - FIBER	822/0120		0.0746	0.0862	0.0281	0.1689	0.0029	0.0120	0.0299	0.2137	Fundamental Festors
	UNDERGROUND METAL	80		0.1184	0.0881	0.0263	0.2128	0.0192	0.0120	0.0361	0.2791	Fundamental Festive
	CONDUIT	40		0.0206	0.0727	0.0326	0.1267	0.0031	0.0120	0.0144	0.1864 0.2960	Fundamental Festiva
10	BURIED CABLE - METAL	460		0.0885	0.0678	0.0277	0.1840	0.0622	0.0120	0.0488	0.2001	Fundamental Factors
11	UG CABLE - FIBER	660		0.0006	0.0886	0.0284	0.1626	0.0008	0.0120	0.0220	0.1973	Fundamental Feature Fundamental Feature
. 12	PURIED CABLE - FIBER	848C		0.0813	0.0670	0.0295	0.1578	0.0040	0.0120	0.0230	0.1973	Purquinana Palians
	THLY RECURRING TE	LRIC								DIRECTLY		
DESI	IGN 3							LANT SPECIFIC	0	ATTRIBUTED	AMNUAL	MONTHLY
LINE	DESCRIPTION	FRC	DIVESTMENT	DEPREC	COM	п	CAP. EXP	EXP.	AD VAL	BHANED and COMMON	TELRIC	TELA
			k = wp 3000	100'8	m.p.s	n-0.F	0 - d'k	0 * 0 * E	gef'k	1.0.4	0 - h - k	t = e / 12
			Lines 23-28,30-42	(BY FRC)	(BY FRC)	(BY FRC)	(BY FRC)	(BY FRC)	(BY FRC)	(BY FRC)	(BY FRC)	(BY FRC)
ELECT	TRONGS					100						
13	LAND	200										
14	BUILDINGS	100										
15	DIGTL ELEC SWITCH	8770										
10	DIGTL CIRC-PAIR GAIN	267C						11.2				
17	POLES	10										
18	ABRIAL CA - METAL	22/12C										
10	AERIAL CA - FIBER	622/0120										
20	UNDERGROUND METAL	BC .										
21	CONDUIT	46C										
22	BURIED CABLE - METAL UG CABLE - PIBER	68C										
23	BURIED CABLE - FIRER	MISC										
25	TOTAL ELECTRONICS											
_												
26	BPORT LAND	200										
27	BUILDINGS	100										
26	DIGTL ELEC SWITCH	377C										
29	DIGTL CIRC-PAIR GAIN	257C										
30	POLES	10										
.25	AERIAL CA - METAL	22/12C										
32	AERIAL CA - FIBER	622/8120										
33	UNDERGROUND METAL	BC .										
34	CONDUIT	40										
36	BURIED CABLE - METAL	48C										
30	UG CABLE - FISER BURIED CABLE - FISER	845C										
36	TOTAL TRANSPORT											
						FLAT RAY	E BUMMAR	Y - DESIGN	3	sou	RCE	
39									J. 1			
40								Y OF OCCUREN AIR 1/2 MILES	ICE	983 NE WP: 4300		15.00% 10
41 42							ELECTRONIC			LINE 25 ' (LINE 30 ' LINE		
43							WEIGHTED A	VERAGE FLAT	RATE BUM	MARY - DESIGN		

# MONTHLY RECURRING COST DEVELOPMENT - STUDY LEVEL: 1997-1999

STATE: FLORIDA WORKPAPER: 103A PAGE: 1 OF 1 DATE: SEPTEMBER, 1998

DIRE	CT FACTORS							LANT SPECIF	ic .	ANNUAL	
LINE	DESCRIPTION	FRC		DEPREC	COM	п	CAP. EXP	EXP.	AD VAL	DIRECT	
							d =(a+b+a)		,	h=(d+++f)	SOURCE
					000000	000000	0.1373	0.0000	0.0120	0.1493	Fundamental Festions
1	LAND .	200		0.0000	0.0947	0.0426	0.1525	0.0001	0.0120	0.1708	Fundamental Fectors
2	BUILDINGS	100		0.0330	0.0828	0.0254	0.1988	0.0236	0.0120	0.2322	Fundamental Feature
•	DIGTL ELEC SWITCH	377C		0.1157	0.0564	0.0249	0.2127	0.0082	0.0120	0.2329	Fundamental Festore
4	DIGTL CIRC-PAIR GAIN	257C		0.0721	0.0699	0.0254	0.1574	0.0176	0.0120	0.1869	Fundamental Fectors
5	POLES	1C 22/12C		0.1023	0.0879	0.0254	0.1956	0.0706	0.0120	0.2781	<b>Fundamental Factors</b>
•	AERIAL CA - METAL	822/8120	Value of State	0.0746	0.0862	0.0281	0.1689	0.0029	0.0120	0.1838	<b>Fundamental Factors</b>
7	AERIAL CA - FISER UNDERGROUND METAL	SC		0.1184	0.0881	0.0263	0.2128	0.0192	0.0120	0.2440	Fundamental Fectors
	CONDUIT	40		0.0206	0.0727	0.0325	0.1257	0.0031	0.0120	0.1408	Fundamental Factors
10	BURIED CABLE - METAL	45C		0.0885	0.0678	0.0277	0.1840	0.0622	0.0120	0.2482	Fundamental Festiva
11	UG CABLE - FIBER	850		0.0686	0.0855	0.0284	0.1625	0.0036	0.0120	0.1781	Fundamental Festions
12	BURIED CABLE - FIBER	846C		0.0613	0.0670	0.0296	0.1578	0.0040	0.0120	0.1738	Fundamental Festiva
MON	THLY RECURRING DI	BEOT									
	GN S									ANNUAL	MONTHLY
						п	CAP. EXP	LANT SPECIF EXP.	AD VAL	DIRECT	DIRECT
UNE	DESCRIPTION	FRC	INVESTMENT	DEPREC	COM		CAP. EX-				
			k = wp 3300 Lines 23-28,38-42	(SY FRC)	m · b · k	n = o * k (SY FRC)	(BY FRC)	(BY FRC)	4 = 1 * k (BY FRC)	(BY FRC)	(# # / 12 (BY FRC)
			********	*****	******		******		*****		*************
	TROMCS			7-3							
13	LAND	200									
14	BUILDINGS	10C 377C									
15	DIGTL ELEC SWITCH	257C									
16	DIGTL CIRC-PAIR GAIN POLES	10									
18	AERIAL CA - METAL	22/120									
19	AERIAL CA - FIBER	622/9120									
20	UNDERGROUND METAL	80									
21	CONDUIT	40									
22	BURIED CABLE - METAL	48C									
23	UG CABLE - FIRER	86C								2	
24	BURIED CABLE - FIBER	BASC									
26	TOTAL ELECTRONICS										
TRAN	APORT .										
26	LAND	200									
27	BUILDINGS	100									
26	DIGTL ELEC SWITCH	377C									
29	DIGTL CIRC-PAIR GAIN	257C									
30	POLES	10									
31	AERIAL CA - METAL	22/12C 822/6120									
32	AERIAL CA - FIBER UNDERGROUND METAL	SC									
33	CONDUIT	40									
36	BURIED CABLE - METAL	48C									
36	UG CABLE - FIBER	68C									
37	BURIED CABLE - FISER	846C									
36	TOTAL TRANSPORT										
						ELAT BA	TE SUMMAS	V DESIG	N S	SOURCE	
30								Y OF OCCUR		BBS NETWORK	15.00%
40								AIR 1/2 MILES		WP: 4300, Line 18	10
41							ELECTRONS			LINE 25 * LINE 30 (LINE 38 * LINE 30) * LINE 40	
										***************************************	
43							WEIGHTED	AVERAGE FLA	T RATE SUM	MARY - DESIGN 3	
-											

#### UNBUNDLED 4-WIRE DIGITAL GRADE LOOP MONTHLY RECURRING COST DEVELOPMENT -STUDY LEVEL: 1997-1999

STATE: FLORIDA WORKPAPER: 164 PAGE: 1 OF 1 DATE: SEPTEMBER, 1888

	DESCRIPTION	PRC		DEPREC	COM	п	CAP. EXP	LANT BPECIPIO EXP.	AD VAL	DIRECTLY ATTRIBUTED SHARED and COMMON	ANNUAL TELRIC	
				•	0.0947	0.0426	0.1373	0.0000	0.0120	0.0000	0.1483	BOURCE Pundamental Feature
!	LAND	290		0.0000	0.0826	0.0389	0.1525	0.0001	0.0120	0.0014	0.1720	Fundamental Fectors
:	BUILDINGS	16C 377C		0.0330	0.0655	0.0364	0.1998	0.0236	0.0120	0.0434	0.2756	Fundamental Festion
:	DIGTL ELEC SWITCH DIGTL CIRC-PAIR GAIN	257C		0.1314	0.0684	0.0249	0.2127	0.0082	0.0120	0.0366	0.2695	Fundamental Festion
:	POLES	10		0.0721	0.0699	0.0264	0.1574	0.0175	0.0120	0.0294	0.2163	Fundamental Feston
	AERIAL CA - METAL	22/120		0.1023	0.0879	0.0264	0.1966	0.0706	0.0120	0.0619	0.3400	Fundamental Festors
1	AERIAL CA - FIBER	822/912C		0.0746	0.0882	0.0281	0.1689	0.0029	0.0120	0.0299	0.2137	Pundamental Festiva
	UNDERGROUND METAL	SC		0.1184	0.0681	0.0263	0.2128	0.0192	0.0120	0.0361	0.2791	Pundamental Factors
	CONDUIT	4C		0.0205	0.0727	0.0325	0.1267	0.0031	0.0120	0.0148	0.1864	Pundamental Festors
10	BURIED CABLE - METAL	45C		0.0885	0.0878	0.0277	0.1840	0.0622	0.0120	0.0468	0.2960	Fundamental Factors Fundamental Factors
11	UG CABLE - FIBER BURIED CABLE - FIBER	860		0.0813	0.0870	0.0284	0.1678	0.0040	0.0120	0.0236	0.1973	Fundamental Festors
	HLY RECURRING TI											
DESK	3N 4						_			DIRECTLY	ANNUAL	MONTHLY
LINE	DESCRIPTION	FRC	<b>DIVESTMENT</b>	DEPREC	COM	п	CAP. EXP	EXP.	AD VAL	SHARED and	TELRIC	TELRIC
			k = up 3400,3401	100'8	m.p.F	n++**	****		4+1-2	COTWON	****	1 = 0 / 12
			Lines 19-22,13-25	(BY FRC)	(BY FRO)	(BY FRC)	(BY FRC)	(BY FRC)	(BY FRC)	(BY PRC)	(BY FRC)	(BY FRC)
SLECT	ROMICA											
13	LAND	200										
14	BUILDINGS	100										
15	DIGTL ELEC SWITCH	377C										
18	DIGTL CIRC-PAIR GAIN	257C	1									
17	POLES	10										
18	AERIAL CA - METAL AERIAL CA - FISER	22/12C 622/012C										
20	UNDERGROUND METAL	BC										
21	CONDUIT	40	1									
22	BURIED CABLE - METAL	48C										
23	UG CABLE - FIBER	86C										
24	BURIED CABLE - FIRER	848C										
25	TOTAL ELECTRONICS		•									
TRANS	PORT											
26	LAND	20C										
27	BUILDINGS DIGTL ELEC SWITCH	377C										
29	DIGTL CIRC-PAIR GAIN	257C										
30	POLES	10										
31	AERIAL CA - METAL	22/12C										
32	AERIAL CA - PIBER	622/012C										
33	UNDERGROUND METAL	80										
34	CONDUIT	40										
35	BURIED CABLE - METAL UG CABLE - PIBER	48C										
37	BURIED CABLE - FIBER	BASC										
20	TOTAL TRANSPORT											
						FLAT RAT	E SUMMAR	Y - DESIGN 4		800	ACE	
30							PROBABILITY STATE AVG	OF OCCUREN	<b>DE</b>	985 NE WP: 4400		25.00%
40												
40 41 42							ELECTRONIC	8		LINE 25	LINE 39	

WEIGHTED AVERAGE FLAT RATE BUILDARY - DESIGN 4

# MONTHLY RECURRING COST DEVELOPMENT -STUDY LEVEL: 1997-1999

STATE: FLORIDA WORKPAPER: 104A PAGE: 1 OF 1 DATE: SEPTEMBER, 1908

DIRE	CT FACTORS					Open.		LANT SPECIFI		AHNUAL	
LINE	DESCRIPTION	FRC		DEPREG	COM	ır	CAP. EXP	EXP.	AD VAL	DIRECT	
							d =(a+b+c)	•	1	h=(d+a+f)	SOURCE
									*****	0.1403	
	LAND .	200		0.0000	0.0947	0.0426	0.1373	0.0000	0.0120	0.1493	Fundamental Factor Fundamental Factor
ż	BUILDINGS	100		0.0330	0.0826	0.0389	0.1525	0.0081	0.0120	0.1708 0.2322	Pundamental Fester
;	DIGTL ELEC SWITCH	377C		0.1157	0.0666	0.0254	0.1988	0.0236	0.0120	0.2329	Fundamental Festor
	DIGTL CIRC-PAIR GAIN	257C		0.1314	0.0684	0.0249	0.2127	0.0082	0.0120	0.1889	Fundamental Factor
	POLES	10		0.0721	0.0699	0.0254	0.1574	0.0176	0.0120	0.2781	Fundamental Fester
	AERIAL CA - METAL	22/120		0.1023	0.0679	0.0254	0.1968	0.0706	0.0120	0.1838	Fundamental Fector
7	AERIAL CA - FIRER	822/812C		0.0746	0.0862	0.0261	0.1669	0.0029	0.0120	0.2440	Fundamental Fester
	UNDERGROUND METAL	80		0.1184	0.0881	0.0263	0.2126	0.0031	0.0120	0.1408	Fundamental Fester
	CONDUIT	40		0.0206	0.0727	0.0325	0.1840	0.0622	0.0120	0.2482	Fundamental Fester
10	SURIED CABLE - METAL	48C		0.0885	0.0656	0.0284	0.1625	0.0036	0.0120	0.1781	Fundamental Festor
11	UG CABLE - FIBER	86C		0.0688	0.0670	0.0295	0.1578	0.0040	0.0120	0.1738	Fundamental Factor
12	BURIED CABLE - FIBER	845C		0.0013	0.0010	0.010					
	THLY RECURRING D	RECT									MONTHLY
								NANT SPECIFI		ANNUAL DIRECT	DIRECT
UNE	DESCRIPTION	FRC	INVESTMENT	DEPREC	COM	ıT	CAP. EXP	ECP.	AD VAL	DIRECT	
			k = up 3400,3401 Lines 19-22,13-25	(SY FRC)	m · b · k	(BY FRC)	e 4 t k	(BY FRC)	(BY FRC)	s=h*k (BY FRC)	(BY FRC)
			******		*****	*****	*****	*****	*****	*******	***********
ELEC:	TRONICS										
13	LAND	200									
14	BUILDINGS	100									
15	DIGTL ELEC SWITCH	377C									
16	DIGTL CIRC-PAIR GAIN	287C									
17	POLES	10									
18	AERIAL CA - METAL	22/120									
10	AERIAL CA - FISER	622/8120									
20	UNDERGROUND METAL	SC									
21	CONDUIT	4C 48C									
22	BURIED CABLE - METAL	860									
23	UG CABLE - FIBER BURIED CABLE - FIBER	MISC									
24	BUNIED CABLE - FIREN	-									
25	TOTAL ELECTRONICS										
TRAN	BPORT										
26	LAND	20C									
27	BUILDINGS	19C									
20	DIGTL ELEC SWITCH	3770									
20	DIGTL CIRC-PAIR GAIN	257C									
30	POLES	10									
31	AERIAL CA - METAL	22/13C									
32	AERIAL CA - FISER UNDERGROUND METAL									*	
33	CONDUIT	40									
36	BURIED CABLE - METAL										
36	UG CABLE - FISER	asc.									
37	BURIED CARLE - FIBER	848C									
36	TOTAL TRANSPORT										
						FLAT RA	TE SUMMA	RY - DESIGN	14	SOURCE	
39 40								TY OF OCCURE AIR 1/2 MILES	INCE	BBS HETWORK WP: 4400, Line 17	25.00% 9
41 42							ELECTRON TRANSPOR			CIME 30 . CIME 30) . CIME 40	
							WEIGHTED	AVERAGE FLA	T RATE SUM	MARY - DESIGN 4	

### UNBUNDLED 4-WIRE DIGITAL GRADE LOOP MONTHLY RECURRING COST DEVELOPMENT -STUDY LEVEL: 1997-1999

STATE: PLORIDA WORSPAPER 105 PAGE 1 OP 1 DATE: SEPTEMBER, 1000

TELF	NIC FACTORS									DIRECTLY		
LINE	DESCRIPTION	PRC		DEPREC	COM	π	CAP. EXP	PLANT SPECIFIC EXP.	AD VAL	SHAVED and COMMON	TELRIC	
						*	d =(a+b+s)				hn(droring) assess	60VRGii
1	LAND	800		0.0000	0.0947	0.0426	0.1373	0.0000	0.0120	0.0000	0.1493	Pundamental Factors
	BUILDINGS	100		0.0330	0.0020	0.0360	0.1526	0.0081	0.0120	0.0434	0.1720	Fundamental Feators Fundamental Feators
9	DIGTL ELEC SWITCH	877C		0.1157	0.0664	0.0249	0.1000	0.0082	0.0120	0.0366	0.2695	Fundamental Festors
4	DIOTL CIRC-PAIR GAIN	257C		0.1314	0.0660	0.0244	0.1574	0.0175	0.0120	0.0294	0.2163	Pundamental Festure
	POLES	1C 29/12C		0.1023	0.0879	0.0254	0.1966	0.0706	0.0120	0.0819	0.3400	Pundamental Festure
;	AERIAL CA - METAL	822/012C		0.0746	0.0002	0.0281	0.1880	0.0029	0.0120	0.0299	0.2137	Fundamental Festors
	AERIAL CA - FIBER	SC SC		0.1184	0.0001	0.0063	0.2128	0.0192	0.0120	0.0351	0.2791	<b>Fundamental Festors</b>
:	UNDERGROUND METAL CONDUIT	40		0.0206	0.0727	0.0325	0.1257	0.0031	0.0120	0.0148	0.1864	<b>Fundamental Posture</b>
10	BURNED CABLE - METAL	46C		0.0685	0.0878	0.0277	0.1840	0.0822	0.0120	0.0466	0.2960	<b>Fundamental Feature</b>
11	UO CABLE - FIBER	MIC		0.0886	0.0865	0.0284	0.1625	0.0006	0.0120	0.0220	0.2001	<b>Pundamental Feature</b>
12	BURIED CABLE - FIBER	648C		0.0813	0.0870	0.0296	0.1578	0.0040	0.0120	0.0235	0.1973	<b>Fundamental Feature</b>
	THLY RECURRING TE	LRIC						PLANT SPECIFIC		DIRECTLY	AMORIAL	MONTHLY
LINE	DESCRIPTION	PRC	BAVESTMENT	DEFREC	COM	п	CAP. EIP	DP.	AD VAL	GOLDMON	TELFOC	TELFUC
			k = up 8600,3801 Lines 25-26,15-17	(BY FRC)	m + b *k (BY PRC)	(BY PRC)	6*4*k (BY FRC)	p · · · k (BY FRC)	(SY PRC)	(BY PRC)	(BY PRC)	1 = o / 12 (BY FRC)
BLBC	TRONICS											
13	LAND	200										
14	BUILDINGS	100										
15	DIGTL ELEC SWITCH	877C										
16	DIGTL CIRC-PAIR GAIN	257C	1									
17	POLES	10										
18	AERIAL CA - METAL	22/120										
10	AERIAL CA - FIBER	822/812C										i i
20	UNDERGROUND METAL	80										
21	CONDUIT	40										
22 25	BURIED CABLE - METAL UO CABLE - PIBER	48C										
24	BURIED CABLE - FIBER	BASC										
26	TOTAL ELECTRONICS											
TRAN	SPORT											
26	LAND	20C										
27	BUILDINGS	100										
20	DIOTL ELEC SWITCH	\$77C										
20	DIGTL CIRC-PAIR GAIN	257C									•	
30	POLES	1C 23/12C										
31	AERIAL CA - METAL AERIAL CA - PIBER	822/812C										
83	UNDERGROUND METAL	SC SC										
Ŧ.	COMPUT	40										
36	BURSED CABLE - METAL	48C										
30	UO CABLE - PIBER	86C										
87	BURNED CABLE - FIBER	845C										
36	TOTAL TRANSPORT											
						FLAT RAT	TE BUMMAR	ty - DESIGN			RCE	
40								Y OF OCCUREN AIR 1/2 MILES	CE	986 NE WP: 4500		15.00%
41 42							ELECTRONIC TRANSPORT			(LINE 30 - LINE 25 -	LINE 30 LINE 30	
43							WEIGHTED A	VERAGE PLAT	RATE SUM	MARY - DESIGN		

#### MONTHLY RECURRING COST DEVELOPMENT -STUDY LEVEL: 1997-1999

STATE: PLONDA WORDPAPER 105A PAGE: 1 OF 1 DATE: SEPTEMBER, 1998

DIRE	CT FACTORS										
77.7	DESCRIPTION	FRO		DEPREC	COM	п	CAP. EXP	PLANT SPECIFIC EXP.	AD VAL	DIRECT	
LINE	DESCRIPTION						d =(a+b+0)			h=(d+e+f)	source
•	LAND	200		0.0000	0.0047	0.0428	0 1373	0.0000	0.0120	0.1493	Fundamental Festors Fundamental Festors
2	BUILDINGS	100		0.0330	0.0826	0.0369	0.1525	0.0061	0.0120	0.1706 0.2322	Fundamental Festion
	DIGTL ELEC ENTTCH	377C		0.1157	0.0666	0.0254	0.1998	0.0236	0.0120	0.2329	Fundamental Fosters
4	DIGTL CIRC-PAIR GAIN	287C		0.1314	0.0664	0.0249	0.2127	0.0082	0.0120	0.1860	Fundamental Festions
	POLES	10		0.0721	0.0500	0.0254	0.1574	0.0176	0.0120	0.2781	Pundamental Factors
•	AERIAL CA - METAL	22/12C		0.1023	0.0679	0.0254	0.1956	0.0029	0.0120	0.1836	Pundamental Pasters
7	AFRIAL CA - FIBER	922/012C		0.0746	0.0002		0.2128	0.0192	0.0120	0.2440	Fundamental Festors
	UNDERGROUND METAL	SC .		0.1184	0.0681	0.0263	0.1257	0.0031	0.0120	€.1408	<b>Fundamental Feolore</b>
•	CONDUIT	40		0.0885	0.0678	0.0277	0.1840	0.0622	0.0120	0.2482	<b>Fundamental Factors</b>
10	BURIED CABLE - METAL	48C		0.0686	0.0656	0.0284	0.1625	0.0036	0.0120	0.1781	Fundamental Feature
11	UO CABLE - FIBER	Michael Company of the State of		0.0813	0.0670	0.0296	0.1578	0.0040	0.0120	0.1738	Fundamental Factors
12	BURIED GABLE - FISER	8490									
	ITHLY RECURRING DI IGN 6	RECT						PLANT SPECIFIC		APRIAL	MONTHLY
LINE	DESCRIPTION	FRC	<b>PAVESTMENT</b>	DEPREC	COM	п	CAP. EUP	EP.	AD VAL	DIRECT	DIRECT
			k = up \$800,3601 Lines 25-26,15-17	(SY FRC)	m = b *lt (BY FRC)	A * 6 * k (BY FRC)	6 * 4 * k (BY FRC)	(BY PRC)	(BY PRC)	(SY FRC)	(= e / 12 (SY PRC)
RLECT	TRONGOS										
13	LWO	200									
14	BUILDINGS	100									
15	DIGTL ELEC SWITCH	377C									
10	DIGTL CIRC-PAIR GAIN	257C									
17	POLES	10									
18	AERIAL CA - METAL	22/12C									
19	AERIAL CA - FIBER	622/012C									
20	UNDERGROUND METAL	60					9				
21	CONDUIT	40									
22	BURSED CABLE - METAL	46C									
23 24	UG CABLE - FIBER BURIED CABLE - FIBER	845C									
26	TOTAL ELECTRONICS										
TRAN	SPORT										
26	LAND	20C									
27	BUILDINGS	100									
28	DIGTL ELEC SWITCH	377C									
29	DIGTL CIRC-PAIR GAIN	257C									
30	POLES	10									
31	AERIAL CA - METAL	22/12C									
32	AERIAL CA - FISER	622/612C									
55	UNDERGROUND METAL	40									
34	CONDUIT BURGED CABLE - METAL	48C									
36	UQ CABLE - FIBER	860									
37	BURNED CABLE - FIBER	BHSC									
36	TOTAL TRANSPORT										
						FLAT RAT	TE SUMMAS	RY - DESIGN	16	sounce	
39 40								Y OF OCCUPEN	eCE .	BBS NETWORK WP: 4500, Line 18	15.00%
41							ELECTRONS TRANSPORT			(FIME 30 , FIME 30) , FIME 40 FIME 32 , FIME 30	
43							WEIGHTED	AVERAGE FLAT	RATE SUM	MARY - DEBIGN 6	

#### UNBUNDLED 4-WIRE B61 DIGITAL GRADE LOOP 1997-1999 LEVEL

DESIGN #1 ELECTRONIC INVESTREENTS STATE: FLORIDA WORKPAPER 3100 PAGE 1 OF 2 DATE: SEPTEMBER, 1996

INE NO.		A007	UTLEND	BOURCES
	CERTRAL OFFICE - ELECTROPICS		BIVETHERT	
,	DSX1 PANEL	257C		WP:30100, Page 1 of 1, Line 1
2	MCBAP	257C		WP:30100, Page 1 of 1, Line 2
,	LAND	20C		WP:30100, Page 1 of 1, Line 3
•	BUILDING	100		WP:30100, Page 1 of 1, Line 4
	OFFICE REPEATER BAY	257C		WP:30100, Page 1 of 1, Line 7
	MCBAP	257C		WP:30100, Page 1 of 1, Line 8
7	LAND	20C		WP:30100, Page 1 of 1, Line 9
•	BUILDING	100		WP:30100, Page 1 of 1, Line 10
	MAIN DISTRIBUTION FRAME	377C		WP:30100, Page 1 of 1, Line 18
10	MCEAP	377C		WP:30100, Page 1 of 1, Line 19
11	LAND	20C		WP:30100, Page 1 of 1, Line 20
12	BUILDING	100		WP:30100, Page 1 of 1, Line 21
	CUSTOMER PREMISES . ELECTRONICS			
19	BLDG ENTRANCE CABLE - COPPER	12C		WP:30100, Page 1 of 1, Line 25
15	NETWORK INTERFACE	257C		SONET FUNDAMENTALS
-	TOTAL ELECTRONIC INVESTMENT BY FRC			SUM WP:3100, Page 1 of 2, Lines 1,2,5,6,15
15		257C		
16		377C		SUM WP:3100, Page 1 of 2, Lines 9,10
17		20C		SUM WP:3100, Page 1 of 2, Lines 3,7,11
15		100		SUM WP:3100, Page 1 of 2, Lines 4,8,12
10		12C		BUM WP:3100, Page 1 of 2, Line 13
20	TOTAL DESIGN I ELECTRONIC INVESTMENT		E .	] SUM WP:3100, Page 1 of 2, Line 15 thru 16

UNBURDLED 4 WIRE DSI DIGITAL GRADE LGGP 1997-1999 LEVEL

DESIGN #1 TRANSPORT INVESTMENTS STATE: PLOR'GA NORSPAPER: 8100 PAGE 2 OF 2

	CENTRAL OFFICE TO CUSTOMER PREMISES		W	(8)	(C)=(A)*(B)		
		CODE	TOTAL DIVERTMENT PER 1/2 MELS (ROUTE MELSE)	TO AR RATIO	AND PROPERTY OF A	SOURCES SOURCES	SOLARI B
	26 GAUGE						
_	AERIAL COPPER	22C	1	1.43	1	WP:30200, Page 1 of 1, Line 34	WP:4010, Page 1 of 1, Line 22
-	POLE	IC	1	1.43		WP:30200, Page 1 of 1, Line 37	
	UNDERGROUND COPPER	SC	1	1.43	1	WP:30200, Page 1 of 1, Line 36	
*	CONDUIT	4C		1.43	i	WP:30200, Page 1 of 1, Line 38	
26	BURIED COPPER	45C	•	1.43	•	WP:30200, Page 1 of 1, Line 35	
*	REPEATER	257C		1.43	•	WP:30200, Page 1 of 1, Line 32	
	TOTAL TRANSPORT BY FRC					DOYEST COM	
		22C				WP:3100, P	lage 2 of 2, Line 22
		10				WP:3100, F	Page 2 of 2, Line 23
		5C				WP:3100, F	Page 2 of 2, Line 24
21		4C				WP:3100, F	Page 2 of 2, Line 25
		45C				WP:3100, F	rage 2 of 2; Line 26
		257C				WP:3100, F	Page 2 of 2, Line 27
						Tanana.	100 Day 0 d 0 l to 00 Day 00
	TOTAL DESIGN #1 TRANSPORT INVESTMENTS 1/2 MILE (AIR MILE)					j sum wp:	3100, Page 2 of 2, Line 28 thru 33

# UNBUNDLED 4-WIRE DOI DIGITAL GRADE LOOP 1997-1999 LEVEL

DESIGN #2 ELECTRORIC INVESTMENTS

STATE: FLORIDA WORIDAPER: \$200 PAGE 1 OF 2 DATE: SEPTEMBER, 1996

NO.		CODE	LEVELEED UTLEED DOUBTLED!	60SRCER
	CENTRAL OFFICE, ELECTRONICS			
1	DS1 ON OC3 - WORKING	257C		SONET FUNDAMENTALS .
2	MCEAP	257C		SONET FUNDAMENTALS
	LAND	10C		SONET PUNDAMENTALS
	BUILDING	100		SORET PUNDAMENTALS
	DSI ON OCS - MUX & PROTECT	257C		SONET FUNDAMENTALS
	MCEAP	257C		SCHET FUNDAMENTALS
7	LAND	20C		SCHET FUNDAMENTALS
	BUILDING	100		BONET FUNDAMENTALS
	, CO NODE - OC	257C		SONET PUNDAMENTALS
10	MCRAP	257C		CONST PUNDAMENTALS
11	LAND	20C		SONET FUNDAMENTALS
12	BUILDINO	10C		SONET FUNDAMENTALS
19	DATA COMM LINK - OCS	257C		SONET PURIDAMENTALS
14	MCEAP	257C		BONET PUNDAMENTALS
15	LAND	20C		SONET PUNDAMENTALS
16	BUILDING	10C		BONET FUNDAMENTALS
	CUSTOMER PREMISES ELECTRONICS.			
17	CP NODE - OC3 (5 Nodes)	257C		SONET FUNDAMENTALS multiplied by 6
10	DEI ON OCS - WORKENG	257C		SONET FUNDAMENTALS
10	DSI ON OCS - MUX & PROTECT	257C		SONET PUNDAMENTALD
20	BLDG ENTRANCE CABLE - OCS	812C		SONET FUNDAMENTALS
21	NETWORK DITERPACE	257C		SONET FUNDAMENTALS
22	BATTERY BACK-UP	257C		SONET PUNDAMENTALS
	TOTAL ELECTRONIC INVESTMENT BY FRC			
23		257C		BUM WP:3200, Page 1 of 2, Lines 1,2,5,4,9,10,13,14,17,18,19,21,22
24		20C		SUM WP: \$200, Page 1 of 2, Lines 3,7,11,16
25		100		SUM WP:3200, Page 1 of 2, Lines 4,8,12,16
26		812C		SUM WP.3200, Page 1 of 2, Line 20
27	TOTAL DESIGN 2 ELECTRONIC INVESTMENT			SUM WP:3200, Page 1 of 2, Line 23 thru 20

# UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

CENTRAL OFFICE TO CUSTOMER PREMISES OC.3

1997-1999 LEVEL

DEMON #2 TRANSPORT INVESTMENTS STATE: FLORIDA WORNPAPER: 5000 PAGE 2 OF 2 DATE: SEPTEMBER: 199

	ACCT	PRODUCT PRODUC	SOURCE, EU SEE ESPA-D SASSESPENT. SU-PA-13			ecologia colibiat do		
AERIAL FIBER	822C			SCHOOL PLANDAMENTALS		Coloulation		
POLE	10			SCHET PLINDAMENTALS		•		
UNDERGROUND FIBER	85C			SCHET FUNDAMENTALS		•		
CONDUIT	4C			SCHET FLADAMENTALS			•	
BURIED FIBER	845C			SONET FUNDAMENTALS		•		
	AGET	ENGLISH ENGLISHED	C) TUTAL PRACES OF PERAPER PER ASSAURCE OF T	60= 60 ° 60 2015/2006/201 PGB. 105 MM.E PGB. A60A314/EMENTT GROOTE ME 400	O) BOOTEL TO AR NABO	(D) = (D) * (D) TOTAL SOMEWHATT FIRE 1/4 MELS FIRE ASSAMINATION?		
TOTAL TRANSPORT - OC 3								100 TO A 400
STANDARD ARRANGEMENT BY FRC	822C		3		1.43		COLUMN (C)	
	1C		3		1.43		COLUMN (D)	
	85C		3		1.43		COLUMN (E)	Celsulation
	4C		3		1.43		and the second second	WP:4010, Pg 1 of 1, Ln 22
	845C		3		1.43		COLUMN (G)	Calculation

TOTAL TRANSPORT BY FRC (6 STRANDS)

822C 1C 85C 4C 845C IINVESTMENTS

SUM WP:3200, Page 2 of 2, Line 33 SUM WP:3200, Page 2 of 2, Line 34 SUM WP:3200, Page 2 of 2, Line 35 SUM WP:3200, Page 2 of 2, Line 36 SUM WP:3200, Page 2 of 2, Lines 37

TOTAL DESIGN #2 TRANSPORT INVESTMENTS 1/2 MILE (AIR MILE) SLB4 WP:3200, Page 2 of 2, Lines 50 Pru 43

# Unbundled 4-wire bei bigital grabe Loop 1997-1999 LEVEL

DESIGN #8 ELECTRONIC INVESTMENTS

STATE: FLORIDA WORKPAPER: 3300 PAGE 1 OF 2 DATE: SEPTEMBER, 1996

ME O.		AOCT	PARTIED PARTIED	BOURCES
CEN	TRAL OFFICE - ELECTRONICS (PLACESO+)			
	DSI ON OC3 - WORKING	257C		SONET FUNDAMENTALS
1	MCEAP	257C		SCHET FUNDAMENTALS
	LAND	20C		SONET FUNDAMENTALS
F	BUILDING	10C		SONET FUNDAMENTALS
į.	DSI ON OC3 - MUX & PROTECT	257C		SOHET PUNDAMENTALS
	MCEAP	257C		SONET PUNDAMENTALS
	LAND	20C		BONEY PUNDAMENTALS
	, BUILDING	10C		BONET PUNDAMENTALS
,	CO NODE - OC3	257C		SONET PUNDAMENTAL®
•	MCEAP	257C		SONET PUNDAMENTALS
1	LAND	20C		SONET PUNDAMENTALS
2	BUILDING	10C		SONET PUNDAMENTALS
	DATA COMM LINK - OC3	257C		SONET FUNDAMENTALS
4	MCEAP	257C		SONET FUNDAMENTALS
	LAND	20C		SONET FUNDAMENTALS
•	BUILDING	10C		SONET FUNDAMENTALS
CUS	TOMER PREMISES ELECTRONICS - (FLM)			* 1
7	CP NODE - OC3 (5 Nodes)	257C		SONET FUNDAMENTALS multiplied by 6
	DEI ON OC3 - WORKING	257C		BONET FUNDAMENTALS
	DSI ON OC3 - MUX & PROTECT	257C		SONET PUNDAMENTALS
0	BLDG ENTRANCE CABLE - OC12	812C		SONET PUNDAMENTALS
1	NETWORK INTERFACE	257C		SONET FUNDAMENTALS
2	BATTERY BACK-UP	257C		SONET FUNDAMENTALS
тот	AL ELECTRONIC INVESTMENT BY FRC			
3 _		257C		SUM WP:3300, Page 1 of 2, Lines 1,2,5,6,9,10,13,14,17,18,19,21,22
		20C		SUM WP:3300, Page 1 of 2, Lines 3,7,11,15
5		100		SUM WP:3300, Page 1 of 2, Lines 4,8,12,16
•		BISC		SUM WP:3300, Page 1 of 2, Line 20
7	TOTAL DESIGN 3 ELECTRONIC INVESTM	ENT		SUM WP:3300, Page 1 of 2, Lines 23 thru 26

UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP 1997-1999 LEVEL

DESIGN #3 TRANSPORT INVESTMENTS

STATE: FLORIDA WORKPAPER: 3300 PAGE 2 OF 2 DATE: BEPTEMBER, 1996

CENTRAL OFFICE TO CUSTOMER PREMISES OC.3 (TLM 158+) **AERIAL FIBER** 822C BONET PUNDAMENTALS SCHET PURDAMENTALS IC POLE UNDERGROUND FIBER ESC BONET PUNDAMENTALS SOMET PUREMENTALS CONDUTT 40 845C BURIED FIBER TOTAL TRANSPORT - OC 3 FLM150+ couver(c) Calculation 1.43 3 STANDARD ARRANGEMENT BY FRC 822C COLUMBI (D) Network 1.43 IC 3 couver(E) Calculation 3 1.43 BSC 1.43 COLUMN (F) WF:4010, Pg 1 of 1, Ln 22 4C couver (a) Calculation 1.43 845C 3 SUM WP:3300, Page 2 of 2, Line 33 SUM WP:3300, Page 2 of 2, Line 34 TOTAL TRANSPORT BY FRC (6 STRANDS) 822C 10 SUM WP:3300, Page 2 of 2, Line 35 85C . SUM WP:3300, Page 2 of 2, Line 36 4C SUM WP:3300, Page 2 of 2, Line 37 845C SUBAI WIP-3300, Page 2 of 2, Linco 38 thru 42 TOTAL DESIGN #3 TRANSPORT INVESTMENTS 1/2 MILE (AIR MILE)

UNBUNDLED 4-WIRE DEI DIGITAL GRADE LOOP

DEMEN 66 ELECTRONIC STREET, SERVIN

STATE: FLORIDA WORIGPAPER: 3400 PAGE 1 OF 3 DATE: SEPTEMBER, 1998

			(1)					
HO		4007 8800	UNILAND VILLED	ROGRAGIA		CORS	PARTITION AND THE PROPERTY.	BORBOR
	CENTRAL OFFICE - ELECTRONICE				maria. Machonica.			
2	DSI ON OCS - WORKENG	257C	•	SONET FUNDAMENTALS	HUB NGDE - OCS (5 Nodes)	257C	5 0	SONET PUNCHAGENTALS & F
•	MCEAP	257C		SONET FUNDAMENTALS	MCEAP	257C		MONET PROMISERALS + 1
•		20C		SONET FUNDAMENTALS	LAND	20C		SCHOOL PURPOSEDITATE . 1
:	BUILDING	100	1	SOIGHT FUNDAMENTALS	BUILDING	10C		SOMET PUREAMENTALA • 1
•								
	DS1 ON OC3 - MUX & PROTECT	257C	1	SONET FUNDAMENTALS	DEX1 PANEL (2)	257C		WP-20100, PAGE 1 OF 1, LIF 1 a 3
	MCEAP	257C		SONET FUNDAMENTALS	MCEAP	257C		97-30100, PAGE 1 0F 1, LN 1 + 1
;	LAND	20C		SONET PUNDAMENTALS	LAND	-20C		WP30160, PA. 1 GP 1, LH11+1
	BUILDING	10C		SOHET PUNDAMENTALS	BUILDING	10C		WPSCHOOL PARTE I OF I, LIF 4 . 3
		257C	•	SONET FUNDAMENTALS	OFFICE REPEATER BAY	257C		99:0000, Pg 1 of 1, La 1 Cd 1
•	CO NODE - OC3	257C	Branch Committee	SONET PUNDAMENTALS	MCEAP	257C		WP20100, Pg 1 of 1, La 8 Cd 1
10	MCEAP	20C		SONET FUNDAMENTALS	LAND	20C		WPONIOS, Pg I of 1, La F Col I
11	LAND			SONET FUNDAMENTALS	BUILDING	10C		WP-20100, Pg I of 1, La 10 Col I
u	BUILDING	10C		SORET FOREAGERT AND	HUB INTERFACE - DOI ON C			
		257C		SOIGT FUNDAMENTALS	WORUGNG	257C		DONGT PURBANGERTALA
**	DATA COMM LINE - OCS	257C		SONET FUNDAMENTALS	MCBAP	257C		SOMET PUREMAMENTALS
14	MCEAP	20C		SONET PUNDAMENTALS	LAND	20C		BONGT PUNGSANGS/TALA
**	LAND	10C		SONET FUNDAMENTALS	BUILDING	10C		BONGT PUNDAMENTALS
18	BUILDING	100		SOIGH FORDINGS TITLE				
	CONTOMER PREMIERA ELECTROPICA.				HUB INTERFACE - DS1 ON C	C-8		
					WORKING	257C		SOMET PUREMAMENTALS
17	BLDG ENTRANCE CABLE - COPPER	12C		WP:30100, Pg I of 1, La 25	MCSAP	257C		SCHOOL FORDAMENTALA
170					LAND	20C		DOMET PURGAMENTALA
19	NETWORK INTERFACE	257C	1	SONET PUNDAMENTALS	BUELDING	10C		LONGT PURDAMENTALS
190					300300			
	TOTAL ELECTRONIC INVESTMENT BY FRC					C-1/41 48	Cal (E) I has	17 17a
19		257C		SUM WP:3400, Page 1 of 2	Col (A) & (B) Lines 1,2,5,8,9,10,13,14,	44 48 6	Col (B) Line	18
20		20C		SUM WP:3400, Page	1 of 3, Col (A) & (B) Lines 3,7	12 18 6	'cd (B) Line	180
21		10C		SUM WP:3400, Page	1 of 3, Col (A) & (B) Lines 4,8	, 12, 10,	, (b) Circ	
22		12C		SUM WP:3400, Page	1 of 3, Col (A) Line 17			
n	TOTAL DESIGN 4 ELECTRONIC SIVESTMENT			SUM WP:3400, Pa	ige 1 of 3, Lines 19 thru 22			

STATE: "LORIDA WORIPAPER: \$400 PAGE 2 OF 9 DATE: SEPTEMBER, 1996

DESIGN AS TRANSPORT INVESTMENTS

CENTRAL OFFICE TO FIRER HUR OC.3

		ACCT	MALLINE MALLIN MALLINE MALLINE MALLINE MALLINE MALLINE MALLINE MALLINE MALLINE	PIL 10 MILE PIL 10 MILE PIL PILAND GOVER MILES		_		
	AERIAL FINER	823C			SONET FUNDAM	ENTALS	Calculation	
	POLE	ıc			SONET FUNDAME	ENTALS		
	UNDERGROUND FIRST	850			SONET FUNDAME	ENTALS		
,	CONDUIT	40			BONET FUNDAM	ENTALS		
*	SURIED FISHER	945C	V		SONET FUNDAME	ENTALS	•	
		AOCT CODE	PRI WALL	OF FEMALES	SALESCONIA BALISCONIA B-10.40	100 I	STATES	

	ACCT	BOALT FORTIL	TOTAL HOLDING	PER VEHICLE PER VEHICLE PER ANALYSISMENT GLOVED MELEN	BOUTS TO AIR BASSO	PORM.  DIVERSALIST  POR US MELA  POR ASSAURCEMENT  (MS MELATS)		
CO TO HUB  STANDARD ARRANGEMENT BY FRC	823C		3		1.43		COLUMN (C)	Calculation
	ıc		3		1.43		COLUMN (D)	Network
	esc		3		1.43		COLUMN (E)	Calculation
	40		3		1.43		COLUMN (F)	WP:4010, Pg 1 of 1, Ln 22
	BISC		3		1.43	1	COLUMN (G)	Celoutation

M CO TO HUB TRANSPORT BY FRO	(6 STRANDS 822C	SUM WP:\$400, Page 2 of 5, Line 29
	ıc	SUM WP:3400, Page 2 of 3, Line 50
	esc	SUM WP:9400, Page 2 of 3, Line \$1
	<b>4</b> C	SUM WP:3400, Page 2 of 5, Line \$2
	MSC	 SUM WP:\$400, Page 2 of 3, Line \$5
CO TO HUB DESIGN AT TRANSPO	RT INVESTMENTS	SUM WP:3400, Page 2 of 3, Lines 34 thru 3

UNBUNDLED 4-WIRE DOL DIGITAL GRADE LOOP 1997-1999 LEVEL

DEMON AS

STATE: FLORIDA WORKPAPER: \$400 PAGE \$ OF \$ DATE: SEPTEMBER: 1990

	FIRER HUB TO CUSTOMER PREMOSES COPPER		W	(3)	(C)-(A)*(B)		
		ACCT	ENDSTAINT TO WHILE BOTTE MEAN	TO AR	PER 10 MEA MAR MEAN	BOURCES _COLMAN_A	sounces 
	26 GAUCE						
	AERIAL COPPER	22C		1.43	5	WP:30200, Page 1 of 1, Line 34 Col V	WP:4010, Page 1 of 1, Line 22
40	POLE	1C		1.43		WP:30200, Page 1 of 1, Line 37 Col ∨	•
41	UNDERGROUND COPPER	SC		1.43		WP:30200, Page 1 of 1, Line 36 Col V	
42	COMPUT	4C		1.43		WP:30200, Page 1 of 1, Line 38 Col V	
49	BURLED COPPER	45C	1	1.43		WP:30200, Page 1 of 1, Line 35 Col V	
	RIPSATUR	257C	i	1.43		WP:30200, Page 1 of 1, Line 32 Col V	

HUB TO CP COPPER TRANSPOR	RT SY PRC	DOVERTMENTS
	<b>20</b>	SUM WP:3400, Page 3 of 3, Line 39
	IC .	SUM WP:3400, Page 3 of 3, Line 40
	sc sc	8UN WP:3400, Page 3 of 3, Line 41
	40	SUM IVP:3400, Page 3 of 3, Line 42
	45C	SUM WP:3400, Page 3 of 3, Line 43
	<b>50°C</b>	8UM WP:3400, Page 3 of 3, Line 44
HUB TO CP DESIGN #4 C	OPPER TRANSPORT INVESTMENTS	BUM WP:3400, Page 3 of 3, Line 45 thru 50

UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP 1997-1999 LEVEL

STATE: PLORIDA WORIPAPER: 3401 PAGE 1 OF 1 DATE: DEPTEMBER, 1800

DESIGN AS WINGSTED TRANSPORT INVESTMENTS						WEIGHTED
						SWESTMENT
	FRC		NAME OF THE		BOOKER COT BY	60 - 60 - 60
CO TO HUB TRANSPORT BY FRC (6 STRANDS)	822C		SUM WP:3400, Page 2 of 3, Line 29	01.17%	SUM WP:4400, Uno 3	
CO TO HOD HOUSE ON ST THE PERSONS	1C		SUM WP:3400, Page 2 of 3, Line 30	91.17%	BUM WP:4400, Line 3	
	85C		SUM WP:3400, Page 2 of 3, Line 31	01.17%	SUM WP:4400, Line 3	
	4C		SUM WP:3400, Page 2 of 3, Line 32	61.17%	SUM WP:4400, Line 3	
	845C	1	SUM WP:3400, Page 2 of 3, Line 33	01.17%	8UM WP:4400, Line 3	
CO TO HUB DESIGN #2 TRANSPORT INVESTMENTS 1/2 MLE (AR MLE)			SUM WP:3400, Page 2 of 3, Lin	es 34 thru	36	
HUB TO CP COPPER TRANSPORT BY FRC	22C		SUM WP:3400, Page 3 of 3, Line 39	20.63%	SUM WP:4400, Line 8	:
HUB TO OF COFFER THUMBER ON I BY THE	IC		SUM WP:3400, Page 3 of 3, Line 49	20.03%	8UM WP:4400, Line 8	
	40		SUBA WP:3400, Page 3 of 3, Line 41	25.60%	SUM WP:4400, Line 8	
	5C 4C		SUM WP:3400, Page 3 of 3, Line 42	38.65%	SUM WP:4400, Line 8	
	45C		SUM WP:3400, Page 3 of 3, Line 43	38.63%	SUM WP:4400, Line 6	:
	257C		SUM WP:3400, Page 3 of 3, Line 44	20.03%	SUM WP:4400, Line 6	1
HUB TO CP DESIGN #4 COPPER TRANSPORT SIVES	тментв	С	☐ SUM WP:3400, Page 3 of 3, LI	ne 45 thru	50	

		BOURCE
FRC		BUOMICE
822C		LINE 1
IC		LINES 2,7
85C		LINE 3
4C		LINES 4,8
845C		LINE 6
22C		LINE 0
5C		LINE 0
45C		LINE 10
257C	1	LINE 11
		7

STATE: FLORICA WORKPAPER: 3800 PAGE 1 OF 3 DATE: SEPTEMBER, 1866

W 46 W CENTRAL OFFICE - ELECTRONICS -SONET FUNDAMENTALS SONET FUNDAMENTALS HUB NODE - OC12 257C 257C DSI ON OC12 - WORKING SONET FUNDAMENTALS SONET FUNDAMENTALS SONET FUNDAMENTALS SONET FUNDAMENTALS MCBAP 257C 257C MITTAR 20C LAND 20C LAND SONET FUNDAMENTALS 100 BUILDBHO BULLDONO 10C SONET FUNDAMENTALS 257C 257C HAR DITERFACE STS-1 CO12 DSI ON OC12 - MUX & PROTECT 257C 257C MCEAP MCEAP LAND 20C LAND 20C SONET FUNDAMENTALS 100 BLEE DONO 10C BUILDING SONET FUNDAMENTALS SONET FUNDAMENTALS SONET FUNDAMENTALS SONET FUNDAMENTALS 257C SONET FUNDAMENTALS HUB INTERFACE STS-1 OCS 257C CO NODE - OC12 SONET FUNDAMENTALS MCBAP 257C 257C - MCBAP SONET FUNDAMENTALS LAND LAND 11 SONET FUNDAMENTALS 10C 10C BLEE DEAD BUILDING. SONET FUNDAMENTALS SONET FUNDAMENTALS SONET FUNDAMENTALS SONET FUNDAMENTALS SONET FUNDAMENTALS HUB HODE - OCS 257C 1 257C DATA COMM LINE - OCI2 SONET FUNDAMENTALS 13 257C MCEAP 257C MITTAR 20C SONET FUNDAMENTALS LAND 20C LAND SONET FUNDAMENTALS BUILDON 10C 100 BULDONO CUSTOMER PREMIERS ELECTRONICS. ) SONET FUNDAMENTALS x 5 257C CP NODE - OCS (5 Nodes) 11 257C SONET FUNDAMENTALS DSI ON OCS - WORKENS SONET FUNDAMENTALS DSI ON OCS - MUX & PROTECT 257C \$12C SONET FUNDAMENTALS BLDG ENTRANCE CABLE - OCS SONET FUNDAMENTALS 257C NETWORK INTERVACE SONET FUNDAMENTALS 257C BATTERY BACK-UP

20 M	TOTAL ELECTRONIC INVESTMENT BY FRC	257C 20C 10C 812C		SUM WP:3500, Page 1 of 3, Col (A) & (B) Lines 1,2,5,6,9,10,13,14,17,18,19,21,22 SUM WP:3500, Page 1 of 3, Col (A) & (B) Lines 3,7,11,15 SUM WP:3500, Page 1 of 3, Col (A) & (B) Lines 4,8,12,16 SUM WP:3500, Page 1 of 3, Line 20
,,	TOTAL ILECTRONIC DESIGN	u i severnai r	3534	SUM WP:3500, Page 1 of 3, Lines 23 thru 26

	CENTRAL OFFICE TO FINE HER OCH	ADOT	BANKANINAL MIN LEFT PARTY PART	GH-W/1 DIVERSION PER VENER PER PERAPE GOVERNIE	BOLACIES COLLAG	īΜ	BOUNCER	COLLABOLON		
20 20	ARRIAL PINER POLE UNDERGROUND PINER	822C 1C 85C			SONET FUNDAM SONET FUNDAM SONET FUNDAM	ENTALS ENTALS	Calcula	tion		
82	COMDUTT BURSED FINER	4C 845C			SONET FUNDAM					
		ACCT COES	(C) ENGINEERY PE ISLAND IN STRAIG COVER LOLDS	(D) TOTAL MAGE OF PERSON FIRE ASSAURTMENT	(S)= (C) * (D) serement Fig. 10 left.s Fig. administrative portio left.se	(F) North TO All Ratio	(CI) = (DI) TOTAL TOTAL TILL LID IN TILL ADDRESS (AID ADDRESS	DIT BA BADOT	_scuscus	
	CO TO HUB STANDARD ARRANGEMENT BY FRC	822C		3		1.43			COLUMN (C)	Calculation
	THE DATE OF THE STATE OF THE ST	10	•	3		1.43			COLUMN (D)	Network
		85C		3		1.43	1		COLUMN (E)	Calculation
		4C		3	!	1.43			COLUMN (F)	WP:4010, Pg 1 of 1, Ln 22 Celevision
97		845C		3	•	1.43			COLUMN (G)	Catalana
30	CO TO HER TRANSPORT BY FIRE & STRANDS	822C					1		SUM WP:350	0, Page 2 of 3, Line 33
		10					1		SUM WP:350	0, Page 2 of 3, Line 34
40		85C					1		SUM WP:350	0, Page 2 of 3, Line 35
41		4C					:		SUM WP:350	0, Page 2 of 3, Line 36
42		845C					!		SUM WP:350	0, Page 2 of 3, Line 37
4	CO TO HUB DESIGN OF TRANSPORT ENVESTMENTS 1/2 MILE (AIR MILE)						[ ]		SLAU WP-2000, F	rago 2 of 5, Libros 56 timu 42

UNDUNDLED 4-WIRE DSI DIGITAL GRADE LOGI

DESCRIPTION OF

STATE: FLORIDA WORIDAPER: 3500 PAGE 3 OF 3 DATE: SEPTEMBER, 100

#### FIRER MUR TO CLETOMER PREMISES OCA

		ACCT	PRESENT PRESENT PRESENT PRESENT (AUTEMAN)	POPE MALES	SOLECES COLLASH (A)		BOURCES COLUM	AGLEGO .	
4	AERIAL FIBER	822C			BONET FLRENMENTALS		Calculation		
40	POLE	10			BONET FUNDAMENTALS				
44	UNDERGROUND FIBER	85C			SOMET FUNDAMENTALS				
47	CONDUIT	4C			BONET FUNDAMENTALS		•		
*	BURIED FIBER	845C		•	SONET FUNDAMENTALS		*	*	
		ADCT CODE	(C) PRINCES	TOTAL HOLGO OF FEMALES	(Q)= (C) * (D) programmy PB. 10 MS.4	(F) BOVES TO	(C) = (E) * (F) TOTAL BANKSTAGAT		
			SOLE PETO	WWW.	ANALYSISSIST BOOTS MILES	BATTO	PER NA MALA PER ADALASMENT USE SERVICE		SOURCES
	HUB TO CP STANDARD ARRANGEMENT BY FRC	822C		1		1.43	** **	COLUMN (C)	Calculation
-	STATEMENT AND	10		1		1.43		COLUMN (D)	Network
60		85C		1		1.43		COLUMN (T)	Gelculation
81		4C		3		1.43		COLUMBI (F)	WP:4010, Pg 1 of 1, Ln 22
63		845C		3		1.43		COLUMN (C)	Calculation
*	HUB TO CP TRANSPORT BY PRC (4 STRANSIS)	822C							3500, Page 3 of 3, Line 49
66		1C							3500, Page 3 of 3, Line 50
66		85C							3500, Page 3 of 3, Line 51
		4C							3500, Page 3 of 3, Line 52
		845C						SUM WP	3500, Page 3 of 3, Line 53
	HUB TO CP DESIGN IS TRANSPORT INVESTMENTS							] SUM WF	:3000, Page 3 of 3, Lines 64 thru 60

UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP 1997-1999 LEVEL

STATE: FLORIDA WORKPAPER: 3601 PAGE 1 OF 1 DATE: SEPTEMBER, 1998

	WEIGHTED TRANSPORT BIVESTMENTS						WEIGHTED
			w	BOOTBICE COLL (A)	<b>69</b>	SOURCE COL. (B)	MYESTMENT (O - W · G)
	CENTRAL OFFICE TO FIBER HAB 4C-12	822C		SUM WP:3500, Page 2 of 3, Line 38	81 17%	SUM WP:4500, Line 3	
		1C		SUM WP:3500, Page 2 of 3, Line 39	01.17%	SUM WP:4500, Line 3	
;		85C		SUM WP:3500, Page 2 of 3, Line 40	61.17%	SUM WP:4800, Line 3	
ī		4C	:	SUM WP:3500, Page 2 of 3, Line 41	61.17%	SUM WP:4500, Line 3	
		845C		SUM WP:3500, Page 2 of 3, Line 42	61.17%	SUM WP-4500, Line 3	
	CO TO HUB DESIGN # TRANSPORT INVESTMENTS		0	SUM WP:3500, Page 2 of 3, Line 29			
	FIRES HAVE TO CP 4C-3	823C	1	SUM WP:3500, Page 3 of 3, Line 54	20.83%	SUM WP-4500, Live 9	1
,		ıc		SUM WP:3500, Page 3 of 3, Line 55	38.83%	8U0A WP:4000, Line 8	1
		ESC		SUM WP:3500, Page 3 of 3, Line 56	38.83%	SUM WIP (\$100, Line 8	. \$
		4C		SUM WP:3500, Page 3 of 3, Line 57	38.83%	SUM WP:4500, Line 8	\$
10		BISC	1	SUM WP:3500, Page 3 of 3, Line 58	38.83%	SUM WP:4500, Line 8	\$
11							
12	HUB TO CP DESIGN #4 COPPER TRANSPORT INVEST	THENTS	[	] SUM WP:3500, Page 3 of 3, Line 54	thru 58		
*	na wire for wirel						

DESIGN 5			
	FRC		SOURCE
	822C	:	LINES 1,0
	10	:	LINES 2,7
	85C		LINES 3,0
	4C		LINES 4,0
	845C		LINES 5,10
		Г	3 LINES 12-17

TOTAL WEIGHTED TRANSPORT INVESTMENTS

#### UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP 1997-1999 LEVEL

***	60~44LDE 1
640	DEPTHENT A

STATE: FLORIDA WORKPAPER: 4010 PAGE 1 OF 1 DATE: SEPTEMBER, 1996

NO.	DESCRIPTION	BOURCES	LENGTHS	% to total
:	HUB TO CP(OC -3) LOOP LENGTH (feet) STATE AVG LOOP LENGTH (feet)	NETWORK ECONOMIC ANALYSIS	4,500 11,590	38.83%
3	CO TO HUB (OC-12) (feet)	LNE 2-LNE1	7,090	<u>61.17%</u> 100.00%
:				
:			(A)	
10	POOR LINE TO A C A COLUMN TO THE			
**	PROBABILITY OF OCCURRENCE	BOO HETWORK	10.00%	
12	DESIGN #1 DESIGN #2	GEOD HE THYCHAN	35,00%	
13	DESIGN #3		15.00%	
14	DESIGN #4		25.00%	
10	DESIGN #5		15.00%	
17	· DESIGNAS	CALCULATION	100.00%	
10				
20				
21				
22	ROUTE-TO-AIR RATIO	ECONOMIC ANALYSIS	1.43	
23				
24				
25				
26				

STATE: FLORIDA WORICPAPER: 4100 PAGE 1 OF 1 DATE: SEPTEMBER 1996

# UNBUNDLED 4-WIRE DSI DIGITAL GRADE LOOP 1997-1999 LEVEL

DERICH #1 LOOP LENGTE STADIARY

(B)=(A)/2640 (AOUTE MELEN) EALF MELEN HO. 11,590 STATE AVO LOOP LENGTH : DESIGN 1 1.43 4 5 CO TO CP LOOP LENGTH 8 0 10 11 12 13 14 15 10 17 10 20 27 28 20 27 28

DESIGN 1 DESIGN 1 STATE AVG. AIR 1/2 MILES 4

WP:4010, Page 1 of 1, Line 2

UNBUNDLED 4-WIRE DSI DIGITAL GRADE LOOP 1997-1999 LEVEL

STATE: FLORIDA WORKPAPER: 4200 PAGE 1 OF 1 DATE: SEPTEMBER 1888

11,590 STATE AVO LOOP LENGTH DESIGN 2 CO TO CP LOOP LENGTH 1.43 10 36,393 (CIRCUMPERENCE OF STATE AVO)

> 10 N'S STATE AVG. ASS LO MELSO

SOURCES

COLUMN (A)

LINE 1 WP:4010, Page 1 of 1, Line 2

LINE 5 WP:4010, Page 1 of 1, Line 2 multiplied by 3.14

COLUMN (B)

COLUMN (C)

WP:4010, Page 1 of 1, Line 22

COLUMN (D)

Calculation

UNBUNDLED 4-WIRE DSI DIGITAL GRADE LOOP 1997-1999 LEVEL

HO

DOMEN /S LOOP LENGTH STEMART

STATE: FLORIDA WORKPAPER 4500 PAGE 1 OF 1 DATE: SEPTEMBER 1898

STATE AVO LOOP LENGTH

CO TO CP LOOP LENGTH

(CIRCUMPIRENCE OF STATE AVO)

36,393

1.43 10

DESIGN 3

BRANCH S STATE AVO. ARE MELES

10

SOURCES

COLUMN (A)

LINE 1 WP:4010, Page 1 of 1, Line 2

LINE 5 WP:4010, Page 1 of 1, Line 2 multiplied by 3.14

COLUMN (B)

Calculation

Line 22

COLUMN (B) COLUMN (C) COLUMN (D)

#### UNBUNDLED 4-WIRE DSI DIGITAL GRADE LOOP 1997-1999 LEVEL

DESIGN AL

STATE: FLORIDA WORKPAPER: 4400 PAGE: 1 OF 1 DATE: SEPTEMBER 1996

(D)-(B)/(C)

LHE			GLOTTE MELTO PRET	BALF MEAN		BASES	UR MARIN		
	STATE AVO LOOP LIENOTH		11,590						
,									
	CO TO HUB WEIGHT	61.17%							
	DESIGN 4								
	(CBCURGEBLENCE OF STATE AVG)								
•			22,263	9		1.43	7		
, .									
	HUB TO CP WEIGHT	38.83%							
	DESIGN 4								
**	HAB TO CP LOOP LIBIOTH					121122411			
**	(PODIT TO PODIT)		4,500	2		1.43	2		
12									
14					DESIGN 4				
15									
**					1	DEMON 4 STA	TE AVO. AIR LA MILES	9	
17					1			-	
**									
20									
22	SOURCES								
23	COLUMN (AA)								
24	Line 3	WP:4010, Pag	ee 1 of 1, Colu	mn (B), Line	3				
25	Line 8	WP:4010, Pag	ge 1 of 1, Colu	ma (B), Line	1				
26	COLUMN (A)								
27	Line 1	WP:4010, Pag	ge 1 of 1, Colu	ma (A), Line	2				
20	Line 6	WP:4400, Pag	to I of I, Colu	ma (A), Line	multiplied b	y WP:4400, 1	Page 1 of 1, Column	(AA) Line 3 multi	plied by 3.14
29	Line 11	WP:4010, Pag	ge 1 of 1, Colu	ma (A), Line	1	•			
80	COLUMN (B)	Calculation							
81	COLUMN (C)		ge 1 of 1, Line	22					
82	COLUMN (D)	Calculation							
83									
84									

STATE: FLORIDA WORIPAPER: 4800 PAGE 1 OF 1 DATE: REPTEMBER: 1881

DEMON S LOOP LENGTH GUIDALET

0		(AA)	(A) GOOTE MEAN FORT	(B)=(A)/2640 gootta adulto Balif hillan	(C) BOTE-TO All BATEO	(D)=(B)(C) MB MEAN BALF MEAN	
	STATE AVO LOOP LIBIOTE		11,590				
	CO TO HUB WINGELT	61.17%					
	DESIGN 1						
	CO TO BUB LOOP LIBRATUR						
	(POBIT TO POBIT)		7,090	3	1.43	3	
	HUB TO CP WEIGHT	38.83%					
	. pendit						
	EUS TO CP LOOP LEHOTH (CRICULIFIELENCE OF STATE AVG)		14,130	6	1.43	5	
	(Carried and Carried and Carri				7.77		
				DESIG			
				DESIG			•
					DESIGN 1 STA	MENN NI SEA JOYA ST	
	SOURCES						
		DLUMN (AA)					
			WP:4010, Pa	ge 1 of 1, Column (B)	), Line 3		
		Line 3		ge 1 of 1, Column (B)			
	α	Line 3 Line 8					
	α	Line 3 Line 8 COLUMN (A)	WP:4010, Pa	go 1 of 1, Column (B)	), Line 1		
	α	Line 3 Line 8 COLUMN (A) Line 1	WP:4010, Pa	ge 1 of 1, Column (B)	), Line 1 ), Line 2	d by W/D:4600 Dags	of 1 Cohmo (AA) Line 3
	α	Line 3 Line 8 COLUMN (A) Line 1 Line 6	WP:4010, Pa WP:4010, Pa WP:4500, Pa	ge 1 of 1, Column (B) ge 1 of 1, Column (A) ge 1 of 1, Column (A)	), Line 1 ), Line 2 ), Line 1 multiplie		of 1, Column (AA) Line 3
	α.	Line 3 Line 8 COLUMIN (A) Line 1 Line 6	WP:4010, Pa WP:4010, Pa WP:4500, Pa WP:4010, Pa	ge 1 of 1, Column (B)	), Line 1 ), Line 2 ), Line 1 multiplie		of 1, Column (AA) Line 3
	α.	Line 3 Line 8 COLUMN (A) Line 1 Line 6	WP:4010, Pa WP:4010, Pa WP:4500, Pa	ge 1 of 1, Column (B) ge 1 of 1, Column (A) ge 1 of 1, Column (A)	), Line 1 ), Line 2 ), Line 1 multiplie		of 1, Column (AA) Line 3
	α ·	Line 3 Line 8 COLUMIN (A) Line 1 Line 6	WP:4010, Pa WP:4010, Pa WP:4500, Pa WP:4010, Pa Calculation	ge 1 of 1, Column (B) ge 1 of 1, Column (A) ge 1 of 1, Column (A)	), Line 1 ), Line 2 ), Line 1 multiplie		of 1, Column (AA) Line 3

### UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

## DEVELOPMENT OF COPPER ELECTRONICS LEVELIZED, UTILIZED INVESTMENT

STATE: FLORIDA WORKPAPER: 50100 PAGE 1 OF 1 DATE: SEPTEMBER: 19

			(4)	(0)	(C)-(A)*(B)	(D)	(E)~(C)~(D)	F	(G)=(E)(F)	(14)	(I)=(G)^(H)
		ACCT	MATERIAL PRICE PER TI	DIPLANT	PROTALLED	PELATION FACTOR	EFFELEED ON	UTLEATION	LEVELEED UTE. OMESTIGHT REFORE	MINC LOAD.	LEVELEED UTL PMESTMEN WITH
INE									LOADHIGS		LO-2408
NO CENTRA	LOFFICE										
	1			1,5072		0.953		0.86			- 1
1	DSX-1 PANEL	267C		1.0072		0.000		0.00		0.0134	
2		257C								0.0047	
3		20C								0.0657	
4		100									
8											
٠.				1.5072	1	0.953		0.85	1		1
7	OFFICE REPEATER BAY	257C		1.0072	,	0.800	•	0.00		0.0134	
8		257C								0.0047	
		200								0.0657	
10		100									
11											
12											
13	2022										
14	MDF	377C									
15		377C									
16		877C									
17		877C		1,3466		0.999		0.85			
18		4 3010		1.0400		0.000		0.00		0.0974	
19		\$77C								0.0047	
20		200								0.0657	
21		100									
22											
23 CUSTON 24	ER PREMISE										
25	BLDG ENTRANCE CABLE	12C				1.022		0.70			
26 28	BLDG ENTITOTICE CHACE			LAA.							
	AQURGSA										
_	COLUMN A COLUMN C COLUMN C COLUMN C COLUMN C COLUMN C	ECONO	MIC ANALY LATION (NO MIC ANALY LATION	TE: BLDG	ENTRANCE	CABLE SOU	IRCE WAS E	CONOMIC A	NALYSIS D	EPT.)	
	COLUMN G COLUMN H COLUMN I	ECONO	MIC ANALY	ISIS	ND 10C LOAD	INGS WER	E BASED ON	TOTAL 257	C PER CATE	EGORY)	

#### DEVELOPMENT OF COPPER TRANSPORT LEVELIZED, UTILIZED INVESTMENT

			(4)	W-M.1	(C)= (0) , 3040	(0)	(E) *(C)*(D)	(P)	(G)=(E)*FACTOR	COPPER LAB.	POLECHOUT	(J)=()Y(V)
LME NO.	DE GALIGE COPPER CARLE	ACCT CODE	PER PAIR PER POOT	2 FMR PER POOT	COMP. USD FOR EL	887 TO CODE	COPPER CAR E WESTHER HVESTHERT	ADI FOR AR DRYER	ABI POR DROP WIRE	WEIGHTED BAYESTMENT WITH AGU	FACTOR	PAYERMENT
	AERUA.	220				0.152777		NA				
;	BURNED	48C				0.633938		NA				
:	UNDERGROUND	SC.				0.213285		N/A				
7	POLE	10				1					0.2523	
	COMPUT	40									0.3894	
ï	ourou.											
;												
÷	AIR DRYER											
	DROP WIRE ADJ.											
11												
12			(10)	(L)	(M) = (K)*(L)							
13					REPUBLICA .							
*				gar 10	90040							
15	REPEATER		944	0006	PHYSITHEPIT							
16												
17	AERIAL.	257C		0.152777								
18	BUNGED	267C		0.633938								
10	UNDERGROUND	267C		0.213285	-							
20		257C		1								
21												
22												
24	COPPER TRANSPOR	RTLEVEL	IZED UTILIZED	PAYESTMENT	BUMBARY							
22 25 24 25 27 28 29 30			00 - 00, 00	(O)	(P)=(H)*(O) TOTAL BASE YR	(Q)	(R)=(P)*(Q)	(S)	(1)=(PQ*(B)	UTLEATEN	(A)-(L)A(r) = (1)	
27		ACCT	TOTAL NV	194	POTAL BASE YA SAV PER DOI	BELINT	POSTALLED PAYENTHERT	PACTOR	NAME AND ASSESSED THE PARTY OF	PACTOR	WESTMENT	
26 29			PER DOI					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			PER DOI & PERSONE	
31						1.5072		0.953		0.85		257C
32	REPEATER	257C		•		1.0072		0.000		0.00		
20						NIA		1.022		0.70		22C
34	AERIAL.	22C				NA		1.020		0.70		45C
35	BURGED	43C		•		NIA		1.019		0.70		5C
36	UNDERGROUND	8C	••			-						1C
37	POLE	10										4C
30	CONDUIT	4C										
-	BOURCES											
	COLUMNA	ECON	DIMIC ANALYS	8 - VRUCS	COLUMNI	ECONOM	ANALYSIS -	FACTORS			ANALYBIB - FAC	TORS
	COLUMNIS		LATION		00,48817	CALCULAT	ION		COLUMNIA	CALCULAT		
	- COLUMNIC		LATION		COLUMNIK	METWORK			COLUMNS	The state of the s	ANALYSIS - FAC	TORS
	COLUMNO		OMIC ANALYS	8 - VRUCS	COLUMNIL	ECONOM	ANALYSIS -	VRUCS	COLUMNY	CALCULAT	ION	
	COLUMNIE	3 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	LATION		COLUMNIA	CALCULAT			COLUMBIU	NETWORK		
	COLUMNIF	NA			COLUMN	POLICE TO A PROPERTY OF THE PARTY OF THE PAR	(K), (H), and (-	ŋ	COLUMNY	CALCULAT	ION	
	COLUMNO	100000000000000000000000000000000000000	LATION		COLUMNO		ANALYSIS -				2	
	COLUMNIA		LATION		COLUMNY	CALCULAT						
	COL GARL H	CALC	- Indian									

TAB B

#### 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)
         1.7842 In-Plant Factor
     $ 35,684.00 Installed Investment
            200 # Circuits per System
         178.42 Per Circuit Investment
=
           0.40 Probability of System
×
          71.37 Weighted Investment
=
           0.70 Utilization
          101.95 Utilized Investment
          0.955 Levelized Inflation Factor
×
          97.36 Levelized Investment
         0.0117 MCE&P Factor
×
           1.14 MCE&P Investment
          97.36 Levelized Investment
           1.14 MCE&P Investment
+
           98.50
          0.0042 Land Factor
            0.41 Land Investment
           97.36 Levelized Investment
           1.14 MCE&P Investment
     $
     S
           98.50
          0.0706 Building Factor
×
           6.95 Building Investment
```

# FUNDAMENTAL DIGITAL LOOP CARRIER INVESTMENT MODEL

	Plug-in		
	\$	150.00	Plug-in Material Price
×		1.0604	In-Plant Factor
=	\$	159.06	Installed Investment
÷		2	# Channels per Plug-in
=	\$	79.53	Per Circuit Investment
×		0.40	Probability of System
=	\$	31.81	Weighted Investment
×		1.06	Spare Stock Factor
=	\$	33.72	Plug-in Investment
×		0.955	Levelized Inflation Factor
=	\$	32.20	
×		0.0117	MCE&P Factor
=	\$	0.38	
	s	32.20	Levelized Investment
+	\$ \$	0.38	MCE&P Investment
=	\$	32.58	
×	7	0.0042	Land Factor
=	\$	0.14	Land Investment
	s	32.20	Levelized Investment
+	\$ \$ \$	0.38	MCE&P Investment
=	\$	32.58	
×		0.0706	
=	\$	2.30	Building 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

	Ś	250.00	Hardwire and Common Investment (per DS1)
+	Ś	200.00	DS1 Card (per DS1)
+	Ś	2.50	Fiber Terminal (per DS1)
+	Š	0.50	Pigtails (per DS1)
+	Ś	1.00	Fiber Jumpers (per DS1)
=	\$	454.00	Total Investment per system (per DS1)
×		0.50	System probability of occurrence
=	\$	227.00	Weighted Investment
+		0.70	Utilization
=	\$	324.29	Utilized Investment
+		24	# Circuits per DS1
=	S	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
×	0.98	TPI
=	\$ 49,000.00	
×	1.7842	In-Plant Factor
=	\$ 87,425.80	Installed Investment
×	1.00	
=	\$ 87,425.80	Total Installed Investment
+	2,000	
=	\$ 43.71	Unit Investment
×	0.955	
=	\$ 41.75	
÷	0.70	
=	\$ 59.64	Study Period Investment
×	0.50	
=	\$ 29.82	Total Investment
×	0.0117	
=	\$ 0.35	MCE&P Investment
	\$ 29.82	Total Investment
+	\$ 0.35	MCE&P Investment
=	\$ 30.17	
×		Land Factor
-	\$ 0.13	Land Investment
	\$ 29.82	Total Investment
+	\$ 0.35 \$ 30.17	MCE&P Investment
	\$ 30.17	
×		Building Factor
=	\$ 2.13	Building Investment

# FLORIDA UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP COST DEVELOPMENT - MONRECURRING

In progress

#### FLORIDA UMBUMDLED 4-WIRE DS1 DIGITAL GRADE LOOP

#### SPECIFIC STUDY ASSUMPTIONS

The cost study for the Unbundled 4-Wire DS1 Digital Grade Loop is based on Total Element Long Run Incremental Costs (TELRIC) methodology prescribed by the FCC's First Report and Order in CC Docket 96-98 released August 8, 1996. Network deployment strategies, first choice provisioning guidelines, and equipment purchasing information are used to develop the Total Element Long Run Incremental Cost.

#### Cost study assumptions are as follows.

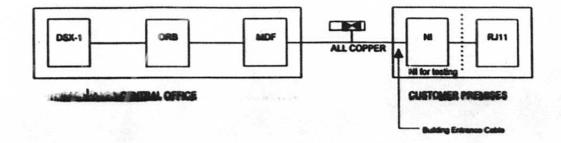
- 1. The 4-Wire DS1 Digital Grade Loop is deployed just like MegaLink® Service; it is deployed on the same network architecture designs as MegaLink® Service and the same provisioning guidelines are used for both. Also, customer distribution is assumed to be similar, so MegaLink® Service loop lengths are used to determine the cost to support the flat rate loop.
- 2. 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.
- 3. The probabilities of occurrence for the designs are based on estimates by BellSouth Network Subject Matter Experts. They are as follows:

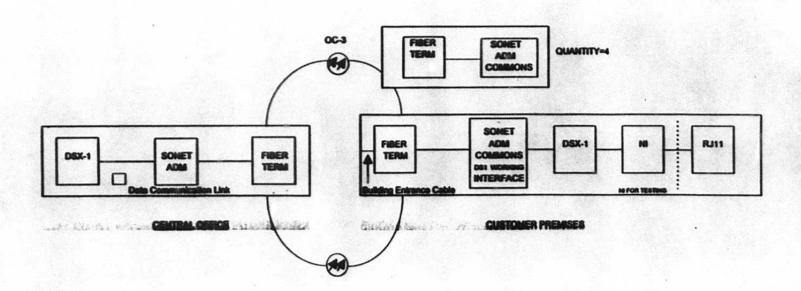
Design #1 Probability of Occurrence - 10% Design #2 Probability of Occurrence - 35% Design #3 Probability of Occurrence - 15% Design #4 Probability of Occurrence - 25% Design #5 Probability of Occurrence - 15%

4. The SONET Fundamental Investment Model provided the equipment investments. (see Section 4, Tab B for a description of this investment model)

#### **UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP**



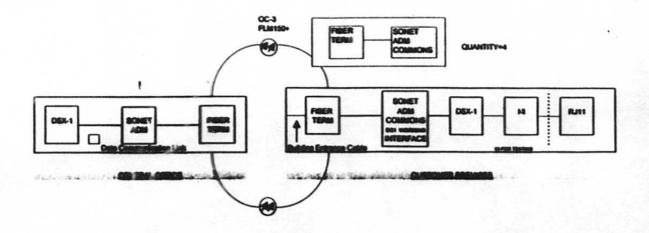


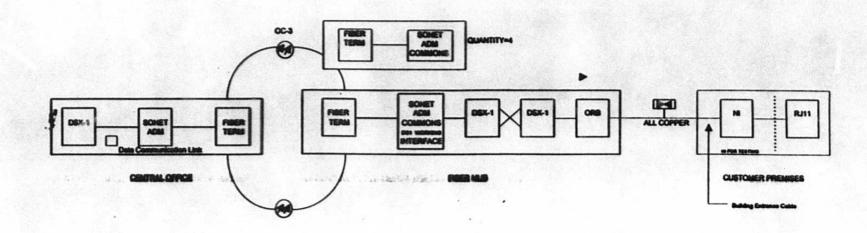


Design # 2

6

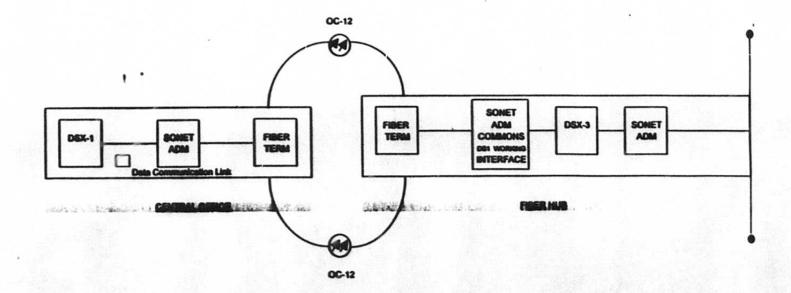
#### UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

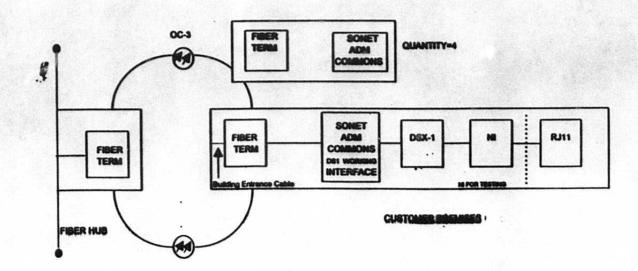




Design # 4

#### UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP





#### FLORIDA UNBUNDLED 4-WIRE DS1 DIGITAL GRADE LOOP

#### FACTORS AND LOADINGS

Following are the Total Element Long Run Incremental Cost (TELRIC) annual cost factors, miscellaneous loadings and labor rates used in the Unbundled 4-Wire DS1 Digital Grade Loop.

# Florida Unbundled 4-Wire DS1 Digital Grade Loop Factors and Loadings

Distribution to Code	22C 45C 5C	0.152777 0.633938 0.213285
Route to Air Ratio		1.43
In Plant Factors	257C 377C	1.5072 1.3466
Loadings Misc Common Equip & Power Misc Common Equip & Power Land Building Pole Conduit	257C 377C 20C 10C 1C 4C	0.0134 0.0974 0.0047 0.0657 0.2523 0.3894
Levelization Factors	257C 377C 22C 5C 45C 822C 85C 845C 12C	0.953 0.999 1.022 1.019 1.020 0.999 0.980 1.038 1.022 1.036
	40	1.050
Gross Receipts Tax (Gross-up Fac	tor)	0.0153

#### 1996 FLORIDA ACCOUNT AVERAGE ANNUAL COST FACTORS

	Field Code	Depreciation	ACFC COM	ACFC Inc Tax	Сар Ехр	ACFC Pit Specific Exp	ACFC Adval Tax	Directly Attributed Shared and Common	TELRIC
			b	c	d	•	f	9	i
	•		11.25%		(a+b+c)				(d+e+f+g)
LAND - COE	20C	0.0000	0.0947	0.0426	0.1373	0.0000		0.0000	0.1493
BUILDINGS - COE	10C, 110C	0.0330	0.0826	0.0369.	0.1525	0.0061	0.0120	0.0014	0.1720
DIGITAL ELEC SWITCH	377C, 587C	0.1157	0.0555	0.0254	0.1986	0.0236	0.0120	0.0434	0.2758
OPERATOR SYSTEMS	117C,417C	0.1157	0.0647	0.0298	0.2100	0.0033	0.0120	0.0500	0.2753
DIGTL CIRC-DOS	157C	0.1608	0.0575	0.0258	0.2439	0.0076	0.0120	0.0394	0.3029
DIGTL CIRC-PAIR GAIN	257C,D257C,F257C	0.1314	0.0584	0.0249	0.2127	0.0082	0.0120	0.0366	0.2695
DIGTL CIRC-OTHER	357C,T357C,F357C,557C	0.1314	0.0564	0.0252	0.2130	0.0093	0.0120	0.0372	0.2715
POLES	10	0.0721	0.0599	0.0254	0.1574	0.0175	0.0120	0.0294	0.2163
AERIAL CA - METAL	22C, 12C	0.1023	0.0879		0.1958	0.0705	0.0120	0.0619	0.3400
AERIAL CA - FIBER	822C, 812C,D22C, F22C,T22C,D12C,F12C,T12C	0.0746	0.0882	0.0281	0.1689	0.0029	0.0120	0.0299	0.2137
UNGROUND CA - METAL	5C	0.1184	0.0681	0.0263	0.2128	0.0192	0.0120	0.0351	0.2791
UNGROUND CA - FIBER	85C,D5C,F5C,T5C	0.0686	0.0655	0.0284	0.1625	0.0036	0.0120	0.0220	0.2001
BURIED CA - METAL	45C	0.0885	0.0678	0.0277	0.1840	0.0522	0.0120	0.0468	0.2950
BURIED CA - FIBER	845C, D45C, F45C, T45C	0.0613	0.0670	0.0295	0.1578	0.0040	0.0120	0.0235	0.1973
SUBMARINE CA-METAL	ec .	0.0937	0.0688		0.1932		STREET, STREET	0.0206	0.2304
SUBMARINE CA-FIBER	86C,D6C,F6C,T6C	0.0937	0.0688		0.1935		ALL DATE NOT THE RESIDENCE OF THE PARTY OF T	0.0209	0.2310
INTRBLD NTWK-METAL	52C	0.0751	0.0869	The state of the s	0.1711			0.0315	0.2338
INTRBLO'NTWK-FIBER	852C,D52C,F52C,T52C	0.0751	0.0669	SOURCE LAND CONTRACTOR OF THE PARTY OF THE P	0.1712		0.0120	0.0270	0.2113
CONDUIT SYSTEMS .?	4C	0.0205	0.0727	0.0325	0.1257	0.0031	0.0120	0.0146	0.1554

DDC-10

# FLORIDA



# UNBUNDLED EXCHANGE PORTS

TELRIC
COST STUDY
DOCUMENTATION

SECTIONS A THRU 7

### UNBUNDLED EXCHANGE PORTS 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
	4A 2-WIRE ANALOG PORT 4B 2-WIRE ISDN PORT 4C 2-WIRE DID PORT 4D 4-WIRE DID PORT 4E 4-WIRE ISDN DS1 PORT (PRI) 4F COIN PORT
SECTION 5	COST DEVELOPMENT - NONRECURRING  5A 2-WIRE ANALOG PORT 5B 2-WIRE ISDN PORT 5C 2-WIRE DID PORT 5D 4-WIRE DID PORT 5E 4-WIRE ISDN DS1 PORT (PRI) 5F COIN PORT
SECTION 6	SPECIFIC STUDY ASSUMPTIONS
SECTION 7	FACTORS AND LOADINGS
	7A LABOR RATES, LABOR INFLATION, ETC. 7B CONVERSION FACTOR DEVELOPMENT - DIRECT 7C CONVERSION FACTOR DEVELOPMENT - TELRIC

### 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. 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.

SCIS, Switching Cost Information System, a model developed by BellCore 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. Also, the model uses 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.



#### INTRODUCTION AND OVERVIEW

#### UNBUNDLED EXCHANGE PORTS COST STUDY DOCUMENTATION

This Total Element Long Run Incremental Cost (TELRIC) study is being provided to support Unbundled Exchange Ports. The costs presented in this study are based on TELRIC methodology established by the FCC's First Report and Order in CC Docket 96-98 (FCC Order) released August 8, 1996.

Unbundled exchange ports provide Alternative Local Exchange Companies (ALECs) with a physical presence in the switch. The port is comprised of the following components: the main distributing frame (MDF), the protector on the MDF, and the non-traffic sensitive switch equipment. The costs of basic hunting (series completion and multiline hunting) are also developed in this study.

A long run analysis is performed to ensure that the time period studied is sufficient to capture all forward looking costs affected by the business decision. Recurring costs developed in this study are levelized to be appropriate for the 1997-1999 study period. Nonrecurring costs follow the same convention and represent 1997-1999 level costs also. These costs are developed by using 1996 level TELRIC loadings and annual cost factors and labor rates designed to produce TELRIC results.



# COST STUDY DOCUMENTATION DESCRIPTION OF STUDY PROCEDURES UNBUNDLED EXCHANGE PORTS

This section describes the general principles for the development of Total Element Long Run Incremental Costs (TELRIC) supporting the Unbundled Exchange Ports.

The purpose of the TELRIC methodology established by the FCC order is to set the rates for interconnection and unbundled network elements. The basis for a TELRIC study is forward-looking long run economic cost methodology. Volume sensitive insensitive costs are identified to develop the direct cost of providing the particular network element being studied. methodology anticipates pricing of network elements in a wholesale network company; hence, many costs regarded as common or shared and, therefore, excluded from BellSouth's direct cost methodology would be included as directly attributable in a TELRIC study. The FCC pricing methodology also specifies that, over and above TELRIC, the additional portion of forward-looking common costs that cannot be directly attributed to any particular network element will be allocated among cost elements. This TELRIC study includes both recurring (capital and operating expenses) and nonrecurring (provisioning) costs.

#### 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 represent a forward-looking view of technology and deployment and include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs consist of plant specific expenses and ad valorem taxes. These expenses contribute to the ongoing cost to the Company associated with the initial capital investment. Also included in the recurring TELRIC are shared and common costs directly attributable to the network element. Gross receipts tax is calculated on the TELRIC.

The first step in developing a TELRIC recurring cost study for 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 Telco engineering and installation labor. A reasonable projection of actual fill utilization of the switch components is considered in the development of the investments.

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

Next, 1996 level TELRIC Annual Cost Factors are used to calculate the direct cost of capital, plant specific expenses and taxes. These factors (specific factors for each Uniform System of Accounts Field Reporting Code) are applied to levelized investments by account code, yielding an annual cost per account code which includes directly attributable shared and common costs. Annual Total Element Long Run Incremental Costs by account codes are then summed and divided by twelve to arrive at a monthly cost per element.

The directly attributable shared and common cost components of the TELRIC annual cost factors are calculated as follows. First, a detailed analysis of the forward-looking direct costs associated with the unbundled network elements is performed. The remaining costs of doing business are then analyzed to determine whether they are shared and common costs that can be reasonably attributed to network elements.

Next, the directly attributable shared and common costs are projected forward and segregated by functional areas to which they are related. The functional areas are wholesale operations, retail services operations, and combined wholesale and retail services operations. Attribution factors based on the specific wholesale functional area, such as central office equipment (COE) investment, COE salary and wages, etc. are then developed and applied to the respective costs. These attributed costs are accumulated by related network investment category, such as pair gain equipment, buried cable, etc. and attributed shared cost factors are developed. These attributed shared factors are then included as a component of the TELRIC annual cost factors by investment category. All directly attributed costs related to retail services operations are excluded.

The common cost allocation factor is applied to TELRIC to produce the forward looking economic cost, as defined by the FCC order, which includes an appropriate share of common costs. The common cost allocation factor is calculated by summing all wholesale costs that cannot be reasonably attributed to specific elements, services or functions and dividing by the sum of the directly assignable and directly attributable wholesale costs.

#### THE DEVELOPMENT OF NONRECURRING COSTS

Nonrecurring costs are "one-time" costs incurred as a result of provisioning, installing, and disconnecting Unbundled Ports. The work function times, identified by individuals knowledgeable about and/or responsible for performing these functions, 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 TELRIC labor rate for the work group performing the function.

Utilizing work functions, work times and TELRIC 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.

The TELRIC labor rates are calculated as follows. Salary and wages, as used in the development of the TELRIC annual cost factors, are accumulated on a basis consistent with specific force groups. Shared costs attributable to salaries and wages are then accumulated on a basis consistent with the development of the respective force group's labor rate. A factor is then developed for each force group by dividing the attributed shared costs (human resources, office equipment, motor vehicles, and building space, etc.) by related salary and wages. This factor is then applied to the salary and wage portion of the incremental labor rate to determine the TELRIC labor rate.

The common cost allocation factor is applied to the nonrecurring TELRIC to produce the forward looking nonrecurring economic cost, as defined by the FCC order, which includes an appropriate share of common costs.



#### COST STUDY DOCUMENTATION

#### SUMMARY OF RESULTS

#### FLORIDA UNBUNDLED EXCHANGE PORTS

This section contains a cost summary for the recurring cost elements studied for 1997-1999 Unbundled Exchange Ports. Nonrecurring cost support is currently in progress.

### Summary of Results 2W Analog Ports Florids

Network Element	Unit			Nonrecurring		Unit Recurring
Unbundled Exchange Ports Residence	Recurring	First Labor	RTU Fees	Additional Labor	RTU Fees	Equivalent
TELRIC	\$1.92		\$21.34		\$21.34	\$0.2
Common Cost Allocation Factor Total Cost	1.0804 \$2.07	1.0804	1.0804 \$23.05	1.0804	1.0804 \$23.05	1.080 \$0.3
Business						
TELRIC	\$1.92		\$21.34		821.34	\$0.2
Common Cost Allocation Factor Total Cost	1.0804 \$2.07	1.0804	1.0604 \$23.06	1.0804	1.0804 \$23.05	1.080 \$0.3
PBX Trunk						
TELRIC	\$1.92		\$21.34		\$21,34	\$0.2
Common Cost Allocation Factor Total Cost	1.0804 \$2.07	1,0804	1.0804 \$23.05	1.0804	1.0804 \$23.05	1.080 \$0.3
Hunting - per Line						
TELRIC	\$0.22		\$0.00		\$0.00	\$0.0
Common Cost Allocation Factor Total Cost	1,0804 \$0.24	1.0804	1.0804 \$0.00	1.0804	1,0804 \$0.00	1,080 \$0.0

Summary <sup>1</sup>	Total Unit Recurring	Nonrecurring <sup>1</sup> First	Additional
Residence Unbundled Port	\$2.36		
Business Unbundled Port	\$2.38		
PBX Unbundled Port	\$2.36		
Hunting	80.24		

There are no volume insensitive costs associated with these net-Local Usage is not included in the above costs.

Notes:

¹ The Total Unit Recurring is equal to the Unit Recurring plus the Unit Recurring Equivalent.

<sup>&</sup>lt;sup>2</sup> Nonrecurring labor costs are in progress.

#### Summary of Results 2W ISDN Digital Ports Florida

Network Element	Unit Recurring	Nonrecurring		Unit Recurring Equivalent
First Port		Labor	RTU Fees 1	
TELRIC	\$8.72	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	e000.00	***
Common Cost Allocation Factor	1.0804	1.0804	\$203.23 1.0804	\$2.70
Total Cost	\$9.42	1.0004	\$219.57	1.0804 \$2.98
Additional Ports, Same Location TELRIC	\$8.72			
TELRIO	90.72	=1_	\$203.23	\$2.70
Common Cost Allocation Factor	1.0804	1.0804	1.0804	1.080
Total Cost	\$9.42		\$219.57	\$2.90
User Profile, per B Channel				
TELRIC Common Cost Allocation Factor		1.0804		
Total Cost		114441		

		Nonrecurring 3	
Summary	Total Unit Recurring <sup>2</sup>	First	Additional
2 Wire ISDN Digital Port	\$12.40		
User Profile, per B Channel			

#### Notes:

<sup>&</sup>lt;sup>1</sup> These RTU Fees are expressed on a per unit basis.

<sup>&</sup>lt;sup>2</sup> The Total Unit Recurring is equal to the Unit Recurring plus the Unit Recurring Equivalent.

<sup>&</sup>lt;sup>3</sup> The nonrecurring labor costs are in progress. User Profile is nonrecurring, only.

# Summary of Results 2W DID Ports Florida

Network Element	Unit Recurring	Nonrecurring		Unit Recurring Equivalent
First Port		Labor	RTU Fees 1	
TELRIC	\$12.27	-	***	
Common Cost Allocation Factor Total Cost	1.0804 \$13.25	1.0804	\$0.00 1.0804 \$0.00	\$0.00 1.080 \$0.00
Additional Ports, Same Location				
TELRIC	\$12.27		\$0.00	en n/
Common Cost Allocation Factor Total Cost	1.0804 \$13.25	1.0804	1.0804 \$0.00	\$0.00 1.0804 \$0.00

Summary	Total Unit Recurring <sup>2</sup>	Nonrecurring <sup>3</sup> First	Additional
2 Wire DID Port	\$13.25		

Notes:

¹ These RTU Fees are expressed on a per unit basis.

<sup>&</sup>lt;sup>2</sup> The Total Unit Recurring is equal to the Unit Recurring plus the Unit Recurring Equivalent.

<sup>3</sup> Nonrecurring costs are in progress.

# Summary of Results 4W DID Ports Florida

Network Element	Unit Recurring	Nonrecurring		Unit Recurring Equivalent
First Port		Labor	RTU Fees 1	
TELRIC	\$126.86		***	
Common Allocation Factor Total Cost	1.0804 \$137.06	1.0804	\$0.00 1.0804 \$0.00	\$0.00 1.0894 \$0.00
Additional Ports, Same Location			*	
TELRIC	\$126.86		\$0.00	***
Common Allocation Factor Total Cost	1.0804 \$137.06	1.0804	1.0804 \$0.00	\$0.00 1.0804 \$0.00

			Nonrecurring <sup>3</sup>	
	Summary	Total Unit Recurring <sup>2</sup>	First	Additional
4 Wire DID Port		\$137.06		

Notes:

¹ These RTU Fees are expressed on a per unit basis.

<sup>&</sup>lt;sup>2</sup> The Total Unit Recurring is equal to the Unit Recurring plus the Unit Recurring Equivalent.

<sup>&</sup>lt;sup>3</sup> Nonrecurring costs are in progress.

### Summary of Results 4W ISDN DS1 Ports (PRI) Florida

Network Element	Unit Recurring	Nonrecurring		Unit Recurring Equivalent
First Port		Labor	RTU Fees 1	
TELRIC	\$234.87		\$2,137.60	\$29.0
Common Cost Allocation Factor Total Cost	1.0804 \$253.75	1.0804	1.0804 \$2,309.47	1.0804 \$31.40
Additional Ports, Same Location				
TELRIC	\$234.87		\$2,137.60	\$29.00
Common Cost Allocation Factor Total Cost	1.0604 \$253.75	1.0804	1.0804 \$2,309.47	1.0804 \$31.40

	Summary	Total Unit	Nonrecurring <sup>3</sup> First	Additional
4 Wire DID Port		\$285.15		

Notes:

¹ These RTU Fees are expressed on a per unit basis.

<sup>&</sup>lt;sup>2</sup> The Total Unit Recurring :3 equal to the Unit Recurring plus the Unit Recurring Equivalent.

<sup>&</sup>lt;sup>3</sup> Nonrecurring costs are in progress.

# Summary of Results Coin Ports Florida

Network Element	Unit Recurring	Nonrecurring		Unit Recurring Equivalent
First Port		Labor	RTU Fees 1	
TELRIC	\$2.18			
Common Cost Allocation Factor Total Cost	1.0804 \$2.36	1.0804	\$21.34 1.0804 \$23.05	\$0.29 1.0804 \$0.35
Additional Ports, Same Location				
TELRIC	\$2.18			
Common Cost Allocation Factor Total Cost	1.0804 \$2.36	1.0804	\$21.34 1.0864 \$23.05	\$0.29 1.0804 \$0.35

Summary		Total Unit Recurring 2 First		Additional
Coin Port		\$2.71		

#### Notes:

These RTU Fees are expressed on a per unit basis.
 The Total Unit Recurring is equal to the Unit Recurring plus the Unit Recurring Equivalent.
 Nonrecurring costs are in progress.

### COST STUDY DOCUMENTATION COST DEVELOPMENT - RECURRING

#### UNBUNDLED EXCHANGE PORTS

This section describes the development of the recurring Total Element Long Run Incremental Costs (TELRIC) for Unbundled Exchange Ports.

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. TELRIC annual cost factors are applied to convert the investment to cost. ACE, an internally developed model, 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 can be developed. The conversion factor to be used in the spreadsheets is developed by using the ACE model to calculate the annual cost of \$10,000 investment and dividing by 12. Section 7B contains the ACE outputs for the \$10,000 based on annual cost factors without the directly attributable shared and common factor. Section 7C contains the ACE outputs including the directly attributable shared and common factor, i.e. the TELRIC factors.

As mentioned in Section 2, the SCIS model lays the foundation for developing vendor EF&I investments. The model's outputs reflect vendor design criteria, BellSouth engineering rules, and customer usage characteristics. This was the basis for all types of ports studied.

For the 2-Wire Analog Port (Section 4A), workpapers 20-24 develop the investment and summarize the monthly costs. Workpaper 34 develops the RTU fee as a unit recurring equivalent.

For the 2-Wire ISDN Port (Section 4B), workpapers 20-21 develop the investment and summarize the monthly cost. Workpaper 22 develops the Right To Use (RTU) expense per port termination.

For the 2-Wire DID (Section 4C) and 4-Wire DID Ports (Section 4D), workpapers 20-24 develop the investment and summarize the monthly cost. Workpaper 33 calculates the RTU fee.

For the 4-Wire ISDN DS1 Port (Section 4E), workpapers 20-22 develop the investment and summarize the monthly cost. Workpaper, 33 develops the Right To Use (RTU) expense per port termination.

For the Coin Port (Section 4F), workpapers 20-23 develop the investment and summarize the monthly cost. Workpaper 33 develops the RTU fee as a unit recurring equivalent.

### **SECTION 4A**

State: Florida Workpaper: 20 Page: 1 of 1 Date:

10/07/96

· Description	Source	Amount	
		7-18-4-1	
Directly Attributeble Shared & Common			\$1.92
	LN3+LN4		\$1.52
IELNIC			
	WP21, LN37		
Direct Common			
			\$1.92
TELRIC	THAT THE		
PBX	W004 1 N97		
Direct			
Directly Attributable Shared & Common			\$1.92
	LN13+LN14		
Number 1			
	WP24, LN17		
Disease Andreadale Shered & Common	WP24, LN18		***
DESCRIA VIEIDORIORI QUINTOC & CONTINUO			\$0.22
IELAIC			
	WP34 I N10		\$21.34
RTU Fee, per Port	W. O., Live		
	MIDDA 1 8100		\$0.00
RTU Fees - Hunting	WF34, LN22		
Notes:			
the second secon	oes not vary by class of service.		
The equipment required is the same for Resid	lence, Business and PBX terminations.		
2 Cost of hunting functionality only. Does not include termination.			
Later. The DTU tee can be emortized over the	economic life of the switch.	Maria Esta	
Note: The RTU fee can be amortized over the This unit recurring equivalent is (WP34, LN16)		\$0.29	
	Direct Directly Attributable Shared & Common TELRIC  Hunting   Direct Directly Attributable Shared & Common TELRIC  RTU Fee, per Port   RTU Fees — Hunting  Notes:  The non—traffic sensitive switch termination of The equipment required is the same for Resid  Cost of hunting functionality , only. Does not  Note: The RTU fee can be amortized over the	Ports 1 Residential Direct Directly Attributable Shared & Common TELRIC  Business Direct Directly Attributable Shared & Common TELRIC  Business Direct Directly Attributable Shared & Common TELRIC  PBX Direct Directly Attributable Shared & Common TELRIC  PBX Direct Directly Attributable Shared & Common TELRIC  PBX Direct Directly Attributable Shared & Common TELRIC  WP21, LN37 WP21, LN37 WP21, LN38 LN13+LN14  Huating 2 Direct Directly Attributable Shared & Common TELRIC  WP24, LN17 WP24, LN17 WP24, LN18 LN18+LN19  PTU Fee, per Port 3 WP34, LN19  Notes:  1 The non-traffic sensitive switch termination does not vary by class of service. The equipment required is the same for Residence, Business and PBX terminations.  2 Cost of hunting functionality , only. Does not include termination.	Ports 1 Residential Direct Directly Attributable Shared & Common TELRIC Hunsting 2 Direct Directly Attributable Shared & Common TELRIC Hunsting 3 Direct Directly Attributable Shared & Common TELRIC WP24, LN17 Directly Attributable Shared & Common TELRIC WP34, LN17 Directly Attributable Shared & Common TELRIC WP34, LN17 Directly Attributable Shared & Common WP34, LN17 Directly Attributable Shared & Common WP34, LN10 TELRIC  Notes:  1 The non-traffic sensitive switch termination does not vary by class of service. The equipment required is the same for Residence, Business and PBX terminations.  2 Cost of hunting functionality , only. Does not include termination.

State: Florida Workpaper: 21 Page: 1 of 1 Date:

10/07/96

N	· Description	Source	Amount
ī	SESS Calculations		
2	Investment - 377C	SCIS/MO - 5ESS Line Termination Report	
3	MDF & Protector		
4	NTS Switching Investment		
5	Investment per Port	LN3+LN4	
8			
7	Conversion Factor - Direct Cost	ACE Report 20, Total Monthly Cost/10,000 (Sect 78)	0.020506
	Conversion Factor - TELFIC	ACE Report 20, Total Monthly Cost/10,000 (Sect 7C)	0.031228
	Directly Attributable Shared & Common Factor	LNA-LN7	0.004722
	District January Common Common Lawy		
_	5ESS Monthly Cost		
1 2	Direct	LNS*LN7	
_		LNS*LND	
3	Directly Attributable Shared & Common	LN12+LN13	
4	TELRIC	UNIZTUNIA	
5			
6	DMS Calculations	COLORED DATE Line Termination Const	
7	Investment - 377G	SCIS/MO - DMS Line Termination Report	
8	MDF & Protector		
9	NTS Switching Investment		
0	Investment per Port	LN18+LN19 ·	
1			
2	Conversion Factor - Direct Cost	ACE Report 20, Total Monthly Cost/10,000 (Sect 78)	0.026506
3	Conversion Factor - TELRIC	ACE Report 20, Total Monthly Cost/10,000 (Sect 7C)	0.031228
4	Directly Attributable Shared & Common Factor	LN23-LN22	0.004722
5			
6	Did Monthly Cost		
7	Direct	LN20°LN22	
8	Streetly Attributable Shered & Common	LN20*LN24	
9	TELRIC	LN27+LN28	
õ			
ñ	Meld Calculations		
2	Technology Distribution	D&F Database - NALs	
3	SESS		68.5%
4	DMS		31.5%
-		그래요. 그 교사이트 = : : : : : : : : : : : : : : : : : :	
15			
36	Meided Monthly Cost	I NACON NOO - I NOOM NOO	
37	Direct.	LN12*LN33+LN27*LN34	
38	Directly Attributable Shared & Common	LN13°LN33+LN28°LN34	** ***
39	TELRIC	LN37+LN38	\$1.916

State: Florida Workpaper: 22 Page: 1 of 1 Date:

10/07/96

N	Description	Source	Amount
2 3	Series Completion EPHC		
4 5	Muhiline Hunt EPHC		
7 8	Model Office Output MO2 SM Realtime Investment	SCIS/MO Output (V2.1)	
0 1 2	User Input IP1 BH Calls	Network	
2 3 4 5 6 7	SCIS/IM Database Items AT3 Resitime per EPHC RS21 Resitime per Series Completion RB20 Resitime per MILH	Assumption Table Item #3 Realtime Table Item #21 Realtime Table Item #20	
8 9	Distribution of Hunt Types Series Completion Multiline Hunt	Product Team	55% 45%
1 2 3	Melded SESS Investment	LN2*LN19+LN6*LN29	
4 5 6			
7 8 9 0			
12 13 14			
15	EPHC = Equivalent POTS Half Cell.		
18			

State: Florida Workpaper: 23 Page: 1 of 1 Date:

LN	Description	Source	Am~int
1	Series Completion		
2	Gotting Started		
3	Memory		
4	Program Store		
5	Data Store		
6	Data Fill		
7	Total Investment - Sedes Completion	LN2+LN4+LN5+LN6	
8			
9	Multilino Hunt		
10	Gotting Started		
11	Momeny		
12	Data Fill		
13	Total Investment - Multiline Hunt	LN10+LN12	
14			
15	Model Office Output	SCIS/MO Output (V2.1)	
16	MO1 Getting Started Investment		
17			
18	Upor Input	Network	
19	IP1 BH Calle		
20	IP2 Lines per Group		
21			
22	SCIS/IN Database Items		
23	IT14 Program Store	Investment Table Item #14	
24	IT15 Data Store	Investment Table Item #15	
25	IT16 Data FM	Investment Table Item #16	
28	MO21 SC Data Store	Memory Table Item #MD21	
27	MF21 SC Data Fill	Memory Table New #MF21	
28	MP21 SC Program Store	Memory Table Item #16721	
29	RT21 Realtime SC	Realtime Table Item #21	
30	MF20 MLH Data Fill - per Group	Memory Table Item #MF20	
31	MF20.01 MLH Data Fill	Memory Table Item #MF20.01	
32	RT20 Realtime MLH	Regitime Table from #20	
33	MISO MONIMIN MIST	resource radio from P.Co	
34	Distribution of Hunt Types	Product Team	
35	Series Completion	Froduct ream	55%
36	Multiline Hunt		45%
37	MUUMIY NUM		45%
38			
39	Melded DMS Investment	LN7*LN35+LN13*LN36	
40	melded nas luastiment	LM/-LN30+LN13-LN36	

State: Florida Workpaper: 24 Page: 1 of 1 Date:

V	Description	Source	Amount
1	Hunting Investments - 377C		
2	5ESS	WP22, LN22	
	DMS	WP23, LN39	
5	Meld Calculations		
	Technology Distribution	D&F Datebase - NALs	
,	5ESS		68.5%
1	DMS		31.5%
•	Melded Investment	LN2*LN7+LN3*LN8	\$7.00
1			
2	Conversion Factor - Direct Cost	ACE Report 20, Total Monthly Cost/10,000 (Sect 78)	0.02651
3	Conversion Factor - TELRIC	ACE Report 20, Total Monthly Cost/10,000 (Sect 7C)	0.03123
	Directly Attributable Shared & Common Factor	U8-U7	0.00472
5			
	Monthly Cost		
7	Direct	UNIO*UNI2	
8	Directly Attributable Shared & Common	LN10°LN14	
9	TELRIC	LN17+LN18	80.22
9			
n			
2			
3			
14			
5			
8			
77			
29			
30			
11			
12			
33			
4			
35			

State: Florida Workpaper: 34 Page: 1 of 1 Date:

	Source	Amount
N . Description		
1 Ports	Contract PR-6700-B	
2 SESS		
3 DMS		
5 Meld Calculations	D&F Database - NALs	68.5%
6 <u>Technology Distribution</u>		31.5%
7 5ESS		\$21.02
8 DMS	LN2°LN7+LN3°LN8	\$21.34
9 Melded RTU Fee	LN9°LN24	
0 Melded RTU Fee w/GRT		
1 FF_	ering .	\$21.02
2 Port RTU Fee Expressed as Recu	LN9	0.89%
3 Melded RTU Fee	Based on 11.25% Annual Interest Rate	120
14 Monthly Interest Rate	Digital Equipment Economic Life	\$0.29
15 Term (Months)	COLUMN INTERIOR I AND I AND I MAN DATE OF THE PARTY OF TH	
16 Unit Recurring Equivalent w/GRT		
17		
18 Hunting		
19 5ESS		
20 DMS		\$0.00
21 22 Melded RTU Fee	LN7°LN19+LN8°LN20	
	Oct Oct Oct O	1.0153
23 24 GRT Factor	Fundamental Cost Group	
25 ?		
26		
27		
28		
2		
30		
31		
32	### [	
33		
34		

**SECTION 4B** 

# 2W ISDN Digital Port Summary of Monthly Costs

State: Florida Workpaper: 20 Page: 1 of 1 Date:

Descript	1011	urce	Amount
Switching Costs - Port			
Direct	WP21, LN31		
Directly Attributable Shared	& Common WP21, LN32		
TELRIC	LN2+LN3		\$8.77
RTU Fees 1	WP22, LN103		\$2.70
<b>Total Monthly Coat</b>	LN4+LN6		\$11.46
			•
*			
1 Note:			
	volume sensitive and volume insensitive costs expr	passed on a per termination	n basis
The volume sensitive cost is:		\$0.857	
The volume insensitive cost is		\$1.900	
			32 1112 111

## 2W ISDN Digital Port Monthly Coats — Switching

State: Florida Workpaper: 21 Page: 1 of 1 Date:

N	Description	Source	A/nount
1	5ESS Calculations	N PAR CESTONESSEE DE LA PLANTE DE LA COMPANIONE	
2	Investment per ISDN Post (377C)	SCIS/MO - 5ESS ISDN Line Termination Report	
3			
4	Conversion Factor - Direct Cost	ACE Report 20, Total Monthly Cost/10,000 (Sect 78)	0.026506
5	Conversion Factor - TELRIC	ACE Report 20, Total Monthly Cost/10,000 (Sect 7C)	0.031228
6	Directly Attributeble Shared & Common Factor	LN5-LN4	0.004722
7			
8	SESS Monthly Cost		
9	Direct	LN2°LN4	
0	Directly Attributable Shared & Common	LN2°LN6	
1	TELRIC	LNO+LN10	
2			
3	DMS Calculations		
4	Investment per ISDN Port (377C)	SCIS/MO - DMS ISDN Line Termination Report	
5			
6	Conversion Factor - Direct Cost	ACE Report 20, Total Monthly Cost/10,000 (Sect 78)	0.026506
7	Conversion Fector - TELRIC	ACE Report 20, Total Monthly Cost/10,000 (Sect 7C)	0.031228
8	Directly Attributable Shared & Common Factor	LN17-LN16	0.004722
9			
0	DMS Monthly Cost		
1	Direct	LN2°LN4	
2	Directly Attributable Shared & Common	LN2°LN6	
3	TELRIC	LN21+LN22	
4			
5	Maid Calculations		
26	Technology Distribution	D&F Detabase - NALs	
27	5ESS		68.5%
	OMS		31.5%
19			
ō	Melded Monthly Cost		
11	Direct	LN9°LN27+LN21°LN28	
12	Directly Attributable Shared & Common	LN10°LN27+LN22°LN28	
3	TELRIC	LN31+LN32	\$8.72
4			
5		그 그리아 원래 살아보다 살아나 되었다면 하셨다.	
16			
37			
38			
39			
40			

State: Florida **Workpaper: 22** Page: 1 of 3 Date:

LN	Description	Source	Amount
1 R	ITU Packages - Discounted Cost		
	ESS		
3 N	lational ISDN I Package	Per Office	
	NIS1BSW National ICON Base		
-	NIS1SBB Standard BRI Rese		
	NISTOAT Basic Date for Steedard BRI		
-	NISTCSD Deluce CSD for Standard BRI		
	NIS1PSD Dakoe PSD for BPI	· · · · · · · · · · · · · · · · · · ·	
	ISBRIDS BPI Data Service Package		
	Island ISDN II Peckage	D. Office	
		Per Office	
	Total per Office	LN3+LN10	
_	SDNOAM ISDN OA&M Package	Per SM	
	XX75RITU X.75' Packet Geleway Access	Per SM	
	CSQRTU Q931/SS7 Interworking	per SM	
	Total per SM RTU Fees	LN12+LN13+LN14	
6 K	SBRIDS BRI Data Services Package	Per BRI	
7			
18 D	M8100		
9 N	(TX750AB ISDN Basic Access		
30	Per 2B+D		
	Per 18+D		
The second second	Per Selich		
	VTX753AB ISON Advanced Signating		
	(TX754AB ISON EXTS		
	(TX755AC ISDN Supplementary Services		
	FIX758AA ISDN Display Services		
7 1	(DCSTAA ISDN/ISUP Interventing		
	CTX767AA ISDN Routing & Digital Analysis		
	DMS-IPH Softwere Packages		
	NTXP47AA — Packet Hendler bees		
	NJ30477AA - Channelized Access on LPP/LIS		
	NEOPTSAA - DMS PH SERVORD		
	NTX158AA ISDN Automatic Message Accounting		
14 P	NTXJ51AA ISDN Digital Test Access	Per Office	
35 P	NTXJ51AA ISDN Digital Test Access	Per BRI	
36 1	NTX119AA MDC Message Waiting	물리 방식하는 말라겠다고 보는 6의 경기로 보고 !!	
	NTX988AA Testing ISDN Services	HUNGS - " " - '' - '' - '' - '' - '' - '' -	
	NTXN91AA TL-1 Teeting Interface Base		
	NTXN93AA TL-1 Testing ISDN Services		
60	NTXR55AA TL-1 Parsing Interface Base	• •	
	NTX167AB CCS7 Trunk Signeling		
	NTXF92AA ISDN OA&M Been		
	NI2 National ISDN II		
		OCHUMANO INIO INIO INIO INIO	
	Total per Switch Expenses	@SUM(LN19LN43) - LN21 - LN20 - LN35	
45			

State: Florida Workpaper: 22 Page: 2 of 3 Date:

4	Description	Source	Amount
6 7 8	Model Office Statistics	Network	
0	Total BRis 18+D 28+D	Model Office Input	
2 3 4 5 6	Technology Dietribution SESS DMS	D&F Database - NALs	68.5% 31.5%
7	Monthly Interest Rate	Based on Annual 11.25% Rate	0.89%
	Term (Months)	377C Economic Life	120
1 2 3 4 5	Volume Sensitive RTU Fees SEBS Per BRI Per SM	LN16 LN15	
8	Capacity per SM (Based on current CCS load)	Network	960
8	Total SESS per BRI	LNS3+LNS4LNSS	
0 1 2 3	DMS Por 1B+D Por 2B+D	TH50	
4	Probability of 18+D Probability of 28+D	LNSO/LN49 LNS1/LN49	8.1%
7	Molded 18+D & 28+D	LN71°LN74+LN72°LN75	
8 99	Per BRI	LN35	
11	Total DMS per BRI	LN77+LN79	
13	Melded SESS & DMS	LN54*LN68+LN55*LN81	\$62.10
15 16	Volume Sensitive Expressed as Unit Recurring	@PMT(LN63,LN57,LN50)	\$0.84
17 18 19	Unit Recurring Equivalent w/GFIT	LN85*LN105	\$0.857

### 2W ISDN Digital Port Development of RTU Fee Costs

State: Florida Workpaper: 22 Page: 3 of 3 Date:

Description		
Volume Inconsitive REM Fee (per Office)	LN11	
DMS	LN44	
Melded per Office	LN54°LN92+LN55°LN93	\$175,755
Volume insensitive per BPS	LNB5/LN49	\$138.06
Volume Insensitive Expansed as Unit Recurring	@PMT(LN97,LN57,LN59)	\$1.88
Unit Recurring w/GRT	LNGGPLN105	\$1.906
Total RTU per BRI	LN87+LN101	\$2.763
GRT Factor	Fundamental Cost Group	1.0153
Note:		
If left as a nonsecuring cost, the per BRI RTU Fee v	rould be:	
Volume Sensitive:	LNESPLN105	\$63.05 \$140.18
Adminis mestamas.		
	SESS DMS  Melded per Office  Volume insensitive Expressed as Unit Recurring  Unit Recurring w/GRT  Total RTU per BRI  GRT Factor  Note: If left as a nonrecurring cost, the per BRI RTU Fee v  Volume Sensitive:  Volume Insensitive:	SESS DMS LN11 LN44  Melded per Office LN54*LN92+LN55*LN93  Volume Insensitive per BPI LN95/LN49  Volume Insensitive Expansed as Unit Recurring @PMT (LN97,LN57,LN59)  Unit Recurring w/GRT LN99*LN105  Total RTU per BRI LN97*LN101  GRT Factor Fundamental Cost Group  Note: If left as a nonsecurring cost, the per BRI RTU Fee would be:  Volume Sensitive: LN93*LN105  LN93*LN105

SECTION 4C

#### 2W DID Port Summary of Monthly Costs

State: Florida Workpaper: 20 Page: 1 of 1 Date:

	Description	Source	Amount
LN S	Summary of Monthly Costs		
	Switching Costs		
1000	Direct	WP21, LN16	
3 0	Directly Attributable Shared & Common	WP21, LN17	
		LN2+LN3	\$6.29
	TELRIC	244	
6			
	Circuit Equipment	WP22, LN30	
8 [	Direct Directly Attributable Shared & Common	WP22, LN31	
		LN7+LN8	\$5.98
	TELRIC	an rais	
11			
12			
13			
14	Total Monthly Cost	LN3+LN8	
15	Direct	LN4+LN9	
16	Directly Attributable Shared & Common	LN15+LN16	\$12.27
17	TELRIC	TM19+TM16	
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32	*		
33			
34			
35	*		
36			
37			
38			181
39			
40			

#### 2W DID Port Calculation of Monthly Switching Costs

State: Florida Workpaper: 21 Page: 1 of 1 Date:

	Description	Source	Amount
	Investments per 2W DID Port - 377C		
	5ESS	WP23, LN6	
1	DMS	WP24, LN10	
	Maided Investment	LN2°LN12 +LN3°LN13	\$201.41
	mater a mercanina	DE DIE IENS DIE	4201.41
	Conversion Factor - Direct Cost	ACE Report 20, Total Monthly Cost/10,000 (Sect 78)	0.026506
-	Conversion Factor - TELRIC	ACE Report 20, Total Monthly Cost/10,000 (Sect 7C)	0.031228
	Directly Attributable Shared & Common Factor	LNB-LN7	0.004722
	Directly Attributation entered & Common Pactor	UNS-UN7	0.004/22
	Total and Statistics	DATE Database Mail	
	Technology Distribution	D&F Detabase - NALs	
	5ESS		68.5%
	DMS		31.5%
	Monthly Cost	•	
	Direct	LNS*LN7	
	Directly Attributable Shared & Common	LNS*LN9	
	TELRIC	LN16+LN17	\$6.29
	경하다 모으라 개념적으로 보겠네다. 그 모양하는 그 그		
	선수에 마시되었다면 하는 그 그 그래요? 그런 경험이 하는데		
1			
	[2]	in degradate and the state of t	

State: Florida Workpaper: 22 Page: 1 of 1 Date:

N	Description	Source	Amount
1	Circuit Equipment Regulred to Terminate 2W (	DID Port - 357C	
2			
3	D4 Hardwire	Fundamental Study	
4	DSX Bay	Fundamental Study	
5	Total Hardwire Investment	LN3+LN4	
6			
7	Conversion Factor - Direct Cost 1	ACE Report 20, Total Monthly Cost/10,000 (Sect 7B)	0.028689
8	Conversion Factor - TELRIC 1	ACE Report 20, Total Monthly Cost/10,000 (Sect 7C)	0.033034
9	Directly Attributable Shared & Common Factor	LNS-LN7	0.004345
0	Directly removement districts a common record		
1	Monthly Cost - Hardwire		
12	Direct	LNS*LN7	
_	Directly Attributable Shared & Common	LNS*LNS	
13			
14	TELRIC	LN12+LN13 .	\$2.3
15			
13	Common Plug-in	Fundamental Study	
7	2WR DPO Plug-in	Fundamental Study	
8	Total Plug-in Investment	LN16+LN17	
9			
0	Conversion Factor - Direct Cost <sup>2</sup>	ACE Report 20, Total Monthly Cost/10,000 (Sect 78)	0.02253
1	Conversion Factor - TELRIC 2	ACE Report 20, Total Monthly Cost/10,000 (Sect 7C)	0.02594
22	Directly Attributable Shared & Common Factor	LN21-LN20	0.00341
23			
24	Monthly Cost - Plug-in		
25	Direct	LN18°LN20	
26	Directly Attributable Shared & Common	UN18°UN22	
27	TELRIC	' LN25+LN26	83.6
8			
26	Total Circuit Equipment Monthly Cost		
30	Direct	LN12+LN25	
31	Directly Attributable Shared & Common	LN13+LN26	
12	TELRIC	LN30+LN31	85.94
-		LN301LN31	\$5.9
3			
14			
15			
36	. [발발시] [1] [1] [1] [1] [1] [1] [1] [1] [1] [1	[10] 전 15 [14] 다 [16] 그 15 [16] [16] [16] [16] [16] [16] [16]	
37	Notes:		
38	Incorporates hardwire in - plant factor.		
39	<sup>2</sup> Incorporates plug—in in—plant factor.		
40			

State: Florida Workpaper: 23 Page: 1 of 1 Date:

N	Description	Source	Amount
1	SESS Investment Calculations		
2	EPHC		
4	Herdwore		
6	Total Investment	LN2+LN4	
8			
9			
11			
12			
13			
15			
16			
17	Model Office Outputs	SCIS/MO Output	
19	MO2 SM Redtime		
20			
21			
23	User Input	Network	
24	IP1 BH DID Calls per Trunk		
25	IP2 Number of Trunks		
26 27			
28			
29			
30	SCIS/IM Database Itoms ATS Realtims per EPHC	Assumption Table Item 3	
32	RS22.03 DID Call per Trunk	Resitime Table Item 22.03	
33	ME6 Digital Trunk	Miscellaneous Equation Item 6	
34			
35			
36		기본 - 1 (1) 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
38			
39	EPHC = Equivalent POTS half-call.		
40			

State: Florida Workpaper: 24 Page: 1 of 1 Date:

.N	Description	Source	Amount
1	DMS Investment Calculations		
2	Getting Started		
3			
4	Hardware		
5			
6	Momery		
7	Data Store		
	Data Fill		
9			
10	Total Investment	LN2+LN4+LN7+LN8	
11			
12			
13	Model Office Outputs		
14	MO1 Getting Started	SCIS/MO Output	
15	mor desiring crained	Constant Carper	
16			
17			
18	User Input	Network	
19	IP1 BH DID Calls per Trunk	Nework	11
20	IP2 Number of Trunks		
21	IP2 reuniper of frunks		
22			
23			
24			
25	SCIS/IN Detabase Rome		
26	RT22 04D	Resitime Table Item 22	
27	MD22 DID Words	Memory Table Item MD22	
28	ME22 DID Words	Memory Table Item MF22	
29	INS 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 **Development of RTU Fee Coats**

State: Florida Workpaper: 33 Page: 1 of 1 Date:

	Decadates	Source	Amount
N	Description	Contract PR6900	
1	DMS100 RTU Fees		1
2	NTX100AA 1 - per effice		1
3			
4	RTU Foo Expressed as Unit Recurring Equivalent	Model Office Data	16,390
5	Average Lines per Office	LN2/LN5	
6	RTU Fee per Line	Based on 11.25% Annual .	0.89%
7	Monthly Interest Rate	Based on 11.23% Annua	120
å	Torm (Months)	Economic Life of Switch	
9	Unit Recurring Cost	@pmt(LN6,LN7,LN6)	
10	Olik risosium 5		
	SERS RTU Food		
11	2599 MIC 1999		1 - 4, 119
12	- to to - Detailed	D&F Detabase - NALs	68.5%
13	Technology Distribution		31.5%
14	5E88		31.5%
15	DMS		
16		LN3°LN13+LN9°LN12	\$0.00
17	Melded RTU Fee		
18		Fundamental Cost Group	1.0153
19	GRT Tax Factor		
20		LN15*LN17	\$0.00
21	RTU w/GRT <sup>2</sup>	TM19-FM11	
22	회해 가득하십시는 교육이 있는 그는 이 소리를 보는데!		
23			
24			
25			
28	Nates:		
2;			
22			
25		nonrecurring The	
30	. This is the unit techning equivalent. It test as a similar	(LN6°LN15+LN11°LN14)°LN19	\$0.0
31	HENNINGER (T.) (1 - 1) (1 - 1) (1 - 1) (1 - 1) (1 - 1) (1 - 1) (1 - 1) (1 - 1) (1 - 1) (1 - 1) (1 - 1) (1 - 1)		
32			
33			
34		(1) 10 10 10 10 10 10 10 10 10 10 10 10 10	
35	[19] 이 그 경향(보다 그 글라마) - 174기 시대하다면 모드		
36	[1] 12 - 12 - 12 - 12 - 12 - 12 - 12 - 12		
37			
38			
39			

**SECTION 4D** 

#### 4W DS1 DID Post Summary of Monthly Costs

State: Florida Workpaper: 20 Page: 1 of 1 Date:

N Description	Source	Amount
	WP21, LN16	
2 Direct	WP21, LN17	\$126.05
3 Directly Amributable Shared & Common	LN2+LN3	\$120.00
4 TELRIC		
5		
6 DSX	WP22, LN8	
7 Direct	WP22, LN9	
8 Directly Amibutable Shared & Common		\$0.81
9 TELRIC	LN7+LN8	
10		
11		
12 Total Monthly Cost	LN2+LN7	
13 Direct	LN3+LN8 .	\$126.06
14 Directly Attributable Shared & Common	LN13+LN14	
15 TELRIC		
16		
17		
18		
19		
20		
31		
HINT (THE PROPERTY OF THE PRO		
2		
23		
24		
26		
26		
27		
28		
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38		*
39		
40		

#### 4W DS1 DID Port Calculation of Monthly Switching Costs

State: Florida Workpaper: 21 Page: 1 of 1

Date:

N Description	Source `	Amount
N Description 1 Investments per 4W DS1 DID Port -377C 2 5ESS 3 DMS	WP23, LN6 WP24, LN10	
4 5 Melded Investment	LN2*LN12 +LN3*LN13	\$4,036.54
6 7 Conversion Factor — Direct Cost 8 Conversion Factor — TELRIC 9 Directly Attributable Shared & Common Factor	ACE Report 20, Total Monthly Cost/10,000 (Sect 7B) ACE Report 20, Total Monthly Cost/10,000 (Sect 7C) LINE-LIN7	0.026506 0.031228 0.004722
10 11 Technology Distribution 12 5ESS 13 DMS	D&F Database - NALs	68.5% 31.5%
14 15 Monthly Cost 16 Direct 17 Directly Attributable Shared & Common 18 TELRIC	LNS*LN7 LNS*LN9 LN16+LN17	\$129.05
19 20 21 22 23		
24 26 26 27		
28 . 29 . 30 . 31 . 32		
33 34 35 36		
37 38 39 40	•	

State: Florida Workpaper: 22 Page: 1 of 1 Date:

N	Description	Source	Amount
1	DSX Investment - 367C 1	Fundamental Coat	
2			0.028689
3	Conversion Factor - Direct Cost 2	ACE Report 20, Total Monthly Cost/10,000 (Sect 78)	
:	Conversion Factor - TELFIC 2	ACE Report 20, Total Monthly Cost/10,000 (Sect 7C)	0.033034
2	Directly Attributable Shared & Common Factor	LN4-LN3	0.004345
5	Dilacely Villingradia director & Common ( 1990)		
6			
7	Monthly Cod	LN1°LN3	
8	Direct	LN1*LN5	
9	Directly Attributable Shared & Common	LNS+LN9	\$0.81
0	TELRIC	TM9+TM9	
1			
12			
3			
14			
5			
16			
17			
8			
19			
20			
0.1000			
21			
22			
23			
24			
25			
26		계명하고 하다 그리고 보고 있었다. 이 사람들은 사람들이 되었다.	
27			
28			
29			
30	Note:		
31	1 This is for one DSX bay termination.		
32			
33			
34			
35			
36			
37			
-			
38			
39			

### 4W DS1 DID Port Development of SESS investments

State: Florida Workpaper: 23

Page: 1 of 1 Date:

LN	Description	Source	Amount
	88 Investment Celeviations		
2 Ef	HC		
4 H	rdware		
5 6 Te	tal investment	LN2+LN4	
7			
8			
10			
11			
12			
14			
5			
7			
	edel Office Outputs	SCIS/MO Output	
9 M	D2 SM Redtime		
20 21			
22			
29 U	or Input	Network	
24 IP	BH DID Calls per Trunk 2 Number of Trunks		
26			
27			
28			
30 84	CIS/IN Detabase Roms		
31 AT	3 Realtime per EPHC	Assumption Table Item 3	
32 R:	122.03 DID Call per Trunk E6 Digital Trunk	Restime Table Item 22.03 Miscellaneous Equation Item 6	
× "		wisconsusous Eduzatos saste e	
35			
36 37			
38			
39			
40			

State: Florida Workpaper: 24 Page: 1 of 1 Date:

LN	Description	Source	Amount
	rvestment Calculations		
2 Getting	g Started		
4 Hardw	are		
5			
6 Memor			
8 Data i			
9			
O Total I	nvestment	LN2+LN4+LN7+LN8	
11			
12			
	Office Outputs		
	etting Started	SCIS/MO Output	
15			
17			
8 User Is	nout .	Network	
	DID Celle per Trunk		11
	mber of Trunks		
21			
22			
23			
14 25 SCIS/I	N Detabase Rome		
26 RT22 D		Resitime Table Item 22	
	DID Words	Memory Table Item MD22	
28 MF22 (	OlD Words	Memory Table Item MF22	
	sta Store Words	Investment Table item 15	
	ata Fill Words	Investment Table Item 16	
	igitel Trunk	Micrellaneous Equation Item 6	
32 33			
34			
35			
36			
37			
38			
39			
40			

#### 4W DS1 DID Port Development of RTU Fee Costs

State: Florida Workpaper: 33 Page: 1 of 1 Date:

LDG	Description	Source	Amount
1	DMS100 RTU Fees	Contract PR6900	
2	NTX100AA 1 — per office		•
3	TELEVISION POLICE		
4	RTU Foe Expressed as Unit Resurring Equivalent		
5	Average Lines per Office	Model Office Data	16,390
6	RTU Fee per Line	LN2/LN5	
7	Monthly Interest Rate	Based on 11.25% Annual	0.89%
-	Term (Months)	Economic Life of Switch	120
	term (months)	@pmt(LN6,LN7,LN8)	
9	Unit Recurring Cost	<b>C</b>	
10			
11	SESS RTU Foos		
12		D&F Detabase - NALs	
13	Technology Distribution	<b>56.</b> 52355	68.5%
14	5E8S		31.5%
15	DMS		
16		LN9°LN15+LN11°LN14	\$0.00
17	Melded RTU Fee	DIS-Dilearners mark	
18		Fundamental Cost Group	1.015
19	GRT Tax Factor	Lindsweiren coar groop	
20			\$0.00
21	RTU w/GRT 2	LN15°LN17	
22			80.0
23	RTU per DS1	LN21°24	
24			
25			
26			
27			
28	Notes:		
29			
30			
31			
32	<sup>2</sup> This is the unit recurring equivalent. If left as a unit n	onrecurring the	
33	expense would be:	(LN6°LN15+LN11°LN14)°LN19°24	\$0.0
34			
-			
35			
36			
37			
38			
39			
40			

SECTION 4E

State: Florida Workpaper: 20 Page: 1 of 1 Date:

N	Description	So	entee	Amount
1	Suitching Gosts <sup>1</sup>			
2	Direct	WP21, LN39		
3	Directly Attributable Shared & Common	WP21, LN40		×
4	TELRIC	LN2+LN3		\$233.87
5				
6	DSX			
-	Direct	WP22, LN9		
	Directly Attributable Shered & Common	WP22, LN10		
100	TELRIC	LN7+LN8		\$1.00
1000	TELNIC			91.00
10				
11	Total Resurring Cods			
12	Direct	LN2+LN7		
13	Directly Attributable Shared & Common	LN3+LN8		
14	TELRIC	LN12+LN13		\$234.87
15				
16				
17	RTU Feas 2	WP33, LN45		\$29.06
18				
19	그 이 강하다면 하는 이 전 전환하다. 그 그는 승규님이 있다고 있다.			
20				
21				
22				
23				
24				
25				
28				
27				
28				
29				
30	Notes:			
31	1 The switching costs only include the physical	termination, i.e. call - by - call ac	cess and incoming call identificati	on are not included.
32				
33	<sup>2</sup> The RTU (se is compiled of volume sensitive	and volume in sensitive costs Th	a brankdown permonth per DDI	
34	o to to compared of folding constants	and Johanna middle and codes. In	o doesoonii, permonui, per em	
35	Volume Sensitive RTU Fee:		\$23.62	
36	Volume Insensitive RTU Fee:		\$5.43	
37				
38				
39				
40				

State: Florida Workpaper: 21 Page: 1 of 1 Date:

14.	Source	Amount
Description ESS Calculations	SCIS/MO - SESS ISON Line Termination Report	
Minimum Cost per D Chennel Minimum Cost per B Chennel	SCISIMO - SESSIBURICA I	
Number of B Channels Investment per Port	LNS+LN4*LN5	0.026506
Conversion Factor — Direct Cast Conversion Factor — TELPIC Directly Attributable Shared & Common Factor	ACE Report 20, Total Monthly Cost/10,000 (Sect 76) ACE Report 20, Total Monthly Cost/10,000 (Sect 7C) LNB-LNB	0.031228 0.004722
SESS Monthly Cost Direct	LNE*LN8 LNE*LN10	
Directly Attributable Shared & Common TELRIC	LINS+LN14	
DMS Colculations <u>Investment - 377C</u> Minimum Cost per D Channel Minimum Cost per B Channel	SCISMO - DMS ISON Line Termination Report	
Humber of B Channels Investment per Port	LNet9+LN20*LN21	0.026506
Conversion Factor — Direct Cost Conversion Factor — TELFIC Directly Altotachilo Shared & Common Factor	ACE Report 20, Total Monthly Cost/10,000 (Sect 76) ACE Report 20, Total Monthly Cost/10,000 (Sect 7C) LN255—LN24	0.031228 0.004722
DMS Monthly Cost	LN22°LN24	
Directly Attributable Shared & Common TELEC	LNESS+LNSO	
Mold Calculations <u>Technology Distribution</u> SESS DMS	D&F Detabase - NALs	68.5% 31.5%
Moldad Monthly Cost Direct	LN13°LN35+LN29°LN36 LN14°LN35+LN30°LN36	
Directly Attributable Shared & Common TELRIC	IN1A*LN35+U430*LN35	\$233.87

# 4W ISDN DE1 Port (PRB) Monthly Costs — DSX

State: Florida Workpaper: 22 Page: 1 of 1 Date:

N	Description	Source	Amount
1	DSX Investment - 267C1	Fundamental Cost	-
3 4 5 8	Conversion Factor — Direct Cost Conversion Factor — TELRIC Directly Attributable Shared & Common Factor	ACE Report 20, Total Monthly Cost/10,000 (Sect 78) ACE: Report 20, Total Monthly Cost/10,000 (Sect 7C) LN4—LN3	0.035694 0.041043 0.005349
,			
3	Monthly Cod	LN1*LN3	
9	Direct	LN1*LN5	
0	Directly Attributable Shered & Common TELRIC	LN9+LN10	\$1.00
2	ICDAO		
3			
4			
5			
6			
6			
0			
1			
2			
4			
5			
18			
17			
65			
90	Note:		
31	<sup>1</sup> This is for one DSX bay termination.		
32			
33			
35			
36			
37			
38			
39		· · · · · · · · · · · · · · · · · · ·	

State: Florida Workpaper: 33

Date:

a: 10/07/9

.84	Occuption	Source	Amount
1	DMS100 RTU Fees	Contract PR6900	
2	Per Office		
3	NTX790AB	PRI Interface Base	
4	HTX783AA	Integrated Services Access	
5	HTI(794AA	PRI/CCS7 Interworking	
6	HTNSSAA	D Chennel Back-up	
7	Total per Office	LN3+LN4+LN5+LNS	
	Por PRI		
10	MTX780AB	PRI Interface Base	
11			
12	Average PRIs per office	Model Office Input	
13			
14	SESS RTU Fees	Contract PR67008	
5	Por PRI		
16	ISRIPRT (notudes ISCCART)	ISDN Primary Rate Interface	
17	NISSPRI	M2 - Banic (1% of Interfaces)	
18	SESS RTU per PRI		
19			
20	Volumo Sensitivo STU Fees		
21	DMS	LN10	
22	SERA.	LN16	
23			
24	Molded Velume Sensitive RTU Fee	LN21°LN27+LN22°LN28	81,711.34
25			
	Distribution	MALE	
77	DMS		31.5%
26	SERR		68.5%
-			
30	Monthly Interest Rate	Based on Annual 11.25% Rate	0.89%
31	Term (Months)	Economic Life of 377C Account	120
32	CRT	Fundamental Cost Group	1,0153
33	Volume Geneithre Expressed as Unit Recurring	(OPMT/LN24 LN39 LN31)*LN32	\$23.62
34		C Company and the	
35	Volume Innonatible RTU Fees		
38	PAIG CO.	107	
37	5500		
38			
30	Molded Volume Insensitive RTU Fee	LN27*LN36+LN28*LN37	\$12,600.00
40	Court Court Institute RIV For	CHET CHAPTER LIES	\$12,000.00
41	Melded Volume Inconstitue per PRI	LN30/LH12	\$300.75
42		Literature.	eses./5
43	Volume incensitive Expressed as Unit Recurring	CORPORTE MAS I NOO I NO MAN MAN	85.43
44	Antonia managara cofination es cuy uncessas	fa. m. fras. i 'rusn'rus ill. russ	90.43
45	Total RTU per PRI, per blooth	LN33+LN43	\$29.00
46	iva niv per rm, per mones	LIGHT LINES	\$20.00
47	Note: White as a suppression and the second party of		
	Note: If left as a nonrecurring cost the per PRI RTU lee Volume Sanskive:	WOULD DE:	
48	Volume Sanstive: Volume Innerestive	LN32*LN41	\$1,737.83
49	Actrino ispatistica	LH32-LH41	\$399.77

SECTION 4F

State: Florida Workpaper: 20 Page: 1 of 1 Date:

Description	Source	Arrount
5E8S Calculations		
Investment - 377C	SCISMO - SESS Line Termination Report	
MDF & Protector		
NTS Switching Investment		
Screening Investment	WP22, LND	
Investment per Port	LN3+LN4+LN5	
Conversion Factor - Direct Cost	ACE Report 20, Total Monthly Cost/10,000 (Sect 7B)	0.026508
Conversion Factor - TELRIC	ACE Report 20, Total Monthly Cost/10,000 (Sect 7C)	0.031228
Directly Attributable Shered & Common Factor	IMO-IMB	0.004722
		4.001162
5ESS Monthly Cost		
Direct	LNS*LNS	
Directly Attributable Shared & Common	LN6*LNS0	
TELRIC	LN13+LN14	
DMS Calculations		
Investment - 377C	SCIS/MID - DMS Line Termination Report	
MOF & Protector	Colores - Calo Line Termination report	
NTS Satishing Investment		
Incremental Cost for Type B Line Card	WP21, LI64	
	WP21, LN0	
Screening Immetment		
Investment per Port	Sum(LN20LN23)	
Conversion Faster - Direct Cost	ACCES TO THE RESIDENCE OF THE PARTY OF THE P	
	ACE Report 20, Total Monthly Cost/10,000 (Sect 7B)	0.026506
Conversion Factor - TELRIC	ACE Regart 20, Total Monthly Cost/10,000 (Sect 7C)	0.031228
Directly Attributable Shared & Common Factor		0.004722
DMS Monthly Cost		
Direct	LN24*LK25	
Quecely Attributable Shared & Common	LN24°LN28	
TELRIC	LN31+LN32	
Mold Celculations		
Technology Distribution	D&F Detabase - NALs	
5E98		68.5%
DMS		31.5%
Molded Monthly Cost — Switching		
Direct	LN13°LN37+LN31°LN38	
Directly Attributable Shared & Common	LN14°LN37+LN32°LN38	
TELRIC	LN41+LN42	\$2.18

Coin Analog Port Monthly Costs

State: Florida Workpaper: 21 Page: 1 of 1 Date:

N	Doe	cription		Source	Amount	
1 D	MS incremental inve- lype A Line Card lype B Line Card ncremental investment	olmont				
2 1	Type A Line Card					
3 1	Ivon B Line Card					
4 1	ncremental investment					
5						
6						
<del>,</del>						
ė.						
				2		
0	E 10 5					
11						
2						
3						
4						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
28						
27						
28						
20						
30						
31						
21 22 23 24 25 28 29 30 31 32 33						
33						
34						
35						

Coin Analog Port Billed Number Screening/Selective Class of Cell Screening SESS investment Development

State: Florida Workpaper: 22 Page: 1 of 1 Date:

Deceription	Source	Amount
5ESS Investments		
A. Getting Started		
	,	
B. Line CCS		
C. EPHC		
D. Total Investment	LN3+LN5+LN7	
D. Telli investment	шативтин	
User Inputs	Network	
IP1 Busy Hour Calle per Line		0.01
IP2 Digita per Cell		3
Model Office Outputs	SCISMO V2.1	
MO1 Investment per Meec	SOUTH VE.	
MO2 Switch Module Resistme per EPHC		
MO4 Investment per Line CCS		
SCIS Database Items AT3 Facilimo per average EPHC	Accumption Table Item #3	
AT4 Holding Tome for 12 Second Announcement	Assumption Table Item #4	
OT31 CCS per Digit	Default Table Item #31	
OT31 CCB per Digit RS322 Code Restriction Cell to Announcement RT322 Code Restriction Cell to Announcement	Realtime (SM) Table Item #322 Realtime Table Item #322	
RT322 Code Resistation Cell to Announcement	Realtime Table Nem #322	
Nate: Assumes restricted cell receives ennouncement		
Ngio: Assumse restricted cell receives ennouncement		

Coin Analog Port Billiod Number Screening/Selective Class of Cell Screening DMS Investment Development

State: Florida Workpaper: 23 Page: 1 of 1 Date:

Description	Source	Amount
DMS invoctments		
A. Getting Started		
B. Line CCS		
C. Memory		
D. Total Investment	LNS+LNS+LN7	
Uoor Ingula	Mehrod	
User Impute IP1 Busy Hour Calle per Line	Resion	0.01
IP2 Digits per Cell IP3 Restricted Lines per Office		100
Model Office Outputs	SCISMO V2.1	
Model Office Outputs MO1 investment per Mesc MO4 investment per Line CCS		
SCIS Database Home		
DT49 CCS per Add't Digit IT14 Program Store &/Word	Default Table Item #49 Investment Table Item #14	
IT15 Data Store \$Word MP322 Program Store Words	Investment Table Item #15	
MD322 Data Store Words	binmory Tobio item #MP322 binmory Tobio item #MD322 Finalism Tobio item #322	
RT322 Code Restriction Cell to Announcement		
RT322 Code Restriction Cell to Announcement  Niste: Assumes restricted cell receives ennouncement	<b></b>	

State: Florida Workpaper: 33 Page: 1 of 1 Date:

V . Description	Source	Amount
SESS RTU per Line	Contract PR-6709-8	
DMS		
5 Mold Calculations	D&F Database - NALs	
5 Technology Clabibution 7 SESS	Der Ussabete - Forus	68.5%
B DMB		31.5%
		01.0.0
0 Melded FITU tee	LN1°LN7+LN3°LN8	\$21.02
1		
2 GRIT Text Feator	Fundamental Cost Group	1.0153
3		
4 Molded RTU w/GRT	LN10°LN12	\$21.34
5		
6 RTU Expressed as Recurring 7 PW of Express	LN10	\$21.02
7 PW of Expanse 8 Monthly Interest Rate	Besed on 11.25% Annual Interest Rate	0.89%
9 Term (Months)	Digital Equipment Economic Life	120
O Monthly Cost w/GRT	(@gent@.N17,LN18,LN19))*LN12	80.20
4		
i - 1		

SECLION 2

#### SECTION 5

# COST STUDY DOCUMENTATION COST DEVELOPMENT - NONRECURRING

#### UNBUNDLED EXCHANGE PORTS

These studies are currently in progress.

### COST STUDY DOCUMENTATION SPECIFIC STUDY ASSUMPTIONS

#### UNBUNDLED EXCHANGE PORTS

The cost studies are based on the Total Element Long Run Incremental Cost (TELRIC) methodology prescribed by FCC's First Report and Order in CC Docket 96-98 released August 8, 1996. Network deployment strategies, first choice provisioning guidelines, and equipment purchasing information are used to develop the Total Element Long Run Incremental Cost.

Cost study assumptions are as follows: Ports

- 1. The physical connection to the switch is comprised of the main distributing frame (MDF), the protector on the MDF, and the non-traffic sensitive switch equipment. This arrangement does not provide any feature functionality.
- 2. Network usage is required to gain access to the switched network.
- 3. RTU fees have been included where applicable to account for the expense which must be paid to switch vendors upon termination.
- 4. Alternative Network Serving Arrangements, ANSA, have not been considered in the ISDN ports.
- The coin port includes screening capabilities.

### COST STUDY DOCUMENTATION FACTORS AND LOADINGS

### UNBUNDLED EXCHANGE PORTS

Following are the TELRIC 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 using the ACE model.

**SECTION 7A** 

### SECTION 7A LABOR RATES, LABOR INFLATION, ETC. FLORIDA

Nonrecurring study in progress. Labor Rates will be outlined when study is complete.

### **Loading Factors**

Ports			
PORTS			

Levelized Inflation	.9990
InPlant (Telco)	1.1705
Common Equipment & Power	1.0974
Building Loading	.0657
Land Loading	.0047

### **Annual Cost Factors**

The ACFs for the ports are displayed on Report 20 of the ACE runs contained in Section 7B (Direct Cost) and 7C (TELRIC).

**SECTION 7B** 

Study Number: 96XXX

Study Name: Conversion Factor Tariff Element: Conversion Factor ACE REPORT 10

Page 1 10/04/96

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

FL AAA VS D

	Capital Investment	Operating		PC	InPlant	*-n\						
	Investment				InFlanc	InPlant	CEAP	Loading	Loading	Field	Capital	Operating
		Investment	Date	<b>Factor</b>	Pactor	Type	<b>Factor</b>	Factor	Type	Code	Investment	Investment
ctor	10,000.00	10,000.00	9/23/96	.9990	1.1705	T	1.0974				12,832.22	12,832.22
ding>			9/23/96					.0657	switch_bldg	10C	843.08	843.08
ding>			9/23/96					.0047	switch_land	20C	60.31	60.31
									**************************************	[발생하다]		(2018년 - 1987년 1일 - 1987년 1일 전 1일

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

 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.

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

Study Number: 96XXX

Study Name: Conversion Factor Tariff Element: Conversion Factor ACE REPORT 10

Page 2 10/04/96

State Tariff Ref

USOC

Modifier

Technology Vol. Sens. Economic Type Investment Basis

vs

	PRIMARY INVEST	MENT DATA			INV	ESTMENT L	CADING FA	CTORS	SUPPORT	STRUCTURE LOAD	INGS	BOOKED I	NVESTMENTS
Field Code	Description	Capital Investment	Operating Investment	Date	PC Pactor		InPlant Type		Loading Factor	Loading Type	Field Code	Capital Investment	Operating Investment
357C	Conversion Factor	10,000.00	10,000.00	9/23/96	.9550	1.3498	н .	1.0683				13,771.02	13,771.02
	- Support Loading> - Support Loading>			9/23/96					.0657	circuit_bldg circuit_land	10C 20C	904.76 64.72	904.76 64.72
									ADJUS	TED TOTAL INVE	THENT:	14,740.50	14,740.50

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

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.

Study Number: 96XXX

Study Name: Conversion Factor Tariff Element: Conversion Factor ACE REPORT 10 Page 3

10/04/96

State Tariff Ref

USOC ccc

Modifier

Technology Vol. Sens. Economic Type Investment Basis

	PRIMARY INVEST	DEENT DATA			INV	ESTMENT L	OADING FA	CTORS	SUPPORT	STRUCTURE LOAD	INGS	BOOKED I	NVESTMENTS
Field		Capital	Operating		PC	InPlant	InPlant	CEAP	Loading	Loading	Field	Capital	Operating
Code	Description	Investment	Investment	Date	Factor	<b>Factor</b>	Туре	Pactor	Pactor	Туре	Code	Investment	Investment
						•••••							
357C	Conversion Factor	10,000.00	10,000.00	9/23/96	.9550	1.0600	P	1.0683				10,814.40	10,814.40
357C	- Support Loading>			9/23/96					.0657	circuit_bldg	10C	710.51	710.51
357C	- Support Loading>			9/23/96					.0047	circuit land	20C	50.83	50.83

MOTES: 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 Pactor types: T = Telco, C = Material Composite, H = Material Hardwire, P = Material Plugin
- 4. The PC factor is the levelized inflation factor for investments.

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

Study Number: 96XXX

Study Name: Conversion Factor Tariff Element: Conversion Factor ACE REPORT 10 Page 4 10/04/96

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

FL DDD ' VS D

	PRIMARY INVEST	DENT DATA			INV	ESTMENT L	OADING FA	CTORS	SUPPORT	STRUCTURE LOAD	INGS	BOOKED I	NVESTMENTS
Field		Capital	Operating		PC	InPlant	InPlant	CEAP	Loading	Loading	Field	Capital	Operating
Code	Description	Investment	Investment	Date	<b>Factor</b>	Pactor	Туре	<b>Factor</b>	Factor	Туре	Code	Investment	Investment
	••••••				•••••								
257C	Conversion Factor	10,000.00	10,000.00	9/23/96	.9530	1.7842	н	1.0134	100			17,231.27	17,231.27
257C	- Support Loading>			9/23/96					.0657	circuit_bldg	10C	1,132.09	1,132.09
257C	- Support Loading>			9/23/96					.0047	circuit_land	20C	80.99	80.99

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

- 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.

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

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.

Page 1 10/04/96

USOC AMBUAL COST DETAILS

Study-Number: 96XXX

Study Name: Conversion Factor

Tariff Element: Conversion Pactor

State Tariff Ref

USOC

Gross Receipts Tax

TOTAL AMBIUAL COSTS

Modifier

Ad Valoren and Other Taxes

Technology Volume Sensitivity Economic Type Investment Basis

TOTAL MONTHLY COST:

265.06

D VS

L		,	MA.						VS								
INVE:	THENT	r DATA				AMMUA	L COST F	CTORS					Inc Tax		Directly	Adval	GRT
eld	St	Investment				Inc.Tax Pactor					Depr. Expense	C.O.M. Expense	Expense			Expense	Expense
de  IC	 PL	943.08		0330	.0826	.0369	.0061	0.0000 0.0000		.0153	27.82	69.64 5.71 712.19	31.11 2.57	5.1 0.0	0.00	10.	.13 2.2 .72 .1 .23 45.5
17C	PL PL	12,832.22		1157	.0555	.0254	.0236	0.0000	13,73		1,484.69						
(BOUL)	RY:		CAPITAL C		Co	preciation	ey	•	78								
		AMBUAL	OPERATING	EXPE	ISES: Na	intenance	Expense	Shared	30	7.98 0.00							

165.09

47.93

3,180.67

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

USOC ANNUAL COST DETAILS

Study Number: 96XXX

Study Name: Conversion Factor Tariff Element: Conversion Factor ACE REPORT 20

Page 2 10/04/96

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

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INVES	THEN	T DATA			AMMUA	L COST F	ACTORS				ANN	UAL EXPEN	SES			
						•••••	• • • • • • • • • • • • • • • • • • • •					•••••				
Field			Depr.	C.O.N.	Inc. Tax	Mcce.	Direct.	AdVal	GRT	Depr.	C.O.M.	Inc Tax	Mcce.	Directly	Adval	GRT
Code	St	Investment	<b>Factor</b>	Pactor	Pactor	Pactor	Attrib.	Factor	Pactor	Expense	Expense	Expense	Expense	Attributed	Expense	Expense
							Shared							Shared		
	•••		•••••												•••••	
10C	FL	904.76	.0330	.0026	.0369	.0061	0.0000	.0120	.0153	29.86	74.73	33.39	5.5	2 0.00	10.8	7 2.36
20C	PL	64.72	0.0000	.0947	.0426	0.0000	0.0000	.0120	.0153	0.00	6.13	2.76	0.0	0.00	.7	8 .15
357C	PL	13,771.02	.1314	.0564	.0252	.0093	0.0000	.0120	.0153	1,809.51	776.69	347.03	128.0	7 0.00	165.5	1 49.37
SUDDIAR	· · · · ·	ADJUSTED TO	PAL THURSTA					14,740	.50							
Survey	••	AMBUAL CAPIT	E. M. Company		reciation	Evmense		1,839								
		ASSOCIAL CAPIT	IAL COSIS:													
					t of Mone	Transitive en			.55							
				Inc	ome Tax I	bxpense		383	.17							
		AMBIUAL OPERA	ATING EXPEN	SES: Mai	ntenance	Expense		133	.59							
				Dir	ectly Att	ributed	Shared	0	.00							
				Ad	Valorem a	and Other	Taxes	177	.17							
		Gross Receip	pts Tax					51	.88							
		TOTAL ANNUAL	. COSTS					3,442	.72	TOTAL MONTH	LY COST:	286.89				

MOTES: 1. Capital and Operating Investments are from ACE Report 10.

USOC ANNUAL COST DETAILS

Study Number: 96XXX

Study Name: Conversion Partor Tariff Element: Conversion Factor

State Tariff Ref

USOC

Modifier

Technology Volume Sensitivity Economic Type Investment Basis

										*****	UAL EXPENS	SES			
INVESTME	OFF DATA			AMBIUA	L COST F	ACTORS									
ield	Investment	Dept.	C.O.M. Pactor	Inc.Tax Factor		Direct. Attrib. Shared			Depr. Expense	C.O.M. Expense	Inc Tax Expense		Directly Attributed Shared	Adval Expense	GRT Expense
OC PL OC PL 57C FI	50.83	.0330 0.0000 .1314		.0369 .0426 .0252	.0061 0.0000 .0093		.0120	0 .0153 0 .0153 0 .0153	23.45 0.00 1,421.01	58.69 4.81 609.93	26.22 2.11 272.52	0.0	0.00		1 .12
UMMARY:	ADJUSTED TO AMBIUAL CAPT AMBIUAL OPES	TAL COSTS:	De Co In DESES: Ma	preciations of Mon acome Tax intenance irectly At	Expense Expense tributed	i Shared	30 10								
	Gross Recei						•	10.74 03.58	TOTAL HONT	HLY COST:	225.3	10			

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

ACE REPORT 20

10/04/96

Page 4

USOC ANNUAL COST DETAILS
Study Number: 96XXX

Study Name: Conversion Factor
Tariff Element: Conversion Factor

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

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INVE	STHE	ET DATA			AMPERA	L COST F					IOIA	UAL EXPENS	SES			
ield lode	St	Investment	Depr. Factor	C.O.M. Pactor			Direct.	AdVal		Depr. Expense	C.O.M. Expense	Inc Tax Expense		Directly Attributed Shared	Adval Expense	GRT Expense
10C 20C 257C	PL PL PL	1,132.09 80.99 27,231.27	.0330 0.0000 .1314	.0825	.0369 .0426 .0249		0.0000 0.0000 0.0000	.0120 .0120 .0120	.0153	37.36 0.00 2,264.19	93.51 7.67 971.84	41.77 3.45 429.06	0.0	0.00	9	7 .19
SUPPLAR	Υ.	ADJUSTED TO AMBUAL CAPT AMBUAL OPER	TAL COSTS:	Deg Con Inc ISES: Mai	preciation at of Mone come Tax I intenance rectly At:	Expense Expense tributed	Shared	148	.55							
		Gross Recei						4,283	1.55	TOTAL HONTH	LY COST:	356.94				

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

SECTION 7C

Study Number: 96XXX

Study Name: Conversion Factors Tariff Element: Conversion Factor Page 1 9/23/96

State Tariff Ref

USOC

Modifier

Technology Vol. Sens. Economic Type Investment Basis

VS :

	PRIMARY INVEST	MENT DATA			INV	ESTMENT L	OADING FA	CTORS	SUPPORT	STRUCTURE LOAD	INGS	BOOKED I	NVESTMENTS
Field Code	Description	Capital Investment	Operating Investment	Date	PC Pactor	InPlant Factor	InPlant Type	CEAP Pactor	Loading Pactor	Loading Type	Field Code	Capital Investment	Operating Investment
	Conversion Factor - Support Loading>	10,000.00	10,000.00	9/23/96	.9990	1.1705	т	1.0974	.0657	switch_bldg	100	12,832.22 843.08 60.31	12,832.22 843.06 60.33
7C	- Support Loading>			9/23/96					.0047	switch_land	20C		

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

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.

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

Study Number: 96XXX

Study Name: Conversion Factors Tariff Element: Conversion Factor ACE REPORT 10

Page 2 9/23/96

State Tariff Ref

USOC

Modifier

Technology

Vol. Sens. Economic Type Investment Basis

VS D

	PRIMARY INVEST	INMENT DATA			IW	ESTMENT L	OADING FA	CTORS	SUPPORT	STRUCTURE LOAD	INGS	BOOKED I	NVESTMENTS
Field		Capital	Operating		PC	InPlant	InPlant	CEAP	Loading	Loading	Field	Capital	Operating
Code	Description	Investment	Investment	Date	Pactor	Pactor	Туре	Pactor	Pactor	Туре	Code	Investment	Investment
		•••••											
357C	Conversion Pactor	16,000.00	10,000.00	9/23/96	.9550	1.3498	H	1.0683				13,771.02	13,771.02
357C	- Support Loading>			9/23/96					.0657	circuit_bldg	10C	904.76	904.76
357C	- Support Loading>			9/23/96					.0047	circuit land	20C	64.72	64.72

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

- 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 PC factor is the levelized inflation factor for investments.

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

Study Number: 96XXX

Study Name: Conversion Factors
Tariff Element: Conversion Factor

ACE REPORT 10 Page 3

9/23/96

State Tariff Ref

USOC

Modifier

Technology Vol. Sens. Economic Type Investment Basis

VS D

	PRIMARY INVEST	DESIT DATA			INV	ESTMENT L	DADING PA	CTORS	SUPPORT	STRUCTURE LOAD	INGS	BOOKED I	NVESTMENTS
rield		Capital	Operating		PC	InPlant	InPlant	CEAP	Loading	Loading	Field	Capital	Operating
Code	Description	Investment	Investment	Date	Factor	Factor	Туре	<b>Factor</b>	Factor	Туре	Code	Investment	Investment
157C	Conversion Factor	10,000.00	10,000.00	9/23/96	.9550	1.0600	Ρ.	1.0683				10,814.40	10,814.40
157C	- Support Loading>			9/23/96					.0657	circuit_bldg	10C	710.51	710.51
157C	- Support Loading>			9/23/96					.0047	circuit land	20C	50.83	50.83

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

- 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.

9/23/96

USOC INVESTMENT DETAILS Study Number: 96XXX

Study Name: Conversion Pactors

Tariff Element: Conversion Factor

State Tariff Ref

USOC DDD

Modifier

Technology Vol. Sens. Economic Type Investment Basis

VS

	PRIMARY INVESTMENT DATA				INV	ESTMENT L	OADING PA	CTORS		STRUCTURE LOAD	BOOKED INVESTMENTS		
ield	Description	Capital Investment	Operating Investment	Date		Factor	InPlant Type	Factor	Loading Factor	Loading Type	Field Code	Capital Investment	Operating Investment
57C	Conversion Factor - Support Loading> - Support Loading>	10,000.00	10,000.00	9/23/96 9/23/96 9/23/96		1.7842	н	1.0134	.0657	circuit_bldg	10C 20C	17,231.27 1,132.09 80.99	1,132.0
								•••••		STED TOTAL INVE		18,444.35	

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

- 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.

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

<sup>2.</sup> 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.

Page 1

9/23/96

USOC AMBURAL COST DETAILS

Study Number: 96XXX

Study Name: Conversion Factors Tariff Element: Conversion Factor

State Tariff Ref

USOC Modifier

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Technology Volume Sensitivity Economic Type Investment Basis

INVE	STREET	T DATA			ANNUA	L COST F	ACTORS					UAL EXPENS				
ield			Depr.	C.O.N.		Htce.	Direct.			Depr.	C.O.M. Expense	Inc Tax Expense		Directly Attributed	Adval Expense	GRT Expense
ode	St	Investment	Factor	Factor	Pactor	Pactor	Shared							Shared	1.6	
								0120	.0153	27.62	69.64	31.11	5.1	14 1.18	10.1	3 2.22
0C	PL	843.08	0.0000		.0369	0.0000	0.0000			0.00	5.71	2.57				
20C 377C	PL PL	60.31	.1157		.0254	.0236	.0434	.0120	.0153	1,484.69	712.19	325.94	302.0	84 556.92	154.2	
LINGUA		ADJUSTED TOT	AL INVEST	MENT				13,735	.61							
UPBOO		AMBIUAL CAPIT		De	preciation		•	1,512	.51							
					et of Hon	The second second			.62							
		ANNUAL OPERA	TING EXPE					-733	1.98							
					rectly At				5.09							
		Gross Receip	ets Tax						6.47		v mes.	312.2				
		TOTAL AMBUA	COSTS					3,74	7.30	TOTAL HONTI	LI COST:					

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

ACE REPORT 20

Page 2

9/23/96

USOC AMBRUAL COST DETAILS

Study Number: 96XXX

Study Name: Conversion Factors Tariff Element: Conversion Factor

USOC

Technology Volume Sensitivity Economic Type Investment Busis

State Tariff Ref

INVE	STMEN	T DATA			AMBIUA	L COST F	ACTORS				ANN	UAL EXPENS	SES			
Field Code	St	Investment	Depr. Factor	274 - 65-34	Inc.Tax Pactor		Direct. Attrib. Shared				C.O.M. Expense	Inc Tax Expense		Directly Attributed Shared	Adval Expense	GRT Expense
10C 20C 357C	PL PL PL	904.76 64.72 13,771.02	.0330 0.0000 .1314	.0826	.0369 .0426 .0252	.0041 0.0000 .0093		.0120 .0120 .0120		29.86 0.00 1,809.51	74.73 6.13 776.69	33.39 2.76 347.03	0.0	0.00		78 .15
SUPPLA	ar.	ADJUSTED TO AMBUAL CAPT	TAL COSTS:	Dej Co In MSES: Ma Di	preciation st of Mon come Tax intenance rectly At	ey Expense Expense tributed	Shared	383 133 513								
		Gross Recei						3,96	9.74	TOTAL HONTH	Y COST:	330.3	•			

MOTES: 1. Capital and Operating Investments are from ACE Report 10.

Modifier

Page 3 9/23/96

USOC AMBRUAL COST DETAILS

Study Number: 96XXX

State Tariff Ref

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Study Name: Conversion Factors Tariff Element: Conversion Factor

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Modifier

Technology Volume Sensitivity Economic Type Investment Basis

INVESTMENT DATA			ANDIUA	L COST F	ACTORS			AMMUAL EXPENSES							
						•••••	•••••						2741 4		
Field	Depr.	C.O.M.	Inc.Tex	Mtce.	Direct.	AdVal	GRT	Depr.	C.O.M.	Inc Tax	Mtce.	Directly	Adval	GRT	
riera							Pastor	Evnense	Expense	Expense	Expense	Attributed	Expense	Expense	

Code	St	Investment	Pactor	<b>Factor</b>	Pactor	<b>Pactor</b>	Attrib.	Factor	Factor	Expense	Exbeuse	Expense	COLUMN TO SERVICE STATE OF THE PARTY OF THE	Accinoced	anpende o	
							Shared							Shared		
10C	PL	710.51	.0330	.0826	.0369	.0061	.0014	.0120	.0153	23.45	58.69	26.22	4.33	99	8.54	1.87
20C	PL	50.03	0.0000	.0947	.0426	0.0000	0.0000	.0120	.0153	0.00	4.81	2.17	0.00	0.00	.61	.12
357C	PL.	10.014.40	.1314	.0564		.0093	.0372	.0120		1,421.01	609.93				129.98	
SUPPLA			OTAL INVESTM					11,575								

	11,575.73		
Depreciation Expense	1,444.46		
Cost of Money	673.43		
Income Tax Expense	300.91		
Maintenance Expense	104.91		
Directly Attributed Shared	403.29		
Ad Valorem and Other Taxes	139.13		
	46.91		
	3,113.04	TOTAL MONTHLY COST:	259.42
	Cost of Money Income Tax Expense Maintenance Expense Directly Attributed Shared	Depreciation Expense   1,444.46	Depreciation Expense 1,444.46  Cost of Money 673.43  Income Tax Expense 300.91  Maintenance Expense 104.91  Directly Attributed Shared 403.29  Ad Valorem and Other Taxes 139.13  46.91

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

ACE REPORT 20

USOC AMMUAL COST DETAILS

Study Number: 96XXX

State Tariff Ref

FL

Study Name: Conversion Pactors

Page 4 9/23/96

Tariff Element: Conversion Factor

USOC DDD

Modifier

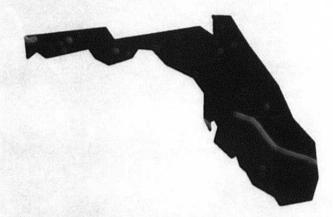
Technology Volume Sensitivity Economic Type Investment Basis

INVE	STMEN	T DATA			AURUA	L COST F	ACTORS					UAL EXPENS				
ield ode	St	Investment	Depr. Factor	C.O.H. Pactor	Inc.Tax Factor		Direct. Attrib.			Depr . Expense	C.O.M. Expense	Inc Tax Expense		Directly Attributed Shared		GRT Expense
9C 9C 57C	FL FL FL	1,132.09 80.99 17,231.27	.0330 0.0000 .1314	.0826 .0947 .0564	.0369 .0426 .0249	.0061	.0014 0.0000 .0366	.0120 .0120 .0120	.0153 .0153	37.36 0.00 2,264.19	93.51 7.67 971.84	41.77 3.45 429.06	0.0	0.00	9	7 .19
SUPPLIAR I	Y.	ADJUSTED TOTA ANNUAL CAPITA ANNUAL OPERA	L COSTS:	Dej Coi In RSES: Ma	preciation at of Non- come Tax	n Expense ey Expense Expense		18,444 2,301 1,073 474 148								
		Gross Receip			rectly At Valorem			221	1.68	TOTAL MONTH	LY COST:	410.4	,			

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

DDC-11

# FLORIDA



UNBUNDLED LOOP
CHANNELIZATION SYSTEM
AND
CENTRAL OFFICE
CHANNEL INTERFACE

TELRIC
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	EACTORS AND LOADINGS

### SECTION A

#### SECTION A

### FLORIDA UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERPACE

### PROPRIETARY RATIONALE

The Unbundled Loop Channelization System and Central Office Channel Interface cost elements contain actual unit cost information for discrete cost elements. Public disclosure of this information would provide BallSouth's competitors with an advantage. The data is valuable to competitors and potential competitors in formulating strategic plans for entry, pricing, marketing and overall husiness 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 Unbundled Loop Channelization System and Central Office Channel Interface Cost Study is considered proprietary.

### FLORIDA UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

#### INTRODUCTION AND OVERVIEW

This Total Element Long Run Incremental Cost (TELRIC) study is being provided to support the Unbundled Loop Channelization System and Central Office Channel Interface. The costs presented in the study are based on the TELRIC methodology established by the FCC's First Report and Order in CC Docket 96-98 (FCC Order) released August 8, 1996.

The Unbundled Loop Channelization System and Central Office Channel Interface is an arrangement offered to the Alternative Local Exchange Companies (ALEC) 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 Voice Grade Access Loops. 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.

A long run analysis is performed to ensure that the time period is sufficient to capture all forward-looking costs affected by the business decision. Recurring costs presented in this study are levelized so as to be appropriate for the 1997-1999 study period. Nonrecurring costs follow the same convention and represent 1997-1999 level costs also. These costs are developed by using 1996 level TELRIC loadings, annual cost factors and labor rates designed to produce TELRIC results.

### FLORIDA UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

#### DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of Total Element Long Run Incremental Costs (TELRIC) supporting the Unbundled Loop Channelization System and Central Office Channel Interface.

The purpose of the TELRIC methodology established by the FCC order is to set the rates for interconnection and unbundled network elements. The basis for a TELRIC study is forward-looking long run economic cost methodology. Volume sensitive and volume insensitive costs are identified to develop the direct costs caused by providing the particular network element being studied. TELRIC methodology anticipates pricing of elements in a wholesale network company; hence, many costs regarded as common or shared and, therefore, excluded from BellSouth's direct cost methodology would be included as directly attributable in a TELRIC study. The FCC pricing methodology also specifies that, over and above TELRIC, the additional portion of forward-looking common costs that cannot be directly attributed to any particular network element will be allocated among the cost elements. This TELRIC study includes both recurring (capital and operating expenses) and nonrecurring (provisioning) costs.

#### DEVELOPMENT OF RECURRING COSTS

The monthly costs to BellSouth Telecommunications, Inc., resulting from the capital investments necessary to provide a cost element are called recurring costs. Recurring costs represent a forward-looking view of technology and deployment and include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs consist of plant specific expenses and ad valorem taxes. These expenses contribute to the ongoing cost to the Company associated with the initial capital investment. Also included in the recurring TELRIC are shared and common costs directly attributable to the network element. Gross receipts tax is calculated on the TELRIC.

The first step in developing a TELRIC recurring cost study 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 and a reasonable projection of the actual fill utilization are also considered.

Plant account specific Levelized Investment 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 year planning period. Appropriate loadings for land, building, and miscellaneous common equipment and power are then applied.

Next, 1996 level TELRIC Annual Cost Factors are used to calculate the direct cost of capital, plant specific 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 which includes directly attributable shared and common costs. Annual Total Element Long Run Incremental Costs by account codes are then summed and divided by twelve to arrive at a monthly cost per cost element.

The directly attributable shared and common cost components of the TELRIC annual cost factors are calculated as follows. First, a detailed analysis of the forward-looking direct costs is performed. The remaining costs of doing business are then analyzed to determine whether they are directly attributable shared and common costs that cannot be reasonably attributed to network elements.

Next, the directly attributable shared and common costs are projected forward and segregated by the functional areas to which they are related. The functional areas are wholesale operations, retail services operations, and combined wholesale and retail services operations. Attribution factors based on the specific wholesale functional area, such as central office equipment (COE) investment, COE salary and wages, etc. are then developed and applied to the respective costs. These attributed costs are accumulated by related network investment category, such as pair gain equipment, buried cable, etc. and attributed shared cost factors are then included as a component of the TELRIC annual cost factors by investment category. All directly attributed costs related to retail services operations are excluded.

The common cost allocation factor is applied to TELRIC to produce the forward-looking economic cost, as defined by the FCC Order, which includes an appropriate share of common costs. The common cost allocation factor is calculated by summing all wholesale costs that cannot be reasonably attributed to specific elements, services or functions and dividing by the sum of the directly assignable and directly attributable wholesale 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, as identified by individuals knowledgeable about and/or responsible for performing these functions, 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 TELRIC labor rate for the work group performing the function.

The TELRIC labor rates are calculated as follows. Salary and wages, as used in the determination of TELRIC annual cost factors, are accumulated on a basis consistent with specific force groups. Shared costs attributable to salaries and wages are then accumulated on a basis consistent with the development of the respective force group's labor rate. A factor is then developed for each force group by dividing the attributed shared costs (human resources, office equipment, motor vehicles, land and building space, etc.) by the related salaries and wages. This factor is then applied to the salary and wage portion of the incremental labor rate for each force group, and the result is added to the incremental labor rate to determine the TELRIC labor rate.

Utilizing work functions, work times, and TELRIC 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 TELRIC 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 nonrecurring cost.

The common cost allocation factor is applied to the nonrecurring TELRIC to produce the forward-looking economic cost, as defined by the FCC Order, which includes an appropriate share of common costs.

## FLORIDA UMBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

### SUMMARY OF RESULTS

This section contains a cost summary for the 1997-1999 Total Element Long Run Incremental Costs (TELRIC) for both recurring and nonrecurring cost elements studied for the Unbundled Loop Channelization System and Central Office Channel Interface.

### FLORIDA UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

### SUMMARY OF RESULTS

	Monthly Cost	Nonrecurring Cost First Additional
Channelization System		
TELRIC	\$389.02	In Progress
Common Cost Allocation Factor	1.0804	
Total	\$420.30	
Central Office Channel Interface - Voice		
TELRIC	\$1.20	In Progress
Common Cost Allocation Factor	1.0804	
Total	\$1.30	

### FLORIDA UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

#### COST DEVELOPMENT - RECURRING

This section describes the development of the recurring Total Element Long Run Incremental Costs (TELRIC) for the Unbundled Loop Channelization System and Central Office Channel Interface.

Generally, 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. TELRIC annual cost factors are then 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: October 7, 1996

DIRECTLY

Ln DESCRIPTION	DIRECT MONTHLY COST	ATTRIBUTED SHARED COST	MC	TELRIC ONTHLY COST	SOURCE
2 (CONCENTRATED AND NON-CONCENTRATED)					
4 System - Capacity 96 Voice Grade Circuits			8	389.02	Wp200 Pg1 Ln 14
6 Working Plug-in for 96 capacity system serves 2 POTS lines					
7 Cost per Circuit			\$	1.20	Wp200 Pg3 Ln 14
10					

15 Note: 16 Concentrated is Mode II. 17 Non-concentrated is Mode I.

17 Non-concentrated is Mod 

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

State: Florida Workpaper: 200 Page: 1 OF 4 Date: October 7, 1996

RATE ELEMENT:	System	Capacity 96	Capacity 96 Valce Grade Circuits ANNUAL COSTS									MONTHLY	
^ .	8	С	D	E-CYACTOR	F-C'FACTOR	G-C-FACTOR	H=E+F+G	I=C*FACTOR	J=C*FACTOR	K=C*FACTOR Directly Attributed	Fellole JeK		
	Account					ince no	Capital	ACFC PR		Shared and	Total		
La Description:	Code	Investment	Source	Depresiation	COM	Tax	Expense	Specific Exp	Ad Vol. Tax	Common	TELRIC		
2 installed investment per 3 98 capacity system 4 (Mode I or Mode II) 8	357C	•	19 <b>300 Pg1</b> Ln 30	•									
6 Land 7	20C		ф300 Pg1 Ln 33										
8 Buildings	10C		49300 Pg1 Ln 36	8									
10 Total			intel Ln 2, 6, 8										
12 GRT Fector												1.015	3
14 Total per Circuit w/ GRT	(Ln 10 Ca	M * Ln 12 Cal M										\$ 389.03	-
10													
29 NOTE: 21 FACTOR = ACF Lecales	i in Wp201;	pg1											
22													
×													

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

200 2 OF 4

October 7, 1996

A B C D E-CFACTOR F-CFACTOR G-CFACTOR H-E+F-G I-CFACTOR J-CFACTOR L-HH+3+K M-L/12    Account   Code Investment   Bearts   Bearts   Bearts   Description:   Code Investment   C	RATE ELEMENT:	System	Capacity 96	Voice Grade Circ	uits								MONTHLY
Account Code Investment Bourse Description:  2 Installed Investment per 3 57C Wip300 Pg1 Ln 3C 3 66 capacity system 4 (Blade) or Model or								ANNUAL C	OSTS				COST
La Description: Code Investment Bource Description COM Tax Expense Rescript Expense Rescrip	A	8	c	D	E-C'FACTOR	F=C*FACTOR	G=C*FACTOR	H=E+F+G	HC*FACTOR	J=C*FACTOR	K-C'FACTOR	L=H+I+J+K	
3 96 capacity system 4 (Mode   or Mode II) 6 6 Land 20C Wep300 Pg1 Ln 33 7 8 Buildings 10C Wep300 Pg1 Ln 36 9 10 Total Total Total Ln 2, 0, 8 11 18 19 NOTE: 20 FACTOR = ACF Located in Vep201pg1 21	La Desgription:		investiment	Source	Depreciation	COM				Ad Yel. Tex		Direct	
7 8 Buildings 10C Wp300 Pg1 Ln 38 9 10 Total Trial Ln 2, 6, 8 11 18 19 NOTE: 20 FACTOR = ACF Located in Vbj201pg1	3 96 capacity system	367C		Wp300 Pg1 Ln 30									
9 10 Total Total Total 11 18 19 NOTE: 28 FACTOR = ACF Located in Vigi201pg1 21	6 Land 7	20C		Wp300 Pg1 Ln 33	*								
11 18 19 NOTE: 28 FACTOR = ACF Located in Vily201pg1 21	8 Buildings	100		Wp300 Pg1 Ln 36									
# TO THE TOTAL CONTROL TO	11 18 19 NOTE:			Total Ln 2, 6, 8									
2 2 3 4 8 8		d in Wip201 <sub>0</sub>	ng1										
	22 23												
- # 10 m - 10 m	24 26												
	26 27												

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

State: Workpaper: Page: Florida 200 3 OF 4

rage: Date: 3 OF 4 October 7, 1996

	Workin	-					ANNU	JAL COSTS				COST
^	8	С	D	E-C'FACTOR	F=C*FACTOR	G=C*FACTOR	H=E+F+G	I-C'FACTOR	J=C*FACTOR	K=C*FACTOR Directly Attributed	L=H+i+J+K	M=L/12
encription:	Account Code	Invesiment	Source	Capraciation	2011	Income Inc	Capital Expense	ACEC PH Specific Exp	Ad Val. Tax	Shared and Common	Total TELRIC	
natalled in resiment	3570		Wp300 Pg2 Ln 2*	•								
and	20C		Wp300 Pg2 Ln 27									
keldings	10C		Wp300 Pg2 Ln 30									
otal			Total Ln 2, 4, 6									
otal per Circuit (i.n 8 C	cal M62)											
RT Factor												1.
otal per Circuit w/ GR	(La 10 Co	M * Ln 12 Ca	M)									\$
OTE:												
ACTOR - ACF Locate	ed in Wip201	pg1										

UNBURDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE MONTHLY UNIT COST BIEVELOPMENT

Florida 200 4 OF 4

REC											Dista:	October 7, 19
RATE ELEMENT:	Worklin	g Plug-in fo	r 96 capacity sys	tem - Serves 2	POTS lines		ANNU	IAL COSTS				MONTHLY
A	8	c	D	E-C'FACTOR	F-C'FACTOR	G-C'FACTOR		I-C'FACTOR	J=C*FACTOR	K-C'FACTOR	L=H+i+J+K	M=L/12
Description:	Account Code	Investment	louse	Depreciation	COM	income Inz	Capital Expense	ACEC PR Specific Exp	Ad Val. Tax		Total Direct Cost	
Installed Investment	357C		Wp300 Pg2 Ln 34									
and	20C		Wp300 Pg2 Ln 27									
Duktings	10C		Wp300 Pg/2 Ln 30									
Total .			Total Lo. 2, 4, 6									
Total par Circuit (La 8 ( NOTE: FACTOR = ACF Leoni	- 1	pg1										

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

State: Florida Workpaper: 201 Page: 1 OF 1 Date: October 7, 1996

							ACFC Pit		Directly Attributed Shared and	Total
ما	Description A	<u>Code</u> B	Depreciation C	COM	inc. Tax	Cap. Expense F=C+D+E	Specific Exp G	Ad Val. Tax H	Common	TELRIC J=F+G+H+I
:	t Digital Circuit	357C	0.1314	0.0564	0.0252	0.2130	0.0093	0.0120	0.0372	0.2715
:	Buildings	10C	0.0330	0.0826	0.0369	0.1525	. 0.0061	0.0120	0.0014	0.1720
	Land	20C	0.0000	0.0947	0.0426	0.1373	0.0000	0.0120	0.0000	0.1493

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29 30 UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE Development of Investment TELRIC State Florida
Work Paper 300
Page 1 of 2
Date October 7, 1996

Ln	Description	Result		FRC	Source
1	Material Price				
2	Hardwired			357C	Network
3	Common Plug-Ins			357C	Network
4					11
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					Makanada
8	Telephone Plant Index		0.9681		Network Line 2*Line 6
9	Hardwired Material Price-Base Year			357C 357C	Line 6*Line 8
10	Common Plug-In Material Price-Base Year			35/6	Line 6-Line 8
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)		0.9550		Economic Analysis
23	Inflated Investment			357C	Line 20°Line 22
24					W. 48 Oct. 14
25	Utilization Factor		1.00		Tariff Structure
26	Utilized/Inflated Circuit			357C	(Line 23)/Line 25
27				****	Foresmin Annhuin
28	Misc. Common Equipment & Power Factor		0.0683		Economic Analysis
29	MCE&P Investment in CKT			357C	Line 26*Line 28 Line 26+Line 29
30	Total Investment in CKT			357C	Line 26+Line 29
31			0 0042	000	Economic Analysis
	Land Factor		0.0047	200	Line 30°Line 32
	Land Investment				CING 30 CING 32
34			0.0657	100	Economic Analysis
	Building Factor		0.0007	100	Line 30°Line 35
36	Building Investment				Care of Care of

UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE Development of Investment TELRIC

State Work Paper Page Date Florida 300 2 of 2 October 7, 1996

Ln	Description	Result	FRC	Source
1	Material Price			
2	POTS Plug-ins		357C	Network
3				
4	Telephone Plant Index	0.9681	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	Network
9				
10	Installed Investment			and the same
11	POTS		357C	Line 5°Line 8
12				
13	Levelization Factor (Inflation)	0.9550	357C	Economic Analysis
14	Inflated Investment		57C	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		Economic Analysis
20	Deferrable POTS Plugs		357C	Line 19°Line 17
21	Mice Common Saulament & Douge Footes	0.0683	357C	Economic Analysis
22	Misc. Common Equipment & Power Factor MCE&P Investment in CKT	0.0000	357C	(Line 17+Line 20)*Line 22
23	medal mineral management		357C	Line 17+Line 20+Line 23
24	Total Investment in CKT		30/0	Life 17 Turie 20 Cire 25
25 26	Land Factor	0.0047	20C	Economic Analysis
27	Land Investment	0.0041	20C	Line 26°Line 24
28	Land myesenent			
29	Building Factor	0.0857	10C	Economic Analysis
30	Building Investment	0.000	10C	Line 29°Line 24
30	Dulluling Illresorters			2010 20 2013 24

### PLORIDA UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

COST DEVELOPMENT - MONRECURRING

In Progress

### FLORIDA UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

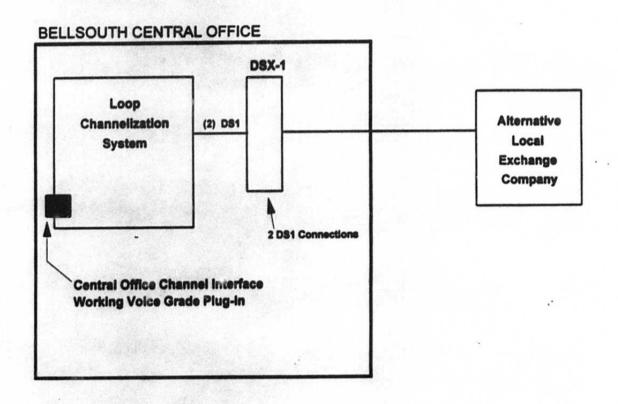
#### SPECIFIC STUDY ASSUMPTIONS

The cost study for the Unbundled Loop Channelization System and Central Office Channel Interface is based on Total Element Long Run Incremental Cost (TELRIC) methodology prescribed by the FCC's First Report and Order in CC Docket 96-98 released August 8, 1996. Network deployment strategies, first choice provisioning guidelines, and equipment purchasing information are used to develop the Total Element Long Run Incremental Cost.

Cost study assumptions are as follows.

- The equipment that will be deployed is an AT&T TR303, 96 capacity.
- Only connection to Unbundled Exchange Access Voice Grade Loops will be allowed. Therefore, the deferrable plug-in is a voice grade Plain Old Telephone (POTS) plug-in.
- Since the remote terminal is located in the central office, bulk power is not required.
- 4. 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



DSX-1 DS1 Digital Cross Connect Panel

27

### FLORIDA UMBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERFACE

### FACTORS AND LOADINGS

Following are the Total Element Long Run Incremental Cost (TELRIC) annual cost factors, miscellaneous loadings and labor rates used in the Unbundled Loop Channelization System and Central Office Channel Interface.

## FLORIDA UNBUNDLED LOOP CHANNELIZATION SYSTEM AND CENTRAL OFFICE CHANNEL INTERPACE

### FACTORS AND LOADINGS

Telephone Plant Index	357C	0.9681
In Plant Factors Hardwired Common Plug-ins Deferrable Plug-ins	357C	1.50 1.25 1.17
Levelization Factor	357C	0.9550
Misc. Common Equipment and Power Factor	357C	0.0683
Misc. Material Loadings for Common Plug-Ins	357C	0.10
Gross Receipts Tax (Gros	s-up Factor)	0.0153
Land Loading	20C	0.0047
Building Loading	10C	0.0657
Spare Stock Factor	357C	0.0925

### 1996 FLORIDA ACCOUNT AVERAGE ANNUAL COST FACTORS

	Field Code	Depreciation	ACFC COM	ACFC Inc Tax	Сар Ехр	ACFC Pit Specific Exp	ACFC Adval Tax	Directly Attributed Shared and Common	TELRIC
			b	c	d	•	1	9	
	La company		11.25%		(a+b+c)				(d+e+f+g)
LAND - COE	20C	0.0000	0.0947		0.1373	0.0000	0.0120	0.0000	0.1493
BUILDINGS - COE	10C, 110C	0.0330	0.0826		0.1525	0.0061	0.0120	0.0014	0.1720
DIGITAL ELEC SWITCH	377C, 567C	0.1157	0.0555		0.1968	0.0238	0.0120	0.0434	0.2756
OPERATOR SYSTEMS	117C,417C	0.1157	0.0647	0.0298	0.2100	0.0033	0.0120	0.0500	0.2753
DIGTL CIRC-DDS	157C	0.1608	0.0575	0.0258	0.2439	0.0076	0.0120	0.0394	0.3029
DIGTL CIRC-PAIR GAIN	257C,D257C,F257C	0.1314	0.0584	0.0249	0.2127	0.0082	0.0120	0.0366	0.2695
DIGTL CIRC-OTHER	357C,T357C,F357C,557C	0.1314	0.0594		0.2130		0.0120	0.0372	0.2715
POLES .	10	0.0721	0.0598	0.0254	0.1574	0.0175	0.0120	0.0294	0.2163
AERIAL CA - METAL	22C, 12C	0.1023	0.0878		0.1956	0.0705	Charles Charles and Allert Charles and Cha	0.0619	0.3400
AERIAL CA - FIBER	823C, 812C,D22C, F22C,T22C,D12C,F12C,T12C	0.0748			0.1689			0.0299	0.2137
LINGROUND CA - METAL	5C	0,1184	0.0881	0.0263	0.2128	0.0192	0.0120	0.0351	0.2791
INGROUND CA - FIBER	85C,DSC,FSC,TSC	0.0888	0.0855	0.0284	0.1625	0.0038	0.0120	0.0220	0.2001
BURIED CA - METAL	45C	0.0885	0.0678		0.1840		0.0120	0.0468	0.2950
BURIED CA - FIBER	845C, D45C, F45C, T45C	0.0813			0.1578		0.0120	0.0235	0.1973
BURMARINE CA-METAL	ec .	0.0937	0.0886		0.1932		0.0120	0.0208	0.2304
SUBMARINE CA-FIBER	86C,D8C,F6C,T6C	0.0937	0.0866		0.1935	0.0048	0.0120	0.0209	0.2310
NTRELD NTWK-METAL	52C	0.0751	0.0869		0.1711			0.0315	0.2336
NTRELD NTWK-FIRER	852C,D62C,F52C,T52C	0.0751	0.0866	Water and William St. Commission of the Commissi	0.1712	The second secon	0.0120	0.0270	0.2113
COMPLET SYSTEMS	4C	0.0205	0.0727		0.1257	0.0031	0.0120	0.0146	0.1554

DDC -12

# FLORIDA



# SPECIAL ACCESS VOICE GRADE SERVICE

INTEROFFICE CHANNEL VOICE-UNBUNDLED EXCHANGE ACCESS

> TELRIC 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 Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access Cost Study contains actual unit cost information for discrete cost elements. 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 Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access Cost Study is considered proprietary.

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

### INTRODUCTION AND OVERVIEW

This Total Element Long Run Incremental Cost (TELRIC) study is being provided to support the Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access. The costs presented in the study are based on the TELRIC methodology established by the FCC's First Report and Order in CC Docket 96-98 (FCC Order) released August 8, 1996.

The Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access is an arrangement offered to Alternative Local Exchange Companies (ALEC) 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 network element is used to connect 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.

A long run analysis is performed to ensure that the time period is sufficient to capture all forward-looking costs affected by the business decision. Recurring costs presented in this study are levelized so as to be appropriate for the 1997-1999 study period. Nonrecurring costs follow the same convention and represent 1997-1999 level costs also. These costs are developed by using 1996 level TELRIC loadings, annual cost factors, and labor rates designed to produce TELRIC results.

### 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 Total Element Long Run Incremental Costs (TELRIC) supporting the Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access.

The purpose of the TELRIC methodology established by the FCC order is to set the rates for interconnection and unbundled network elements. The basis for a TELRIC study is forward-looking long run economic cost methodology. Volume sensitive and volume insensitive costs are identified to develop the direct costs caused by providing the particular network element being studied. methodology anticipates pricing of elements in a wholesale network company; hence, many costs regarded as common or shared and, therefore, excluded from BellSouth's direct cost methodology would be included as directly attributable in a TELRIC study. pricing methodology also specifies that, over and above TELRIC, the additional portion of forward-looking common costs that cannot be directly attributed to any particular network element will be allocated among the cost elements. This TELRIC study includes both recurring (capital and operating expenses) and nonrecurring (provisioning) costs.

#### DEVELOPMENT OF RECURRING COSTS

The monthly costs to BellSouth Telecommunications, Inc., resulting from the capital investments necessary to provide a cost element are called recurring costs. Recurring costs represent a forward-looking view of technology and deployment and include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs consist of plant specific expenses and ad valorem taxes. These expenses contribute to the ongoing cost to the Company associated with the initial capital investment. Also included in the recurring TELRIC are shared and common costs directly attributable to the network element. Gross receipts tax is calculated on the TELRIC.

The first step in developing a TELRIC 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 and a reasonable projection of the actual fill utilization are also considered.

Plant account specific Levelized 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 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, 1996 level TELRIC Annual Cost Factors are used to calculate the direct cost of capital, plant specific 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, which includes directly attributable shared and common costs. Annual Total Element Long Run Incremental Costs by account codes are then summed and divided by twelve to arrive at a monthly cost per cost element.

The directly attributable shared and common cost components of the TELRIC annual cost factors are calculated as follows. First, a detailed analysis of the forward-looking direct costs is performed. The remaining costs of doing business are then analyzed to determine whether they are directly attributable shared and common costs that cannot be reasonably attributed to network elements.

Next, the directly attributable shared and common costs are projected forward and segregated by the functional areas to which they are related. The functional areas are wholesale operations, retail services operations, and combined wholesale and retail services operations. Attribution factors based on the specific wholesale functional area, such as central office equipment (COE) investment, COE salary and wages, etc. are then developed and applied to the respective costs. These attributed costs are accumulated by related network investment category, such as pair gain equipment, buried cable, etc. and attributed shared cost factors are then included as a component of the TELRIC annual cost factors by investment category. All directly attributed costs related to retail services operations are excluded.

The common cost allocation factor is applied to TELRIC to produce the forward-looking economic cost, as defined by the FCC Order, which includes an appropriate share of common costs. The common cost allocation factor is calculated by summing all wholesale costs that cannot be reasonably attributed to specific elements, services or functions and dividing by the sum of the directly assignable and directly attributable wholesale costs.

#### 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, as identified by individuals knowledgeable about and/or responsible for performing these functions, 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 TELRIC labor rate for the work group performing the function.

The TELRIC labor rates are calculated as follows. Salary and wages, as used in the determination of TELRIC annual cost factors, are accumulated on a basis consistent with specific force groups. Shared costs attributable to salaries and wages are then accumulated on a basis consistent with the development of the respective force group's labor rate. A factor is then developed for each force group by dividing the attributed shared costs (human resources, office equipment, motor vehicles, land and building space, etc.) by the related salaries and wages. This factor is then applied to the salary and wage portion of the incremental labor rate for each force group, and the result is added to the incremental labor rate to determine the TELRIC labor rate.

Utilizing work functions, work times, and TELRIC 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 TELRIC 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 nonrecurring cost.

The common cost allocation factor is applied to the nonrecurring TELRIC to produce the forward-looking nonrecurring economic cost, as defined by the FCC Order, which includes an appropriate share of common costs.

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

### SUMMARY OF RESULTS

This section contains a cost summary for the 1997-1999 Total Element Long Run Incremental Costs (TELRIC) for both recurring and nonrecurring cost elements studied for the 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

	Monthly Cost		Nonrecurring Cost
Interoffice Channel Voice Unbundled Exchange Access 0 thru 8 miles	Fixed	Per Mile	First Additional
TELRIC	\$15.59	\$0.0116	In progress
Common Cost Allocation Factor	1.0804	1.0804	
Total	\$16.84	\$0.0125	
9 thru 25 miles			
TELRIC	\$15.75	\$0.0125	In progress
Common Cost Allocation Factor	1.0804	1.0804	
Total	\$17.02	\$0.0135	
Over 25 miles			
TELRIC	\$15.75	\$0.0125	In progress
Common Cost Allocation Factor	1.0804	1.0804	
Total	\$17.02	\$0.0135	

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

#### COST DEVELOPMENT - RECURRING

This section describes the development of the recurring Total Element Long Run Incremental Costs (TELRIC) for the Special Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access.

Generally, 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. TELRIC annual cost factors are then 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 Network Department.

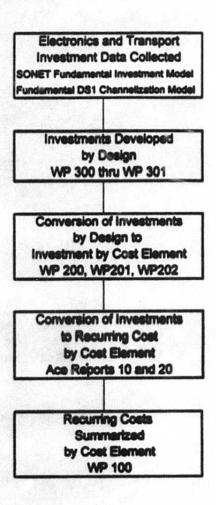
The fixed component includes the SONET multiplexer, the DS1 channelization card, a fiber splicing terminal, DSX-1 panel, a D4 Channel Bank and a voice grade activation plug-in at each end of the facility. Also included in the fixed component is the circuit equipment in the intermediate central office. 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 - TELRIC Unbundled Exchange Access Interoffice Voice Grade

State: Workpaper: Page: Date: FLORIDA 100 1 of 1 1-Oct-96

### **Monthly Recurring Costs**

1		monday reducting of				
2	Fixed					Source
3			Direct Cost	<b>Directly Attributed</b>	TELRIC	
4				Shared & Common Cost		
5	0 thru 8 miles					
6		Building	\$	\$	8	Ace Report 20 Page 1
7		Land	\$	•	\$	Ace Report 20 Page 1
8		Circuit Eqpt.	\$	\$	\$	Ace Report 20 Page 1
9						
10						
11	9 thru 25 miles				1	
12		Building	1	•		Ace Report 20 Page 3
13		Land	•	•	\$	Ace Report 20 Page 3
14		Circuit Eqpt.	\$	•	\$	Ace Report 20 Page 3
15						
16	Over 25 miles					A D
17		Building	:	•	:	Ace Report 20 Page 5
18		Land	The second second	•	\$	Ace Report 20 Page 5
19		Circuit Eqpt.	\$	•	\$	Ace Report 20 Page 5
20 24 Tab	al Annual Cost					
21 Tota 22	al Annual Cost 0 thru 8 miles		5			Ln6,7,&8
				:	:	
23 24	9 thru 25 miles Over 25 miles		1		\$	Ln12,13,&14 Ln17,18,&19
25	Over 25 miles		•	•	•	L117,10,019
	nthly Recurring Con					
20 MOI	0 thru 8 miles	913			\$ 15.59	Ln22/12
28	9 thru 25 miles				\$ 15.75	Ln23/12
20	Over 25 miles				\$ 15.75	Ln24/12
30	Over 20 miles				\$ 10.70	CIVATE
31	Per Mile					
32	r or ivino					
33	0 thru 8 miles					
34		Pole Line	4		\$	Ace Report 20 Page 2
35		Conduit	•		\$	Ace Report 20 Page 2
36		Aerial Cable		\$	\$	Ace Report 20 Page 2
37		Buried Cable	\$	\$	\$	Ace Report 20 Page 2
38		Underground Cable	\$	\$	\$	Ace Report 20 Page 2
39						
40	9 thru 25 miles					
41		Pole Line	\$	\$	\$	Ace Report 20 Page 4
42		Conduit	\$	\$	\$	Ace Report 20 Page 4
43		Aerial Cable	\$	\$	\$	Ace Report 20 Page 4
44		Buried Cable	\$	\$	\$	Ace Report 20 Page 4
45		Underground Cable	\$	\$	\$	Ace Report 20 Page 4
46						
47	Over 25 miles					
48		Pole Line	\$	\$	\$	Ace Report 20 Page 6
49		Conduit	\$	\$	\$	Ace Report 20 Page 6
50		Aerial Cable	\$	\$	\$	Ace Report 20 Page 6
51		Buried Cable	\$	\$	\$	Ace Report 20 Page 6
52		Underground Cable	\$	\$	\$	Ace Report 20 Page 6
53						
	al Annual Cost					
55	0 thru 8 miles		•	3	•	Ln34,35,36,37.&38
56	9 thru 25 miles		•	•		Ln41,42,43,44,&45
57	Over 25 miles		•	•	•	Ln48,49,50,51,&52
58						
		are.				Same and the same
	nthly Recurring Co				e 0.0446	1.055/12
60	0 thru 8 miles		\$	:	\$ 0.0116	Ln55/12
			\$ 5	:	\$ 0.0116 \$ 0.0125 \$ 0.0125	Ln55/12 Ln56/12 Ln57/12

Inter	office	od Exerially 7 100000	Workpaper:	100
	e Grade		Page: Date:	1 of 1 1-Oct-96
			Date.	1-001-90
1	Monthly Reco	urring Costs		
2	Fixed		Source	
4	Fixed		Source	
5	0 thru 8 miles	\$	Ace Report 20 P	age 1
5 6 7	9 thru 25 miles	\$	Ace Report 20 P	
7	Over 25 miles	\$	Ace Report 20 P	age 5
8				
9				
10	Per Mile			
11	0 thru 8 miles	\$	Ace Report 20 P	909 2
12 13	9 thru 25 miles	š	Ace Report 20 P	
14	Over 25 miles	\$	Ace Report 20 P	
15				
16				
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18				
19 20				
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23				
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....ce Channel Voice - Unbundled Exchange Access

**FLORIDA** 

State:

50

2 CSNUMBER: 1 of IOC Voice-TELRIC 3 CSNAME: 10/1/96 4 TARIFF ELEMENT: Fixed 0-8 Miles **Tariff Ref** USOC Modifier Technology Volume Sensitivity Economic Type **Investment Basis** 6 State VG SONET VS DIR FL 1 VG INVESTMENT DATA ANNUAL COST FACTORS ANNUAL EXPENSES NOTE 1. NOTE 2. NOTE 3. NOTE 4. 10 11 Dir. Attrib. Dir. Attrib. 12 Field Levelized Capital Plant. Shared & AdVal Deprec. C.O.M. Inc Tax Plant Dep. Inc Tax GRT AdVal GRT Shared & 13 Code C.O.M Specific Common Expense Expense Expense Specific Common K =(C\*D) L =(C\*E) M =(C\*F) N =(C\*G) O =(C\*H) Factor Factor Expense Expense State Investment Factor Rate E G H P =(C\*I) C D Q .0826 .0330 .0369 .0061 .0014 .0120 .0153 10C FL 0.0000 .0947 .0426 0.0000 0.0000 .0120 .0153 20C FL .0564 .1314 .0252 .0093 .0372 .0120 .0153 357C FL 15 TOTALS 16 17 18 19 20 TOTAL ANNUAL COST..... TOTAL MONTHLY COST.....

ACE I

**ORT 20** 

NOTES:

1. Capital 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. Plant Specific, Directly Attributed Shared and common and Ad Valorem Expenses = Capital Investment multiplied by the corresponding ACF

4. Gross Receipts Tax = Gross Receipts Tax Rate multipled by the sum of the Capital Costs & Operating Expenses ( K thru P )

1 USOC ANNU.

JOST DETAILS

JOST DETAILS 1 USOC ANNU, 2 of 2 CSNUMBER: IOC Voice-TELRIC 3 CSNAME: 10/1/96 4 TARIFF ELEMENT: Per Mile 0-8 Investment Basis **Economic Type** Volume Sensitivity Technology USOC Modifier Tariff Ref 6 State DIR VS VG SONET ٧G 2 FL ANNUAL EXPENSES ANNUAL COST FACTORS INVESTMENT DATA NOTE 4. NOTE 3. NOTE 2. NOTE 1. 10 Dir. Attrib. Dir. Attrib. 11 GRT Levelized Plant. Shared & AdVal Deprec. C.O.M. inc Tax Plant Shared & Inc Tax 12 Field Capital Dep. Expense Expense Expense Expense Expense Specific Common  $K = (C^*D) L = (C^*E) M = (C^*F) N = (C^*G) O = (C^*H)$ Specific Common Factor Rate C.O.M Factor Factor 13 Code Investment State P =(C\*1) Q G н 14 A D В C .0153 .0599 .0254 .0175 .0294 .0120 .0721 1C FL .0031 .0153 .0727 .0146 .0120 .0205 .0325 FL .0299 .0120 .0153 .0662 .0281 .0029 .0746 822C FL .0235 .0120 .0153 .0670 .0295 .0040 0613 845C FL .0153 .0655 0284 .0036 .0220 .0120 .0686 85C FL 15 TOTALS 16 17 TOTAL MONTHLY COST..... 18 TOTAL ANNUAL COST.....

NOTES:

20

Capital Investments are the INVESTMENTS from ACE Report 10
 Depreciation, Cost of Money and Income Tax Expense = Capital Investment multiplied by the corresponding Annual Cost Factor
 Plant Specific, Directly Attributed Shared and common and Ad Valorem Expenses = Capital Investment multiplied by the corresponding ACF.

4. Gross Receipts Tax = Gross Receipts Tax Rate multipled by the sum of the Capital Costs & Operating Expenses ( K thru P )

ACE I

JRT 20

4 TARIFF	ELEMENT Tariff Ref	: Fixed 9-25 N	Ailes Modifier		Technolo	gy Vo	lume Sensitivi	ity	Economic	Туре	Investme	ent Basis			10/	1/96
FL 9		3 INVESTMENT D	VG		ONET	FACTORS	VS		DIR	V	G	ANNUAL	. EXPENS	ES		
10		NOTE 1.									NOTE			NOTE 3.	'	NOTE 4.
11 12 Field 13 Code 14 A	State B	Capital Investment C	Dep. Factor D	Levelized C.O.M E	Inc Tax Factor F	Plant. Specific G	Dir. Attrib. Shared & Common H	AdVal Factor	GRT Rate J	Deprec. Expense K =(C*D)	C.O.M. Expense L =(C'E)	Inc Tax Expense M =(C°F)	Plant Specific N =(C*G)	Dir. Attrib. Shared & Common O =(C*H)	AdVal Expense P =(C*I'	GRT Expense Q
10C	FL		.0330	.0826	.0369	.0061	.0014	.0120	0 .0153						100	
20C	FL		0.0000	.0947	.0426	0.0000	0.0000	.012	0 .0153							
357C	FL	778	.1314	.0564	.0252	.0093	.0372	.012	0 .0153							
15 TOTAL 16 17 18 19 20		: TOTAL ANNUAL	COST				·		1	FOTAL M	ONTHLY	COST				

ACE I

**JRT 20** 

NOTES:

JOST DETAILS

1 USOC ANNU-

Capital Investments are the INVESTMENTS from ACE Report 10
 Depreciation, Cost of Money and Income Tax Expense = Capital Investment multiplied by the corresponding Annual Cost Factor
 Plant Specific, Directly Attributed Shared and common and Ad Valorem Expenses = Capital Investment multipled by the corresponding ACF
 Gross Receipts Tax = Gross Receipts Tax Rate multipled by the sum of the Capital Costs & Operating Expenses (K thru P)

2 CSNUMBER: 6 3 CSNAME: IOC Voice-TELRIC 10/1/96 4 TARIFF ELEMENT: Per Mile 9-25 Tariff Ref USOC Modifier Technology Volume Sensitivity **Economic Type Investment Basis** DIR FL VG SONET VS VG INVESTMENT DATA ANNUAL COST FACTORS 9 ANNUAL EXPENSES NOTE 1. NOTE 2. 10 NOTE 3. NOTE 4. 11 Dir. Attrib. Dir. Attrib. Levelized 12 Field Plant. Capital Shared & AdVai Dep. Inc Tax GRT Deprec. C.O.M. Inc Tax Plant AdVal GRT Shared & 13 Code C.O.M Specific Investment Factor Common Factor Expense Expense Specific Common Expense Expense State Factor Rate 14 A G H D K =(C\*D) L =(C\*E) M =(C\*F) N =(C\*G) O =(C\*H) C P =(C\*1) Q .0721 .0599.0254 .0175 .0294 .0120 1C .0153 FL .0727 .0205 0325 .0031 .0146 .0120 .0153 FL .0662 .0748 .0281 .0029 .0299.0120 .0153 822C FL .0670 .0613 0295 .0040 .0235 .0120 .0153 **845C** FL .0655 .0686 .0284 .0036 .0220 .0120 .0153 85C FL 15 TOTALS 16 17 18 TOTAL ANNUAL COST. TOTAL MONTHLY COST..... 19

ACE,

ORT 20

NOTES:

1 USOC ANNU.

20

JOST DETAILS

1. Capital 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. Plant Specific, Directly Attributed Shared and common and Ad Valorem Expenses = Capital Investment multiplied by the corresponding ACF

4. Gross Receipts Tax = Gross Receipts Tax Rate multipled by the sum of the Capital Costs & Operating Expenses ( K thru P)

2 CSNUM 3 CSNAM 4 TARIFI		IOC Voice-TELR Fixed >25 M													5 of 10/	6 1/96
6 State	Tariff Ref	USOC	Modifier		Technolo	gy Vo	lume Sensitivi	ty	Economic	Туре	Investme	ent Basis				
FL		5	VG	S	ONET		VS		DIR	V	G					
9		INVESTMENT D	ATA	ANNU	JAL COST	FACTORS						ANNUA	L EXPENS	SES		
10		NOTE 1.									NOTE	2.		NOTE 3.		NOTE 4.
11 12 Field 13 Code 14 A	State B	Capital Investment C	Dep. Factor D	Levelized C.O.M E	Inc Tax Factor F	Plant. Specific G	Dir. Attrib. Shared & Common H	AdVai Factor	GRT Rate J	Deprec. Expense K =(C*D	C.O.M. Expense L =(C*E)	Inc Tax Expense M =(C°F	Plant Specific N ~(C*G	Dir. Attrib. Shared & Common ) O =(C*H)	AdVal Expense P =(C°I)	GRT Expense Q
10C	FL		.0330	.0826	.0369	.0061	.0014	.0120	.0153							
20C	FL		0.0000	.0947	.0426	0.0000	0.0000	.0120	.0153							
357C	FL		.1314	.0564	.0252	.0093	.0372	.0120	.0153							
15 TOTAL 16 17 18 19		TOTAL ANNUAL	COST						,	TOTAL M	ONTHLY	COST				

ACE .

**ORT 20** 

NOTES:

**JOST DETAILS** 

1 USOC ANNU.

Capital Investments are the INVESTMENTS from ACE Report 10
 Depreciation, Cost of Money and Income Tax Expense = Capital Investment multiplied by the corresponding Annual Cost Factor
 Plant Specific, Directly Attributed Shared and common and Ad Valorem Expenses = Capital Investment multipled by the corresponding ACF
 Gross Receipts Tax = Gross Receipts Tax Rate multipled by the sum of the Capital Costs & Operating Expenses ( K thru P )

ACE, **ORT 20 JOST DETAILS** USOC ANNU. CSNUMBER: 6 IOC Voice-TELRIC CSNAME: 10/1/96 Per Mile >25 TARIFF ELEMENT: **Economic Type** Investment Basis Volume Sensitivity Technology USOC Modifier Tariff Ref State DIR SONET VS VG 6 VG FL ANNUAL EXPENSES ANNUAL COST FACTORS INVESTMENT DATA NOTE 4. NOTE 2. NOTE 3. NOTE 1. Dir. Attrib. Dir. Attrib. AdVal Levelized Plant. Shared & AdVal GRT Deprec. C.O.M. Inc Tax Plant GRT Capital Shared & 2 Field Dep. inc Tax Expense Expense Expense Specific Common K =(C\*D) L =(C\*E) M =(C\*F) N =(C\*G) O =(C\*H) Expense Expense Specific Common Factor C.O.M Rate Factor 3 Code Investment Factor P =(C°1) Е G н Q 4 A C D .0721 .0599 .0254 .0175 .0294 .0120 .0153 10 FL .0727 .0325 .0031 .0146 .0120 .0153 .0205 FL 0662 .0299 .0281 .0029 .0120 .0153 .0746 822C .0670 .0235 0295 .0040 .0120 .0153 .0613 845C .0655 .0284 .0036 .0220 .0120 .0153 .0686 85C

5 TOTALS

7890

TOTAL ANNUAL COST.....

TOTAL MONTHLY COST.....

NOTES:

 Capital Investments are the INVESTMENTS from ACE Report 10
 Depreciation, Cost of Money and Income Tax Expense = Capital Investment multiplied by the corresponding Annual Cost Factor 3. Plant Specific, Directly Attributed Shared and common and Ad Valorem Expenses = Capital Investment multipled by the corresponding ACF

4. Gross Receipts Tax = Gross Receipts Tax Rate multipled by the sum of the Capital Costs & Operating Expenses ( K thru P)

CSNUMBER:

CSNAME: IOC Voice-TELRIC

TARIFF ELEMENT Fixed 0-8 Miles

ACE REPORT 10

1 of 6 10/1/96

State Tariff Ref

USOC

Modifier

Technology

**Economic Type** Vol. Sen.

**Investment Basis** 

VG

SONET

VS DIR VG

PRIMARY INVESTMENT DATA

INVESTMENT LOADING FACTORS

SUPPORT STRUCTURE LOADINGS

INVESTMENT

Field Code	Description	Capital Investment	Date	FC Factor	InPlant Factor	InPlant Type	CP&E Factor	Loading Factor	Loading Type	Field Code	Capital Investment
357C	Circuit Equipment		10/1/96	1.00		14	1.0683				
357C	~ Support Loading>							0.0657	circuit_bldg	10C	
357C	~ Support Loading>							0.0047	circuit_land	20C	

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.

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

CSNUMBER:

CSNAME:

IOC Voice-TELRIC

TARIFF ELEMENT Per Mile 0-8

ACE REPORT 10

2 of 6 10/1/96

State Tariff Ref

FL

USOC

Modifier

Technology

Vol. Sen.

Economic Type

**Investment Basis** 

2

VG

SONET

VS

DIR

VG

PRIMARY INVESTMENT DATA

INVESTMENT LOADING FACTORS

SUPPORT STRUCTURE LOADINGS

INVESTMENT

Field Code	Description	Capital Investment	Date	FC Factor	InPlant Factor	InPlant Type	CP&E Factor	Loading Factor	Loading Type	Field Code	Capital Investment
322C	Aerial Cable - Fiber		10/1/96	1.00							
322C	~ Support Loading>							0.2523	pole_fib	1C	
45C	Buried Cable-Fiber		10/1/96	1.00							
35C	Underground Cable- Fiber		10/1/96	1.00							
35C	~ Support Loading>							0.3894	cond_fib	4C	

Initial Total Investment

Code.

**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

InPlant Factor types: T = Telco, C = Material Composite, H = Material Hardwire, P = Material Plugin
 The FC factor is the levelized inflation factor for investments.
 PRIVATE/PROPRIETARY: NO DISCLOSURE OUTSIDE BELLSOUTH EXCEPT BY WRITTEN AGREEMENT.

CSNUMBER:

IOC Voice-TELRIC CSNAME:

**TARIFF ELEMENT Fixed 9-25 Miles** 

**ACE REPORT 10** 

3 of 6 10/1/96

State Tariff Ref

FL

USOC

Modifier

Technology

Vol. Sen.

VS

Economic Type

Investment Basis

3

VG

SONET

DIR

VG

PRIMARY INVESTMENT DATA

INVESTMENT LOADING FACTORS

SUPPORT STRUCTURE LOADINGS

INVESTMENT

Field Code	Description	Capital Investment	Date	FC Factor	InPlant Factor	InPlant Type	CP&E Factor	Loading Factor	Loading Type	Field Code	Capital Investment
357C	Circuit Equipment		10/1/96	1.00			1.0683				
57C	~ Support Loading>							0.0657	circuit_bldg	10C	
357C	~ Support Loading>							0.0047	circuit_land	20C	

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.

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

CSNUMBER:

CSNAME:

IOC Voice-TELRIC

TARIFF ELEMENT Per Mile 9-25

ACE REPORT 10

4 of 6 10/1/96

State Tariff Ref

FL

USOC

Modifier

Technology

**Economic Type** Vol. Sen.

Investment Basis

VG

SONET

VS

DIR

VG

PRIMARY INVESTMENT DATA

INVESTMENT LOADING FACTORS

SUPPORT STRUCTURE LOADINGS

INVESTMENT

Field Code	Description	Capital Investment	Date	FC Factor	InPlant Factor	InPlant Type	CP&E Factor	Loading Factor	Loading Type	Field Code	Capital Investment
822C	Aerial Cable - Fiber		10/1/96	1.00					1 1111		
322C	~ Support Loading>							0.2523	pole_fib	1C	
845C	Buried Cable - Fiber		10/1/96	1.00							
85C	Underground Cable - Fiber		10/1/96	1.00							
85C	~ Support Loading>							0.3894	cond_fib	4C	

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.

InPlant Factor types: T = Talco, C = Material Composite, H = Material Hardwire, P = Material Plugin
 The FC factor is the levelized inflation factor for investments.
 PRIVATE/PROPRIETARY: NO DISCLOSURE OUTSIDE BELLSOUTH EXCEPT BY WRITTEN AGREEMENT.

**CSNUMBER:** 

CSNAME:

IOC Voice-TELRIC

TARIFF ELEMENT Fixed >25 Miles

ACE REPORT 10

5 of 6 10/1/96

State Tariff Ref

USOC

Modifier

Technology

Vol. Sen.

VS

**Economic Type** 

**Investment Basis** 

VG

SONET

DIR

VG

PRIMARY INVESTMENT DATA

INVESTMENT LOADING FACTORS

SUPPORT STRUCTURE LOADINGS

INVESTMENT

Field Code	Description	Capital Investment	Date	FC Factor	InPlant Factor	InPlant Type	CP&E Factor	Loading Factor	Loading Type	Field Code	Capital Investme	nt
357C	Circuit Equipment	\$	10/1/96	1.00			1.0683				\$	
357C	~ Support Loading>							0.0657	circuit_bldg	10C		
357C	~ Support Loading>							0.0047	circuit_land	20C		. 1

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.

InPlant Factor types: T = Telco, C = Material Composite, H = Material Hardwire, P = Material Plugin
 The FC factor is the levelized inflation factor for investments.

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

CSNUMBER:

IOC Voice-TELRIC CSNAME:

TARIFF ELEMENT Per Mile >25

ACE REPORT 10

6 of 6 10/1/96

State Tariff Ref

FL

USOC

Modifier

Technology

Vol. Sen.

VS

**Economic Type** 

Investment Basis

6

VG

SONET

DIR

VG

PRIMARY INVESTMENT DATA

INVESTMENT LOADING FACTORS

SUPPORT STRUCTURE LOADINGS

INVESTMENT

Field Code	Description	Carrital Inv.stment	Date	FC Factor	InPlant Factor	InPlant Type	CP&E Factor	Loading Factor	Loading Type	Field Code	Capital Investment
822C	Aerial Cable - Fiber		10/1/96	1.00		-					
822C	~ Support Loading>						= 5	0.2523	pole_fib	1C	
845C	<b>Buried Cable - Fiber</b>		10/1/96	1.00							
85C	Underground Cable Fiber		10/1/96	1.00							
85C	~ Support Loading>							0.3894	cond_fib	4C	

**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.

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

	Interoffic Interoffic Voice Gr					State: Workpaper: Page: Date:	FLORIDA 200 1 of 1 1-Oct-96
1 2	Fixed	Investment Per DS1					Source
3			:	357C			
4		Design 1	\$				WP300, Ln37
5		Design 2	\$				WP301, Ln45
6							
7							
9		8 Miles Investment Per Voice Grade	8				Ln 4 / 24 VG per DS1
10		Design 1 Probability of Occurrence	•	0.18			Network Area Staff
11		Total Investment	8	0.10			Ln9 * Ln10
12			•				
13		Design 2	8				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		Band 0 - 8 Miles Investment	s				Ln11 + Ln15
22		DS0 Utilization	•	0.657			VG Utilization
23		Utilized Investment		0.001			Ln21 / Ln22
24		D4 Chan. Bnk & Cm. Pigs +DSX-1 Termination +FX Plug	š				Fundamental DS1 Channelization Model
25		Total Investment	8				Ln 23 + Ln24
26			7				
27	Per Mile	Investment Per DS1					Source
28			1	322C	845C	85C	
29		Design 1					WP300, Ln38, Ln39, Ln40
30		Design 2	\$				WP301, Ln46, Ln47, Ln48
31							
32		A A STATE A LANGE AND A STATE					
	Band 0 -	8 Miles Investment Per Voice Grade	8				Ln 29/24 VG per DS1
34		Design 1 Probability of Occurrence	•	0.18	0.18	0.18	Network Area Staff
36		Total Investment - Route Distance	8		00	0.10	Ln34 * Ln36
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		Band Total Investment - Route Miles	8				Ln36 + Ln40
46		Average Distance - Air Miles	•	23.58	23.58	23.58	1995 Annual Filing
48		Investment Per Air Mile	\$	20.00	20.00	25.00	Ln46 / Ln47
49		DS0 Utilization	•	0.657	0.657	0.657	VG Utilization
50		Utilized Investment	\$				Ln48 / Ln49

FLORIDA Interoffice Channel Voice - TELRIC Unbundled Exchange Access State: Workpaper: 201 Interoffice 1 of 2 Voice Grade Page: Date: 1-Oct-96 1 Fixed Investment Per DS1 Source 357C 2 WP300, Ln37 Design 1 3 Design 2 WP301, Ln45 4 5 6 7 9 Band 9 - 25 Miles Per Voice Grade Ln 4 / 24 VG Per DS1 10 Design 2 1.00 **Network Area Staff** 11 **Probability of Occurrence Total Investment** Ln10 \* Ln11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 Ln12 Band 9-25 Miles Investment 30 **DS0** Utilization 0.657 **VG Utilization** 31 Ln 30 / Ln31 Utilized Investment 32 Fundamental DS1 Channelization Model 33 D4 Chan. Bnk & Cm. Pigs +DSX-1 Termination +FX Plug Ln32 + Ln33 34 **Total Investment** 35 36 37 38 39 40 41 42 43 44

	Interoffice Channel Voice - TELRIC Unbundled Exchange Access Interoffice Voice Grade				State: Workpaper: Page: Date:	FLORIDA 201 2 of 2 1-Oct-96
1	Per Mile Investment Per DS1					
2			822C	845C	85C	
3						Water on a serior
4		. \$		\$	\$	WP300, Ln38, Ln39, Ln40
5	Design 2	\$		\$	\$	WP301, Ln46, Ln47, Ln48
6						
7 8						
	Band 9 - 25 Miles Per Voice Grade					
10						
11						
12						
13						
14						
15		\$				Ln 5/24 VG Per DS1
16			1.00	1.00	1.00	Network Area Staff
17		\$				Ln15 * Ln16
18						
19 20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						Ln17
31	Sand Total - Route Miles Average Distance - Air Miles	\$	23.58	23.58	23.58	1995 Annual Filing
33		\$	23.50	23.50	23.50	Ln31 / Ln32
34	Utilization	•	0.657	0.657	0.657	VG Utilization
35						Ln33/ Ln34
36						
37						
38						
39						
40						
41						
42						
43						
45						
46						
47						
•••						

	Channel Voice - TELRIC Unbundled Exchange Access				State:	FLORIDA
Interoffice . Voice Grade					Workpaper: Page:	202 1 of 1
10.00 0.1					Date:	1-Oct-96
1 Fixed	Investment Per DS1					Source
2			357C			
	Design 1					WP300, Ln37
	Design 2					WP301, Ln45
5						
6 7 Rend >26	Miles Investment Per Voice Grade					
	Design 2	\$				Ln 4 / 24 VG Per DS1
9	Probability of Occurrence	•	1.00			Network Area Staff
10	Total Investment	8				Ln8 * Ln9
11		•				
12						
13						
14						
15						
16						
17						
18						
19 20	Band > 25 Miles Investment	s				Ln10
21	Utilization	•	0.657			VG Utilization
22	Utilized Investment	s	0.007			Ln20 / Ln 21
23	D4 Chan. Bnk & Cm. Pigs +DSX-1 Termination +FX Plug		485.06			Fundamental DS1 Channelization Model
24	Total Investment	8	614.65			Ln22 + Ln23
25						-
26						
27						
	Investment Per DS1					
29			822C	845C	85C	
30 31	Design 2	\$				WP301, Ln46, Ln47, Ln48
32						
33						
34						
	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						
	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		0.657	0.657	0.657	VG Utilization
51	Utilized Investment	\$				Ln49 / Ln50

Interoffice Channel Voice - TELRIC Unbundled Exchange Access State: Workp

Workpaper: 300 Page: 1 of 1 Date: 1-Oct-96

**FLORIDA** 

Design 1

50

Voice Grade

	A	В	Equip		
1.1		FRC	Invest		Source
Line	Description	ERC	IIIVesi	THEIT	Source
1	C.O. Node - OC-48 BLSR	357C	•		SONET Fundamental Investment Model
3	Number Required		•	2	Network
4	Total Investment		s	-	Line 2 * Line 3
5	Total IIIVosunian		•		LINE Z LINE O
	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			•		SAIR O CARE !
	C.O. Interface DS1 on OC-48-Mux & Protect	357C	s		SONET Fundamental Investment Model
11	Number Required		•	2	Network
12	Total Investment		s	-	Line 10 * Line 11
13	Total III Total		•		
	C.O. Interface DS1 on OC-48-Working	357C	s		SONET Fundamental Investment Model
15	Number Required		•	2	Network
16	Total Investment		s	_	Line 14 * Line 15
17			•		
	Data Communications - OC-48	357C	\$		SONET Fundamental Investment Model
19	Number Required		•	1	Network
20	Total Investment		S		Line 18 * Line 19
21	Total invosation		•		Carlo To Carlo To
	Fiber - OC-48 BLSR Per Mile Per Strand	822C	8		SONET Fundamental Investment Model
23	Number Strands	100 TO 10	•	3	Network
24	Number Miles			16	Network
25	Total Investment		\$		Line 22 ° (Line 23 ° Line 24)
26	Total IIIVesullent		•		Line 22 (Cine 20 Cine 24)
	Fiber - OC-48 BLSR Per Mile Per Strand	845C	S		SONET Fundamental Investment Model
28	Number Strands			3	Network
29	Number Miles			16	Network
30	Total Investment		\$		Line 27 * (Line 28 * Line 29)
31					
	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		s		Line 32 ° (Line 33 ° Line 34)
36			digital in		
	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					

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Interoffice Channel Voice - TELRIC Unbundled Exchange Access

Interoffice

Voice Grade

FLORIDA State: Workpaper: 301 1 of 1

Page: Date:

1-Oct-96

Design 2 - OC-48 Ring

	A	В	C Equipment	
Line	Description		Investment	Source
1	0.0 Node 00.46 RI SB	2570		CONST Fundamental Investment Medal
	C.O. Node - OC-48 BLSR	357C		SONET Fundamental Investment Model Network
3	Number Required Total Investment		. 4	Line 2 * Line 3
4	I otal investment		\$	Line 2 Line 3
5	C.O. Node - OC-48 (BLSR) Intermediate	357C	2	SONET Fundamental Investment Model
7	Number Required	3010	2	Network
8	Total Investment		s -	Line 6 * Line 7
9	Total IIIVestilan		•	
_	C.O. Interface DS1 on OC-48-Mux & Protect	357C	s	SONET Fundamental Investment Model
11	Number Required		4	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			124	
	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	C.O. Connection STS-1 on OC-48-Working	357C	\$	SONET Fundamental Investment Model
27	Number Required	3370	2	Network
28	Total Investment		s -	Line 26 * Line 27
29			•	
7.7	Fiber - OC-48 BLSR Per Mile Per Strand	822C	S	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				
1000	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	Design 2 - OC-48 Ring Total Investment	357C		Ln4+Ln8+Ln12+Ln16+Ln20+Ln24+Ln28
46	Design 2 - OC-40 King Total Investment	822C		Line 33
47		845C		Line 38
48		85C	\$	Line 43
49				Part of the second seco
50	Private/Proprietary: No disclo	euro cud	side Bell South av	need by written enmement

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

### COST DEVELOPMENT - MONRECURRING

In progress

### FLORIDA SPECIAL ACCESS VOICE GRADE SERVICE INTEROFFICE CEANNEL VOICE - UNBUNDLED EXCHANGE ACCESS

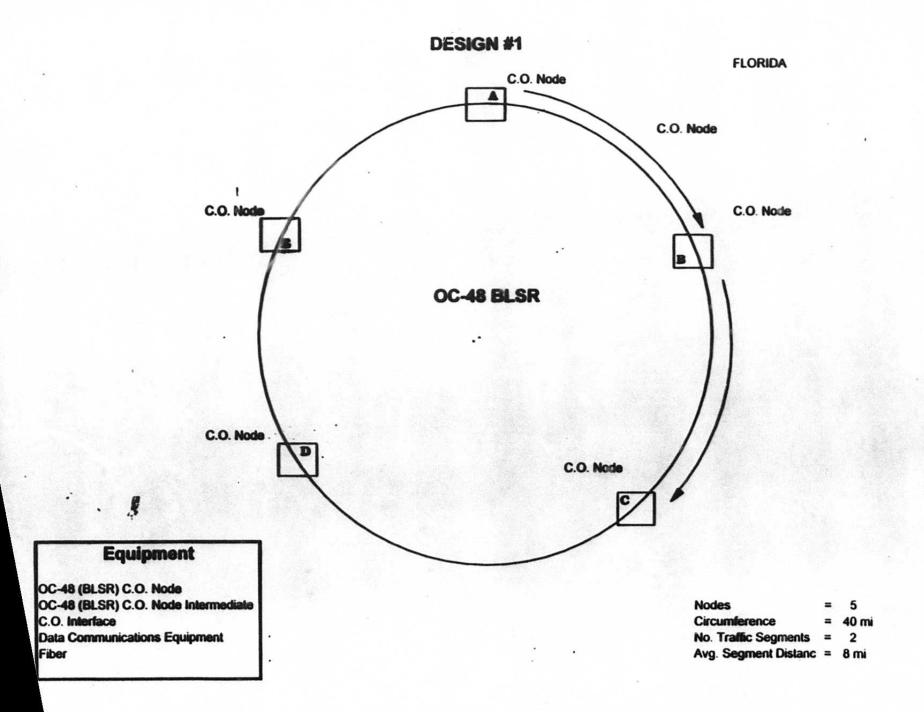
### SPECIFIC STUDY ASSUMPTIONS

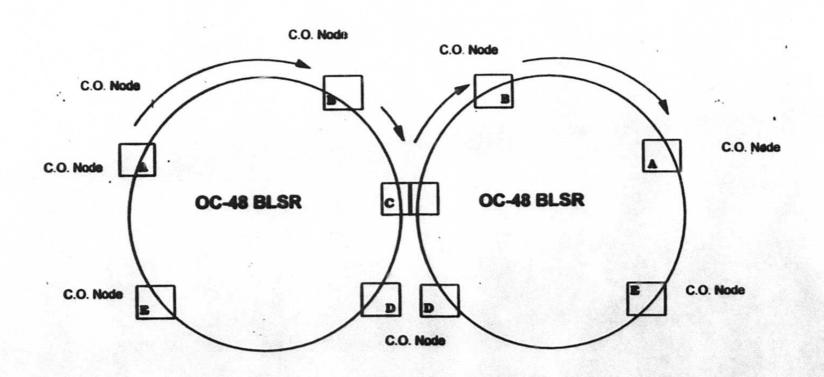
The cost study for the Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access is based on the Total Element Long Run Incremental Cost (TELRIC) methodology prescribed by the FCC's First Report and Order in CC Docket 96-98 released August 8, 1996. Network deployment strategies, first choice provisioning guidelines, and equipment purchasing information are used to develop the Total Element Long Run Incremental Cost.

Cost study assumptions are as follows.

1. Two architectures are studied to develop these costs. The 0 thru 8 mile band includes Design One and Design Two, weighted 18% and 82%, respectively. The 9 to 25 mile band and the greater than 25 mile band use Design Two only.

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





### 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

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

#### PACTORS AND LOADINGS

Following are the Total Element Long Run Incremental Cost (TELRIC) annual cost factors, miscellaneous loadings and labor rates used in the Special Access Voice Grade Service Interoffice Channel Voice - Unbundled Exchange Access.

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

### FACTORS AND LOADINGS

1.3498
1.0600
1.0600
0.955
0.999
1.038
0.980
0.300
0.0683
0.0047
0.0657
0.2523
0.3894
0.0153

### 1996 FLORIDA ACCOUNT AVERAGE ANNUAL COST FACTORS

	Field Code	Depreciation	ACFC COM	ACFC Inc Tax	Сар Ехр	ACFC Pit Specific Exp	ACFC Adval	Directly Attributed Shered and Common	TELRIC
			b	c	d	•	f	9	i
	1		11.25%		(a+b+c)				(d+e+f+g)
LAND - COE	20C	0.0000	0.0947	0.0426	0.1373	0.0000	0.0120	0.0000	0.1493
BUILDINGS - COE	10C, 110C	0.0330	0.0828	0.0369	0.1525	0.0061	0.0120	0.0014	0.1720
DIGITAL ELEC SWITCH	377C, 587C	0.1157	0.0555	0.0254	0.1966	0.0236	0 0120	0.0434	0.2756
OPERATOR SYSTEMS	117C,417C	0.1157	0.0647	0.0296	0.2100	0.0033	0.0120	0.0500	0.2753
DIGTL CIRC-DDS	157C	0.1608	0.0575	0.0256	0.2439	0.0076	0.0120	0.0394	0.3029
DIGTL CIRC-PAIR GAIN	257C,D257C,F257C	0.1314	0.0584		0.2127	0.0082		0.0366	0.2695
DIGTL CIRC-OTHER	357C,T357C,F357C,S57C	0.1314	0.0564		0.2130			0.0372	0.2715
POLES .	10	0.0721	0.0599	0.0254	0.1574	0.0175	0.0120	0.0294	0.2163
AERIAL CA - METAL	22C, 12C	0.1023	0.0879		0.1956		0.0120	0.0619	0.3400
AERIAL CA - FIBER	822C, 812C,D22C, F22C,T22C,D12C,F12C,T12C	0.0748	0.0862	0.7281	0.1689	0.0029	0.0120	0.0299	0.2137
UNGROUND CA-METAL	5C	0.1184	0.0881	0.0263	0.2128	0.0192	0.0120	0.0351	0.2791
UNGROUND CA-FIBER	85C,D5C,F5C,T5C	0.0888	0.0855	0.0284	0.1625	0.0036	0.0120	0.0220	0.2001
BURIED CA - METAL	45C	0.0885	0.0578	0.0277	0.1840	0.0522	0.0120	0.0468	0.2950
BURIED CA - FIBER	845C, D45C, F45C, T45C	0.0613	0.0870		0.1578		SCHOOL REVISION IN THE PROPERTY OF THE PROPERT	0.0235	0.1973
SUBMARINE CA-METAL	6C	0.0937	0.0688		0.1932			0.0208	0.2304
SUBMARINE CA-FIBER	86C,D8C,F6C,T6C	0.0937	0.0688		0.1935			0.0209	0.2310
INTROLD NTWK-METAL	52C	0.0751	0.0089		0.1711		The state of the s	0.0315	0.2338
INTRBLD NTWK-FIRE	852C,D52C,F52C,T52C	0.0751	0.0869		0.1712			0.0270	0.2113
CONDUIT SYSTEMS	4C	0.0205	0.0727	0.0325	0.1257	0.0031	0.0120	0.0146	0.1554

DDC 13

# FLORIDA



# OPERATOR CALL PROCESSING ACCESS SERVICE

TELRIC COST STUDY DOCUMENTATION

SECTIONS A THRU 6

### FLORIDA

# OPERATOR CALL PROCESSING ACCESS 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 TELRIC					
SECTION 5	SPECIFIC STUDY ASSUMPTIONS					
SECTION 6	FACTORS AND LOADINGS					

## **SECTION A**

### SECTION A

#### FLORIDA

### OPERATOR CALL PROCESSING ACCESS SERVICE

### PROPRIETARY RATIONALE

The Operator Call Processing Access Service Study contains actual unit cost information for discrete cost elements. 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 Call Processing Access Service Cost Study is considered proprietary.

#### **FLORIDA**

### OPERATOR CALL PROCESSING ACCESS SERVICE INTRODUCTION AND OVERVIEW

This Total Element Long Run Incremental Cost (TELRIC) study is being provided to support Operator Call Processing Access Service. The costs presented in this study are based on the TELRIC methodology established by the Federal Communications Commission's (FCC) First Report and Order in CC Docket 96-98 (FCC Order) released August 8, 1996.

Operator Call Processing Access Service is an optional service available to Local Exchange service providers, hereafter referred to as customers. The Company will provide Operator Call Processing to end users on behalf of the Local Exchange service provider.

Operator Call Processing Access Service consists of (1) Operator Provided Call Handling and (2) Fully Automated Call Handling.

Operator Provided Call Handling provides the following services at the end user's request:

- alternate billing services, i.e., collect, calling card, and third number billing
- person-to-person calling
- dialing assistance and instructions
- verification of a busy line
- interruption of a busy line
- emergency call trace
- general operator assistance

Processing alternately billed calls requires accessing a database to verify the correctness of the billing information. BellSouth Telecommunications (BST) will store customers' end user billing verification information in the BST Line Information DataBase (LIDB) or customers may choose to store their billing verification information in a foreign LIDB.

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.

A long run analysis is performed to ensure that the time period studied is sufficient to capture all forward looking costs affected by the business decision.

The recurring costs presented in this study are levelized so as to be appropriate for the 1997 - 1999 study period. These costs are developed by using 1996 level TELRIC loadings, annual cost factors and labor rates designed to produce TELRIC results.

#### **FLORIDA**

### OPERATOR CALL PROCESSING ACCESS SERVICE

#### DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of the Total Element Long Run Incremental Cost (TELRIC) supporting Operator Call Processing Access Service.

The purpose of the TELRIC methodology established by the FCC order is to set the rates for interconnection and unbundled network elements. The basis for a TELRIC study is forward looking long run economic cost methodology. Volume sensitive and volume insensitive costs are identified to develop the direct costs caused by providing the particular network element being studied. TELRIC methodology anticipates pricing of elements in a wholesale network company. Many costs regarded as common or shared would be included as directly attributable in a TELRIC study. The FCC pricing methodology also specifies that, over and above TELRIC, the additional portion of forward looking common costs that cannot be directly attributed to any particular network element will be allocated among the cost elements. TELRIC includes both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs. There are no nonrecurring costs associated with Operator Call Processing Access Service.

#### THE DEVELOPMENT OF RECURRING COSTS

The per unit costs to BellSouth Telecommunications, Inc. resulting from the capital investments necessary to provide a service are called recurring costs. Recurring costs represent a forward looking view of technology and deployment and include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs consist of plant specific expenses and ad valorem taxes. These expenses contribute to the ongoing cost to the Company associated with the initial capital investment. Recurring costs may also be noninvestment related, such as expensed labor, feature specific software and contract expenses. Also included in the recurring TELRIC are shared and common costs directly attributable to the network element. Gross receipts tax is calculated on the TELRIC.

The first step in developing a TELRIC study for Operator Call Processing Access 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 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. Next, 1996 level TELRIC Annual Cost Factors are used to calculate the direct cost of capital, plant specific 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 which includes directly attributable shared and common costs. Annual Total Element Long Run Incremental Costs by account codes are then summed and divided by the associated demand to arrive at a cost per cost element.

The directly attributable shared and common cost components of the TELRIC annual cost factors are calculated as follows. First, a detailed analysis of the forward looking directly assigned costs associated with the interconnect or unbundled network element is performed. The remaining costs of doing business are then analyzed to determine whether they are directly attributable shared and common costs that can be reasonably attributed to network elements.

Next, the directly attributable shared and common costs are projected forward and segregated by the functional areas to which they are related. The functional areas are wholesale operations, retail services operations, and combined wholesale and retail services operations. Attribution factors based on the specific wholesale functional area, such as central office equipment (COE) investment, COE salary and wages, etc., are then developed and applied to the respective costs. These attributed costs are accumulated by related network investment category, such as pair gain equipment, buried cable, etc., and attributed shared cost factors are developed. These attributed shared cost factors are then included as a component of the TELRIC annual cost factors by investment category. All directly attributed costs related to retail services operations are excluded.

The common cost allocation factor is applied to TELRIC to produce the forward looking economic cost, as defined in the FCC Order, Appendix B, Section 51.505, which includes an appropriate share of common costs. The common cost allocation factor is calculated by summing all wholesale costs that cannot be reasonably attributed to specific elements, services or functions and dividing by the sum of the directly assignable and directly attributable wholesale costs.

## **FLORIDA**

# OPERATOR CALL PROCESSING ACCESS SERIVCE

## SUMMARY OF RESULTS

This section contains a unit cost summary for the Total Element Long Run Incremental Cost (TELRIC) for Operator Call Processing Access Service.

# OPERATOR PROVIDED COST PER MINUTE

USING BST LIDB TELRIC	\$1.2293
Common Cost Allocation Factor Total Cost	1.0804 \$1.3281
USING FOREIGN LIDB TELRIC	\$1.2450
Common Cost Allocation Factor Total Cost	1.0804 \$1.3451
FULLY AUTOMATED COST PER CALL	
USING BST LIDB	\$0.0547
TELRIC Common Cost Allocation Factor	1.0804
Total Cost	\$0.0591
USING FOREIGN LIDB	****
TELRIC	\$0.0748
Common Cost Allocation Factor Total Cost	1.0804 \$0.0808

#### **FLORIDA**

#### OPERATOR CALL PROCESSING ACCESS SERVICE

#### COST DEVELOPMENT

This section defines the cost development for Operator Call Processing 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 TELRIC factors are applied to convert the investment to cost. Labor expense is directly identified.

# Workpaper 1

Total Element Long Run Incremental Costs (TELRIC) are summarized. 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 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.

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 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 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 software in the Operator Service Systems is divided by the projected 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 average demand 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.

1.	FLORIDA		WORYPAPER 1
2.			10/08/96
3.	OPERATOR CALL PROCESSING ACCESS SER	VICE	PAGE 1 OF 5
4.			
5.	SUMMARY		
6.			
7.			
8.	OPERATOR PROVIDED COST PER MINUTE		
9.			
10.	USING BST LIDB		
11.	DIRECT COST	WP1,PG2,LN55	\$0.9714
12.	DIRECTLY ATTRIBUTED SHARED & COMMON COST	WP1,PG3,LN55	\$0.2579
13.	TELRIC	LN11+LN12	\$1.2293
14.			
15.	USING FOREIGN LIDB		
16.	DIRECT COST	WP1,PG4,LN55	\$0.9871
17.	DIRECTLY ATTRIBUTED SHARED & COMMON COST	WP1,PG5,LN55	\$0.2579
18.	TELRIC	LN16+LN17	\$1.2450
19.	FULLY AUTOMATED COST PER CALL		
20.	FULLY AUTOMATED COST PER CALL		
22.	USING BST LIDB		
23.	DIRECT COST	WP1,PG2,LN67	\$0.0527
24.	DIRECTLY ATTRIBUTED SHARED & COMMON COST	WP1,PG2,LN67	\$0.0020
25.	TELRIC TELRIC	LN23+LN24	\$0.0547
26.	, cento	LITES LITE	<b>V</b> 0.0017
27.	USING FOREIGN LIDB		
28.	DIRECT COST	WP1.PG4.LN67	\$0.0728
29.	DIRECTLY ATTRIBUTED SHARED & COMMON COST	WP1,PG5,LN67	\$0.0020
30.	TELRIC	LN28+LN29	\$0.0748

**FLORIDA WORKPAPER 1** 1. 10/08/96 2 **OPERATOR CALL PROCESSING** PAGE 2 OF 5 3. ACCESS SERVICE 5. SUMMARY 6. **OPERATOR PROVIDED AND** 7. **FULLY AUTOMATED USING BST LIDS** 8. COST AWT/ 9. DIRECT COST **FWS** PER CALLS TOTAL TOTAL UNIT 10. MINUTES COST COST 6/96 CALL 6/96 11. 12 **OPERATOR HANDLED** 13. 14. STATION-TO-STATION 15. 0+ CALLING CARD - VOLUME SENSITIVE 16. 17. 0+ CALLING CARD - VOLUME INSENSITIVE 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 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. 0+ COLLECT - VOLUME SENSITIVE 29. 0+ COLLECT - VOLUME INSENSITIVE 30. SENT PAID - VOLUME SENSITIVE 31. SENT PAID - VOLUME INSENSITIVE 32. VERIFICATION - VOLUME SENSITIVE 33. VERIFICATION -VOLUME INSENSITIVE VERIFICATION-NON REVENUE-VOL. SENS. 34. 35. VERIFICATION-NON REVENUE-VOLINSENS. **VERIFICATION & INTERRUPT-VOL.SENS. VERIFICATION & INTERRUPT-VOL.INSENS.** 37. 38. PERSON-TO-PERSON 39. 0- CALLING CARD - VOLUME SENSITIVE 40 0- CALLING CARD - VOLUME INSENSITIVE 41. 0- BILL-TO-THIRD - VOLUME SENSITIVE 42. 43. 0- BILL-TO-THIRD - VOLUME INSENSITIVE 44. 0- COLLECT - VOLUME SENSITIVE 45. 0- COLLECT - VOLUME INSENSITIVE 46. 0+ CALLING CARD - VOLUME SENSITIVE 0+ CALLING CARD - VOLUME INSENSITIVE 47. 48. 0+ BILL-TO-THIRD - VOLUME SENSITIVE 49. 0+ BILL-TO-THIRD - VOLUME INSENSITIVE 50. 0+ COLLECT - VOLUME SENSITIVE 51. 0+ COLLECT - VOLUME INSENSITIVE 52. \$0.9036 53. COST PER MINUTE - VOLUME SENSITIVE \$0.0678 **COST PER MINUTE - VOLUME INSENSITIVE** 55. DIRECT COST, PER MINUTE \$0.9714 56. 57. **FULLY AUTOMATED CALLING CARD - VOLUME SENSITIVE** 58. **CALLING CARD - VOLUME INSENSITIVE** BILL-TO-THIRD - VOLUME SENSITIVE 60. 61. **BILL-TO-THIRD - VOLUME INSENSITIVE** COLLECT- VOLUME SENSITIVE 62. 63. **COLLECT - VOLUME INSENSITIVE** 64 \$0.0182 **COST PER CALL - VOLUME SENSITIVE** 65. \$0.0345 **COST PER CALL - VOLUME INSENSITIVE** 66. \$0.0527 67. DIRECT COST, PER CALL

1. 2.	FLORIDA						WORKPAPER 1 10/08/96
3. 4.	OPERATOR CALL PROCESSING ACCESS SERVICE						PAGE 3 OF 5
5. 6. 7. 8.	SUMMARY OPERATOR PROVIDED AND FULLY AUTOMATED USING BST LIDB						
9. 10. 11.	DIRECTLY ATTRIBUTED SHARED AND COMMON COST (DASCC)	AWT/ FWS 6/96	PER CALL	CALLS 6/96	TOTAL	TOTAL	UNIT
12. 13.	OPERATOR HANDLED						
14. 15.	STATION-TO-STATION						
16. 17. 18.	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						
22. 23. 24.	0- COLLECT - VOLUME SENSITIVE 0- COLLECT - VOLUME INSENSITIVE 0- NO ATTEMPT - VOLUME SENSITIVE 0- NO ATTEMPT - VOLUME INSENSITIVE						
26. 27. 28.	0+ BILL-TO-THIRD - VOLUME SENSITIVE 0+ BILL-TO-THIRD - VOLUME INSENSITIVE 0+ COLLECT - VOLUME SENSITIVE					***	
30. 31.	SENT PAID - VOLUME INSENSITIVE						
33.	VERIFICATION - VOLUME SENSITIVE VERIFICATION - VOLUME INSENSITIVE VERIFICATION-NON REVENUE-VOL. SENS.						
	VERIFICATION-NON REVENUE-VOL.INSENS. VERIFICATION & INTERRUPT-VOL.INSENS. VERIFICATION & INTERRUPT-VOL.INSENS.						
39.	PERSON-TO-PERSON 0- CALLING CARD - VOLUME SENSITIVE						
	0- BILL-TO-THIRD - VOLUME SENSITIVE 0- BILL-TO-THIRD - VOLUME INSENSITIVE						
45. 46.							
48. 49. 50.	0+ CALLING CARD - VOLUME INSENSITIVE 0+ BILL-TO-THIRD - VOLUME SENSITIVE 0+ BILL-TO-THIRD - VOLUME INSENSITIVE 0+ COLLECT - VOLUME SENSITIVE						
52. 53. 54.	0+ COLLECT - VOLUME INSENSITIVE  COST PER MINUTE - VOLUME SENSITIVE  COST PER MINUTE - VOLUME INSENSITIVE  DASCC, PER MINUTE						\$0.2579 \$0.0000 \$0.2579
56. 57. 58.	FULLY AUTOMATED CALLING CARD - VOLUME SENSITIVE						
60. 61. 62.	CALLING CARD - VOLUME INSENSITIVE BILL-TO-THIRD - VOLUME SENSITIVE BILL-TO-THIRD - VOLUME INSENSITIVE COLLECT - VOLUME SENSITIVE COLLECT - VOLUME INSENSITIVE						
64. 65. 66.	COST PER CALL - VOLUME SENSITIVE						\$0.0015 \$0.0005 \$0.0020

**FLORIDA WORKPAPER 1** 1. 2. 10/08/96 **OPERATOR CALL PROCESSING** 3. PAGE 4 OF 5 **ACCESS SERVICE** 4. 5. SUMMARY 6. **OPERATOR PROVIDED AND** 7. **FULLY AUTOMATED USING FOREIGN LIDB** 8. AWT/ COST 9. PER DIRECT COST **FWS** CALLS TOTAL TOTAL UNIT 10. 6/96 CALL 6/96 MINUTES COST COST 11. 12 **OPERATOR HANDLED** 13. 14. STATION-TO-STATION 15. 0+ CALLING CARD - VOLUME SENSITIVE 16. 17. 0+ CALLING CARD - VOLUME INSENSITIVE 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. 0+ COLLECT - VOLUME SENSITIVE 29. 0+ COLLECT - VOLUME INSENSITIVE 30. SENT PAID - VOLUME SENSITIVE 31. SENT PAID - VOLUME INSENSITIVE 32. VERIFICATION - VOLUME SENSITIVE 33. VERIFICATION -VOLUME INSENSITIVE 34. VERIFICATION-NON REVENUE-VOL. SENS. 35. VERIFICATION-NON REVENUE-VOL.INSENS. 36. VERIFICATION & INTERRUPT-VOL.SENS. 37. VERIFICATION & INTERRUPT-VOL.INSENS. 38 39. PERSON-TO-PERSON 0- CALLING CARD - VOLUME SENSITIVE 40. 41. 0- CALLING CARD - VOLUME INSENSITIVE 42. 0- BILL-TO-THIRD - VOLUME SENSITIVE 43. 0- BILL-TO-THIRD - VOLUME INSENSITIVE 44. 0- COLLECT - VOLUME SENSITIVE 45. 0- COLLECT - VOLUME INSENSITIVE 46. 0+ CALLING CARD - VOLUME SENSITIVE 47. 0+ CALLING CARD - VOLUME INSENSITIVE 48. 0+ BILL-TO-THIRD - VOLUME SENSITIVE 49. 0+ BILL-TO-THIRD - VOLUME INSENSITIVE 50. 0+ COLLECT - VOLUME SENSITIVE 51. 0+ COLLECT - VOLUME INSENSITIVE 52. \$0.9231 53. COST PER MINUTE - VOLUME SENSITIVE 54. COST PER MINUTE - VOLUME INSENSITIVE \$0.0640 55. DIRECT COST, PER MINUTE \$0.9871 56. 57. **FULLY AUTOMATED CALLING CARD - VOLUME SENSITIVE** 58. 59. CALLING CARD - VOLUME INSENSITIVE 60. BILL-TO-THIRD - VOLUME SENSITIVE 61. BILL-TO-THIRD - VOLUME INSENSITIVE 62. COLLECT- VOLUME SENSITIVE 63. COLLECT - VOLUME INSENSITIVE 64 65. COST PER CALL - VOLUME SENSITIVE \$0.0433 COST PER CALL - VOLUME INSENSITIVE \$0.0295 66 67. DIRECT COST, PER CALL \$0.0728

WORKPAPER 1 **FLORIDA** 1. 10/08/96 2. PAGE 5 OF 5 **OPERATOR CALL PROCESSING** 3. **ACCESS SERVICE** 4. 5. SUMMARY 6. **OPERATOR PROVIDED AND** 7. **FULLY AUTOMATED USING FORE!GN LIDB** 8. AWT/ COST 9. UNIT TOTAL TOTAL CALLS DIRECTLY ATTRIBUTED SHARED AND 10. **FWS** PER COST COST MINUTES 8/98 COMMON COST (DASCC) CALL 6/96 11. 12. **OPERATOR HANDLED** 13. 14 STATION-TO-STATION 15. 0+ CALLING CARD - VOLUME SENSITIVE 16. 17. 0+ CALLING CARD - VOLUME INSENSITIVE 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. 0+ COLLECT - VOLUME SENSITIVE 29. 0+ COLLECT - VOLUME INSENSITIVE 30. SENT PAID - VOLUME SENSITIVE 31. SENT PAID - VOLUME INSENSITIVE 32. VERIFICATION - VOLUME SENSITIVE 33. VERIFICATION -VOLUME INSENSITIVE 34. VERIFICATION-NON REVENUE-VOL. SENS. 35. VERIFICATION-NON REVENUE-VOL.INSENS. **VERIFICATION & INTERRUPT-VOL.SENS. VERIFICATION & INTERRUPT-VOL.INSENS.** 37. 38. PERSON-TO-PERSON 39. 40. 0- CALLING CARD - VOLUME SENSITIVE 41. 0- CALLING CARD - VOLUME INSENSITIVE 42. 0- BILL-TO-THIRD - VOLUME SENSITIVE 43. 0- BILL-TO-THIRD - VOLUME INSENSITIVE 44. 0- COLLECT - VOLUME SENSITIVE 45. 0- COLLECT - VOLUME INSENSITIVE 46. 0+ CALLING CARD - VOLUME SENSITIVE 47. 0+ CALLING CARD - VOLUME INSENSITIVE 48. 0+ BILL-TO-THIRD - VOLUME SENSITIVE 49. 0+ BILL-TO-THIRD - VOLUME INSENSITIVE 0+ COLLECT - VOLUME SENSITIVE 51. 0+ COLLECT - VOLUME INSENSITIVE 52. \$0.2579 53. COST PER MINUTE - VOLUME SENSITIVE \$0.0000 54. COST PER MINUTE - VOLUME INSENSITIVE \$0.2579 DASCC, PER MINUTE 55. 56. **FULLY AUTOMATED** 57. 58. **CALLING CARD - VOLUME SENSITIVE CALLING CARD - VOLUME INSENSITIVE** 60. BILL-TO-THIRD - VOLUME SENSITIVE 61. BILL-TO-THIRD - VOLUME INSENSITIVE 62. COLLECT- VOLUME SENSITIVE 63. COLLECT - VOLUME INSENSITIVE 64. \$0.0015 65. COST PER CALL - VOLUME SENSITIVE \$0.0005 66. COST PER CALL - VOLUME INSENSITIVE \$0.0020 67. DASCC, PER CALL

1.	FLORIDA						WORKPAPER 2
2.							10/08/96
3.	OPERATOR CALL PROCESSING ACCESS SE	ERVICE					PAGE 2 OF 4
4.							
5.	SUMMARY OF COST BY CALL TYPE						
6.	OPERATOR PROVIDED AND						
7.	FULLY AUTOMATED USING BST LIDB	AWT/				GROSS	DASCC
8.		<b>FWS</b>	OPR.			RECEIPTS	COST
9.	DIRECTLY A TRIBUTED SHARED AND	6/96	LABOR	OSC	AABS	0.0153	PER CALL
10.	COMMON COST (DASCC)				-		
11.	CALLING CARD						
12	0+ CALLING CARD - VOLUME SENSITIVE		\$0.1176	\$0.0033	\$0.0000	\$0.0018	\$0.1227
13.	0+ CALLING CARD - VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
14			\$0.0000	\$0.0000	\$0.0015	\$0.0000	\$0.0015
15.			\$0.0000	\$0.0000	\$0.0005	\$0.0000	\$0.0005
16.	CONTRACTOR OF THE PROPERTY OF						
17.	Commission of the Commission o		*****	*0.0044	***	***	*****
18.	[10]		\$0.1480 \$0.0000	\$0.0041 \$0.0000	\$0.0000	\$0.0023 \$0.0000	\$0.1544 \$0.0000
20			\$0.0000	\$0.0053	\$0.0000	\$0.0000	\$0.1985
21			\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
22			\$0.1240	\$0.0034	\$0.0000	\$0.0019	\$0.1293
23.			\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
24	0- NO ATTEMPT - VOLUME SENSITIVE		\$0.0679	\$0.0019	\$0.0000	\$0.0011	\$0.0709
25.	0- NO ATTEMPT - VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
26.	0+ BILL-TO-THIRD - VOLUME SENSITIVE		\$0.1075	\$0.0030	\$0.0000	\$0.0017	\$0.1122
27.	[18] [2], 2·2010 [2], 2·2010 [2], 1·2010 [2], 1·2010 [2], 2·2010		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
28.			\$0.0000	\$0.0000	\$0.0015	\$0.0000	\$0.0015
29.			\$0.0000	\$0.0000	\$0.0005	\$0.0000	\$0.0005
30.			\$0.0864	\$0.0024	\$0.0000	\$0.0014	\$0.0902
31.	나타를 살고 하면 가게 되었다. 그는		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000 \$0.0015
33.			\$0.0000	\$0.0000	\$0.0015	\$0.0000	\$0.0005
34.			\$0.1160	\$0.0032	\$0.0000	\$0.0018	\$0,1210
35.	16 ) 및 15 (14 ) 및 15 (15 )		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0,0000
36.			\$0.0000	\$0.0050	\$0.0000	\$0.0001	\$0.0051
37.	VERIFICATION -VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
38.	VERIFICATION-NON REVENUE-VOL. SENS.		\$0.1876	\$0.0052	\$0.0000	\$0.0029	\$0.1957
39.	VERIFICATION-NON REVENUE-VOL.INSENS.		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
40.			\$0.1948	\$0.0054	\$0.0000	\$0.0031	\$0.2033
41.			\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
42							
43.							
44.	The state of the s		******	******	***	*****	*****
45.			\$0.3074	\$0.0085	\$0.0000	\$0.0048 \$0.0000	\$0.3207 \$0.0000
47			\$0.0000 \$0.4196	\$0.0000	\$0.0000	\$0.0006	\$0.0000
48			\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
49			\$0.2100	\$0.0058	\$0.0000	\$0.0000	\$0.2191
50.			\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
51.			\$0.2787	\$0.0077	\$0.0000	\$0.0044	\$0.2908
52	[18] [전기] [18] [18] [18] [18] [18] [18] [18] [18		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
53.	1는 1. 전 1. 1. 1 전 1		\$0.3112	\$0.0086	\$0.0000	\$0.0049	\$0.3247
54.	0+ BILL-TO-THIRD - VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
55.	0+ COLLECT - VOLUME SENSITIVE		\$0.1320	\$0.0037	\$0.0000	\$0.0021	\$0.1378
56.	0+ COLLECT - VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000

	FLORIDA						
1.	FLORIDA						WORKPAPER 2
2.							10/08/96
3.	OPERATOR CALL PROCESSING ACCESS SE	RVICE					PAGE 4 OF 4
4.							
5.	SUMMARY OF COST BY CALL TYPE						
6.	OPERATOR PROVIDED AND						
7.	FULLY AUTOMATED USING FOREIGN LIDB	AWT/				GROSS	DASCC
8.		FWS	OPR.			RECEIPTS	COST
9.	DIRECTLY ATTRIBUTED SHARED AND	6/96	LABOR	osc	AABS	0.0153	PER CALL
10.	COMMON COST (DASCC)						
11.							
12	0+ CALLING CARD - VOLUME SENSITIVE		\$0.1176	\$0.0033	\$0.0000	\$0.0018	\$0.1227
13.	0+ CALLING CARD - VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
14.	AUTOMATED CALLING CARD - VOLUME SENSITIVE		\$0.0000	\$0.0000	\$0.0015	\$0.0000	\$0.0015
15.	AUTOMATED CALLING CARD - VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0005	\$0.0000	\$0.0005
16.							•
17.	STATION-TO-STATION						
18.	0- CALLING CARD - VOLUME SENSITIVE		\$0.1480	\$0.0041	\$0.0000	\$0.0023	\$0.1544
19.	0- CALLING CARD - VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0,0000	\$0,0000
20.	0- BILL-TO-THIRD - VOLUME SENSITIVE		\$0.1902	\$0.0053	\$0.0000	\$0.0030	\$0.1985
21.	0- BILL-TO-THIRD - VOILUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
22	0- COLLECT - VOLUME SENSITIVE		\$0.1240	\$0.0034	\$0.0000	\$0.0019	\$0.1293
23.	0- COLLECT - VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
24.	0- NO ATTEMPT - VOLUME SENSITIVE		\$0.0679	\$0.0019	\$0.0000	\$0.0011	\$0.0709
25.	0- NO ATTEMPT - VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
26.	0+ BILL-TO-THIRD - VOILUME SENSITIVE 0+ BILL-TO-THIRD - VOILUME INSENSITIVE		\$0.1075	\$0.0030	\$0.0000	\$0.0017	\$0.1122
28.	AUTOMATED BILL-TO-THIRD - VOLUME SENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000 \$0.0015
29.	AUTOMATED BILL-TO-THIRD - VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0005	\$0.0000	\$0.0015
30.	0+ COLLECT - VOLUME SENSITIVE		\$0.0864	\$0.0024	\$0.0000	\$0.0014	\$0.0902
31.			\$0.0000	\$0.0000	\$0,0000	\$0,0000	\$0,0000
32	AUTOMATED COLLECT - VOLUME SENSITIVE		\$0.0000	\$0.0000	\$0.0015	\$0.0000	\$0.0015
33.	AUTOMATED COLLECT - VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0005	\$0.0000	\$0.0005
34.	SENT PAID - VOLUME SENSITIVE		\$0.1160	\$0.0032	\$0.0000	\$0.0018	\$0.1210
35.	SENT PAID - VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
36.	VERIFICATION - VOLUME SENSITIVE		\$0.0000	\$0.0050	\$0.0000	\$0.0001	\$0.0051
37.	VERIFICATION -VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
38.	VERIFICATION-NON REVENUE-VOL. SENS.		\$0.1876	\$0.0052	\$0.0000	\$0.0029	\$0.1957
40.	VERIFICATION-NON REVENUE-VOL.INSENS. VERIFICATION & INTERRUPT-VOL.SENS.		\$0.0000 \$0.1948	\$0.0000	\$0.0000	\$0.0000	\$0.0000
41.	VERIFICATION & INTERRUPT-VOLINSENS.		\$0.0000	\$0.0054	\$0.0000	\$0.0031	\$0.2033 \$0.0000
42.	VETUT ION HOLD & HTTE ET HOLD TO THOUGHT.		40.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
43.							
44.	PERSON-TO-PERSON						
45.	0- CALLING CARD - VOLUME SENSITIVE		\$0.3074	\$0.0085	\$0.0000	\$0.0048	\$0.3207
46.	0- CALLING CARD - VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
47.	0- BILL-TO-THIRD - VOLUME SENSITIVE		\$0.4196	\$0.0116	\$0.0000	\$0.0066	\$0.4378
48.	0- BILL-TO-THIRD - VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
49.	0- COLLECT - VOLUME SENSITIVE		\$0.2100	\$0.0058	\$0.0000	\$0.0033	\$0.2191
50.	0- COLLECT - VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
51.	0+ CALLING CARD - VOLUME SENSITIVE		\$0.2787	\$0.0077	\$0.0000	\$0.0044	\$0.2908
52.	0+ CALLING CARD - VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
53.	0+ BILL-TO-THIRD -VOLUME SENSITIVE		\$0.3112	\$0.0086	\$0.0000	\$0.0049	\$0.3247
54.			\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000
55. 56.	0+ COLLECT - VOLUME SENSITIVE		\$0.1320	\$0.0037	\$0.0000	\$0.0021	\$0.1378
50.	0+ COLLECT - VOLUME INSENSITIVE		\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000

1.	FLORIDA		WORKPAPER 3
2.			10/08/96
3.	OPERATOR CALL PROCESSING ACCESS SERVICE		PAGE 1 OF 2
4.			
5.	DIRECT COST		
6.	OPERATOR LABOR		-
7.	<b>OPERATOR LABOR PER PRODUCTIVE HOUR - 1997-1999</b>		\$32.09
8.			
9.	RATIO PRODUCTIVE TO CALL PROCESSING HOURS	•	1.50
10.			
11.	OPERATOR DIRECT COST PER MINUTE - VOLUME SENSITIVE	(LN7/60) x (LN9)	\$0.8023

1.	FLORIDA		WORKPAPER 3
2.			10/08/96
3.	OPERATOR CALL PROCESSING ACCESS SERVICE		PAGE 2 OF 2
4.			
5.	DIRECTLY ATTRIBUTED SHARED AND COMMON CO	OST (DASCC)	
6.	OPERATOR LABOR		-
7.	OPERATOR LABOR PER PRODUCTIVE HOUR - 1997-1999		\$10.12
8.			V.
9.	RATIO PRODUCTIVE TO CALL PROCESSING HOURS		1.50
10.			
11.	OPERATOR DASCC COST PER MINUTE - VOLUME SENSITIVE	(LN7/60) x (LN9)	\$0.2530

3.	OPERATOR CALL PROCESSING ACCESS	DERVICE	, i har		PAGE 1 OF 2
4.					
5.	DIRECT COST				
6.					
7.	OPERATOR SERVICE CENTER (OSC)				
8.	POSITIONS				136
9.	DEMAND - MINUTES, 1996				130
10.	DEMAND - MINUTES, 1990				
11.	SOFTWARE				
12.	WORKSTATION SOFTWARE, PER POSITION				
13.	OPEN POSITION PROTOCOL, PER POSITION				
14.	ANNUITY FACTOR				0.2723
15.	EQUIVALENT ANNUAL COST		((LN8xLN14) x (LN12+LN	13))	0.2.20
16.	SOFTWARE COST PER MINUTE		(LN15)/(LN9)	,	
17.	SOI TWARE GOOT FERTILINGS		(2.1.0)(2.10)		
18.	HARDWARE				
19.	INVESTMENT PER POSITION				\$18,827
20.	MCEAP FACTOR (377C)				1.0974
21.	LAND FACTOR (20C)				0.0047
22.	BUILDING FACTOR (10C)				0.0657
23.	DIRECT ANNUAL COST FACTOR - POSITION (37	77C)			0.2322
24.	DIRECT ANNUAL COST FACTOR - LAND (20C)	.0,			0.1493
25.	DIRECT ANNUAL COST FACTOR - BUILDING (10	(C)			0.1706
26.	ANNUAL COST - POSITION		LN8xLN19xLN20xLN23		000
27.	ANNUAL COST - LAND		LN8xLN19xLN20xLN21xL	N24	
28.	ANNUAL COST - BUILDING		LN8xLN19xLN20xLN22xL		
29.	TOTAL ANNUAL COST		LN26+LN27+LN28		\$685,916
30.	HARDWARE COST PER MINUTE		LN29/LN9		\$0.0381
31.					
32.	VOICE AND DATA CIRCUITS				
33.		CIRCUITS/	UNIT	ANNUAL	ANNUAL
34.	CIRCUIT TERMINATION	MILES	INVESTMENT	<b>COST FACTOR</b>	COST
35.					
36.	CIRCUIT (357C)	272	\$134.45	0.2343	\$8,568
37.	LAND (20C)	272	\$0.34	0.1493	\$14
38.	BUILDING (10C)	272	\$5.58	0.1706	\$259
39.					
40.	CIRCUIT MILEAGE				
41.	AERIAL (822C)	28,119	\$0.08	0.1838	\$413
42.	BURIED (845C)	28,119	\$0.32	0.1738	\$1,564
43.	UNDERGROUND (85C)	28,119	\$0.08	0.1781	\$401
44.	POLE (1C)	28,119	\$0.02	0.1869	\$105
45.	CONDUIT (4C)	28,119	\$0.05	0.1408	\$198
46.	CIRCUIT (357C)	28,119	\$1.40	0.2343	\$9,224
47.	BUILDING (10C)	28,119	\$0.06	0.1706	\$288
48.					****
49.	CIRCUIT ANNUAL COST		SUM LN36LN47		\$21,034
50.	COST DED MINISTE		11100110		00 0040
51.	COST PER MINUTE		LN49/LN9		\$0.0012
52.	DIDECT COST DED MINISTE MOLINE DENOITE		I NIAGAL NIGO A NIGA		<b>60 0000</b>
53.	DIRECT COST PER MINUTE - VOLUME SENSITIVE		LN16+LN30+LN51		\$0.0988

1.	FLORIDA				WORKPAPER 4
2.					10/08/96
3.	OPERATOR CALL PROCESSING ACCES	S SERVICE			PAGE 2 OF 2
4.					
5.	DIRECTLY ATTRIBUTED SHARED AND	COMMON CO	OST (DASCC)		
6.					
7.	OPERATOR SERVICE CENTER (OSC)				
8.					
9. 10.					
11.					
12.	POSITIONS				136
13.	Positions			,	100
14.					
15.	DEMAND - MINUTES, 1996				
16.					
17.					
18.	HARDWARE				
19.	INVESTMENT PER POSITION				
20.	MCE&P FACTOR (377C)				1.0974
21.	LAND FACTOR (20C)				0.0047
22.	BUILDING FACTOR (10C)				0.0657
23.	DASCC ANNUAL COST FACTOR - POSITION (	377C)			0.0434
24.	DASCC ANNUAL COST FACTOR - LAND (20C)		**		0.0000
25.	DASCC ANNUAL COST FACTOR - BUILDING (	10C)			0.0014
26.	ANNUAL COST - POSITION		LN12xLN19xLN20xLN23	1 1104	
27.	ANNUAL COST - LAND		LN12xLN19xLN20xLN21x		
28. 29.	ANNUAL COST - BUILDING TOTAL ANNUAL COST		LN12xLN19xLN20xLN22x LN26+LN27+LN28	LN25	\$122,206
30.	HARDWARE COST PER MINUTE		LN29/LN15		\$0.0068
31.	HARDWARE COST FER MINOTE		LINZBICINIO		\$0.0000
32.	VOICE AND DATA CIRCUITS				
33.		CIRCUITS/	UNIT	ANNUAL	ANNUAL
34.	CIRCUIT TERMINATION	MILES	INVESTMENT	COST FACTOR	COST
35.					
36.	CIRCUIT (357C)	272	\$134.45	0.0372	\$1,360
37.	LAND (20C)	272	\$0.34	0.0000	\$0
38.	BUILDING (10C)	272	\$5.58	0.0014	\$2
39.					
40.	CIRCUIT MILEAGE		****	0.000	***
41.	AERIAL (822C)	28,119 28,119	\$0.08	0.0299	\$67
42.	BURIED (845C)	28,119	\$0.32 \$0.08	0.0235 0.0220	\$211 \$49
43. 44.	UNDERGROUND (85C) POLE (1C)	28,119	\$0.02	0.0294	\$17
45.	CONDUIT (4C)	28,119	\$0.05	0.0146	\$21
46.	CIRCUIT (357C)	28,119	\$1.40	0.0372	\$1,464
47.	BUILDING (10C)	28,119	\$0.06	0.0014	\$2
48.	55(5),15(1),5	20,113			**
49.	CIRCUIT ANNUAL COST		SUM LN36LN47		\$3,193
50.					
51.	COST PER MINUTE		LN49/LN15		\$0.0002
52.	DASCC COST PER MINUTE - VOLUME SENSITIVE		LN30+LN51		\$0.0070

1.	FLORIDA			WORKPAPER 5
2.		*		10/08/96
3.	<b>OPERATOR CALL PROCESSING ACCESS S</b>	ERVICE		PAGE 1 OF 1
4.				
5.	DIRECT COST			
6.	OPERATOR SERVICE SYSTEM (OSS)			
7.	DEMAND - CALLS, 1996			
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			0.2723
16.				
17.	TOTAL COST	(LN13A+(8xLN13B))		\$9,375,561
18.				
19.	ANNUALIZED COST	LN15 x LN17		\$7 552,965
20.	DIDECT COST OFF CALL MOUNTS INSTANCED			
21.	DIRECT COST PER CALL - VOLUME INSENSITIVE	LN19/LN8		\$0.0222

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	FLORIDA				WORKDARED 7
1.	FLORIDA				WORKPAPER 7
2.	OPERATOR CALL PROCESSING ACCESS	PERMICE			10/08/96
3. 4.	OPERATOR CALL PROCESSING ACCESS	SERVICE			PAGE 1 OF 2
5.	AABS - REGIONAL				
6.					
7.	DIRECT COST				-
8.					
9.	DATA CIRCUITS	CIRCUITS/	UNIT	ANNUAL	ANNUAL
10.		MILES	INVESTMENT	COST FACTOR	COST
11.	CIRCUIT TERMINATION				
12.	CIRCUIT (357C)	2,875	\$134.45	0.2327	\$89,949
13.	LAND (20C)	2,875	\$0.34	0.1486	\$145
14.	BUILDING (10C)	2,875	\$5.58	0.1679	\$2,694
15.					
16.	CIRCUIT MILEAGE	14	A Million		
17.	AERIAL (822C)	483,925	\$0.08	0.1849	\$7,158
18.	BURIED (845C)	483,925	\$0.32	0.1747	\$27,053
19.	UNDERGROUND (85C)	483,925	\$0.08	0.1781	\$6,895
20.	POLE (1C)	483,925	\$0.02	0.1922	\$1,860
21.	CONDUIT (4C)	483,925	\$0.05	0.1395	\$3,375
22.	CIRCUIT (357C)	483,925	\$1.40	0.2327	\$157,653
23.	BUILDING (10C)	483,925	\$0.06	0.1679	\$4,875
24.					****
	TOTAL ANNUAL COST, DATA CIRCUITS - VOLUME S	SENSITIVE	SUM LN12LN23		\$301,657
26.	UNICOTACIO CATEMAY AND DE				
	INVESTMENT - GATEWAY AND IVS				
28.	VOLUME SENSITIVE				
29.	VOLUME INSENSITIVE				
30.	ANNUAL COST EACTOR (277C)				0.2442
31.	ANNUAL COST FACTOR (377C)				0.2412
	ANNUAL COST - GATEWAY AND IVS				
34.	VOLUME SENSITIVE	LN28xLN31			
35.	VOLUME INSENSITIVE	LN29xLN31			
36.	VOLUME INSENSITIVE	LINZBALINGT			
	ANNUAL SOFTWARE EXPENSE				
38.	GATEWAY AND IVS - VOLUME INSENSITIVE				
39.	GATEWAT AND IVS - VOLUME INSCRINT				
	1996 ANNUAL CALLS				238,750,000
41.					
11TOD. CO	AABS DIRECT COST PER AUTOMATED CALL				
43.	VOLUME SENSITIVE	(LN25+LN34)/LN4	0		\$0.0083
44.	VOLUME INSENSITIVE	(LN35+LN38)/LN4	0		\$0.0053

1.	FLORIDA				WORKPAPER 7		
2.					10/08/96		
3.							
4.	0. 2.000				PAGE 2 OF 2		
5.	AABS - REGIONAL						
6.	ANDO - REGIOTALE						
7.	DIRECTLY ATTRIBUTED SHARED AND CO	MMON COST (D)	ASCCI		-		
8.	DIRECTET ATTRIBUTED SHARED AND CO	MIMON COOL (D)	1000)				
	DATA CIRCUITS	CIRCUITS/	UNIT	ANNUAL	ANNUAL		
9.	DATA CIRCUITS	MILES			ANNUAL		
10.		MILES	INVESTMENT	COST FACTOR	COST		
11.	CIRCUIT TERMINATION						
12.	CIRCUIT (357C)	2,875	\$134.45	0.0372	\$14,379		
13.	LAND (20C)	2,875	\$0.34	0.0000	\$0		
14.	BUILDING (10C)	2,875	\$5.58	0.0014	\$22		
15.							
16.	CIRCUIT MILEAGE						
17.	AERIAL (822C)	483,925	\$0.08	0.0299	\$1,158		
18.	BURIED (845C)	483,925	\$0.32	0.0235	\$3,639		
19.	UNDERGROUND (85C)	483,925	\$0.08	0.0220	\$852		
20.	POLE (1C)	483,925	\$0.02	0.0294	\$285		
21.	CONDUIT (4C)	483,925	\$0.05	0.0146	\$353		
22.	CIRCUIT (357C)	483,925	\$1.40	0.0372	\$25,203		
23.	BUILDING (10C)	483,925	\$0.06	0.0014	\$41		
24.							
25.	TOTAL ANNUAL COST, DATA CIRCUITS - VOLUME SE	NSITIVE	SUM LN12LN23		\$45,932		
26.							
27.	INVESTMENT - GATEWAY AND IVS						
28.	VOLUME SENSITIVE						
29.	VOLUME INSENSITIVE						
30.	ANNUAL COST FACTOR (2770)				0.0434		
31.	ANNUAL COST FACTOR (377C)				0.0434		
33.	ANNUAL COST - GATEWAY AND IVS						
34.	VOLUME SENSITIVE	LN28xLN31					
35.	VOLUME INSENSITIVE	LN29xLN31					
36.	VOCOME INDENDITIVE						
37.							
38.							
39.							
40.	1996 ANNUAL CALLS				238,750,000		
41.							
42.	AABS DASCC COST PER AUTOMATED CALL						
43.	VOLUME SENSITIVE	(LN25+LN34)/LN40	0		\$0.0015		
44	VOLUME INCENSITIVE	I NISER NIAO			£0.000E		

LN35/LN40

\$0.0005

**VOLUME INSENSITIVE** 

1.	FLORIDA		WORKPAPER 8			
2.			10/08/96			
3.	OPERATOR CALL PROCESSING ACCESS SERVICE	*	PAGE 1 OF 1			
4.						
5.	LIDB - REGIONAL					
6.			_			
7.	DIRECT COST		-			
8.	BST LIDB STORAGE					
9.	RATIO BST OSS QUERIES TO BST LIDB PER MONTH		0.80			
10.	RATIO BST OSS QUERIES TO FOREIGN LIDB PER MONTH		0.20			
11.						
12.	AVERAGE COST PER QUERY, BST LIDB - VOLUME SENSITIVE		\$0.0006 \$0.0081			
	AVERAGE COST PER QUERY, BST LIDB - VOLUME INSENSITIVE					
14.	AVERAGE CHARGE PER QUERY, FOREIGN LIDB - VOLUME SENSITIVE		\$0.0417			
15.						
16.		(LN9xLN12)+(LN10xLN14)	\$0.0088			
17.	WEIGHTED AVERAGE, VOLUME INSENSITIVE	LN9xLN13	\$0.0065			
18.	FORFICH LIPR CTORACE					
	FOREIGN LIDB STORAGE					
	RATIO BST OSS QUERIES TO BST LIDB PER MONTH		0.20			
	RATIO BST OSS QUERIES TO FOREIGN LIDB PER MONTH		0.80			
22.	AVERAGE COST BED OUEDV BET LIDE MOLLINE SENSITIVE		*****			
	AVERAGE COST PER QUERY, BST LIDB - VOLUME SENSITIVE		\$0.0006			
	AVERAGE COST PER QUERY, BST LIDB - VOLUME INSENSITIVE		\$0.0081			
25.	AVERAGE CHARGE PER QUERY, FOREIGN LIDB - VOLUME SENSITIVE		\$0.0417			
26.	WEIGHTED AVERAGE VOLUME SENSITIVE	(1 NO. 1 NO.) (1 NO.) 1 NO.	******			
		(LN20xLN23)+(LN2 ixLN25)				
20.	WEIGHTED AVERAGE, VOLUME INSENSITIVE	LN20xLN24	\$0.0016			

# FLORIDA

# OPERATOR CALL PROCESSING ACCESS SERVICE

# SPECIFIC STUDY ASSUMPTIONS

Cost study assumptions are as follows:

Software expenses were projected to the 1997-1999 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.

# **FLORIDA**

# OPERATOR CALL PROCESSING ACCESS SERVICE

# **FACTORS AND LOADINGS**

Following are the annual TELRIC factors, miscellaneous loadings and labor rates used in the Operator Call Processing Access Service cost study.

		1996	1997-1999			
Labor Cost per Hour	(Regional)					
Directly Assigned			***			
Operator, JFC	2120	\$30.04	\$32.09			
Directly Attributed	Shared and Common					
Operator, JFC 2	2120	\$ 9.47	\$10.12			
Operator Labor Inflat	ion Rate					
From 1996 (Attached		1.0683				
Hardware Inflation Ra	ate 377C (Regional)	1.000				
Amortization Factor (	5 Years @ 11.25%)	0.2723				
Miscellaneous Comm						
and Power Factor	377C (Florida)	1.0974				
Gross Receipts Tax F	actor (Florida)	1.0153				
Land Loading	20C (Florida)	0.0047	*			
Building Loading	10C (Florida)	0.0657				
Annual TELRIC Fact	ors (Florida), Attached					
Annual TELRIC Fact	ors (Regional), Attached					

# Labor Levelization Factor Base Year 1996

# **Labor Inflation Factors**

(LN4 + LN5 + LN6)

1. 1997	1.034
2. 1998	1.035
3. 1999	1.036
Present Worth Factors @ 11.25%	
4. 1997	0.8989
5. 1998	0.8080
6. 1999	0.7263
Labor Levelization Factor	
$((LN1 \times LN4) + (LN1 \times LN2 \times LN5) + (LN1 \times LN3 \times LN5) + (LN1 \times LN5) +$	.N1 x LN2 x LN3 x LN6))/

1.0683

# 1996 BELLSOUTH TELECOMMUNICATIONS ACCOUNT AVERAGE ANNUAL COST FACTORS

\* FOR USE IN SERVICE COST STUDIES ONLY \*

	Field Code	Depreciation	ACFC COM	ACFC Inc Tax	Сар Ехр	ACFC Plt Specific Exp	ACFC Adval Tax	Directly Attributed Shared and Common	TELRIC
		a	ь	c	d	e	f	g	i
			11.25%		(a+b+c)				(d+e+f+g)
LAND - COE	20C	0.0000	0.0947	0.0426	0.1373	0.0000	0.0113	0.0000	0.1486
BUILDINGS - COE	10C, 110C	0.0330	0.0826	0.0369	0.1525	0.0041	0.0113	0.0014	0.1693
DIGITAL ELEC SWITCH	377C, 587C	0.1157	0.0555		0.1966	0.0333	0.0113	0.0434	0.2846
CPERATOR SYSTEMS	117C,417C	0.1157	0.0647	0.0296	0.2100	0.0071	0.0113	0.0500	0.2784
DIGTL CIRC-DDS	157C	0.1608	0.0575	0.0256	0.2439	0.0060	0.0113	0.0394	0.3006
DIGTL CIRC-PAIR GAIN	257C,D257C,F257C	0.1314	0.0564	0.0249	0.2127	0.0082	0.0113	0.0366	0.2688
DIGTL CIRC-OTHER	357C,T357C,F357C,557C	0.1314	0.0564		0.2130	0.0084	0.0113	0.0372	0.2699
POLES	1C	0.0721	0.0599	0.0254	0.1574	0.0235	0.0113	0.0294	0.2216
AERIAL CA - METAL	22C, 12C	0.1023	0.0679		0.1956	0.0461	0.0113	0.0619	0.3149
AERIAL CA - FIBER	822C, 812C,D22C, F22C,T22C,D12C,F12C,T12C	0.0746	0.0662		0.1689	0.0047	0.0113	0.0299	0.2148
UNGROUND CA - METAL	5C	0.1184	0.0681	0.0263	0.2128	0.0172	0.0113	0.0351	0.2764
UNGROUND CA - FIBER	85C,D5C,F5C,T5C	0.0686	. 0.0655	0.0284	0.1625	0.0043	0.0113	0.0220	0.2001
BURIED CA - METAL	45C	0.0885	0.0678	0.0277	0.1840	0.0391	0.0113	0.0468	0.2812
BURIED CA - FIBER	845C, D45C, F45C, T45C	0.0613	0.0670		0.1578	0.0056	0.0113	0.0235	0.1982
SUBMARINE CA-METAL	6C	0.0937	0.0688	0.0307	0.1932	0.0026	0.0113	0.0206	0.2277
SUBMARINE CA-FIBER	86C,D6C,F6C,T6C	0.0937	0.0688	0.0310	0.1935	0.0026	0.0113	0.0209	0.2283
INTRBLD NTWK-METAL	52C	0.0751	0.0669		0.1711	0.0138	0.0113	0.0315	0.2277
INTRBLD NTWK-FIBER	852C,D52C,F52C,T52C	0.0751	0.0669	0.0292	0.1712	0.0041	0.0113	0.0270	0.2136
CONDUIT SYSTEMS	4C	0.0205	0.0727	0.0325	0.1257	0.0025	0.0113	0.0146	0.1541

Image Table: ACF.WK1

#### 1996 FLORIDA ACCOUNT AVERAGE ANNUAL COST FACTORS

\* FOR USE IN SERVICE COST STUDIES ONLY \*

	Field Code	Depreciation a	ACFC COM	ACFC Inc Tax	Cap Exp	ACFC Ptt Specific Exp	ACFC Adval Tax	Directly Attributed Shared and Common g	TELRIC i
			11.25%		(a+b+c)				(d+e+f+g)
LAND - COE	20C	0.0000	0.0947	0.0426	0.1373	0.000	0.0120	0.0000	0.1493
BUILDINGS - COE	10C, 110C	0.0330	0.0826	0.0369	0.1525	0.0061	0.0120	0.0014	0.1720
DIGITAL ELEC SWITCH	377C, 587C	0.1157	0.0555	)	0.1966	0.0236	0.0120	0.0434	0.2756
OPERATOR SYSTEMS	117C,417C	0.1157	0.0647	0.0296	0.2100	0.0033	0.0120	0.0500	0.2753
DIGTL CIRC-DDS	157C	0.1608	0.0575	0.0256	0.2439	0.0076	0.0120	0.0394	0.3029
DIGTL CIRC-PAIR GAIN	257C,D257C,F257C	0.1314	0.0564	0.0249	0.2127	0.0082	0.0120	0.0366	0.3029
DIGTL CIRC-OTHER	357C,T357C,F357C,557C	0.1314	0.0564	0.0252	0.2130	0.0093	0.0120	0.0372	0.2715
POLES	10	0.0721	0.0599	0.0254	0.1574	0.0175	0.0120	0.0294	0.2163
AERIAL CA - METAL	22C, 12C	0.1023	0.0679	0.0254	0.1956	0.0705	0.0120	0.0294	0.2103
AERIAL CA - FIBER	822C, 812C,D22C, F22C,T22C,D12C,F12C,T12C	0.0746	0.0662		0.1689	0.0029	0.0120	0.0299	0.2137
UNGROUND CA - METAL	5C	0,1184	0.0681	0.0263	0.2128	0.0192	0.0120	0.0351	0.2791
UNGROUND CA - FIBER	85C,D5C,F5C,T5C	0.0686	. 0.0655	0.0284	0.1625	0.0036	0.0120	0.0220	0.2001
BURIED CA - METAL	45C	0.0885	0.0678	0.0277	0.1840	0.0522	0.0120	0.0468	0.2950
BURIED CA - FIBER	845C, D45C, F45C, T45C	0.0613	0.0670		0.1578	0.0040	0.0120	0.0235	0.1973
SUBMARINE CA-METAL	6C	0.0937	0.0688		0.1932	0.0046	0.0120	0.0206	0.2304
SUBMARINE CA-FIBER	86C,D6C,F6C,T6C	0.0937	0.0688	0.0310	0.1935	0.0046	0.0120	0.0209	0.2310
INTRBLD NTWK-METAL	52C	0.0751	0.0669	0.0291	0.1711	0.0192	0.0120	0.0315	0.2338
INTRBLD NTWK-FIBER	852C,D52C,F52C,T52C	0.0751	0.0669	0.0292	0.1712	0.0011	0.0120	0.0270	0.2113
CONDUIT SYSTEMS	4C	0.0205	0.0727	0.0325	0.1257	0.0031	0.0120	0.0146	0.1554

# FLORIDA



# INWARD OPERATOR SERVICES ACCESS SERVICE

TELRIC COST STUDY DOCUMENTATION

SECTIONS A THRU 6

# **FLORIDA**

# INWARD OPERATOR SERVICES ACCESS 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 TELRIC
SECTION 5	SPECIFIC STUDY ASSUMPTIONS
SECTION 6	FACTORS AND LOADINGS

# SECTION A

#### SECTION A

### **FLORIDA**

# INWARD OPERATOR SERVICES ACCESS SERVICE PROPRIETARY RATIONALE

The Inward Operator Services Access Service Study contains actual unit cost information for discrete cost elements. 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 Inward Operator Services Access Service Cost Study is considered proprietary.

### **FLORIDA**

# INWARD OPERATOR SERVICES ACCESS SERVICE INTRODUCTION AND OVERVIEW

This Total Element Long Run Incremental Cost (TELRIC) study is being provided to support Inward Operator Services Access Service. The costs presented in this study are based on the TELRIC methodology established by the Federal Communication Commission's (FCC's) First Report and Order in CC Docket 96-98 (FCC Order) released August 8, 1996.

Inward Operator Services provide Verification and Emergency Interrupt Service and is an optional service provided on a stand alone basis and available to Local Exchange service providers for whom BellSouth does not provide Operator Call Processing Service. Operator Call Processing Service includes Verification and Emergency Interrupt as part of that service.

A Local Exchange service provider seeking to verify the status of a local exchange subscriber line will access the BellSouth Operator Services System (OSS) serving the Local Access Transport Area (LATA) of the subscriber line to be verified via an application specific dedicated Inward Operator Services (IOS) access trunk group for each IOS location specified by the Local Exchange service provider. The Local Exchange service provider operator will ask the BellSouth operator to verify that the subscriber line in question is in use. The BellSouth operator will monitor the status of the subscriber line and report this status to the Local Exchange service provider operator. The Local Exchange service provider operator will relay this information to the end user. If the line is in use, the Local Exchange service provider end user may request that the call in progress be interrupted to inform the local exchange subscriber of any emergency need to reach that number. In this case, the Local Exchange service provider operator will ask the BellSouth operator to interrupt the subscriber's call in progress. BellSouth's operator will interrupt the call in progress, inform the subscriber that the Local Exchange service provider end user has an emergency need to reach that line, and ask the subscriber if he/she is willing to terminate the call in progress. If the local exchange subscriber agrees to hang up, BellSouth's operator will inform the Local Exchange service provider operator. The Local Exchange service provider operator can then inform the end user that the subscriber line in question will be free momentarily, and the end user may redial the local exchange subscriber's number to complete the emergency call.

The 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.

The Operator Service System is a software package that allows a tandem switch to act as an automated call distributor and directs Operator calls to the active operator position that has been idle for the longest period. The operator position is a workstation that ties the operator to both the customer and the line called for verification/interrupt.

A long run analysis is performed to ensure that the time period studied is sufficient to capture all forward looking costs affected by the business decision. The recurring costs presented in this study are levelized so as to be appropriate for the 1997 - 1999 study period. These costs are developed by using 1996 level TELRIC loadings, annual cost factors and labor rates designed to produce TELRIC results.

### **FLORIDA**

# INWARD OPERATOR SERVICES ACCESS SERVICE

#### DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of the Total Element Long Run Incremental Cost (TELRIC) supporting Inward Operator Services Access Service.

The purpose of the TELRIC methodology established by the FCC order, is to set the rates for interconnection and unbundled network elements. The basis for a TELRIC study is forward looking long run economic cost methodology. Volume sensitive and volume insensitive costs are identified to develop the direct costs caused by providing the particular network element being studied. TELRIC methodology anticipates pricing of elements in a wholesale network company. Many costs regarded as common or shared would be included as directly attributable in a TELRIC study. The FCC pricing methodology also specifies that, over and above TELRIC, the additional portion of forward looking common costs that cannot be directly attributed to any particular network element will be allocated among the cost elements. TELRIC includes both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs. There are no nonrecurring costs associated with Inward Operator Services Access 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 represent a forward looking view of technology and deployment and include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs consist of plant specific expenses and ad valorem taxes. These expenses contribute to the ongoing cost to the Company associated with the initial capital investment. Recurring costs may also be noninvestment related, such as expensed labor, feature specific software and contract expenses. Also included in the recurring TELRIC are shared and common costs directly attributable to the network element. Gross receipts tax is calculated on the TELRIC.

The first step in developing a TELRIC study for Inward Operator Services Access 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 to the base study period. In-plant factors are applied to material prices 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 year planning period. Miscellaneous loadings are then applied.

Next, 1996 level TELRIC Annual Cost Factors are used to calculate the direct cost of capital, plant specific 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 which includes directly attributable shared and common costs. Annual Total Element Long Run Incremental Costs by account codes are then summed and divided by the associated demand to arrive at a cost per cost element.

The directly attributable shared and common cost components of the TELRIC annual cost factors are calculated as follows. First, a detailed analysis of the forward looking directly assigned costs associated with the interconnect or unbundled network element is performed. The remaining costs of doing business are then analyzed to determine whether they are directly attributable shared and common costs that can be reasonably attributed to network elements.

Next, the directly attributable shared and common costs are projected forward and segregated to functional areas to which they are related. The functional areas are wholesale operations, retail services operations, and combined wholesale and retail services operations. Attribution factors based on the specific wholesale functional area, such as central office equipment (COE) investment, COE salary and wages, etc., are then developed and applied to the respective costs. These attributed costs are accumulated by related network investment category, such as pair gain equipment, buried cable, etc., and attributed shared cost factors are developed. These attributed shared cost factors are then included as a component of the TELRIC annual cost factors by investment category. All directly attributed costs related to retail services operations are excluded. The common cost allocation factor is applied to TELRIC to produce the total element cost/price, which includes an appropriate share of common costs.

The common cost allocation factor is applied to TELRIC to produce the forward looking economic cost, as defined in the FCC order, Appendix B, Section 51.505 which includes an appropriate share of common costs. The common cost allocation factor is calculated by summing all wholesale costs that cannot be reasonably attributed to specific elements, services or functions and dividing by the sum of the directory assignable and directly attributable wholesale costs.

## **FLORIDA**

# INWARD OPERATOR SERVICES ACCESS SERVICE SUMMARY OF RESULTS

This section contains a unit cost summary for the Total Element Long Run Incremental Cost (TELRIC) for Inward Operator Services Access Service.

	COST PER CALL
Verification	
TELRIC Common Cost Allocation Factor Total Cost	\$0.8587 1.0804 \$0.9277
Emergency Interrupt	
TELRIC Common Cost Allocation Factor Total Cost	\$0.9316 1.0804 \$1.0065

### **FLORIDA**

# INWARD OPERATOR SERVICES ACCESS SERVICE

### COST DEVELOPMENT

This section defines the Total Element Long Run Incremental Cost (TELRIC) development for Inward Operator Services 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 TELRIC factors are applied to convert the investment to cost. Labor expense is directly identified.

## Workpaper 1

The verification and emergency interrupt volume sensitive and volume insensitive costs per call are summarized, and the Total Element Long Run Incremental Costs (TELRIC) per call are 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 call using the Actual Work Time (shown in seconds).

# Workpaper 3

The operator cost per minute is developed using the 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.

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 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 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 software in the Operator Service Systems is divided by the projected 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 is developed using the switching and transport cost per minute (for access) and the estimated time required for the actual verification and emergency interrupt functions.

1.	FLORIDA		WORKPAPER 1
2.			PAGE 1 0F 1
3.	INWARD OPERATOR SERVICES ACCESS SERVICE		10/08/96
4.			
5.			
10.	SUMMARY OF COST PER CALL		
11.			
12.			COST PER
13.			CALL
14.	VERIFICATION		
15.	DIRECT COST	WP2,PG1,LN15	\$0.6717
16.	DIRECTLY ATTRIBUTED SHARED & COMMON COST	WP2,PG2,LN15	\$0.1870
17.	TELRIC	LN11+LN12	\$0.8587
18.			
19.			
20.	EMERGENCY INTERRUPT		
21.	DIRECT COST	WP2,P1,LN21	\$0.7282
22.	DIRECTLY ATTRIBUTED SHARED & COMMON COST	WP2,P2,LN21	\$0.2034
23.	TELRIC	LN17+LN18	\$0.9316

\$0.0768

\$0.0768

\$0.0224

\$0.0224

\$0.6178

SO.6178

18.

19. 20. 21. **VOLUME SENSITIVE UNIT COST** 

DIRECT COST

**VOLUME INSENSITIVE UNIT COST** 

\$0.0003

\$0.0003

\$0.0106

\$0.0003

\$0.0109

\$0.7055

\$0.0227

\$0.7282

1. FLORIDA 2. INWARD OPERATOR SERVICES 3. ACCESS SERVICE 4. 5. SUMMARY OF COST BY CALL TYPE 6. 7. DIRECTLY ATTRIBUTED SHARED 8. AND COMMON COST (DASCC) OPERATOR RECEIPTS PE 9. AWT LABOR OSC 0.0153 CAL	
3. ACCESS SERVICE 10 4. 5. SUMMARY OF COST BY CALL TYPE 6. 7. DIRECTLY ATTRIBUTED SHARED GROSS COST AND COMMON COST (DASCC) OPERATOR RECEIPTS PE	
4. 5. SUMMARY OF COST BY CALL TYPE 6. 7. DIRECTLY ATTRIBUTED SHARED GROSS COS 8. AND COMMON COST (DASCC) OPERATOR RECEIPTS PE	2 OF 2
6. 7. DIRECTLY ATTRIBUTED SHARED GROSS COS 8. AND COMMON COST (DASCC) OPERATOR RECEIPTS PE	/08/96
6. 7. DIRECTLY ATTRIBUTED SHARED GROSS COS 8. AND COMMON COST (DASCC) OPERATOR RECEIPTS PE	
7. DIRECTLY ATTRIBUTED SHARED GROSS COS 8. AND COMMON COST (DASCC) OPERATOR RECEIPTS PE	
8. AND COMMON COST (DASCC) OPERATOR RECEIPTS PE	
8. AND COMMON COST (DASCC) OPERATOR RECEIPTS PE	ST
9 AWT LABOR OSC 0.0153 CA	R
	L.
10.	
11. VERIFICATION	
12. VOLUME SENSITIVE UNIT COST \$0.1792 \$0.0050 \$0.0028 \$	0.1870
13. VOLUME INSENSITIVE UNIT COST \$0.0000 \$	0.0000
14.	
15. DASCC \$0.1792 \$0.0050 \$0.0028 \$0	.1870
16.	
17. EMERGENCY INTERRUPT	
18. VOLUME SENSITIVE UNIT COST \$0.1948 \$0.0055 \$0.0031 \$	0.2034
	0.0000
20.	
	.2034

1.	FLORIDA		WORKPAPER 3
2.			PAGE 1 OF 2
3.	INWARD OPERATOR SERVICES ACCESS SERVICE		10/08/96
4.			
5.	OPERATOR LABOR		
6.	DIRECT COST		
7. 8.	DIRECT COST		
9.			
10.	OPERATOR LABOR PER PRODUCTIVE HOUR - 1997-1999	JFC: 2120	\$32.09
11.			
12.	RATIO PRODUCTIVE TO CALL PROCESSING HOURS		1.50
13.			
14.	OPERATOR DIRECT COST PER MINUTE, VOLUME SENSITIVE	E (LN10/60) x (LN12	\$0.8023

1. 2.	FLORIDA		WORKPAPER 3 PAGE 2 OF 2
3.	INWARD OPERATOR SERVICES ACCESS SERVICE		10/08/96
5. 6.	OPERATOR LABOR		
7.	DIRECTLY ATTRIBUTED SHARED AND COMMON COST		•
9. 10.	OPERATOR LABOR PER PRODUCTIVE HOUR - 1997-1999	JFC: 2120	\$10.12
11.	RATIO PRODUCTIVE TO CALL PROCESSING HOURS		1.50
13. 14.	OPERATOR DIRECTLY ATTRIBUTED SHARED & COMMON COST PER MINUTE, VOLUME SENSITIVE	(LN9/60) x (LN11)	\$0.2530

1. 2.	FLORIDA			w	ORKPAPER 4 PAGE 1 OF 2
3.	INWARD OPERATOR SERVICES ACCESS	BERVICE			10/08/96
4. 5.	OPERATOR SERVICE CENTER (OSC)				
6.					
7.	DIRECT COST				-
8.					
9.	POSITIONS				136
10.	DEMAND - MINUTES, 1996				
11.					
12.	SOFTWARE				
13.	WORKSTATION SOFTWARE, PER POSITI				
14.	OPEN POSITION PROTOCOL, PER POSIT	ION			
15.	ANNUITY FACTOR				0.2723
16.	ANNUALIZED COST		(LN13 + LN14) x	(LN9)xLN15	
17.	SOFTWARE COST PER MINUTE		(LN16) / LN10		
18.					
19.	HARDWARE				
20.	INVESTMENT PER POSITION				4 0074
21.	MCE&P FACTOR				1.0974
22.	LAND FACTOR				0.0047
23.	BUILDING FACTOR				0.0657
24.	DIRECT ANNUAL COST FACTOR (377C)				0.2322
25.	DIRECT ANNUAL COST FACTOR (20C)				0.1493
26.	DIRECT ANNUAL COST FACTOR (10C)		# NOV# NOON# NO	24141241	0.1706
27.	ANNUAL COST - POSITION		(LN9)(LN20)(LN		
28.	ANNUAL COST - LAND			21)(LN22)(LN25)	
29.	ANNUAL COST - BUILDING			21)(LN23)(LN26)	
30.	TOTAL ANNUAL COST		(LN27+LN28+LN	(29)	
31.	HARDWARE COST PER MINUTE		(LN30)/(LN10)		
32.	VOICE AND DATA CIRCUITS				
33.	VOICE AND DATA CIRCUITS	CIRCUITS/	UNIT	ANNUAL	ANNUAL
34.	CIRCUIT TERMINATION	MILES	INVESTMENT	COST FACTOR	COST
0.400	도 보기 (BE) (F. 17.17)에 없는 네가 150 (1911) (1912)에서 12 12 13 150 150 150 150 150 150 150 150 150 150	272	\$134.45	0.2343	\$8,568
36.	CIRCUIT (357C)	272	\$0.34	0.1493	\$14
37. 38.	LAND (20C) BUILDING (10C)	272	\$5.58	0.1706	\$259
39.	BOILDING (10C)	212	\$0.00	0.1700	9255
40.	CIRCUIT MILEAGE				
41.	AERIAL (822C)	28,119	\$0.08	0.1838	\$413
42.	BURIED (845C)	28,119	\$0.32	0.1738	\$1,564
43.	UNDERGROUND (85C)	28,119	\$0.08	0.1781	\$401
44.	POLE (1C)	28,119	\$0.02	0.1869	\$105
45.	CONDUIT (4C)	28,119	\$0.05	0.1408	\$198
46.	CIRCUIT (357C)	28,119	\$1.40	0.2343	\$9,224
47.	BUILDING (10C)	28,119	\$0.06	0.1706	\$288
48.	DOILD II TO (100)	20,110	•••••		****
49.	TOTAL ANNUAL COST		SUM LN 36LN4	7	\$21,034
50.				950	
51. 52.	CIRCUIT COST PER MINUTE		LN49/LN10		\$0.0012
53.	DIRECT COST PER MINUTE - VOLUME SEI	JOIN NO.	(LN17 + LN31	+ ME4V	\$0.0998

1.	FLORIDA			١	WORKPAPER 4
2. 3.	INWARD OPERATOR SERVICES ACCESS S	ERVICE			10/08/96
4. 5.	OPERATOR SERVICE CENTER (OSC)				
6. 7.	DIRECTLY ATTRIBUTED SHARED AND				
8.	COMMON COST (DASCC)				
9. 10.					
11.					
12.	POSITIONS				136
13.					
14.					
15.	DEMAND - MINUTES, 1996				
16.					
17.					
18.	HARDWARE				
19.					
20.	INVESTMENT PER POSITION				
21.	MCE&P FACTOR				1.0974
22.	LAND FACTOR				0.0047
23.	BUILDING FACTOR				0.0657
24.	DASCC ANNUAL COST FACTOR (377C)				0.0434
25.	DASCC ANNUAL COST FACTOR (20C)				0.0000
26.	DASCC ANNUAL COST FACTOR (10C)		// N/40/// N/20/// A	IDANI NOAN	0.0014
27.	ANNUAL COST - POSITION ANNUAL COST - LAND		(LN12)(LN20)(LN	N21)(LN22)(LN25)	
28.			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	121)(LN23)(LN26)	
29. 30.	ANNUAL COST - BUILDING TOTAL ANNUAL COST		(LN27+LN28+LN		
31.	HARDWARE COST PER MINUTE		(LN30)/(LN15)	125)	
32.	HARDWARE COST FER MINUTE		(61430)/(61413)		
33.	VOICE AND DATA CIRCUITS				
34.	VOICE AND DATA CIRCOTTS	CIRCUITS/	UNIT	ANNUAL	ANNUAL
35.	CIRCUIT TERMINATION	MILES	INVESTMENT	COST FACTOR	COST
36.	CIRCUIT (357C)	272	\$134.45	0.0372	\$1,360
37.	LAND (20C)	272	\$0.34	0.0000	\$0
38.	BUILDING (10C)	272	\$5.58	0.0014	\$2
39.					
40.	CIRCUIT MILEAGE				
41.	AERIAL (822C)	28,119	\$0.08	0.0299	\$67
42.	BURIED (845C)	28,119	\$0.32	0.0235	\$211
43.	UNDERGROUND (85C)	28,119	\$0.08	0.0220	\$49
44.	POLE (1C)	28,119	\$0.02	0.0294	\$17
45.	CONDUIT (4C)	28,119	\$0.05	0.0146	\$21
46.	CIRCUIT (357C)	28,119	\$1.40	0.0372	\$1,464
47.	BUILDING (10C)	28,119	\$0.06	0.0014	\$2
48.	TOTAL ANNUAL COST				60.400
49.	TOTAL ANNUAL COST		SUM LN 36LN4	,	\$3,193
	CIRCUIT COST DED MINISTE		I NAON NAS		\$0.0002
	CIRCUIT COST PER MINUTE		LIN49/LIN15		φ(J.0002
	DASCC COST PER MINISTE, VOLUME REN	RITIVE	1 NR1 + 1 N61		\$0.0071
50. 51. 52. 53.	CIRCUIT COST PER MINUTE  DASCC COST PER MINUTE - VOLUME SEN	SITIVE	LN49/LN15 LN31 + LN51		

1.	FLORIDA		WORKPAPER 5
2.			PAGE 1 OF 1
3.	INWARD OPERATOR SERVICES ACCESS SERVICE		10/08/96
4.			
5.	DIRECT COST		
6.			
7.	OPERATOR SERVICE SYSTEM (OSS)		-
8.	DEMAND - CALLS, 1996		
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		0.2723
18.			
19.	ANNUALIZED COST	((LN15A) + (8xLN15B)) x LN17	\$2,578,644
20.	100 TO TO THE THE TO TH		
21	DIRECT COST PER CALL - VOLUME INSENSITIVE	LN19/LN9	\$0.0224

1.	FLORIDA	<b>WORKPAPER 6</b>
2.		PAGE 1 OF 1
3.	INWARD OPERATOR SERVICES ACCESS SERVICE	10/08/96
4.		
5.	DIRECT COST	
6.		
7.	VERIFICATION/INTERRUPT CALLS	-
8.	OSC TO LATA	
9.		
10.	COST PER MINUTE	\$0.0015
11.	MINUTES PER CALL - VERIFICATION FUNCTION	0.10
12.	MINUTES PER CALL - VERIFICATION & INTERRUPT FUNCTION	0.20
13.		
14.	DIRECT COST PER CALL,	
15.	VERIFICATION - VOLUME SENSITIVE LN10xLN11	\$0.0002
16.		
17.	DIRECT COST PER CALL,	
18.	EMERGENCY INTERRUPT - VOLUME SENSITIVE LN10xLN12	\$0.0003

## **FLORIDA**

# INWARD OPERATOR SERVICES ACCESS SERVICE

# SPECIFIC STUDY ASSUMPTIONS

Cost study assumptions are as follows:

Software expenses were projected to the 1997-1999 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.

# **FLORIDA**

# INWARD OPERATOR SERVICES ACCESS SERVICE

# **FACTORS AND LOADINGS**

Following are the annual TELRIC factors, miscellaneous loadings and labor rates used in the Inward Operator Services Access Service cost study.

		1996		1997-1999
Directly Assigned H Operator, JFC 212	ourly Labor Rates: (Regional) 20	\$30.04		\$32.09
Directly Attributed S	Shared and Common			
Hourly Labor Rates:				
Operator, JFC 212	20	\$9.47		\$10.12
Labor Levelization F	Factor From 1996 (Attached)		1.0683	
Hardware Inflation F	Rate 377C (Regional)		1.000	
Amortization Factor	(5 Years @ 11.25%)		0.2723	
Miscellaneous Com	non Equipment			
and Power Factor	377C (Florida)		1.0974	
Gross Receipts Tax	Factor (Florida)		1.0153	
Land Loading	20C (Florida)		0.0047	
Building Loading	10C (Florida)		0.0657	
Annual TELRIC Fac	ctors (Attached)			

# Labor Levelization Factor Base Year 1996

# Labor Inflation Factors

1. 1997	1.034
2. 1998	1.035
3. 1999	1.036
Present Worth Factors @ 11.25%	
4. 1997	0.8989
5. 1998	0.8080
6. 1999	0.7263
Labor Levelization Factor ((LN1 x LN4) + (LN1 x LN2 x LN5) + (LN1 x LN2 x LN3 x LN6))/	
((LN1 x LN4) + (LN1 x LN2 x LN3) + (LN1 x LN2 x LN3)) (LN4 + LN5 + LN6)	1.0683

DDC-15

# FLORIDA



# EMERGENCY CALL TRACE

TELRIC COST STUDY DOCUMENTATION

SECTIONS A THRU 7

## FLORIDA

# EMERGENCY CALL TRACE

# 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 - Usage

Workpaper - Development of Usage Costs

SECTION 5 Cost Development - Nonrecurring

Workpaper - Development of Nonrecurring Costs

SECTION 6 Specific Study Assumptions

SECTION 7 Factors and Loadings

# SECTION A

#### SECTION A

## FLORIDA EMERGENCY CALL TRACE

#### PROPRIETARY RATIONALE

The Emergency Call Trace Cost Study contains actual unit cost information for discrete cost elements. 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 Emergency Call Trace Cost Study is considered proprietary.

### FLORIDA EMERGENCY CALL TRACE

#### INTRODUCTION AND OVERVIEW

This Total Element Long Run Incremental Cost (TELRIC) study is being provided to support Emergency Call Trace. The costs presented in this study are based on the TELRIC methodology established by the FCC's First Report and Order in CC Docket 96-98 (FCC Order) released August 8, 1996.

Emergency Call Trace is an arrangement offered to Alternative Local Exchange Company (ALECs) for the purpose of allowing emergency agencies to trace live calls originating from central offices belonging to BellSouth and terminating in the ALEC's central office.

When an emergency agency requests a live call trace, the BellSouth operator immediately transfers the call to the In-Charge supervisor. The In-Charge supervisor uses BellSouth's Corporate network to call the Network Reliability Center and request a live call trace. After the number being traced is determined, this information is relayed to the emergency agency.

### FLORIDA EMERGENCY CALL TRACE

#### DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of Total Element Long Run Incremental Costs (TELRIC) supporting the Emergency Call Trace.

The purpose of the TELRIC methodology established by the FCC order is to set the rates for interconnection and unbundled network elements. The basis for a TELRIC study is forward looking long run economic cost methodology. Volume sensitive and volume insensitive costs are identified to develop the direct costs caused by providing the particular network element being studied. TELRIC methodology anticipates pricing of elements in a wholesale network company; hence, many costs regarded as common or shared and, therefore, excluded from BellSouth's direct cost methodology would be included as directly attributable in a TELRIC study. The FCC pricing methodology also specifies that, over and above TELRIC, the additional portion of forward-looking common costs that cannot be directly attributed to any particular network element will be allocated among the cost elements. This TELRIC study includes both recurring (capital and operating expenses) and nonrecurring (provisioning) costs.

#### THE DEVELOPMENT OF USAGE COSTS

The study utilizes Bellcore's Network 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.

The usage cost per minute to BellSouth Telecommunications, Inc., results from the capital investments necessary to provide Emergency Call Trace. These costs represent a forward-looking view of technology and deployment and include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs consist of plant specific expenses and ad valorem taxes. These expenses contribute to the ongoing cost to the Company associated with the initial capital investment. Also included in TELRIC usage are shared and common costs directly attributable to the network element. Gross receipts tax is calculated on the TELRIC.

The first step in developing a TELRIC study for Emergency Call Trace is to determine Network usage on a per minute basis. This is accomplished through the use of Bellcore's NCAT model (Network Cost Analysis Tool Version 4.1).

Next, Network usage on a per minute basis is multiplied by the Gross Receipts Tax Factor to develop the TELRIC Network Usage Cost per minute for Emergency Call Trace.

The directly attributable shared and common cost components of the TELRIC annual cost factors are calculated as follows. First, a detailed analysis of the forward-looking direct costs is performed. The remaining costs of doing business are then analyzed to determine whether they are directly attributable shared and common costs that cannot be reasonable attributed to network elements.

Next, the directly attributable shared and common costs are projected forward and segregated by the functional areas to which they are related. The functional areas are wholesale operations, retail services operations, and combined wholesale and retail services operations. Attribution factors based on the specific wholesale functional area, such as central office equipment (COE) investment, COE salary and wages, etc. are then developed and applied to the respective costs. These attributed costs are accumulated by related network investment category, such as pair gain equipment, buried cable, etc. and attributed shared cost factors are developed. These attributed share cost factors are then included as a component of the TELRIC annual cost factors by investment category. All directly attributed costs related to retail services operations are excluded.

The common cost allocation factor is applied to TELRIC to produce the forward looking economic cost, as defined by the FCC Order, Appendix B, Section 51.505, which includes an appropriate share of common costs. The common cost allocation factor is calculated by summing all wholesale costs that cannot be reasonable attributed to specific elements, services or functions and dividing by the sum of the directly assignable and directly attributable wholesale costs.

#### DEVELOPMENT OF MONRECURRING COSTS

Nonrecurring costs are "one-time" costs incurred as a result of provisioning Emergency Call Trace. The first step in developing nonrecurring costs is to determine the cost elements related to the study. These cost elements are then defined 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, as identified by individuals knowledgeable about and/or responsible for performing these functions, are used to describe the flow of work within the various work centers involved. Provisioning costs are developed by multiplying the work time for each work function by the TELRIC labor rate for the work group performing the function. The gross receipts tax is applied to develop the total nonrecurring cost.

The TELRIC labor rates are calculated as follows. Salary and wages, as used in the determination of TELRIC annual labor rates, are accumulated on a basis consistent with specific force groups. Shared costs attributable to salaries and wages are then accumulated on a basis consistent with the development of the respective force group's labor rate. A factor is then developed for each force group by dividing the attributed shared costs (human resources, office equipment, motor vehicles, land and building space, etc.) by the related salaries and wages. This factor is then applied to the salary and wage portion of the incremental labor rate to determine the TELRIC labor rate.

The common cost allocation factor is applied to the nonrecurring TELRIC to produce the forward looking nonrecurring economic cost, as defined by the FCC Order, Appendix B, Section 51.505, which includes an appropriate share of common costs.

#### FLORIDA EMERGENCY CALL TRACE

#### SUMMARY OF RESULTS

This section contains a cost summary for the Total Element Long Run Incremental Cost (TELRIC) per minute for Emergency Call Trace.

#### Emergency Call Trace

	TELRIC
Call Trace Cost / minute	\$2.92
Common Cost Allocation Factor	1.0804
TELRIC COST PER MINUTE	\$3.15

#### FLORIDA EMERGENCY CALL TRACE

#### COST DEVELOPMENT - RECURRING

This section defines the cost development of the recurring Total Element Long Run Incremental Costs (TELRIC) for Emergency Call Trace.

Generally, economic cost development is outlined in Section 2. Network architecture is determined; the necessary equipment is identified; and material prices are obtained. TELRIC annual cost factors are then applied to convert the investment to cost.

Workpaper 1 develops the volume sensitive costs, which include the network components used by Emergency Call Trace. Note that the cost for Operator Handled is used as a surrogate for the cost for corporate network.

#### Network Usage Cost Development

Network Cost Analysis Tool - Production Module (NCAT), Version 4.1 is used to develop TELRIC for Operated Handled Network Usage. NCAT is a large scale personal computer system, maintained and developed by Bellcore. NCAT calculates the incremental cost of traffic on the public switched telephone network on a per minute and message charging basis.

NCAT calculates the cost (capital related and operation) of traffic, starting with the originating switch, over the network through the available trunk groups, the tandem switches, and ends at the terminating switch. Costs are calculated for all possible network routes, and a composite cost is developed on the overflow traffic characteristic of the network.

	Emergency Call Trace Development of Usage Cost			State: Workpaper: Page: Date:	FLORIDA 1 1 of 1 7-Oct-96
	LEVEL 1997 - 1999				
			Direct	Directly Attributed Shared & Common	TELDIC
	Description	Source	Cost	Costs	TELRIC
1 2	Cost per min for Network Usage	NCAT(Operator Handled)			
3	Gross Receipts Tax Factor	BST Fundamental Cost	1.0153		1.0153
5	Total Cost per minute	Ln1xLn3			
7	Network and Operator Services cost/min	Wp2 Ln9			
9 10 11 12	Call Trace Cost / Minute	Ln5 + Ln7			\$2.92

<sup>\*</sup>Directly Attributed Shared & Common Costs are developed by calculating the difference between TELRIC costs and Direct costs.

#### FLORIDA EMERGENCY CALL TRACE

#### COST DEVELOPMENT - MONRECURRING

Nonrecurring Total Element Long Run Incremental Costs (TELRIC) are one-time costs incurred as a result of provisioning and completion of orders initiated by a customer requesting Emergency Call Trace. The first step in developing nonrecurring costs is to determine the cost elements related to the study. These cost elements are then defined by all of the individual work functions required to provision the cost element. The work function times, as identified by individuals knowledgeable about and/or responsible for performing these functions, are used to describe the flow of work within the Network Reliability Center (NRC) and Operator Services. 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 levelized TELRIC labor rate. The labor inflation factors (LIF) are used to bring the labor rates to the appropriate study period. The labor rates and the labor inflation factors are shown in Section 7.

Description	(Figure)	P	C C	a°b°c
1 Network Reliability Center (NRC)		\$78.51	1.0153	
2				
3 Operator Services		\$57.38	1.0153	
5 Total Nonrecurring Cost				
6				
7 Average Trace (minutes)				
8				
9 Emergency Call Trace Cost per minute				

#### FLORIDA EMERGENCY CALL TRACE

#### SPECIFIC STUDY ASSUMPTIONS

The cost study for Emergency Call Trace is based on Total Element Long Run Incremental Cost (TELRIC) methodology prescribed by the FCC's First Report and Order in CC Docket 96-98 released August 8, 1996, in addition to Network deployment strategies.

Cost study assumptions are as follows:

- The call to be traced must terminate in a central office belonging to the ALEC.
- The cost for the corporate network is the same as the cost for Operator Handled Service on a per minute basis.

#### FLORIDA EMERGENCY CALL TRACE

#### FACTORS AND LOADINGS

Following are the Total Element Long Run Incremental Cost (TELRIC) factors and loadings used in the Emergency Call Trace cost study:

Gross Receipts Tax Factor

0.0153

Directly Assigned Hourly Labor Rates

	1996	Levelized
Network Reliability Center (NRC)	\$71.62	\$76.51
Operator Services	\$53.71	\$57.38

To create a levelized labor rate from a 1996 Labor Rate:

1996 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

#### Labor Inflation

Year 1 3.4% Year 2 3.5% Year 3 3.6%

#### FLORIDA EMERGENCY CALL TRACE

#### FACTORS AND LOADINGS (continued)

Following are the Total Element Long Run Incremental Cost (TELRIC) annual cost factors and loadings used by NCAT in the development of Network Usage Cost used in the Emergency Call Trace cost study:

#### Annual Cost Factors excluding Gross Receipts Tax Factor:

	Direct	TELRIC
10C	0.1706	0.1720
20C	0.1493	0.1493
357C	0.2343	0.2715
377C	0.2322	0.2756
811C	0.1869	0.2163
822C	0.1838	0.2137
845C	0.1738	0.1973
84C	0.1408	0.1554
85C	0.1781	0.2001

#### In-Plant Factor:

Telco 377C

1.1705

#### Miscellaneous Common Equipment and Power Loadings:

377C

1.0974

#### Land and Building COE Loadings:

10C 0.0657 20C 0.0047

# FLORIDA



# DIRECTORY ASSISTANCE ACCESS SERVICE

TELRIC COST STUDY DOCUMENTATION

SECTIONS A THRU 6

#### **FLORIDA**

# DIRECTORY ASSISTANCE ACCESS 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 TELRIC
SECTION 5	SPECIFIC STUDY ASSUMPTIONS
SECTION 6	FACTORS AND LOADINGS

### **SECTION A**

#### SECTION A

#### FLORIDA

#### DIRECTORY ASSISTANCE ACCESS SERVICE

#### PROPRIETARY RATIONALE

The Directory Assistance Access Study contains actual unit cost information for discrete cost elements. 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.

#### **FLORIDA**

### DIRECTORY ASSISTANCE ACCESS SERVICE INTRODUCTION AND OVERVIEW

This Total Element Long Run Incremental Cost (TELRIC) study is being provided to support Directory Assistance Access Service. The costs presented in this study are based on the TELRIC methodology established by the Federal Communication Commission's (FCC's) First Report and Order in CC Docket 96-98 (FCC Order) released August 8, 1996.

Directory Assistance (DA) Access Service will be offered for the purpose of allowing a facilities based Local Exchange service provider end user to access a BellSouth DA location for telephone number listing requests.

Directory Assistance will be provided to facilities based Local Exchange service providers via modified Feature Group C "traditional signaling". Local Exchange service provider subscribers will deliver DA calls to a BellSouth Directory Assistance Location(s) via application specific interconnection trunks. Traffic types other than DA calls may not originate via these trunks. BellSouth will only provide those listings which reside in our Directory Assistance DataBase. Addresses provided via Directory Assistance may not reflect the location of the phone.

The rate for Directory Assistance Access Service for Local Exchange service providers will be on a per call basis. A call is defined as a call which reaches a BellSouth DA Location.

The basic DA Access Service offering does not include the following:

- Access to Non-Pub, Non-List numbers
- Reverse Search

Directory Assistance Access Service 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.

The Operator Service System is a software package that allows a tandem switch to act as an automated call distributor and direct a DA call to the active operator position that has been idle for the longest period.

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.

A long run analysis is performed to ensure that the time period studied is sufficient to capture all forward looking costs affected by the business decision.

The recurring costs presented in this study are levelized so as to be appropriate for the 1997 - 1999 study period. These costs are developed by using 1996 level TELRIC loadings and labor rates designed to produce TELRIC results.

#### **FLORIDA**

#### DIRECTORY ASSISTANCE ACCESS SERVICE

#### DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of the Total Element Long Run Incremental Costs (TELRIC) supporting Directory Assistance Access Service.

The purpose of the TELRIC methodology established by the FCC order is to set the rates for interconnection and unbundled network elements. The basis for a TELRIC study is forward looking long run economic cost methodology. Volume sensitive and volume insensitive costs are identified to develop the direct costs caused by providing the particular network element being studied. TELRIC methodology anticipates pricing of elements in a wholesale network company. Many costs regarded as common or would be included as directly attributable in a TELRIC study. The FCC pricing methodology also specifies that, over and above TELRIC, the additional portion of forward looking common costs that cannot be directly attributed to any particular network element will be allocated among the cost elements. TELRIC includes both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs. There are no nonrecurring costs associated with Directory Assistance Access Service.

The per unit costs to BellSouth Telecommunications, Inc. resulting from the capital investments necessary to provide a service are called recurring costs. Recurring costs represent a forward-looking view of technology and deployment and include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs consist of plant specific expenses and ad valorem taxes. These expenses contribute to the ongoing cost to the Company associated with the initial capital investment. Recurring costs may also be noninvestment related, such as expensed labor, feature specific software and contract expenses. Also included in the recurring TELRIC are shared and common costs directly attributable to the network element. Gross receipts tax is calculated on the TELRIC.

The first step in developing a TELRIC study for Directory Assistance is to determine the forward-looking network architecture. Prices for the 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. 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. Next, 1996 level TELRIC Annual Cost Factors are used to calculate the direct cost of capital, plant specific 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 which includes directly attributable shared and common costs. Annual Total Element Long Run Incremental Costs by account codes are then summed and divided by the associated demand to arrive at a cost per cost element.

The directly attributable shared and common cost components of the annual TELRIC factors are calculated as follows. First, a detailed analysis of the forward looking directly assigned costs associated with the interconnect or unbundled network element is performed. The remaining costs of doing business are then analyzed to determine whether they are directly attributable shared and common costs that can be reasonably attributed to network elements.

Next, the directly attributable shared and common costs are projected forward and segregated to the appropriate functional areas. The functional areas are wholesale operations, retail services operations, and combined wholesale and retail services operations. Attribution factors based on the specific wholesale functional area, such as central office equipment (COE) investment, COE salary and wages, etc., are then developed and applied to the respective costs. These attributed costs are accumulated by related network investment category, such as pair gain equipment, buried cable, etc., and attributed shared cost factors are developed. These attributed shared cost factors are then included as a component of the TELRIC annual cost factors by investment category. All directly attributed costs related to retail services operations are excluded.

The common cost allocation factor is applied to TELRIC to produce the forward looking economic cost, as defined in the FCC Order, Appendix B, Section 51.505, which includes an appropriate share of common costs. The common cost allocation factor is calculated by summing all wholesale costs that cannot be reasonably attributed to specific elements, services or functions and dividing by the sum of the directly assignable and directly attributable wholesale costs.

#### **FLORIDA**

### DIRECTORY ASSISTANCE ACCESS SERVICE SUMMARY OF RESULTS

This section contains a cost summary for the Total Element Long Run Incremental Cost (TELRIC) for Directory Assistance Access Service..

COST PER CALL

#### DIRECTORY ASSISTANCE ACCESS SERVICE CALLS

TELRIC	\$0.2816
Common Cost Allocation Factor	1.0804
Total Cost	\$0.3042

#### **FLORIDA**

#### 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 TELRIC factors are applied to convert the investment to cost. Operator labor expense is directly identified.

#### Workpaper 1

Provides the summary of the Total Element Long Run Incremental Cost (TELRIC) for Directory Assistance Access Service.

#### 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 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.

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 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 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 1996 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 Administrative Database is developed separately from the Operations Databases, the Interactive Voice System (IVS) 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 an 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.

These costs are divided by the annual DA calls to develop the cost per call.

The following Workpapers detail this cost development.

#### DIRECTORY ASSISTANCE ACCESS SERVICE

#### SUMMARY OF COSTS

FLORIDA WORKPAPER 1 PAGE 1 OF 1 10/08/96

LINE	DESCRIPTION	SOURCE	TANOMA
1. 1	DIRECTORY ASSISTANCE SERVICE CALL		
2. (	OPERATOR LABOR		
3.	DIRECT COST	WP2,PG1,LN5	\$0.1808
4.	DIRECTLY ATTRIBUTED SHARED & COMMON COST	WP2,PG2,LN5	\$0.0578
5.			
6. (	OPERATOR SERVICE CENTER		
7.	DIRECT COST	WP2,PG1,LN9	\$0.0325
8.	DIRECTLY ATTRIBUTED SHARED & COMMON COST	WP2,PG2,LN9	\$0.0023
9.			
10. (	OPERATOR SERVICE SYSTEM		
11.	DIRECT COST	WP2,PG1,LN12	\$0.0007
12.			
13.	DA DATABASE		
14.	DIRECT COST	WP2,PG1,LN15	\$0.0030
15.	DIRECTLY ATTRIBUTED SHARED & COMMON COST	WP2,PG2,LN12	\$0.0003
16.			
17. (	GROSS RECEIPTS TAX (GRT) FACTOR		1.0153
18.			
19. [	DIRECT COST PER CALL W/ GRT	(LN3+LN7+LN11+LN14)xLN17	\$0.2203
20.			
21. [	DIRECTLY ATTRIBUTED SHARED & COMMON COST		
22.	PER CALL W/ GRT	(LN4+LN8+LN15)xLN17	\$0.0613
23.			
24. 1	TELRIC, PER CALL W/GRT	LN19+LN22	\$0.2816

### DIRECTORY ASSISTANCE ACCESS SERVICE DEVELOPMENT OF COST PER DA CALL

FLORIDA WORKPAPER 2 PAGE 1 OF 2 10/08/96

#### **DIRECT COST**

LINE	DESCRIPTION	SOURCE	AMOUNT
1.	ACTUAL WORK TIME (AWT), SECONDS - 1996		
2.			
3.	OPERATOR LABOR		
4.	DIRECT COST PER MINUTE	WP3,PG1,LN5	\$0.6062
5.	DIRECT COST PER DA CALL - VOLUME SENSITIVE	(LN1/60)xLN4	\$0.1808
6.			
7.	OSC		
8.	DIRECT COST PER MINUTE	WP4,PG1,LN45	\$0.1091
9.	DIRECT GOST PER DA CALL - VOLUME SENSITIVE	(LN1/60)xLN8	\$0.0325
10.			
11.	OSS		
12.	DIRECT COST PER DA CALL - VOLUME INSENSITIVI	E WP5,LN13	\$0.0007
13.			
14.	DA DATABASE		
15.	DIRECT COST PER DA CALL - VOLUME SENSITIVE	WP6,PG1,LN52	\$0.0030

6.		11.60	
7.	OSC		
8.	DASCC COST PER MINUTE	WP4,PG2,LN45	\$0.0076
9.	DASCC COST PER DA CALL - VOLUME SENSITIVE	(LN1/60)xLN8	\$0.0023
10.			
11.	DA DATABASE		
12	DASCC COST PER DA CALL - VOLUME SENSITIVE	WP6,PG2,LN50	\$0.0003

### DIRECTORY ASSISTANCE ACCESS SERVICE OPERATOR LABOR

FLORIDA WORKPAPER 3 PAGE 1 OF 2 10/08/96

#### DIRECT COST

LINE	DESCRIPTION	SOURCE	AMOUNT
		SHIP SERVICE	•
1.	OPERATOR LABOR PER PRODUCTIVE HOUR - 1997-1999		\$27.98
2.			
3.	RATIO PRODUCTIVE TO CALL PROCESSING HOURS		1.30
4.			
5.	OPERATOR DIRECT COST PER MINUTE - VOLUME SENSI	TVE (LN1/60) x LN3	\$0.6062

#### DIRECTORY ASSISTANCE ACCESS SERVICE OPERATOR LABOR

FLORIDA WORKPAPER 3 PAGE 2 OF 2 10/08/96

#### DIRECTLY ATTRIBUTED SHARED AND COMMON COST (DASCC)

LINE	DESCRIPTION	SOURCE	AMOUNT
No constitu			-
1.	OPERATOR LABOR PER PRODUCTIVE HOUR - 1997-1999		\$8.95
2. 3.	RATIO PRODUCTIVE TO CALL PROCESSING HOURS		1.30
4. 5.	OPERATOR DASCG COST PER MINUTE - VOLUME SENSI	TIVE (LN1/60) x LN3	\$0.1939

### DIRECTORY ASSISTANCE ACCESS SERVICE OPERATOR SERVICE CENTER (OSC)

DIRECT COST

FLORIDA WORKPAPER 4 PAGE 1 OF 2 10/08/96

POSITIONS, 1996 DEMAND - MINUTES, 1996				
DEMAND - MINUTES, 1996				681
SOFTWARE (1997-1999)				
WORKSTATION SOFTWARE, PER POSITION				
OPEN POSITION PROTOCOL, PER POSITION				
AMORTIZATION FACTOR				0.2723
SOFTWARE COST PER MINUTE	((LN1xLN7) x (LN	5+LN6))/LN2		
HARDWARE (1997-1999)				
INVESTMENT PER POSITION				
MCE&P FACTOR (377C)				1.0974
				0.0047
				0.0657
	TCH (377C)			0.2322
				0.1493
				0.1706
ANNUAL COST - POSITION (377C)	(LN1x(LN11xLN12	2))xLN15		
ANNUAL COST - LAND (20C)				
그는 하다 많은 자꾸 사람이 하게 되었다면서 되지 않아 나를 하는데 하는데 하게 되었다면서 하는데 없어요? 이 없는데 그는데 그를 하는데	20 Maria - C. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.			
	LN21/LN2	-		
VOICE AND DATA CIRCUITS (1997-1999)				
	CIRCUITS/	UNIT	ANNUAL	ANNUAL
CIRCUIT TERMINATION (FRC)		INVESTMENT	COST FACTOR	COST
	Baseman Company of the Company of th			
CIRCUIT (357C)	1.022	\$134.45	0.2343	\$32,195
	7.0	\$0.34	0.1493	\$52
		\$5.58	0.1706	\$973
CIRCUIT MILEAGE (FRC)				
그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그	90,103	\$0.08	0.1838	\$1,325
	90,103	\$0.32	0.1738	\$5,011
	90,103	\$0.08	0.1781	\$1,284
	90,103	\$0.02	0.1869	\$337
	90,103	\$0.05	0.1408	\$634
	90,103	\$1.40	0.2343	\$29,556
	90.103	\$0.06	0.1706	\$922
			-,,,,	****
TOTAL ANNUAL COST	SUM LN28. LN39			\$72,289
				,
CIRCUIT COST PER MINUTE	LN41/LN2			\$0.0009
				45.000
1	AMORTIZATION FACTOR SOFTWARE COST PER MINUTE  HARDWARE (1997-1999)  INVESTMENT PER POSITION MCE&P FACTOR (377C)  LAND FACTOR (20C) BUILDING FACTOR (10C) DIRECT ANNUAL COST FACTOR - DIGITAL SWID DIRECT ANNUAL COST FACTOR - BUILDING (10C) DIRECT ANNUAL COST FACTOR - BUILDING (10C) ANNUAL COST - POSITION (377C) ANNUAL COST - BUILDING (10C) TOTAL ANNUAL COST HARDWARE COST PER MINUTE  VOICE AND DATA CIRCUITS (1997-1999)  CIRCUIT TERMINATION (FRC)  CIRCUIT (357C) LAND (20C) BUILDING (10C)  CIRCUIT MILEAGE (FRC) AERIAL (822C) BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C) BUILDING (10C)  TOTAL ANNUAL COST CIRCUIT COST PER MINUTE	AMORTIZATION FACTOR SOFTWARE COST PER MINUTE  HARDWARE (1997-1999)  INVESTMENT PER POSITION  MCE&P FACTOR (377C)  LAND FACTOR (20C)  BUILDING FACTOR (10C)  DIRECT ANNUAL COST FACTOR - DIGITAL SWITCH (377C)  DIRECT ANNUAL COST FACTOR - BUILDING (10C)  ANNUAL COST - POSITION (377C)  ANNUAL COST - LAND (20C)  ANNUAL COST - BUILDING (10C)  TOTAL ANNUAL COST  HARDWARE COST PER MINUTE  VOICE AND DATA CIRCUITS (1997-1999)  CIRCUIT TERMINATION (FRC)  CIRCUIT (357C)  LAND (20C)  BUILDING (10C)  CIRCUIT MILEAGE (FRC)  AERIAL (822C)  BURIED (845C)  UNDERGROUND (85C)  POLE (1C)  CONDUIT (4C)  CIRCUIT (357C)  BUILDING (10C)  SUM LN28.LN39  FOTAL ANNUAL COST  SUM LN28.LN39	AMORTIZATION FACTOR SOFTWARE COST PER MINUTE  HARDWARE (1997-1999) INVESTMENT PER POSITION MCEAP FACTOR (377C) LAND FACTOR (20C) BUILDING FACTOR (10C) DIRECT ANNUAL COST FACTOR - DIGITAL SWITCH (377C) DIRECT ANNUAL COST FACTOR - LAND (20C) DIRECT ANNUAL COST FACTOR - BUILDING (10C) ANNUAL COST - POSITION (377C) ANNUAL COST - LAND (20C) ANNUAL COST - LAND (20C) ANNUAL COST - BUILDING (10C) ANNUAL COST - BUILDING (10C) CIN1x(LN11xLN12xLN13))xLN16 (LN1x(LN11xLN12xLN14))xLN17 TOTAL ANNUAL COST HARDWARE COST PER MINUTE  VOICE AND DATA CIRCUITS (1997-1999) CIRCUIT TERMINATION (FRC)  CIRCUIT (357C) AERIAL (822C) BUILDING (10C) CIRCUIT MILEAGE (FRC) AERIAL (822C) BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C) BUILDING (10C)  FOTAL ANNUAL COST BUILDING (10C)  FOTAL ANNUAL COST SUM LN28.LN39  CIRCUIT COST PER MINUTE  LN41/LN2	AMORTIZATION FACTOR SOFTWARE COST PER MINUTE  ((LN1xLN7) x (LN5+LN6))/LN2  HARDWARE (1997-1999)  INVESTMENT PER POSITION MCEAP FACTOR (377C)  LAND FACTOR (20C)  BUILDING FACTOR (10C)  DIRECT ANNUAL COST FACTOR - DIGITAL SWITCH (377C)  DIRECT ANNUAL COST FACTOR - BUILDING (10C)  ANNUAL COST - POSITION (377C)  ANNUAL COST - POSITION (377C)  CANNUAL COST - LAND (20C)  ANNUAL COST - BUILDING (10C)  CINTX (LN1x (LN11xLN12xLN13)) xLN16  (LN1x (LN11xLN12xLN14)) xLN17  TOTAL ANNUAL COST  HARDWARE COST PER MINUTE  CIRCUIT (357C)  LAND (20C)  CIRCUIT (357C)  LAND (20C)  BUILDING (10C)  CIRCUIT (357C)  AERIAL (822C)  BUILDING (10C)  AERIAL (822C)  PO.103  SO.08  O.1838  BUILDING (10C)  CIRCUIT (357C)  AERIAL (822C)  PO.103  SO.08  O.1738  UNDERGROUND (85C)  PO.103  SO.08  O.1738  UNDERGROUND (85C)  PO.103  SO.08  O.1738  UNDERGROUND (85C)  PO.103  SO.08  O.1781  POLE (1C)  CONDUIT (4C)  PO.103  SO.05  O.1406  CIRCUIT (357C)  PO.103  SO.05  O.1406  CIRCUIT (357C)  PO.103  SO.05  O.1406  CIRCUIT (357C)  PO.103  SO.05  O.1706  TOTAL ANNUAL COST  SUM LN28.LN39  CIRCUIT COST PER MINUTE

#### DIRECTLY ATTRIBUTED SHARED AND COMMON COST (DASCC)

LINE	DESCRIPTION	SOURCE			- AMOUNT	
1.	POSITIONS, 1996				681	
2.						
3.	DELLAND ANNUMER 1999					
4.	DEMAND - MINUTES, 1996					
5.						
6. 7.						
8.						
9.	HARDWARE (1997-1999)					
10.	HANDWANE (1991-1999)					
11.	INVESTMENT PER POSITION					
12.	MCE&P FACTOR (377C)				1.0974	
13.	LAND FACTOR (20C)				0.0047	
14.	BUILDING FACTOR (10C)				0.0657	
15.	DASCC ANNUAL COST FACTOR - DIGITAL	SWITCH (377C)			0.0434	
16.	DASCC ANNUAL COST FACTOR - LAND (2				0.0000	
17.	DASCC ANNUAL COST FACTOR - BUILDIN				0.0014	
18.						
19.	ANNUAL COST - LAND (20C)					
20.	ANNUAL COST - BUILDING (10C)	(LN1x(LN11xLN1				
21.	TOTAL ANNUAL COST LN18+LN19+LN20					
22.	HARDWARE COST PER MINUTE	LN21/LN4				
23.						
24.	VOICE AND DATA CIRCUITS (1997-1999)					
25.		CIRCUITS/	UNIT	ANNUAL	ANNUAL	
26.	CIRCUIT TERMINATION (FRC)	MILES	INVESTMENT	COST FACTOR	COST	
27.				THE RESERVE OF THE PARTY OF THE PARTY.		
28.	CIRCUIT (357C)	1,022	\$134.45	0.0372	\$5,112	
29.	LAND (20C)	1,022	\$0.34	0.0000	\$0	
30.	BUILDING (10C)	1,022	\$5.58	0.0014	\$8	
31.						
32.	CIRCUIT MILEAGE (FRC)					
33.	AERIAL (822C)	90,103	\$0.08	0.0299	\$216	
34.	BURIED (845C)	90,103	\$0.32	0.0235	\$678	
35.	UNDERGROUND (85C)	90,103	\$0.08	0.0220	\$159	
36.	POLE (1C)	90,103	\$0.02	0.0294	\$53	
37.	CONDUIT (4C)	90,103	\$0.05	0.0146	\$66	
38.	CIRCUIT (357C)	90,103	\$1.40	0.0372	\$4,693	
39.	BUILDING (10C)	90,103	\$0.06	0.0014	\$8	
40. 41.	TOTAL ANNUAL COST	SUM LN28LN39			\$10,993	
41.	TOTAL ANNUAL COST	SUM LINZOLINS			\$10,993	
43.	CIRCUIT COST PER MINUTE	LN41/LN4			\$0.0001	
44.	CINCOLL COOL FER MINIOLE	D1411014			₩0.0001	
45.	DASCC COST PER MINUTE - VOLUME SENS	OTRIC I NOOLI NAS	CACON PROMOTOR SOCIAL	MANAGER STREET, STREET	\$0,0076	

### DIRECTORY ASSISTANCE ACCESS SERVICE OPERATOR SERVICE SYSTEM (OSS)

DIRECT COST

FLORIDA WORKPAPER 5 PAGE 1 OF 1 10/08/96

LINE	DESCRIPTION	SOURCE	AMOUNT
1.	DEMAND - 1996		
2.	DIRECTORY ASSISTANCE CALLS		
3.			
4.	DA		
5.	SOFTWARE EXPENSE PER TANDEM (1997-1999)		
6.			
7.	TANDEM SWITCHES		9
8.			
9.	DA SOFTWARE EXPENSE	LN5 x LN7	\$745,542
10.			
11.	AMORTIZATION FACTOR		0.2723
12.			
13.	DIRECT COST PER DA CALL - VOLUME INSENSITIVE	(LN9xLN11)/LN2	\$0.0007

#### DIRECTORY ASSISTANCE ACCESS SERVICE REGIONAL DA DATABASE SYSTEM

**FLORIDA WORKPAPER 6** PAGE 1 OF 2 10/08/96

#### DIRECT COST

1.	ADMINISTRATIVE DATABASE (1997-1999)				-
2.	HARDWARE INVESTMENT - VOLUME INSENSITIVE				
3.	SOFTWARE EXPENSE - VOLUME INSENSITIVE				
4.	OPERATIONS DATABASES (1997-1999)				
5.	HARDWARE INVESTMENT - VOLUME SENSITIVE				
6.	IVS HARDWARE - VOLUME SENSITIVE				
7.	SOFTWARE EXPENSE - VOLUME SENSITIVE				
8.	IVS SOFTWARE - VOLUME SENSITIVE				0.0042
9.	LAND FACTOR (20C)				0.0042
10.	BUILDING FACTOR (10C)				0.0706
11.	MISCELLANEOUS POWER & COMMON EQUIP. FAC	TOR (377C)			1.0980
12.	DIRECT ANNUAL COST FACTOR (377C)				0.2412
13.	DIRECT ANNUAL COST FACTOR (20C)				0.1486
14.	DIRECT ANNUAL COST FACTOR (10C)				0.1679
15.	AMORTIZATION FACTOR				0.2723
16.	ANNUAL COST				
17.	ADMINISTRATIVE DATABASE	Miles de la constante de la co			
18.	HARDWARE	LN2xLN11xL	N12		
19.	SOFTWARE	LN3xLN15			
20.	LAND	LN2xLN11xL			
21.	BUILDING	LN2xLN11xL	N10xLN14		
22.	OPERATIONS DATABASE				
23.	HARDWARE	(LN5+LN6)xl	N11xLN12		
24.	SOFTWARE	(LN7+LN8)xl	N15		
25.	LAND	(LN5+LN6)xl	.N11xLN9xLN13		
26.	BUILDING	(LN5+LN6)xl	N11xLN10xLN1	4	
27.					
28.	1.544 MB/S LINKS, ADMIN AND				
28. 29.	1.544 MB/S LINKS, ADMIN AND OSC TO DATABASE (1997-1999)	CIRCUITS/	UNIT	ANNUAL	ANNUAL
5 7 7 7 7 7 7		CIRCUITS/ MILES	UNIT INVESTMENT	ANNUAL COST FACTOR	ANNUAL COST
29.					COST
29. 30.	OSC TO DATABASE (1997-1999)				
29. 30. 31.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC)  CIRCUIT (357C)	MILES	INVESTMENT	COST FACTOR	COST
29. 30. 31. 32.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC)  CIRCUIT (357C)  LAND (20C)	MILES 73	\$1,748.56	COST FACTOR 0.2327	COST \$29,703
29. 30. 31. 32. 33.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC)  CIRCUIT (357C)	73 73	\$1,748.56 \$4.34	0.2327 0.1486	\$29,703 \$47
29. 30. 31. 32. 33. 34.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC)  CIRCUIT (357C)  LAND (20C)	73 73	\$1,748.56 \$4.34	0.2327 0.1486	\$29,703 \$47
29. 30. 31. 32. 33. 34. 35.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC)  CIRCUIT (357C)  LAND (20C)  BUILDING (10C)	73 73	\$1,748.56 \$4.34	0.2327 0.1486	\$29,703 \$47
29. 30. 31. 32. 33. 34. 35.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC) CIRCUIT (357C) LAND (20C) BUILDING (10C)  CIRCUIT MILEAGE (FRC) AERIAL (822C)	73 73 73 73	\$1,748.56 \$4.34 \$72.48	0.2327 0.1486 0.1679	\$29,703 \$47 \$888
29. 30. 31. 32. 33. 34. 35. 36.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC) CIRCUIT (357C) LAND (20C) BUILDING (10C)  CIRCUIT MILEAGE (FRC) AERIAL (822C) BURIED (845C)	73 73 73 73	\$1,748.56 \$4.34 \$72.48	0.2327 0.1486 0.1679	\$29,703 \$47 \$888 \$8,262
29. 30. 31. 32. 33. 34. 35. 36. 37.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC) CIRCUIT (357C) LAND (20C) BUILDING (10C)  CIRCUIT MILEAGE (FRC) AERIAL (822C)	73 73 73 73 24,022 24,022	\$1,748.56 \$4.34 \$72.48 \$1.86 \$6.59	0.2327 0.1486 0.1679 0.1849 0.1747	\$29,703 \$47 \$888 \$8,262 \$27,656
29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC) CIRCUIT (357C) LAND (20C) BUILDING (10C)  CIRCUIT MILEAGE (FRC) AERIAL (822C) BURIED (845C) UNDERGROUND (85C)	73 73 73 73 24,022 24,022 24,022	\$1,748.56 \$4.34 \$72.48 \$1.86 \$6.59 \$1.86	0.2327 0.1486 0.1679 0.1849 0.1747 0.1781	\$29,703 \$47 \$888 \$8,262 \$27,656 \$7,958
29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC) CIRCUIT (357C) LAND (20C) BUILDING (10C)  CIRCUIT MILEAGE (FRC) AERIAL (822C) BURIED (845C) UNDERGROUND (85C) POLE (1C)	73 73 73 73 24,022 24,022 24,022 24,022 24,022	\$1,748.56 \$4.34 \$72.48 \$1.86 \$6.59 \$1.86 \$0.44	0.2327 0.1486 0.1679 0.1849 0.1747 0.1781 0.1922	\$29,703 \$47 \$888 \$8,262 \$27,656 \$7,958 \$2,031
29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC) CIRCUIT (357C) LAND (20C) BUILDING (10C)  CIRCUIT MILEAGE (FRC) AERIAL (822C) BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C)	73 73 73 73 24,022 24,022 24,022 24,022 24,022 24,022	\$1,748.56 \$4.34 \$72.48 \$1.86 \$6.59 \$1.86 \$0.44 \$1.10	0.2327 0.1486 0.1679 0.1849 0.1747 0.1781 0.1922 0.1395	\$29,703 \$47 \$888 \$8,262 \$27,656 \$7,958 \$2,031 \$3,636
29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC) CIRCUIT (357C) LAND (20C) BUILDING (10C)  CIRCUIT MILEAGE (FRC) AERIAL (822C) BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C)	73 73 73 73 24,022 24,022 24,022 24,022 24,022 24,022 24,022	\$1,748.56 \$4.34 \$72.48 \$1.86 \$6.59 \$1.86 \$0.44 \$1.10 \$29.84	0.2327 0.1486 0.1679 0.1849 0.1747 0.1781 0.1922 0.1395 0.2327	\$29,703 \$47 \$888 \$8,262 \$27,656 \$7,958 \$2,031 \$3,636 \$166,600 \$5,001
29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC) CIRCUIT (357C) LAND (20C) BUILDING (10C)  CIRCUIT MILEAGE (FRC) AERIAL (822C) BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C) BUILDING (10C)	73 73 73 73 24,022 24,022 24,022 24,022 24,022 24,022 24,022	\$1,748.56 \$4.34 \$72.48 \$1.86 \$6.59 \$1.86 \$0.44 \$1.10 \$29.84 \$1.24	0.2327 0.1486 0.1679 0.1849 0.1747 0.1781 0.1922 0.1395 0.2327	\$29,703 \$47 \$888 \$8,262 \$27,656 \$7,958 \$2,031 \$3,636 \$166,600 \$5,001
29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC) CIRCUIT (357C) LAND (20C) BUILDING (10C)  CIRCUIT MILEAGE (FRC) AERIAL (822C) BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C)	73 73 73 73 24,022 24,022 24,022 24,022 24,022 24,022 24,022	\$1,748.56 \$4.34 \$72.48 \$1.86 \$6.59 \$1.86 \$0.44 \$1.10 \$29.84 \$1.24	0.2327 0.1486 0.1679 0.1849 0.1747 0.1781 0.1922 0.1395 0.2327	\$29,703 \$47 \$888 \$8,262 \$27,656 \$7,958 \$2,031 \$3,636 \$166,80
29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC)     CIRCUIT (357C)     LAND (20C)     BUILDING (10C)  CIRCUIT MILEAGE (FRC)     AERIAL (822C)     BURIED (845C)     UNDERGROUND (85C)     POLE (1C)     CONDUIT (4C)     CIRCUIT (357C)     BUILDING (10C)  TOTAL ANNUAL COST	73 73 73 73 24,022 24,022 24,022 24,022 24,022 24,022 24,022	\$1,748.56 \$4.34 \$72.48 \$1.86 \$6.59 \$1.86 \$0.44 \$1.10 \$29.84 \$1.24	0.2327 0.1486 0.1679 0.1849 0.1747 0.1781 0.1922 0.1395 0.2327	\$29,703 \$47 \$888 \$8,262 \$27,656 \$7,958 \$2,031 \$3,636 \$166,600 \$5,001
29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC) CIRCUIT (357C) LAND (20C) BUILDING (10C)  CIRCUIT MILEAGE (FRC) AERIAL (822C) BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C) BUILDING (10C)	73 73 73 73 24,022 24,022 24,022 24,022 24,022 24,022 24,022	\$1,748.56 \$4.34 \$72.48 \$1.86 \$6.59 \$1.86 \$0.44 \$1.10 \$29.84 \$1.24	0.2327 0.1486 0.1679 0.1849 0.1747 0.1781 0.1922 0.1395 0.2327	\$29,703 \$47 \$888 \$8,262 \$27,656 \$7,958 \$2,031 \$3,636 \$166,600 \$5,001
29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC) CIRCUIT (357C) LAND (20C) BUILDING (10C)  CIRCUIT MILEAGE (FRC) AERIAL (822C) BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C) BUILDING (10C)  TOTAL ANNUAL COST  ANNUAL CALLS, REGIONAL - 1996	73 73 73 73 24,022 24,022 24,022 24,022 24,022 24,022 24,022	\$1,748.56 \$4.34 \$72.48 \$1.86 \$6.59 \$1.86 \$0.44 \$1.10 \$29.84 \$1.24	0.2327 0.1486 0.1679 0.1849 0.1747 0.1781 0.1922 0.1395 0.2327	\$29,703 \$47 \$888 \$8,262 \$27,656 \$7,958 \$2,031 \$3,636 \$166,600 \$5,001
29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC) CIRCUIT (357C) LAND (20C) BUILDING (10C)  CIRCUIT MILEAGE (FRC) AERIAL (822C) BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C) BUILDING (10C)  TOTAL ANNUAL COST  ANNUAL CALLS, REGIONAL - 1996  COST PER CALL	73 73 73 73 73 24,022 24,022 24,022 24,022 24,022 24,022 (LN32LN43)	\$1,748.56 \$4.34 \$72.48 \$1.86 \$6.59 \$1.86 \$0.44 \$1.10 \$29.84 \$1.24	0.2327 0.1486 0.1679 0.1849 0.1747 0.1781 0.1922 0.1395 0.2327 0.1679	\$29,703 \$47 \$888 \$8,262 \$27,656 \$7,958 \$2,031 \$3,636 \$166,600 \$5,001
29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47.	OSC TO DATABASE (1997-1999)  CIRCUIT TERMINATION (FRC) CIRCUIT (357C) LAND (20C) BUILDING (10C)  CIRCUIT MILEAGE (FRC) AERIAL (822C) BURIED (845C) UNDERGROUND (85C) POLE (1C) CONDUIT (4C) CIRCUIT (357C) BUILDING (10C)  TOTAL ANNUAL COST  ANNUAL CALLS, REGIONAL - 1996	73 73 73 73 73 24,022 24,022 24,022 24,022 24,022 24,022 (LN32LN43)	\$1,748.56 \$4.34 \$72.48 \$1.86 \$6.59 \$1.86 \$0.44 \$1.10 \$29.84 \$1.24	0.2327 0.1486 0.1679 0.1849 0.1747 0.1781 0.1922 0.1395 0.2327 0.1679	\$29,703 \$47 \$888 \$8,262 \$27,656 \$7,958 \$2,031 \$3,636 \$166,800 \$5,001 \$252,035

#### DIRECTORY ASSISTANCE ACCESS SERVICE REGIONAL DA DATABASE SYSTEM

38.

BURIED (845C)

FLORIDA WORKPAPER 6 PAGE 2 OF 2 10/08/96

0.0235

\$3,720

#### **DIRECTLY ATTRIBUTED SHARED & COMMON COST (DASCC)**

1.	ADMINISTRATIVE DATABASE (1997-1999)				-
2.	HARDWARE INVESTMENT - VOLUME INSEN	ISITIVE			
3.					
4.	OPERATIONS DATABASES (1997-1999)				
5.	HARDWARE INVESTMENT - VOLUME SENSI	TIVE			
6.	IVS HARDWARE - VOLUME SENSITIVE				
7.					
8.	LAND FACTOR (20C)				0.0042
9.	BUILDING FACTOR (10C)				0.0706
10.	MISCELLANEOUS POWER & COMMON EQUI	P. FACTOR (377C)			1.0980
11.	DASCC ANNUAL COST FACTOR (377C)				0.0434
12.	DASCC ANNUAL COST FACTOR (20C)				0.0000
13.	DASCC ANNUAL COST FACTOR (10C)				0.0014
14.					
15.	ANNUAL COST				
16.					
17.	ADMINISTRATIVE DATABASE				
18.	HARDWARE	LN2xLN10xLN	11		
19.	LAND	LN2xLN10xLN	8xLN12		
20.	BUILDING	LN2xLN10xLN	9xLN13		
21.		The second second			
22.	OPERATIONS DATABASE				
23.	HARDWARE	(LN5+LN6)xLN	110xLN11		
24.	LAND	(LN5+LN6)xLN	10xLN8xLN12		
25.	BUILDING	(LN5+LN6)xLN			
26.					
27.					
28.	1.544 MB/S LINKS, ADMIN AND				
29.	OSC TO DATABASE (1997-1999)	CIRCUITS/	UNIT	ANNUAL	ANNUAL
30.		MILES	INVESTMENT	COST FACTOR	COST
31.	CIRCUIT TERMINATION (FRC)				
32.	CIRCUIT (357C)	73	\$1,748.56	0.0372	\$4,748
33.	LAND (20C)	73	\$4.34	0.0000	\$0
34.	BUILDING (10C)	73	\$72.48	0.0014	\$7
35.					-
36.	CIRCUIT MILEAGE (FRC)				
37.	AERIAL (822C)	24,022	\$1.86	0.0299	\$1,336
20	DUDIED (DAEC)	04.000	20.50	0.0005	62 720

39.	UNDERGROUND (85C)	24,022	\$1.86	0.0220	\$983
40.	POLE (1C)	24,022	\$0.44	0.0294	\$311
41.	CONDUIT (4C)	24,022	\$1.10	0.0146	\$386
42.	CIRCUIT (357C)	24,022	\$29.84	0.0372	\$26,666
43.	BUILDING (10C)	24,022	\$1.24	0.0014	\$42
44.					
45.	TOTAL ANNUAL COST	(LN32LN43)			\$38,199
46.					
47.	ANNUAL CALLS, REGIONAL - 1996				
48.					
49.	DASCC COST PER CALL				
50.	VOLUME SENSITIVE	(LN18+LN19+LN2	0+LN23+LN24+LN	125+LN45)/LN47	\$0.0003

24,022

\$6.59

#### **FLORIDA**

#### DIRECTORY ASSISTANCE ACCESS SERVICE

#### SPECIFIC STUDY ASSUMPTIONS

#### Cost study assumptions are as follows:

Software expenses were projected to the 1997-1999 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.

#### **FLORIDA**

#### DIRECTORY ASSISTANCE ACCESS SERVICE

#### **FACTORS AND LOADINGS**

Following are the annual TELRIC factors, miscellaneous loadings and labor rates used in the Directory Assistance Access Service cost study.

		1996		1997-1999
	Hourly Labor Rates: (Regional) ance (DA) Operator, JFC 2940	\$26.19		\$27.98
	Shared and Common			
Hourly Labor Rate				***
Directory Assist	ance (DA) Operator, JFC 2940	\$8.38		\$8.95
Operator Labor Inf	lation Rate From 1996 (Attached)	1	.0683	
Hardware Inflation	Rate 377C (Regional)		1.000	
Amortization Facto	or (5 Years @ 11.25%)	0	.2723	
	nmon Equipment and Power Factor		.0974	
377C (Florida			.0974	
	nmon Equipment and Power Factor		0000	
377C (Region	al)	i ome	.0980	
Gross Receipts Tax	Factor (Florida)	1	.0153	
Land Loading	20C (Florida)	0	.0047	
Land Loading	20C (Regional)	0	.0042	
	100 (Fli4-)	0	.0657	
Building Loading	10C (Florida)		.0706	
Building Loading	10C (Regional)	0	.0706	
Annual TELRIC F	actors, Regional (See following spread	isheet)		

Annual TELRIC Factors, Florida (See following spreadsheet)

#### Labor Levelization Factor Base Year 1996

#### **Labor Inflation Factors**

1. 1997	1.034
2. 1998	1.035
3. 1999	1.036
Present Worth Factors @ 11.25%	
4. 1997	0.8989
5. 1998	0.8080
6. 1999	0.7263
Labor Levelization Factor ((LN1 x LN4) + (LN1 x LN2 x LN5) + (LN1 x LN2 x LN3 x LN6))/ (LN4 + LN5 + LN6)	1.0683

#### 1996 BELLSOUTH TELECOMMUNICATIONS ACCOUNT AVERAGE ANNUAL COST FACTORS

\* FOR USE IN SERVICE COST STUDIES ONLY \*

	Field Code	Depreciation	ACFC COM	ACFC Inc Tax	Сар Ехр	ACFC Pit Specific Exp	ACFC Adval Tax	Directly Attributed Shared and Common	TELRIC
		a	ь	С	d	, e	f	g	i
			11.25%		(a+b+c)				(d+e+f+g)
LAND - COE	20C	0.0000	0.0947	0.0426	0.1373	0,0000	0.0113	0.0000	0.1486
BUILDINGS - COE	10C, 110C	0.0330	0.0826	0.0369	0.1525	0.0041	0.0113	0.0014	0.1693
DIGITAL ELEC SWITCH	377C, 587C	0.1157	0.0555	0.0254	0.1966	0.0333	0.0113	0.0434	0.2846
OPERATOR SYSTEMS	117C,417C	0.1157	0.0647	0.0296	0.2100	0.0071	0.0113	0.0500	0.2784
DIGTL CIRC-DDS	157C	0.1608	0.0575	0.0256	0.2439	0.0060	0.0113	0.0394	0.3006
DIGTL CIRC-PAIR GAIN	257C,D257C,F257C	0.1314	0.0564	0.0249	0.2127	0.0082	0.0113	0.0366	0.3000
DIGTL CIRC-OTHER	357C,T357C,F357C,557C	0.1314	0.0564	0.0252	0.2130	0.0084	0.0113	0.0372	0.2699
POLES	1C	0.0721	0.0599	0.0254	0.1574	0.0235	0.0113	0.0294	0.2216
AERIAL CA - METAL	22C, 12C	0.1023	0.0679	0.0254	0.1956	0.0461	0.0113	0.0619	0.3149
AERIAL CA - FIBER	822C, 812C,D22C, F22C,T22C,D12C,F12C,T12C	0.0746	0.0662		0.1689	0.0047	0.0113	0.0299	0.2148
UNGROUND CA - METAL	5C	0.1184	0.0681	0.0263	0.2128	0.0172	0.0113	0.0351	0.2764
UNGROUND CA - FIBER	85C,D5C,F5C,T5C	0.0686	. 0.0655	0.0284	0.1625	0.0043	0.0113	0.0220	0.2001
BURIED CA - METAL	45C	0.0885	0.0678	0.0277	0.1840	0.0391	0.0113	0.0468	0.2812
BURIED CA - FIBER	845C, D45C, F45C, T45C	0.0613	0.0670		0.1578	0.0056	0.0113	0.0235	0.1982
SUBMARINE CA-METAL	6C	0.0937	0.0688	0.0307	0.1932	0.0026	0.0113	0.0206	0.2277
SUBMARINE CA-FIBER	86C,D6C,F6C,T6C	0.0937	0.0688	0.0310	0.1935	0.0026	0.0113	0.0209	0,2283
INTRBLD NTWK-METAL	52C	0.0751	0.0669	0.0291	0.1711	0.0138	0.0113	0.0315	0.2277
INTRBLD NTWK-FIBER	852C,D52C,F52C,T52C	0.0751	0.0669	0.0292	0.1712	0.0041	0.0113	0.0270	0.2136
CONDUIT SYSTEMS	4C	0.0205	0.0727	0.0325	0.1257	0.0025	0.0113	0.0146	0.1541

Image Table: ACF.WK1

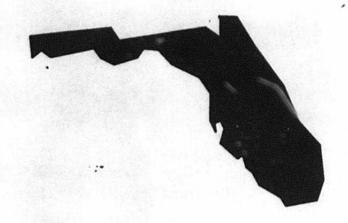
#### 1996 FLORIDA ACCOUNT AVERAGE ANNUAL COST FACTORS

\* FOR USE IN SERVICE COST STUDIES ONLY \*

Directly

	Field Code	Depreciation	ACFC COM	ACFC Inc Tax	Сар Ехф	ACFC Pit Specific Exp	ACFC Adval Tax	Attributed Shared and Common	TELRIC
		8	ь	c	d	•	f	9	
			11.25%		(a+b+c)				(d+e+f+g)
LAND - COE	20C	0.0000	0.0947	0.0428	0.1373	0.0000		0.0000	0.1493
BUILDINGS - COE	10C, 110C	0.0330	0.0826		0.1525	0.0061	0.0120	0.0014	0.1720
DIGITAL ELEC SWITCH	377C, 587C	0.1357	0.0555		0.1966	0.0236	0.0120	0.0434	0.2756
OPERATOR SYSTEMS	117C,417C	0.1157	0.0647	0.0298	0.2100	0.0033	0.0120	0.0500	0.2753
DIGTL CIRC-DDS	157C	0.1608	0.0575	0.0256	0.2439	0.0076	0.0120	0.0394	0.3029
DIGTL CIRC-PAIR GAIN	257C,D257C,F257C	0.1314	0.0564		0.2127	0.0082	0.0120	0.0366	0.2695
DIGTL CIRC-OTHER	357C,T357C,F357C,557C	0.1314	0.0564	0.0252	0.2130	0.0093	0.0120	0.0372	0.2715
POLES	10	0.0721	0,0599	0.0254	0.1574	0.0175	0.0120	0.0294	0.2163
AERIAL CA - METAL	22C, 12C	0.1023	0.0679	0.0254	0.1956	0.0705	0.0120	0.0619	0.3400
AERIAL CA - FIBER	822C, 812C,D22C, F22C,T22C,D12C,F12C,T12C	0.0746			0.1689	0.0029	0.0120	0.0299	0.2137
UNGROUND CA - METAL	5C	0.1184	0.0681	0.0263	0.2128	0.0192	0.0120	0.0351	0.2791
UNGROUND CA - FIBER	85C,D5C,F5C,T5C	0.0688			0.1625	0.0036	0.0120	0.0220	0.2001
BURIED CA - METAL	45C	0.0885			0.1840		0.0120	0.0468	0.2950
BURIED CA - FIBER	845C, D45C, F45C, T45C	0.0613	0.0670	0.0295	0.1578	0.0040	0.0120	0.0235	0.1973
SUBMARINE CA-METAL	6C	0.0937			0.1932				0.2304
SUBMARINE CA-FIBER	86C,D6C,F6C,T6C	0.0937			0.1935				0.2310
INTRBLD NTWK-METAL	52C	0.0751			0.1711			11.70 NO. 10/10/00/00 PROBLEM TO 17.77.	0.2338
INTRBLD NTWK-FIBER	852C,D52C,F52C,T52C	0.0751	THE SECOND CLAREST CONTRACT OF		0.1712				0.2113
CONDUIT SYSTEMS	4C	0.0205	0.072	7 0.0325	0.1257	0.0031	0.0120	0.0146	0.1554

### FLORIDA



# DIRECTORY ASSISTANCE DATABASE SERVICE

TELRIC
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
SECTION 3	SUMMARY OF RESULTS
SECTION 4	COST DEVELOPMENT - RECURRING TELRIC
SECTION 5	SPECIFIC STUDY ASSUMPTIONS
SECTION 6	FACTORS AND LOADINGS

### **SECTION A**

#### SECTION A

#### FLORIDA

### DIRECTORY ASSISTANCE DATABASE SERVICE (DADS) . PROPRIETARY RATIONALE

The Directory Assistance Database Service (DADS) study contains actual unit cost information for discrete cost elements. 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.

#### FLORIDA

### DIRECTORY ASSISTANCE DATABASE SERVICE (DADS) INTRODUCTION AND OVERVIEW

This Total Element Long Run Incremental Cost (TELRIC) study is being provided to support Directory Assistance Database Service (DADS). The costs presented in this study are based on the TELRIC methodology established by the Federal Communication Commission's (FCC's) First Report and Order in CC Docket 96-98 (FCC Order) released August 8, 1996.

DADS provides a Local Exchange service provider with the right to use BellSouth's subscriber listing information (listed names, addresses, telephone numbers) solely for setting up its own directory assistance type services. Nonpublished listings and listings that are requested to be omitted by BellSouth customers are not provided. Other local exchange company subscriber listings are not provided unless a contract is in effect between BellSouth and the local exchange company to do so.

A long run analysis is performed to ensure that the time period studied is sufficient to capture all forward looking costs affected by the business decision. The recurring costs presented in this study are levelized so as to be appropriate for the 1997 - 1999 study period. These costs are developed by using 1996 level TELRIC loadings and labor rates designed to produce TELRIC results.

Directory Assistance Database Service is provided on a Regional basis and the study is, accordingly, a Regional Study.

#### FLORIDA

#### DIRECTORY ASSISTANCE DATABASE SERVICE (DADS) .

#### DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of the Total Element Long Run Incremental Costs (TELRIC) supporting Directory Assistance Database Service (DADS).

The purpose of the TELRIC methodology established by the FCC order, is to set the rates for interconnection and unbundled network elements. The basis for the TELRIC study is forward looking long run economic cost methodology. Volume sensitive and volume insensitive costs are identified to develop the direct costs caused by providing the particular network element being studied. TELRIC methodology anticipates pricing of elements in a wholesale network company. Many costs regarded as common or shared would be included as directly attributable in a TELRIC study. The FCC pricing methodology also specifies that, over and above TELRIC, the additional portion of forward looking common costs that cannot be directly attributed to any particular network element will be allocated among the cost elements. TELRIC includes both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs. There are no nonrecurring costs associated with Directory Assistance Database Service.

#### THE DEVELOPMENT OF RECURRING COSTS

The recurring and per unit 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 knowledgeable individuals responsible for Directory Assistance Database Service.

The TELRIC is produced using the direct expense of material prices and TELRIC labor rates.

The TELRIC labor rates are calculated as follows. Salary and wages, as used in the determination of TELRIC annual cost factors, are accumulated on a basis consistent with specific force groups. Shared costs attributable to salaries and wages are then accumulated on a basis consistent with the development of the respective force group's labor rate. A factor is then developed for each force group by dividing the attributed shared costs (human resources, office equipment, motor vehicles, land and building space, etc.) by the related salaries and wages. This

factor is then applied to the salary and wage portion of the incremental labor rate for each force group, and the result is added to the incremental labor rate to determine the TELRIC labor rate.

The common cost allocation factor is applied to TELRIC to produce the forward looking economic cost, as defined in the FCC Order, Appendix B, Section 51.505, which includes an appropriate share of common costs. The common cost allocation factor is calculated by summing all wholesale costs that cannot be reasonably attributed to specific elements, services or functions and dividing by the sum of the directly assignable and directly attributable wholesale costs.

#### FLORIDA

### DIRECTORY ASSISTANCE DATABASE SERVICE (DADS) SUMMARY OF RESULTS

This section contains a cost summary for the Total Element Long Run Incremental Cost (TELRIC) for Directory Assistance Database Service.

DADS, Cost per Listing TELRIC Common Cost Allocation Factor Total Cost	\$0.0181 1.0804 \$ 0.0196
DADS, Monthly Recurring Cost TELRIC Common Cost Allocation Factor Total Cost	\$113.04 1.0804 \$122.13

#### FLORIDA

#### 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 TELRIC unit cost per listing and cost per month.

Workpaper 2 develops the per listing requested and monthly costs.

The per listing requested cost is based on the average end user listings requested for each customer, the estimated CPU time for the initial extract and twenty-five monthly updates, and the tape material and shipping expense.

The monthly recurring cost is developed by dividing the monthly labor cost required for administration, customer inquiries and auditing by the forecasted number of customers. An individual customer requesting listings in two different state jurisdictions is shown as two customers.

The following workpapers detail this development.

1.	DIRECTORY ASSISTANCE		FLORIDA
2.	DATABASE SERVICE (DADS)	1	WORKPAPER 1
3.			10/7/96
4.	SUMMARY OF COST PER LISTING		
5.	AND MONTHLY RECURRING COST		
6.			
7.			
8.			1
9.	COST PER LISTING REQUESTED		
10.	DIRECT !	WP2 LN23	\$0.0181
11.	DIRECTLY ATTRIBUTED SHARED AND C	OMMON	\$0.0000
12.	TELRIC	LN10 + LN11	, \$u.0181 ·
13.			
14.			
15.	MONTHLY RECURRING COST		
16.	DIRECT : .	WP2 LN30	\$85.27
17.	DIRECTLY ATTRIBUTED SHARED AND		
18.	COMMON	WP2 LN39	\$27.77
19.	TELRIC	LN16 + LN18	\$113.04

1.	DIRECTORY ASSISTANCE			FLORIDA
2.	DATABASE SERVICE (DADS)		.00	WORKPAPER 2
3.				10/7/96
4.	DEVELOPMENT OF COST PER LISTING REQUES	STED		
5.	AND MONTHLY RECURRING COST			
6.		4		
7.	DIRECT COST			
8.	COST PER END USER REQUEST, PER CUSTOM	ER		,
9.	; INITIAL FILE ;			
10.	CPU PER FILE	1.28 HRS	x \$29.44	\$8.24
11.	MAG TAPE (2) AND SHIPPING	2 x \$24.5	0!	\$49.00
12.	TOTAL COST	LN10 + L	N11	\$57.24
13.	ANNUITY FACTOR		10000	0.2723
14.	EQUIVALENT MONTHLY COST	((LN12)x(	LN13))/12	\$1.30
15.		1		17
16.	FILE UPDATE ;			
17.	MONTHLY CPU - UPDATES	1.17 HRS	\$29.44	\$5.00
18.	MAG TAPE (25) AND SHIPPING	25 x \$ 24.	.50	\$612.50
19.	MONTHLY COST	LN17+LN	Contract of the Contract of th	\$617.50
20.	TOTAL MONTHLY COST	LN14+LN	19	\$618.80
21.	GROSS RECEIPTS TAX FACTOR	1		1.0153
22.	AVERAGE LISTINGS REQUESTED PER MONTH			34,800
23.	PER LISTING, REQUESTED VOLUME SENSITIVE	(LN20 x	LN21)/LN22	\$0.0181 :
24.		1929		1
25.	MONTHLY RECURRING COST			
26.	ADMINISTRATION AND OPERATIONS			
27.	PER MONTH	HRS x	\$ 47.99	\$3,359.30
28.	NUMBER OF CUSTOMERS			
29.		BAUE S		-
30.	DIRECT, MONTHLY RECURRING COST	(LN21 x L	N27)/LN28	\$85.27
31.				
32.				
33.	DIRECTLY ATTRIBUTED SHARED ANI	COMMON	COST (DASC	2)
34.	MONTHLY RECURRING COST			
35.	ADMINISTRATION AND OPERATIONS			1
36.	: PER MONTH	HRS x	\$ 15.63	\$1,094.10
37.	NUMBER OF CUSTOMERS	1		
38.			Harmon Har	
39.	DASCC, MONTHLY RECURRING COST	(LN21 x L	N36)/LN37	\$27.77

#### **FLORIDA**

### DIRECTORY ASSISTANCE DATABASE SERVICE (DADS) . SPECIFIC STUDY ASSUMPTIONS

Cost study assumptions are as follows:

Number of Customers Average End User Requests per Month

34,800

#### **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.

Labor Cost per Hour (Regional)	1996	1997-1999
Directly Assigned Marketing, Payband 58	\$44.92	\$47.99
Directly Attributed Shared and Common Marketing, Payband 58	\$14.63	\$15.63
Labor Levelization Factor (Attached)	1.0	0683
Fundamental Computer Cost per CPU Hour	\$2	9.44
Gross Receipts Tax Factor (Florida)	1.0	0153
Amortization Factor (5 Years @ 11.25%)	0.2	723

#### Labor Levelization Factor Base Year 1996

#### **Labor Inflation Factors**

1. 1997	1.034
2. 1998	1.035
3. 1999	1.036
Present Worth Factors @ 11.25%	
4. 1997	0.8989
5. 1998	0.8080
6. 1999	0.7263
Labor Levelization Factor	
((LN1 x LN4) + (LN1 x LN2 x LN5) + (LN1 x LN2 x LN3 x LN6))/ (LN4 + LN5 + LN6)	1.0683

DDC-19

### FLORIDA



## DACC ACCESS SERVICE

TELRIC
COST STUDY
DOCUMENTATION

SECTIONS A THRU 7

#### FLORIDA

### DIRECTORY ASSISTANCE CALL COMPLETION ACCESS 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

Workpapers

Summary of Recurring TELRIC
Development of Volume Sensitive Costs
Development of Volume Insensitive Costs

SECTION 5 Cost Development - Nonrecurring

Workpaper - Summary of Nonrecurring TELRIC

SECTION 6 Specific Study Assumptions

SECTION 7 Factors and Loadings

### SECTION A

#### SECTION A

#### FLORIDA DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

#### PROPRIETARY RATIONALE

The Directory Assistance Call Completion Access Cost Study contains actual unit cost information for discrete cost elements. 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 Call Completion Access Service Cost Study is considered proprietary.

#### FLORIDA DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

#### INTRODUCTION AND OVERVIEW

This Total Element Long Run Incremental Cost (TELRIC) study is being provided to support Directory Assistance Call Completion (DACC) Access Service. The costs presented in this study are based on the TELRIC methodology established by the FCC's First Report and Order in CC Docket 96-98 (FCC Order) released August 8, 1996.

Directory Assistance Call Completion Access Service is an arrangement offered to Alternative Local Exchange Companies (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.

### FLORIDA DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

### DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of Total Element Long Run Incremental Costs (TELRIC) supporting the Directory Assistance Call Completion Access Service.

The purpose of the TELRIC methodology established by the FCC order is to set the rates for interconnection and unbundled network elements. The basis for a TELRIC study is forward looking long run economic cost methodology. Volume sensitive and volume insensitive costs are identified to develop the direct costs caused by providing the particular network element being studied. TELRIC methodology anticipates pricing of elements in a wholesale network company; hence, many costs regarded as common or shared and, therefore, excluded from BellSouth's direct cost methodology would be included as directly attributable in a TELRIC study. The FCC pricing methodology also specifies that, over and above TELRIC, the additional portion of forward looking common costs that cannot be directly attributed to any particular network element will be allocated among the cost elements. This TELRIC study contains recurring (capital and operating expenses) costs.

### 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 represent a forward-looking view of technology and deployment and include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs consist of plant specific expenses and ad valorem taxes. These expenses contribute to the ongoing cost to the Company associated with the initial capital investment. Also included in the recurring TELRIC are shared and common costs directly attributable to the network element. Gross receipts tax is included in the TELRIC for this study.

The first step in developing a TELRIC recurring cost study for the Directory Assistance Call Completion Access Service 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.

#### SECTION 2 (Cont'd)

### FLORIDA DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

#### DESCRIPTION OF STUDY PROCEDURES (Cont'd)

Next, 1996 level TELRIC Annual Cost Factors are used to calculate the direct cost of capital, plant specific expenses and taxes.

The directly attributable shared and common cost components of the TELRIC annual cost factors are calculated as follows. First, a detailed analysis of the forward-looking direct costs is performed. The remaining costs of doing business are then analyzed to determine whether they are directly attributable shared and common costs that cannot be reasonably attributed to network elements.

Next, the directly attributable shared and common costs are projected forward and segregated by the functional areas to which they are related. The functional areas are wholesale operations, retail services operations, and combined wholesale and retail services operations. Attribution factors based on the specific wholesale functional area, such as central office equipment (COE) investment, COE salary and wages, etc. are then developed and applied to the respective costs. These attributed costs are accumulated by related network investment category, such as pair gain equipment, buried cable, etc. and attributed shared cost factors are developed. These attributed shared cost factors are then included as a component of the TELRIC annual cost factors by investment category. All directly attributed costs related to retail services operations are excluded.

The common cost allocation factor is applied to TELRIC to produce the forward looking economic cost, as defined by the FCC Order, which includes an appropriate share of common costs. The common cost allocation factor is calculated by summing all wholesale costs that cannot be reasonably attributed to specific elements, services or functions and dividing by the sum of the directly assignable and directly attributable wholesale costs.

#### DEVELOPMENT OF MONRECURRING COSTS

Nonrecurring costs are "one-time" costs incurred as a result of provisioning this service. This one-time cost is for establishing or changing an announcement which is recorded and stored on an per audio unit basis. To develop nonrecurring costs, estimates have been obtained regarding the labor costs involved for the function of making a recording and for loading the announcement.

The common cost allocation factor is applied to the nonrecurring TELRIC to produce the forward looking nonrecurring economic cost, as defined by the FCC Order, which includes an appropriate share of common costs.

### FLORIDA DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

### SUMMARY OF RESULTS

This section contains a cost summary for the Total Element Long Run Incremental Cost (TELRIC) for both recurring and nonrecurring cost elements.

Directory Assistance Call Completion Access Service

TELRIC per Call Attempt

TELRIC Common Cost
TELRIC Allocation Factor Total
\$.0157 1.0804 \$.0170

Recording Cost per Announcement

TELRIC Common Cost
Allocation Factor Total
\$1,535 1.0804 \$1,658.41

Loading cost per audio unit

TELRIC Common Cost
TELRIC Allocation Factor Total
\$225 1.0804 \$243.09

### FLORIDA DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

#### COST DEVELOPMENT - RECURRING

This section defines the cost development of the recurring Total Element Long Run Incremental Costs (TELRIC) for 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. TELRIC annual cost factors are then 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 investment related and software expense to develop the volume sensitive cost 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

WORKPAPER 1 PAGE 1 of 1 10-7-98

SUMMARY OF RECURRING TELRIC

	Pescription	Source	Direct Cost	Directly Attributed Shared & Common Coat*		
Line	A	B	C	D	E	
1.	DACC Cost per Call Attempt - Volume Sensitive Cost	WP2 Ln36	•			
2.	DACC Cost per Call Attempt - Avg Volume Insensitive Cost	WP3 Ln14				
4.					C EN SUES	í
5.	TELRIC Unit DACC Access Cost per Call Attempt	Ln 1 + Ln 3			\$0.0167	į

<sup>\*</sup> Directly Attributed Shared & Common Costs are developed by calculating the difference between TELRIC costs and Direct costs.

Directly

### DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE FLORIDA

COST PER CALL ATTEMPT
DEVELOPMENT OF VOLUME SENSITIVE COSTS

			Direct	Attributed Shared & Common	
Line	Description	Source	Cost	Cost	TELRIC
1.	Volume Sensitive Investment Related Cost per Call Al	ternet B	C	D	E
2.					
3.	Interactive Voice System (IVS) Investment per IVS	Fundamental IVS Inv & Exp Study			1.0974
4.	Miss, Common Egpt. & Power Factor	BST Fundamental Cost	1 0974		1.0974
5.	Total Investment w/MCE&P per IVS	Ln3*Ln4			
6.	Annual Engineered Traffic Volume per IVS (seconds)	Fundamental IVS Inv & Exp Study			
7.	Seconds per DACC call attempt	Operator Services	0.2322		0.2756
8.	Dig Elec Switch Annual Cost Fector	BST Fundamental Cost	0.2322		0.2750
9.	Dig Elec Switch Cost per call attempt	(Ln 5/Ln 6) * Ln 7 * Ln 8			
10.					
11.		BST Fundamental Cost	0.0047		0.0047
12.	Land Loading Factor	Ln 5 * Ln 12	0.004		
13.	Land Investment per IVS	BST Fundamental Cost	0.1493		0.1493
14.	Land Annual Cost Factor	(Ln 13/Ln 6) * Ln 7 * Ln 14			
15.	Land Cost per call attempt	(Diriable) Cir Ciri			
16.					
17.		BST Fundamental Cost	0.0857		0.0857
18.	Building Loading Factor Building Investment per IVS	Ln 5 * Ln 18			
19. 20.	Building Annual Cost Factor	BST Fundamental Cost	0.1706		0.1720
21.	Building Cost per call attempt	(Ln 19/Ln 6) * Ln 7 * Ln 20			
22.	Building cost bat can attempt				
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	0.0000	-	0.2723
30.	Annuity Factor	BST Fundamental Cost	0.2723		0.2723
31.	Software Cost per Call Attempt	(Ln 29/Ln 6) * Ln 7 * Ln 30			
32.					
33.		60 J. L			
34.	Volume Sensitive Cost per Call Attempt w/o GRT	Ln 24 + Ln 31	1.0153		1.0153
35.	Gross Receipts Tax Factor	BST Fundamental Cost	1.0153		1.0100
36.	Volume Sensitive Cost per Call Attempt w/GRT	Ln 34 ° Ln 36			

<sup>\*</sup> Directly Attributed Shared & Common Costs are developed by calculating the difference between TELRIC costs and Direct costs.

### DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE FLORIDA

WORKPAPER 3 PAGE 1 of 1 10-7-96

COST PER CALL ATTEMPT
DEVELOPMENT OF VOLUME INSENSITIVE COSTS

Line	Description	Source	Direct <u>Cost</u>	Directly Attributed Shared & Common Cost*	IELRIC
1.	Volume Insensitive Costs	В	C	D	E
2.					
3.	DACC Software				
4.	RTU software for Switch	Operator Services			
5.	RTU software for Gateway	Operator Services			
6. 7.	Total Volume Insensitive Software Cost	Ln4 + Ln5			
8.	Annuity Factor	<b>BST Fundamental Cost</b>	0.2723	1	0.2723
9.	Gross Receipts Tax Factor	<b>BST Fundamental Cost</b>	1.0153		1.0153
10.	Annual Volume Insensitive Cost	Ln6 * Ln8 * Ln9			
11.					
12. 13.	Annual Demand - DACC Call Attempts	Operator Services			
14.	Average Vol Insensitive Cost per Call Attempt	Ln 10/Ln 12			

<sup>\*</sup> Directly Attributed Shared & Common Costs are developed by calculating the difference between TELRIC costs and Direct costs.

### PLORIDA DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

#### COST DEVELOPMENT - NONRECURRING

Nonrecurring Total Element Long Run Incremental Costs (TELRIC) are one-time costs incurred as a result of the work functions required to establish or change a recording of the company name and rate information and installing the recording in each audio box. In order to develop the nonrecurring cost for the work functions required, estimates have been obtained regarding the labor costs involved for these functions.

The following workpaper reflects the cost summary for establishing or changing a recording of the company name and rate information for Directory Assistance Call Completion Access Service. These nonrecurring costs are for recording a company name and rate information with a surcharge phrase of 20 cents to \$2.55 in penny increments.

### DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE FLORIDA

WORKPAPER 4 PAGE 1 of 1 10-7-96

COST PER RECORDING ANNOUNCEMENT SUMMARY OF NONRECURRING TELRIC

Line				Directly Attributed Shared &	
Line	Description	Source	Cost	Cost*	I RIC
1.	Recording cost per announcement	Operator Services		•	\$1,535
2.					
3.	Loading cost per audio unit	Operator Services			\$225

<sup>\*</sup> Directly Attributed Shared & Common Costs are developed by calculating the difference between TELRIC costs and Direct costs.

### FLORIDA DIRECTORY ASSISTANCE CALL COMPLETION ACCESS SERVICE

#### SPECIFIC STUDY ASSUMPTIONS

The cost study for Directory Assistance Call Completion Access Service is based on the Total Element Long Run Incremental Cost (TELRIC) methodology prescribed by the FCC's First Report and Order in CC Docket 96-98 released August 8, 1996. Network deployment strategies and equipment purchasing information are used to develop the Total Element Long Run Incremental Cost.

Cost study assumptions are as follows:

Directory Assistance Call Completion Access Service is available to facility-based ALECs subject to the following conditions:

- The incoming call from the ALEC must arrive at our Directory Assistance equipment via separate identifiable trunk groups.
- The ALEC must subscribe to BellSouth Directory Assistance Service.
- · 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.
- DACC Access Service is provided via mechanized means. No live Operator assistance will be provided in conjunction with DACC.
- End Users 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.

### 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:

Gross Receipts Tax Factor	0.0153
Annuity Factor (based on 5 yrs & 11.25% COM)	0.2723
Annual Cost Factors:	
Digital Electronic Switch	0.2756
Land	0.1493
Building	0.1720
Loading Factors:	
Land	0.0047
Building	0.0657
Miscellaneous Common Equipment & Power	0.0974

## FLORIDA



# **DIRECTORY TRANSPORT**

TELRIC COST STUDY DOCUMENTATION

SECTIONS A THRU 7

### FLORIDA

### DIRECTORY TRANSPORT

### COST STUDY DOCUMENTATION

### CONTENTS

**Proprietary Rationale SECTION A Introduction and Overview SECTION 1 Description of Study Procedures SECTION 2 Summary of Results SECTION 3 Cost Development - Recurring SECTION 4** Workpapers **Summary of TELRIC Development of TELRIC Cost Development - Nonrecurring** SECTION 5 **Specific Study Assumptions SECTION 6 Factors and Loadings SECTION 7** 

### SECTION A

#### SECTION A

#### FLORIDA DIRECTORY TRANSPORT

#### PROPRIETARY RATIONALE

The Directory Transport Cost Study contains actual unit cost information for discrete cost elements. 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 Transport Cost Study is considered proprietary.

#### FLORIDA DIRECTORY TRANSPORT

#### INTRODUCTION AND OVERVIEW

This Total Element Long Run Incremental Cost (TELRIC) study is being provided to support Directory Transport for Directory Assistance Access Service. The costs presented in this study are based on the TELRIC methodology established by the FCC's First Report and Order in CC Docket 96-98 (FCC Order) released August 8, 1996.

Directory Transport provides for the transport facilities and termination between the Alternative Local Exchange Company'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.

#### FLORIDA DIRECTORY TRANSPORT

### DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of Total Element Long Run Incremental Costs (TELRIC) supporting Directory Transport.

The purpose of the TELRIC methodology established by the FCC order is to set the rates for interconnection and unbundled network elements. The basis for a TELRIC study is forward-looking long run economic cost methodology. TELRIC methodology anticipates pricing of elements in a wholesale network company; hence, many costs regarded as common or shared and, therefore, excluded from BellSouth's direct cost methodology would be included as directly attributable in a TELRIC study. The FCC pricing methodology also specifies that, over and above TELRIC, the additional portion of forward looking common costs that cannot be directly attributed to any particular network element will be allocated among the cost elements. This TELRIC study includes both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs.

### 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 represent a forward-looking view of technology and deployment and include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs consist of plant specific expenses and ad valorem taxes. These expenses contribute to the ongoing cost to the Company associated with the initial capital investment. Also included in the recurring TELRIC are shared and common costs directly attributable to the network element. Gross receipts tax is included in the TELRIC for this study.

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 2 (Cont'd)

#### FLORIDA DIRECTORY TRANSPORT

### DESCRIPTION OF STUDY PROCEDURES (Cont'd)

### DEVELOPMENT OF RECURRING COSTS (Cont'd)

The common cost allocation factor is applied to TELRIC to produce the forward looking economic cost, as defined by the FCC Order, which includes an appropriate share of common costs. The common cost allocation factor is calculated by summing all wholesale costs that cannot be reasonably attributed to specific elements, services or functions and dividing by the sum of the directly assignable and directly attributable wholesale costs.

### FLORIDA DIRECTORY TRANSPORT

#### SUMMARY OF RESULTS

This section contains a cost summary for the Total Element Long Run Incremental Cost (TELRIC) for providing Directory Transport.

### Directory Transport

### Switched Common Transport per DA Service Call

TELRIC	Common Cost Allocation Factor	Total
\$.000141	1.0804	\$.000152

### Switched Common Transport per DA Service Call Mile

TELRIC	Common Cost Allocation Factor		Total
5.000008	1.0804		\$.000009

### Access Tandem Switching per DA Service Call

TELRIC	Allocation Factor	Total
\$.000884	1.0804	\$.000955

#### FLORIDA DIRECTORY TRANSPORT

### COST DEVELOPMENT - RECURRING

This section defines the cost development of the recurring Total Element Long Run Incremental Costs (TELRIC) for Directory Transport.

Generally, economic cost development is outlined in Section 2. Network architecture is determined; the necessary equipment is identified; material prices are obtained; and factors, utilization and loadings are applied. TELRIC annual cost factors are then 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

SUMMARY OF TELRIC

WORKPAPER 1 PAGE 1 of 1 10-7-96

				Attributed Shared &	
Line	<u>Description</u>	Source	Direct Cost C	Common Cost*	TELRIC
1.	Switched Common Transport per DA Service Call	WP 2 Ln 13			\$0.000141
2. 3.	Switched Common Transport per DA Service Call Mile	WP 2 Ln 15			\$0.00008
4. 5.	Access Tandem Switching per DA Service Call	WP 2 Ln 17			\$0.000884

<sup>\*</sup> Directly Attributed Shared & Common Costs are developed by calculating the difference between TELRIC costs and Direct costs.

WORKPAPER 2 PAGE 1 of 1 10-7-96

Directly

#### DEVELOPMENT OF TELRIC

Line	Description	Source	Direct Cost	Attributed Shared & Common Cost*	TELRIC E
1.	Switched Common Trensport - 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. 6.	Access Tandem Switching Cost per Min.	Ntwk Interconnection Svc Cost Study			
7. 8.	Holding Time (in seconds) per DA Call	Operator Services			
9. 10. 11.	Holding Time as a percent of a minute	Ln 8/60			
12. 13.	Switched Common Transport per DA Service Cell	] ln 1 ° ln 10			\$0.000141
14. 15.	Switched Common Transport per DA Service Call Mile	☐rv 3 . rv 10			\$0.000008
16. 17.	Access Tandern Switching per DA Service Call				\$0.000884

<sup>\*</sup> Directly Attributed Shared & Common Costs are developed by calculating the difference between TELRIC costs and Direct costs.

### FLORIDA DIRECTORY TRANSPORT

### COST DEVELOPMENT - MONRECURRING

Not Applicable

### PLORIDA DIRECTORY TRANSPORT

### SPECIFIC STUDY ASSUMPTIONS

The cost study for Directory Transport is based on the Total Element Long Run Incremental Cost (TELRIC) methodology prescribed by the FCC's First Report and Order in CC Docket 96-98 released August 8, 1996. Network deployment strategies, first choice provisioning guidelines, and equipment purchasing information are used to develop the Total Element Long Run Incremental Cost.

Cost study assumptions are as follows:

Holding Time (in seconds) per DA Call 4:

#### FLORIDA DIRECTORY TRANSPORT

#### FACTORS AND LOADINGS

Following are the Total Element Long Run Incremental Cost (TELRIC) annual cost factors and loadings used in the development of costs for Directory Transport:

Annual Cost Factors (including Gross Receipts Tax):

10C	0.1747
20C	0.1516
357C	0.2757
377C	0.2798
811C	0.2196
822C	0.2170
845C	0.2003
84C	0.1578
85C	0.2032

#### In-Plant Factor:

Telco 377C 0.1705

Miscellaneous Common Equipment and Power Loadings:

377C 0.0974

Land and Building COE Loadings:

10C 0.0657

# FLORIDA



# NUMBER SERVICES INTERCEPT ACCESS SERVICE

TELRIC COST STUDY DOCUMENTATION

SECTIONS A THRU 7

#### FLORIDA

## NUMBER SERVICES INTERCEPT ACCESS 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

Workpapers

Summary of Recurring TELRIC
Summary of Volume Sensitive Costs
Summary of Volume Insensitive Costs
Development of Costs for LION System
Development of Costs for CAMS
Development of Costs for Data Links
Development of Costs for Voice Links
Cost for Updating Intercept Database

SECTION 5 Cost Development - Nonrecurring

SECTION 6 Specific Study Assumptions

SECTION 7 Factors and Loadings

# SECTION A

#### SECTION A

# FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE PROPRIETARY RATIONALE

The Number Services Intercept Access Cost Study contains actual unit cost information for discrete cost elements. 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 Number Services Intercept Access Service Cost Study is considered proprietary.

# FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE INTRODUCTION AND OVERVIEW

This Total Element Long Run Incremental Cost (TELRIC) study is being provided to support the Number Services Intercept Access Service. The costs presented in this study are based on the TELRIC methodology established by the FCC's First Report and Order in CC Docket 96-98 (FCC Order) released August 8, 1996.

Number Services Intercept Access Service is an arrangement offered to Alternative Local Exchange Companies (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.

A separate, dedicated trunk facility to the TOPS switch is required for Intercept. 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.

# FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of Total Element Long Run Incremental Costs (TELRIC) supporting the Number Services Intercept Access Service.

The purpose of the TELRIC methodology established by the FCC order is to set the rates for interconnection and unbundled network elements. The basis for a TELRIC study is forward looking long run economic Volume sensitive and volume insensitive costs cost methodology. are identified to develop the direct costs caused by providing the particular network element being studied. TELRIC methodology anticipates pricing of elements in a wholesale network company; hence, many costs regarded as common or shared and, therefore, excluded from BellSouth's direct cost methodology would be included as directly attributable in a TELRIC study. The FCC pricing methodology also specifies that, over and above TELRIC, additional portion of forward looking common costs that cannot be directly attributed to any particular network element will be allocated among the cost elements. This TELRIC study includes both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs.

#### 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 represent a forward-looking view of technology and deployment and include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs consist of plant specific expenses and ad valorem taxes. These expenses contribute to the ongoing cost to the Company associated with the initial capital investment. Also included in the recurring TELRIC are shared and common costs directly attributable to the network element. Gross receipts tax is included in the TELRIC for this study.

The first step in developing a TELRIC recurring cost study for the Number Services Intercept Access Service 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.

#### SECTION 2 (Cont'd)

## FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE

#### DESCRIPTION OF STUDY PROCEDURES (Cont'd)

Next, 1996 level TELRIC Annual Cost Factors are used to calculate the direct cost of capital, plant specific expenses and taxes. Account specific factors for each Uniform System of Accounts - Field Reporting Code (USOA - FRC) are applied to investments by account code, yielding an annual cost per account code which includes directly attributable shared and common costs.

The directly attributable shared and common cost components of the TELRIC annual cost factors are calculated as follows. First, a detailed analysis of the forward-looking direct costs is performed. The remaining costs of doing business are then analyzed to determine whether they are directly attributable shared and common costs that cannot be reasonably attributed to network elements.

Next, the directly attributable shared and common costs are projected forward and segregated by the functional areas to which they are related. The functional areas are wholesale operations, retail services operations, and combined wholesale and retail services operations. Attribution factors based on the specific wholesale functional area, such as central office equipment (COE) investment, COE salary and wages, etc. are then developed and applied to the respective costs. These attributed costs are accumulated by related network investment category, such as pair gain equipment, buried cable, etc. and attributed shared cost factors are developed. These attributed shared cost factors are then included as a component of the TELRIC annual cost factors by investment category. All directly attributed costs related to retail services operations are excluded.

The common cost allocation factor is applied to TELRIC to produce the forward looking economic cost, as defined by the FCC Order, which includes an appropriate share of common costs. The common cost allocation factor is calculated by summing all wholesale costs that cannot be reasonably attributed to specific elements, services or functions and dividing by the sum of the directly assignable and directly attributable wholesale costs.

# FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE SUMMARY OF RESULTS

This section contains a cost summary for the Total Element Long Run Incremental Cost (TELRIC) for providing Number Services Intercept.

#### Number Services Intercept Access Service

	TELRIC	Common Cost Allocation Factor	Total
TELRIC per Intercept Query	\$0.0193	1.0804	\$0.0209

#### FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE

#### COST DEVELOPMENT - RECURRING

This section defines the cost development of the recurring Total Element Long Run Incremental Costs (TELRIC) for 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. TELRIC annual cost factors are then applied to convert the investment to cost. The common cost allocation factor is applied to TELRIC to produce the forward looking economic cost, as defined by the FCC Order, Appendix B, Section 51.505, which includes an appropriate share of common costs.

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 investment related and software expense per query to develop the Volume Sensitive 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) system 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.

#### SECTION 4 (Cont'd)

# PLORIDA 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. The Gross Receipts Tax Factor is then applied to develop the

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.

Investment Related Annual Cost for the LION system.

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. The Gross Receipts Tax Factor is then applied to develop the Investment Related Annual Cost for CAMS.

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. Gross Receipts Tax factor is then applied to calculate the annual cost for the facilities with Gross Receipts included.

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. Gross Receipts Tax factor is then applied to calculate the annual cost for the facilities with Gross Receipts included.

#### SECTION 4 (Cont'd)

# FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE COST DEVELOPMENT - RECURRING (Cont'd)

Workpaper 8 develops the cost for updating the Intercept Database with discontinued or non-working numbers on a per query basis. These costs represent costs incurred as a result of the work functions required to update the Intercept database. In order to develop the cost for the work function required, the work time for the work function is multiplied by the appropriate labor rate. The labor inflation factor is used to bring the labor rate to the appropriate study period. The Gross Receipts Tax Factor is also applied. Workpaper 8 reflects the cost development for updating the Intercept database with discontinued or non-working numbers. The cost is developed on a per Intercept query basis.

WORKPAPER 1 PAGE 1 of 1 10-7-96

SUMMARY OF RECURRING TELRIC

Line 1.	Description  Volume Sensitive Cost per Intercept Query  Volume Insensitive Cost per Intercept Query	Source D WP2 Ln35 WP3 Ln 14	Direct Cost	Attributed Shared & Common Cost*	TELRIC E
2.	Volume insensitive Cost per intercept Guery				
3.	Database update cost per Query	WP8 Ln 7			
4.					
5.	TELRIC Unit Intercept Access Cost per Query	Ln 1+Ln 2+Ln 3			\$0.0193

<sup>\*</sup> Directly Attributed Shared & Common Costs are developed by calculating the difference between TELRIC costs and Direct costs.

COST PER INTERCEPT QUERY
DEVELOPMENT OF VOLUME SENSITIVE COSTS
Development of Cost for Interactive Voice System (IVS)

Line	Description  Volume Sensitive Inv & Related Cost per Query	Source B	Direct Cost	Directly Attributed Shared & Common Cosi*	TELRIC
2.		Fundamental IVS Inv & Exp Study			
3. 4. 5. 6.	Interactive Voice System (IVS) Investment per IVS Nisc. Common Eqpt. & Power Factor Total Investment w/MCE&P per IVS Annual Eng Traffic volume per IVS (seconds)	BST Fundamental Cost Ln 3 * Ln 4 Fundamental IVS Inv & Exp Study	1.0974		1.0974
7. 8. 9.	Seconds per Intercept query Dig Elec Switch Annual Cost Factor Dig Elec Switch Cost per Query	Operator Services BST Fundamental Cost (Ln 5/Ln 6) * Ln 7 * Ln 8	0.2322		0.2756
10. 11. 12.	Land Loading Factor	BST Fundamental Cost	0.0047		0.0047
13. 14. 15.	Land Investment per IVS Land Annual Cost Factor Land Cost per Query	Ln 5 ° Ln 12 BST Fundamental Cost (Ln 13/Ln 6) ° Ln 7 ° Ln 14	0.1493	1	0.1493
17.	Building Loading Factor	BST Fundamental Cost	0.065		0.0657
19. 20. 21. 22.	Building Investment per IVS Building Annual Cost Factor Building Cost per Query	Ln 5 * Ln 18 BST Fundamental Cost (Ln 19/Ln 6) * Ln 7 * Ln 20	0.170	3	0.1720
23. 24. 25.	Total Investment Related Cost per Query				
26. 27. 28. 29. 30.	Volume Sensitive Software Cost per Query RTU IVS software expense per IVS Annuity Factor Software Cost for IVS per Query	Fundamental IVS Inv & Exp Study BST Fundamental Cost (Ln 28/Ln 6) * Ln 7 * Ln 29	0.272	3	0.2723
31. 32. 33.	Volume Sensitive Cost per Intercept Query w/o GRT Gross Receipts Tax Factor	Ln 24 + Ln 30 BST Fundamental Cost	1.015	3	1.0153
34. 35.	CONTRACTOR OF THE PROPERTY OF				

<sup>\*</sup> Directly Attributed Shared & Common Costs are developed by calculating the difference between TELRIC costs and Direct costs.

WORKPAPER 3 PAGE 1 of 1 10-7-96

#### SUMMARY OF VOLUME INSENSITIVE COSTS

<u>Line</u>	Description Annual Cost	Source B	Direct Cost	Directly Attributed Shared & Common Cost*	TELRIC E
2.		WP 4 Ln 24			
3.	LION Hardware				
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			
	Annual Volume Insensitive Cost	Sum Ln 3Ln 9			
10.	Annual Volume Insensitive Cost	oun droiler			
11.		Onember Condess			
12.	Annual Demand - Intercept Queries	Operator Services			
13.					
14.	Avg Vol Insensitive Cost per Intercept Qu	lery Ln 10 / Ln 12			

<sup>\*</sup> Directly Attributed Shared & Common Costs are developed by calculating the difference between TELRIC costs and Direct costs.

WORKPAPER 4 PAGE 1 of 1 10-7-96

COST PER CALL
DEVELOPMENT OF VOLUME INSENSITIVE COSTS
Development of Cost for LION System

Deven			Direct	Directly Attributed Shared & Common	
Line	Description	Source	Cost	Cost	TELRIC
	H	В	C	D	E
1.	Hardware				
2. 3.	LION Investment - Installed	Operator Services			
4.	Misc. Common Eqpt. & Power Factor	<b>BST Fundamental Cost</b>	1.0974		1.0974
5.	Total Investment w/MCE&P	Ln3*Ln4			
6.					
7.					
8.	Dig Elec Switch Annual Cost Factor	BST Fundamental Cost	0.2322		0.2756
9.	Dig Elec Switch Annual Cost	Ln5°Ln8			
10.					
11.			0.0047		0.0047
12.	Land Loading Factor	BST Fundamental Cost	0.0047		0.0047
13.	Land investment	Ln 5 * Ln 12	0.1493		0.1493
14.	Land Annual Cost Factor	BST Fundamental Cost	0.1483		0.1483
15.	Land Annual Cost	Ln 13 ° Ln 14			
16.					
17.		BST Fundamental Cost	0.0657		0.0657
18.	Building Loading Factor	Ln 5 ° Ln 18	0.000		
19.	Building Investment	BST Fundamental Cost	0.1706		0.1720
20.	Building Annual Cost Factor Building Annual Cost	Ln 19 ° Ln 20			
21. 22.	Total Inv Related Annual Cost - LION w/o GRT	Ln9 + Ln15 + Ln21			
23.	Gross Receipts Tax factor	BST Fundamental Cost	1.0153		1.0153
24.	Total inv Related Annual Cost - LION w/GRT	Thn 22 * Ln 23			
25.	Total IIIV Related Pallines Cool State III				
26.					
27.	Software				
28.					
29.	Software Expense - Installed	Operator Services	1000		
30.	Annuity Factor	<b>BST Fundamental Cost</b>	0.2723		0.2723
31.	Gross Receipts Tax Factor	BST Fundamental Cost	1.0153		1.0153
32.	Annual Software Cost for LION WIGRT				
		경기를 잃었다면서 내용하는 경기를 받는다.			

Directly Attributed Shared & Common Costs are developed by calculating the difference between TELRIC costs and Direct costs.

WORKPAPER 5 PAGE 1 of 1 10-7-96

COST PER CALL
DEVELOPMENT OF VOLUME INSENSITIVE COSTS
Development of Cost for CAMS

Investment - Installed				Direct	Directly Attributed Shared & Common	
1.   Hardware	Line	Description	Source	Cost	Cost	TELRIC
Investment - Installed		H	В	C	D	E
Investment - Installed		Hardware	•			
Misc. Common Eqpt. & Power Factor   BST Fundamental Cost   1.0974   1.097		Investment - leatelled	Operator Services			
5. Total Investment w/MCE&P 6. 7.				1.0974		1.0974
6. 7. 8. Dig Elec Switch Annual Cost Factor	0.00			1.007.4		
7. 8. Dig Elec Switch Annual Cost Factor		TOTAL INVESTIGATE WINDOWS				
8. Dig Elec Switch Annual Cost Factor 9. Dig Elec Switch Annual Cost 10. 11. 12. Land Loading Factor						
9. Dig Elec Switch Annual Cost  10.  11.  12. Land Loading Factor		Dig Elec Switch Annual Cost Factor	<b>BST Fundamental Cost</b>	0.2322		0.2756
10. 11. 12. Land Loading Factor			Ln5°Ln8			
11. 12. Land Loading Factor BST Fundamental Cost 0.0047 0.0047 13. Land Investment Ln 5 * Ln 12 14. Land Annual Cost Factor BST Fundamental Cost 0.1493 0.1493 15. Land Annual Cost Ln 13 * Ln 14 16. 17. 18. Building Loading Factor BST Fundamental Cost 0.0657 0.0657 19. Building Investment Ln 5 * Ln 18 20. Building Annual Cost Factor BST Fundamental Cost 0.1706 0.1720 21. Building Annual Cost - CAMS w/o GRT 22. Total Inv Related Annual Cost - CAMS w/o GRT BST Fundamental Cost 1.0153 1.0153 24. Total Inv Related Annual Cost - CAMS w/GRT Cost - CAMS w/GRT BST Fundamental Cost 1.0153 1.0153 25. Software 28. Software Expense - Installed Operator Services 30. Annuity Factor BST Fundamental Cost 0.2723 0.2723 31. Gross Receipts Tax Factor BST Fundamental Cost 1.0153 1.0153	-					
13. Land Investment 14. Land Annual Cost Factor 15. Land Annual Cost 16. 17. 18. Building Loading Factor 19. Building Investment 20. Building Annual Cost 21. Building Annual Cost 22. Total Inv Related Annual Cost - CAMS w/o GRT 23. Gross Receipts Tax Factor 24. Total Inv Related Annual Cost - CAMS w/GRT 25. 26. 27. Software 28. 29. Software Expense - Installed 30. Annuity Factor 31. Gross Receipts Tax Factor 32. Software Expense - Installed 33. Annuity Factor 34. Gross Receipts Tax Factor 35. BST Fundamental Cost 36. Operator Services 37. Annuity Factor 38. Software Expense - Installed 39. Annuity Factor 30. Annuity Factor 31. Gross Receipts Tax Factor 30. Software Expense - Installed 30. Annuity Factor 31. Gross Receipts Tax Factor 31. Gross Receipts Tax Factor 32. Software Expense - Installed 30. Annuity Factor 31. Gross Receipts Tax Factor 32. Software Expense - Installed 30. Annuity Factor 31. Gross Receipts Tax Factor 32. Software Expense - Installed 33. Annuity Factor 34. Software Expense - Installed 35. Software Expense - Installed 36. Software Expense - Installed 37. Software Expense - Installed 38. Software Expense - Installed 39. Annuity Factor 30. Annuity Factor 31. Gross Receipts Tax Factor 31. Gross Receipts Tax Factor						
14. Land Annual Cost Factor       BST Fundamental Cost       0.1493       0.1493         15. Land Annual Cost       Ln 13 * Ln 14       0.0657       0.0657         16. 17.       Building Loading Factor       BST Fundamental Cost       0.0657       0.0657         19. Building Investment       Ln 5 * Ln 18       0.1708       0.1708       0.1720         21. Building Annual Cost Factor       BST Fundamental Cost       0.1708       0.1720         21. Building Annual Cost       Ln 19 * Ln 20       Ln 19 * Ln 21         23. Gross Receipts Tax Factor       BST Fundamental Cost       1.0153       1.0153         24. Total Inv Related Annual Cost - CAMS w/GRT       Ln 22 * Ln 23       Ln 22 * Ln 23         25. 26. 27. Software       Software Expense - Installed       Operator Services         30. Annuity Factor       BST Fundamental Cost       0.2723       0.2723         31. Gross Receipts Tax Factor       BST Fundamental Cost       1.0153       1.0153	12.	Land Loading Factor	<b>BST Fundamental Cost</b>	0.0047		0.0047
15. Land Annual Cost  16. 17. 18. Building Loading Factor BST Fundamental Cost 0.0657 0.0657  19. Building Investment Ln 5 * Ln 18  20. Building Annual Cost Factor BST Fundamental Cost 0.1706 0.1720  21. Building Annual Cost Ln 19 * Ln 20  22. Total Inv Related Annual Cost - CAMS w/o GRT Ln9 + Ln15 + Ln21  23. Gross Receipts Tax Factor BST Fundamental Cost 1.0153 1.0153  24. Total Inv Related Annual Cost - CAMS w/GRT Ln 22 * Ln 23  25. 26. 27. Software  28. 29. Software Expense - Installed Operator Services  30. Annuity Factor BST Fundamental Cost 0.2723 0.2723  31. Gross Receipts Tax Factor BST Fundamental Cost 1.0153 1.0153	13.	Land Investment	Ln 5 * Ln 12			
16. 17. 18. Building Loading Factor 19. Building Investment 10. Building Investment 10. Building Annual Cost Factor 19. Building Annual Cost Factor 19. Building Annual Cost Factor 19. Building Annual Cost BST Fundamental Cost 10. 1700 10. 1720 11. Building Annual Cost 10. 1720 12. Total Inv Related Annual Cost - CAMS w/o GRT 10. 1720 10. Gross Receipts Tax Factor 10. 1720 10. 17	14.	Land Annual Cost Factor		0.1493		0.1493
17.  18. Building Loading Factor  19. Building Investment  20. Bulding Annual Cost Factor  21. Building Annual Cost  22. Total Inv Related Annual Cost - CAMS w/o GRT  23. Gross Receipts Tax Factor  24. Total Inv Related Annual Cost - CAMS w/GRT  25.  26.  27. Software  28.  29. Software Expense - Installed  29. Software Expense - Installed  30. Annuity Factor  31. Gross Receipts Tax Factor  BST Fundamental Cost  Cost	15.	Land Annual Cost	Ln 13 ° Ln 14			
18. Building Loading Factor 19. Building Investment 20. Building Annual Cost Factor 21. Building Annual Cost 22. Total Inv Related Annual Cost - CAMS w/o GRT 23. Gross Receipts Tax Factor 24. Total Inv Related Annual Cost - CAMS w/GRT 25. Cost Inv Related Annual Cost - CAMS w/GRT 26. Software 27. Software 28. 29. Software Expense - Installed 30. Annuity Factor 31. Gross Receipts Tax Factor 31. Gross Receipts Tax Factor 32. BST Fundamental Cost O.2723 31. Gross Receipts Tax Factor 33. BST Fundamental Cost O.2723 34. 1.0153	16.					
19. Building Investment 20. Building Annual Cost Factor 21. Building Annual Cost 22. Total Inv Related Annual Cost - CAMS w/o GRT 23. Gross Receipts Tax Factor 24. Total Inv Related Annual Cost - CAMS w/GRT 25. 26. 27. Software 28. 29. Software Expense - Installed 30. Annuity Factor 31. Gross Receipts Tax Factor 32. Departmental Cost 33. Annuity Factor 34. Departmental Cost 35. Departmental Cost 36. Departmental Cost 37. Software Expense - Installed 38. Departmental Cost 39. Annuity Factor 31. Gross Receipts Tax Factor 31. Gross Receipts Tax Factor 31. Departmental Cost 32. Departmental Cost 33. Departmental Cost 34. Departmental Cost 35. Departmental Cost 36. Departmental Cost 37. Departmental Cost 38. Departmental Cost 39. Departmental Cost 39. Departmental Cost 39. Departmental Cost 30. Annuity Factor 31. Departmental Cost 30. Annuity Factor 31. Departmental Cost 32. Departmental Cost 33. Departmental Cost 34. Departmental Cost 35. Departmental Cost 36. Departmental Cost 37. Departmental Cost 38. Departmental Cost 39. Departmental Cost	17.					
20. Building Annual Cost Factor 21. Building Annual Cost 22. Total Inv Related Annual Cost - CAMS w/o GRT 23. Gross Receipts Tax Factor 24. Total Inv Related Annual Cost - CAMS w/GRT 25. Cost Inv Related Annual Cost - CAMS w/GRT 26. 27. Software 28. 29. Software Expense - Installed 30. Annuity Factor 31. Gross Receipts Tax Factor 31. Gross Receipts Tax Factor 32. BST Fundamental Cost 0.2723 0.2723 31. Gross Receipts Tax Factor 32. BST Fundamental Cost 1.0153 1.0153				0.0857		0.0657
21. Building Annual Cost 22. Total Inv Related Annual Cost - CAMS w/o GRT 23. Gross Receipts Tax Factor 24. Total Inv Related Annual Cost - CAMS w/GRT 25. 26. 27. Software 28. 29. Software Expense - Installed 29. Software Expense - Installed 30. Annuity Factor 31. Gross Receipts Tax Factor 31. Gross Receipts Tax Factor 32. Building Annual Cost 33. Ln 20 34. Ln 20 35. Ln 9 + Ln 21 35. Ln 22 * Ln 23 36. Ln 22 * Ln 23 37. Software 38. Operator Services 39. Annuity Factor 30. Annuity Factor 31. Gross Receipts Tax Factor 32. BST Fundamental Cost 33. Ln 27. Software Expense - Installed 34. Departmental Cost 35. Software Expense - Installed 36. Software Expense - Installed 37. Software Expense - Installed 38. Software Expense - Installed 39. Software Expense - Installed 30. Annuity Factor 31. Gross Receipts Tax Factor 31. Software Expense - Installed 30. Annuity Factor 31. Software Expense - Installed 30. Annuity Factor 31. Software Expense - Installed 30. Annuity Factor 31. Gross Receipts Tax Factor 31. Software Expense - Installed 30. Annuity Factor 31. Software Expense - Installed 30. Annuity Factor 31. Software Expense - Installed 31. Software Expense - Installed 32. Software Expense - Installed 33. Software Expense - Installed 34. Software Expense - Installed 35. Software Expense - Installed 36. Software Expense - Installed 37. Software Expense - Installed 38. Software Expense - Installed 39. Software Expense - Installed 30. Annuity Factor 31. Software Expense - Installed 30. Annuity Factor						0.4700
22. Total Inv Related Annual Cost - CAMS w/o GRT   Ln9 + Ln15 + Ln21			그는 이 이번, 그들은 아이들은 살이 되었다. 나는 아이를 다 아름다고 살아 먹는 것이 하고 있다.	0.1706		0.1720
23. Gross Receipts Tax Factor  24. Total Inv Related Annual Cost - CAMS w/GRT  25. 26. 27. Software  28. 29. Software Expense - Installed  29. Annuity Factor  30. Annuity Factor  31. Gross Receipts Tax Factor  BST Fundamental Cost  0.2723  0.2723  1.0153						
24. Total Inv Related Annual Cost - CAMS w/GRT  Ln 22 * Ln 23  25.  26.  27. Software  28.  29. Software Expense - Installed  30. Annuity Factor  31. Gross Receipts Tax Factor  BST Fundamental Cost  1.0153  0.2723  1.0153				1.0153		1.0163
25. 26. 27. Software 28. 29. Software Expense - Installed Operator Services 30. Annuity Factor BST Fundamental Cost 0.2723 0.2723 31. Gross Receipts Tax Factor BST Fundamental Cost 1.0153 1.0153	-			1.0155		1.0100
26. 27. Software 28. 29. Software Expense - Installed Operator Services 30. Annuity Factor BST Fundamental Cost 0.2723 0.2723 31. Gross Receipts Tax Factor BST Fundamental Cost 1.0153 1.0153		Total Inv Related Annual Cost - CAMS W/GKT	Lh 22 - Lh 23			
27.         Software           28.         29.         Software Expense - Installed         Operator Services           30.         Annuity Factor         BST Fundamental Cost         0.2723         0.2723           31.         Gross Receipts Tax Factor         BST Fundamental Cost         1.0153         1.0153						
28. 29. Software Expense - Installed Operator Services 30. Annuity Factor BST Fundamental Cost 0.2723 0.2723 31. Gross Receipts Tax Factor BST Fundamental Cost 1.0153 1.0153						
29. Software Expense - Installed Operator Services 30. Annuity Factor BST Fundamental Cost 0.2723 0.2723 31. Gross Receipts Tax Factor BST Fundamental Cost 1.0153 1.0153		Software				
30. Annuity Factor BST Fundamental Cost 0.2723 0.2723 31. Gross Receipts Tax Factor BST Fundamental Cost 1.0153 1.0153		Software Expense - Installed				
31. Gross Receipts Tax Factor BST Fundamental Cost 1.0153 1.0153						
32. Annual Software Cost for CAMS Ln29°Ln30°Ln31				1.0153		1.0153
	32.	Annual Software Cost for CAMS	Ln29°Ln30°Ln31			

<sup>\*</sup> Directly Attributed Shared & Common Costs are developed by calculating the difference between TELRIC costs and Direct costs.

WORKPAPER 6 PAGE 1 of 1 10-7-96

COST PER CALL
DEVELOPMENT OF VOLUME INSENSITIVE COSTS
Development of Annual Cost for Data Links

Line	Pata Linka	Links/Miles	Unit Investment b	Annual Gost Factor C	TELRIC Annual Cost Factor	Annual Direct <u>Cost</u> e=a*b*c	Directly Attributed Shared & Common <u>Coat</u> * †=g-e	<u>TELRIC</u> gea'b'd
1.	TOPS/LION DATA LINKS							
2.								
3.	Termination			0.2327	0.2699			
4.	Circuit			0.2327	0.1486			
5.	Land			0.1488	0.1693			
6. 7.	Building			0.1679	0.1093			
8.	Mileage			0.1849	0.2148			
9.	Aerial Fiber			0.1849	0.1982			
10.	Buried Fiber			0.1747	0.2001			
11.	Underground Fiber			0.1761	0.2216			
12.	Pole			0.1922	0.2216			
13.	Conduit			0.1395	0.1541			
14.	Circuit			0.2327	0.1693			
15.	Building	1 Oate 1 later unto 6	107	0.1079	0.1083			
16.	Total Annual Cost - TOPS/LIOI Total Annual Cost - TOPS/LIO	N Data Links Wo	IN COT	1				
17.	Total Annual Cost - 10PS/LIC	JN Deta Links Wi	ui GRI					
19.								
20.	LION/IVS DATA LINKS							
21.								
22.	Termination							
23.	Circuit			0.2327	0.2699			
24.	Land			0.1486	0.1486			
25.	Building			0.1679	0.1693			
26.								
27.	Mileage					-		
28.	Aerial Fiber			0.1849	0.2148			
29.	Buried Fiber			0.1747	0.1982			
30.	Underground Fiber			0.1781	0.2001			
31.	Pole			0.1922	0.2216			
32.	Conduit			0.1395	0.1541			
33.	Circuit			0.2327	0.2699			
34.	Building			0.1679	0.1693			
35.	Total Annual Cost - LION/IVS I	Data Links w/o GR	T					
36.	Total Annual Cost - LION/IVS	Data Links with	GRT					

<sup>\*</sup> Directly Attributed Shared & Common Costs are developed by calculating the difference between TELRIC costs and Direct costs.

WORKPAPER 7 PAGE 1 of 1 10-7-96

COST PER CALL.
DEVELOPMENT OF VOLUME INSENSITIVE COSTS
Development of Annual Cost for Voice Links

Line	<u>DS1 Voice Links</u>	Links/Miles	Unit Investment b	Annual Cost Factor	TELRIC Annual Cost Factor	Annual Direct <u>Cost</u> e=a*b*c	Directly Attributed Shared & Common Cost* f=g-e	TELRIC g=a*b*d
1.	TOPS/IVS VOICE LINKS							
2.								
3.	Termination							
4.	Circuit			0.2327	0.2899			
5.	Land			0.1486	0.1486			
6.	Building			0.1679	0.1693			
7.								
8.	Mileage							
9.	Aerial Fiber			0.1849	0.2148			
10.	Buried Fiber			0.1747	0.1962			
11.	Underground Fiber			0.1781	0.2001			
12.	Pole			0.1922	0.2216			
13.	. Conduit			0.1395	0.1541			
14.	Circuit			0.2327	0.2699			
15.	Building			0.1679	0.1693			
16.	Total Annual Cost - TOPS/IVS	Voice Links w/o	GRT					
17.	Total Annual Cost - TOPS/IV	8 Voice Links w	ith GRT	J				

<sup>\*</sup> Directly Attributed Shared & Common Costs are developed by calculating the difference between TELRIC costs and Direct costs.

WORKPAPER 8 PAGE 1 of 1 10-7-96

TELRIC

Cost

Cost

## COST FOR UPDATING INTERCEPT DATABASE DEVELOPMENT OF TELRIC

Data Base Administrative Ctr (DBAC) \$31.06 \$40.85 1.0153  Total Annual Labor Cost  Directly Attributed Shared & Common Costs are developed by calculating the difference between TELRIC costs and Direct costs	Line	<u>Description</u>	Worktime (Hours)	Labor Rate b	TELRIC Labor Rate	Gross Receipts Tax Factor d	Annual Direct <u>Cost</u> e=a*b*d	Directly Attributed Shared & Common Cost* f=g-e	TELRK g=a°c*
		Data Base Administrative Ctr (DBAC)		\$31.06	\$40.85	1.0153			
	2	Total Angual Labor Cost						:	
	3								
								Directly	
Directly									
<b>DefudirthA</b>									
Attributed Shared &							Direct	Common	

Line Description Source

4 Number of Database Changes per Year Operator Services
5 Cost per Database Change Ln 3 / Ln 4
6 Number of Intercept Queries per Listing
7 Database Update Cost per Query Ln 5 / Ln 6

<sup>\*</sup> Directly Attributed Shared & Common Costs are developed by calculating the difference between TELRIC costs and Direct costs.

#### FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE

COST DEVELOPMENT - NONRECURRING

Not applicable

## FLORIDA NUMBER SERVICES INTERCEPT ACCESS SERVICE

#### SPECIFIC STUDY ASSUMPTIONS

The cost study for Number Services Intercept Access is based on the Total Element Long Run Incremental Cost (TELRIC) methodology prescribed by the FCC's First Report and Order in CC Docket 96-98 released August 8, 1996. Network deployment strategies and equipment purchasing information are used to develop the Total Element Long Run Incremental Cost.

Cost study assumptions are as follows:

- 1. The equipment that will be deployed is Nortel equipment.
- The Line Information for Open Network (LION) is the database for Number Services Intercept. This database contains the nonworking numbers along with information on referrals.
- 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.
- Voice and data links interconnect the Traffic Operator Position System, the LION system, the CAMS and the IVS.
- ALECs must provide updates to BellSouth's Intercept database in order for number referrals for their customers be provided.
- This study assumes 20,000 Intercept changes annually, 30 changes per page and 15 Intercept queries per disconnected or nonworking number.

#### 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:

Gross Receipts Tax Factor 0.0153

Annuity Factor (based on 5 yrs & 11.25% COM) 0.2723

#### Annual Cost Factors:

Digital	Electronic Switch	0.2756
Land		0.1493
Building		0.1720

#### Loadings Factors:

Land					0.0047
Building					0.0657
Misc. Common	Equipment	&	Power	Factor	0.0974

#### \*\*\*\*\*\*\*\*

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. 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	0.0153
Annual Cost Factors:	
Digital Circuit 357C	0.2699

Digital Circuit 357C	0.2699
Land	0.1486
Building	0.1693
Aerial Cable Fiber	0.2148
Buried Cable Fiber	0.1982
Underground Cable Fiber	0.2001
Poles	0.2216
Conduit	0.1541

# FLORIDA



# CCS7 SIGNALING TRANSPORT SERVICE

TELRIC COST STUDY DOCUMENTATION

SECTIONS A THRU 7

Docket: Intervenor:	Req	juest No.	QC'	d	
EGIONAL NEGOTIATION	REQUESTOR				
. REQUEST DATE:					:
. P.O.D. ITEM NO.:	INTERRO	GATORY ITE	M NO.		
AUDIT REQUEST NO DOCUMENT TITLE: CCS7	Signaling Trans	nort Service			
. DOCUMENT SUMMARY: _	Provides procedi	ires and suppor			
development of CCS7 Signalia	ng Transport Ser	vice.			
DOCUMENT DATE: _					
. DOCUMENT TYPEL	ETTED M	EMO M	ZDIA	LITICA	TION
CHART/DIAGRAM	FINANCIAL	STATEMENT		TABLE	_REPORT
	20 001 00	TOPP OT POT	ONIC	MEDIA V	ACOUNT TO TO
HANDWRITTEN NOTI	ESCOMP	UIER/ELECTI	KONIC	MEDIA A	COST STUDY
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. NO. OF PAGES:					
. NO. OF PAGES:	Last Name			Dept	Phone #
DOCUMENT (SOURCE)	Last Name	First Name	MI	Dept Finance	Phone # (205) 977-0348
. NO. OF PAGES: PERSON PROVIDING: DOCUMENT (SOURCE)	Last Name Durden	First Name Rick First Name	MI	Dept Finance Dept	Phone # (205) 977-0348
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NO. OF PAGES: PERSON PROVIDING: DOCUMENT (SOURCE)  AUTHOR:  DOC LOCATION (BOX #) PRODUCTION DATE (FILE	Last Name Durden Last Name Brand	First Name Rick First Name Grace (REG	MI MI ULATO	Dept Finance Dept Finance ORY USE ON	Phone # (205) 977-0348  Phone # (205) 977-0354
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O. DOC LOCATION (BOX #) O. DOC LOCATION DATE (FILI PRODUCTION HISTORY Proprietary: _X_ Yes	Last Name Durden  Last Name Brand  NG DATE)  No Explanation	First Name Rick First Name Grace (REG (R) on:See Sectors	MI MI ULATO	Dept Finance Dept Finance ORY USE ON	Phone #  (205) 977-0348  Phone #  (205) 977-0354  ILY) ONLY)
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#### **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 TELRIC		
SECTION 5	COST DEVELOPMENT - NONRECURRING TELRIC		
SECTION 6	SPECIFIC STUDY ASSUMPTIONS		
SECTION 7	FACTORS AND LOADINGS		

# **SECTION A**

#### SECTION A

#### FLORIDA .

#### CCS7 SIGNALING TRANSPORT SERVICE

#### PROPRIETARY RATIONALE

The CCS7 Signaling Transport Service contains actual unit cost information for discrete cost elements. 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 Service Cost Study is considered proprietary.

#### **FLORIDA**

#### CCS7 SIGNALING TRANSPORT SERVICE

#### INTRODUCTION AND OVERVIEW

This Total Element Long Run Incremental Cost (TELRIC) study is being provided to support CCS7 Signaling Transport Service. The costs presented in this study are based on the TELRIC methodology established by the Federal Communication Commission's (FCC'S) First Report and Order in CC Docket -96-98 (FCC Order) released August 8, 1996.

This cost study develops the Total Element Long Run Incremental Cost (TELRIC) 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.

CCS7 Signaling Transport Service is available to the Local Exchange service provider for the purpose of providing call set-up and noncall set-up capabilities and the completion of Transaction Capabilities Application Part (TCAP) queries. Call set-up can be between the Local Exchange service provider and any BellSouth central office or between the Local Exchange service provider and any other network provider connected to BellSouth's SS7 network.

TCAP messages can be transported to the BellSouth Intelligent Network or Advanced Intelligent Network in which the Local Exchange service provider has purchased the appropriate use. Queries to central offices for provision of Intelligent Network services will also be permitted.

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.

A long run analysis is performed to ensure that the time period studied is sufficient to capture all forward looking costs affected by the business decision.

The recurring and nonrecurring costs presented in this study are levelized so as to be appropriate for the 1997-1999 study period. These costs are developed by using 1996 level TELRIC loadings, annual cost factors and labor rates designed to produce TELRIC results.

#### FLORIDA

#### CCS7 SIGNALING TRANSPORT SERVICE

#### DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of Total Element Long Run Incremental Cost (TELRIC) supporting CCS7 Signaling Transport Service.

The purpose of the TELRIC methodology established by the FCC order is to set the rates for interconnection and unbundled network elements. The basis for a TELRIC study is forward looking long run economic cost methodology. Volume sensitive and volume insensitive costs are identified to develop the direct costs caused by providing the particular network element being studied. TELRIC methodology anticipates pricing of elements in a wholesale network company. Many costs regarded as common or shared would be included as directly attributable in a TELRIC study. The FCC pricing methodology also specifies that, over and above TELRIC, the additional portion of forward looking common costs that cannot be directly attributed to any particular network element will be allocated among the cost elements. TELRIC includes both recurring (capital and operating expenses) and nonrecurring (service provisioning) costs.

#### THE DEVELOPMENT OF RECURRING COSTS

The per unit costs to BellSouth Telecommunications, Inc., resulting from the capital investments necessary to provide a service are called recurring costs. Recurring costs represent a forward looking view to technology and deployment and include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs consist of plant specific expenses and ad valorem taxes. These expenses contribute to the ongoing costs to the Company associated with the initial capital investment. Recurring costs may also be noninvestment related, such as expensed labor, feature specific software and contract expenses. Also included in the recurring TELRIC are shared and common costs directly attributable to the network element. Gross receipts tax is calculated on the TELRIC.

The first step in developing a TELRIC study for CCS7 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 noninvestment related expenses to the 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.

Next, 1996 level TELRIC Annual Cost Factors are used to calculate the direct cost of capital, plant specific 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 which includes directly attributable shared and common costs. Annual TELRIC by account codes are then summed and divided by the associated demand to arrive at a cost per cost element.

The directly attributable shared and common cost components of the TELRIC annual cost factors are calculated as follows. First, a detailed analysis of the forward looking directly assigned costs associated with the interconnect or unbundled network elements is performed. The remaining costs of doing business are then analyzed to determine whether they are directly attributable shared and common costs that can be reasonably attributed to network elements.

Next, the directly attributable shared and common costs are projected forward and segregated by the functional areas to which they are related. The functional areas are wholesale operations, retail services operations, and combined wholesale and retail services operations. Attribution factors based on the specific wholesale functional area, such as central office equipment (COE) investment, COE salary and wages, etc., are then developed and applied to the respective costs. These attributed costs are accumulated by related network investment category, such as pair gain equipment, buried cable, etc., and attributed shared cost factors are developed. These attributed shared cost factors are then included as a component of the TELRIC annual cost factors by investment category. All directly attributed costs related to retail services operations are excluded.

The common cost allocation factor is applied to TELRIC to produce the forward looking economic cost, as defined in the FCC Order, Appendix B, Section 51.505, which includes an appropriate share of common costs. The common cost allocation factor is calculated by summing all wholesale costs that cannot be reasonably attributed to specific elements, services or functions and dividing by the sum of the directly assignable and directly attributable wholesale costs.

#### 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 TELRIC labor rate for the work group performing the function.

The TELRIC labor rates are calculated as follows: Salary and wages, as used in the determination of TELRIC annual cost factors, are accumulated on a basis consistent with specific force groups. Shared costs attributable to salaries and wages are then accumulated on a basis consistent with the development of the respective force group's labor rate. A factor is then developed for each force group by dividing the attributed shared costs (human resources, office equipment, motor vehicles, land and building space, etc.) by the related salaries and wages. This factor is then applied to the salary and wage portion of the incremental labor rate for each force group, and the result is added to the incremental labor rate to determine the TELRIC labor rate.

Utilizing work functions, work times and TELRIC 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 TELRIC 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 nonrecurring cost.

The common cost allocation factor is applied to the nonrecurring TELRIC to produce the forward looking economic cost, as defined in the FCC Order, Appendix B, Section 51.505, which includes an appropriate share of common costs.

## **FLORIDA**

### CCS7 SIGNALING TRANSPORT SERVICE

# SUMMARY OF RESULTS

This section contains a cost summary for the Total Element Long Run Incremental Cost (TELRIC) for CCS7 Signaling Transport Service.

CCS7 SIGNALING CONNECTION	
Per 56 Kbps Facility, Per Month	0.440
TELRIC	\$ 4.42
Common Cost Allocation Factor	1.0804
Total Cost	\$ 4.78
Per 56 Kbps Facility, Non-Recurring	In Progress
TELRIC .	
Common Cost Allocation Factor	
Total Cost	
CCS7 SIGNALING TERMINATION	
Per STP Port, Per Month	
TELRIC	\$111.30
Common Cost Allocation Factor	1.0804
Total Cost	\$120.25
CCS7 SIGNALING USAGE	
Per Call Setup Message	
TELRIC	\$0.000026
Common Cost Allocation Factor	1.0804
Total Cost	\$0.000028
Per TCAP Message	
TELRIC	\$0.000092
Common Cost Allocation Factor	1.0804
Total Cost	\$0.000099
CCS7 SIGNALING USAGE SURROGATE	
Per 56 Kbps Facility, Per Month	
TELRIC	\$410.51
Common Cost Allocation Factor	1.0804
Total Cost	\$443.52

#### FLORIDA

#### CCS7 SIGNALING TRANSPORT SERVICE

#### COST DEVELOPMENT - RECURRING

This section defines the recurring Total Element Long Run Incremental Cost (TELRIC) 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 TELRIC 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 average utilization and the expected monthly octets carried by Common Channel Signaling Access (CCSAC) Links are calculated.

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 average utilization 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 utilization 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 throughput is then a function of the number of link pairs and the utilization 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 utilization 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.

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.

	S7 SIGNALING		FLORIDA
2 TR	ANSPORT SERVICE COST SUMMARY		WORKPAPER 1
	CURRING COST		PAGE 1 OF 1
4			
51			
	SCRIPTION	SOURCE	AMOUNT
7	221311414		-
	S7 Signaling Connection		
	r 56 Kbps Facility, per mo -		
10 Dire		WP2, Pg 1 Ln 31	\$3.83
		WP2, Pg 2 Ln 31	\$0.66
11 DIN	ectly Attributable Shared and Common Cost (DASCC)	Ln 10 + Ln 11	\$4.42
12 TE	LRIC	Ln 10 + Ln 11	\$4.47
13		37 106131	
	S7 Signaling Termination		
	r STP Port, per mo.	No.	
	ect STP Port, per mo.	WP3, Pg 1 Ln 35	\$97.57
	SCC STP Port, per mo.	WP3, Pg 2 Ln 35	\$13.73
18 TEI	LRIC	Ln 16 + Ln 17	\$111.30
19			
	S7 Signaling Usage		
	ect C Links & Port	WP4, Pg 1, Ln32	\$0.0000079
	SCC C Links & Port	WP4, Pg 2, Ln32	\$0.00000012
23	OCC O LIIMS & FOR		***************************************
24			-
	inks and Ports - Direct	WP5,Pg 1 Ln35+WP6,Pg 1 Ln21	\$0.0000015
	inks and Ports - Direct	WP5.Pg 2 Ln35+WP6.Pg 2 Ln21	\$0.00000002
	oss Receipts Tax Factor	THE OF ME CHOO! THE OF ME CHE!	1.0153
	oss Receipts Tax Pactor		1,0193
28		(I = 04 -1 = 05) -1 = 07	\$0.0000095
	ect Cost Per Octet	(Ln21+Ln25)xLn27 (Ln22+Ln26)xLn27	\$0.0000003
	SCC Per Octet	(Lnzz+Lnzb)xLnz/	\$0.0000014
31 TEI			24.
32 Avi	erage Octets per setup(ISUP) Message		
	erage Octets per TCAP Message		84.
34		OROSOVIE AND SECTION OF THE SECTION	<del> </del>
	S7 Usage Per Call SetUp (ISUP)Message		
36 Dire		Ln29 x Ln 32	\$0.000023
37 DA		Ln30 x Ln 32	\$0.000003
38 TEI	LRIC	Ln36 + Ln37	\$0.000026
39			
	S7 Usage Per TCAP Message	1 22 . 22	
41 Dire		Ln29 x Ln33	\$0.000080
42 DA		Ln30 x Ln33	\$0.000012
43 TEI	LRIC	Ln41 + Ln42	\$0.000092
44			
	erage Monthly Octets per 56 Kbps Facility	Workpaper 7 Ln 27	376,610,798
46			
	S7 Signaling Usage Surrogate per 56 Kbps Facility	MENERAL PLANS	
48 Din		Ln29 x Ln45	\$357.78
49 DA		Ln30 x Ln45	\$52.73
50 TEI	LRIC	Ln48 + Ln49	\$410.51

1	CCS7 SIGNALING		FLORIDA
	CONNECTION	STATE OF THE PARTY	WORKPAPER 2
3			PAGE 1 OF 2
4	DIRECT		
5			
6	DESCRIPTION	SOURCE .	AMOUNT
7			
8	Investment		
	Land	WP6 Ln 10, Investment	\$0.34
10	Building	WP6 Ln 11, Investment	\$7.38
	Digital Circuit	WP6 Ln 12, Investment	\$176.45
	Aerial	WP6 Ln 13, Investment	\$2.40
	Burled	WP6 Ln 14, Investment	\$9.60
	Underground	WP6 Ln 15, Investment	\$2.40
	Poles	WP6 Ln 16, Investment	\$0.60
	Conduit	WP6 Ln 17, Investment	\$1.50
	Total	Sum Ln 9 - Ln 16	\$200.67
18			
19	Direct Annual Cost Factor		
	Land 20C		0.1486
	Building 10C		0.1679
	Digital Circuit 357C		0.2327
	Aerial 822C		0.1849
24	Burled 845C		0.1747
25	Underground 85C		0.1781
	Poles 1C		0.1922
	Conduit 4C		0.1395
28			
	Annual Cost	Algorithm 1	\$45.23
	Gross Receipts Tax Factor		1.0153
31	Direct Monthly Cost	(Ln29xLn30)/12	\$3.83
-	Algorithm 1: (L9xL20) + (Ln10x	Ln21) + (Ln11xLn22) + (Ln12xLn	23) + (Ln13xLn24) + (Ln14xLn25) +
	(Ln15xLn26) + (Ln		
	PRIVATE/PROPRIETARY		
	Contains Private and/or Propr	letary Information	
	May not be used or Disclosed		nies
	Except Pursuant to a Written	Agreement	

ST SIGNALING DINNECTION  RECTLY ATTRIBUTABLE SHAR  ESCRIPTION  Vestment  nd	ED AND COMMON COST (DAS	WORKPAPER 2 PAGE 2 OF 2 SCC) AMOUNT
RECTLY ATTRIBUTABLE SHAR ESCRIPTION  Vestment  nd		SCC)
escription vestment nd		
escription vestment nd		
vestment nd	SOURCE .	AMOUNT
vestment nd		
nd		
nd		A CONTRACTOR OF THE PARTY OF TH
	WP6 Ln 10, Investment	\$0.34
illding	WP6 Ln 11, Investment	\$7.38
gital Circuit	WP6 Ln 12, Investment	\$176.45
erial	WP6 Ln 13, Investment	\$2.40
ırled	WP6 Ln 14, Investment	\$9.60
nderground	WP6 Ln 15, Investment	\$2.40
oles	WP6 Ln 16, Investment	\$0.60
onduit	WP6 Ln 17, Investment	\$1.50
ital	Sum Ln 9 - Ln 16	\$200.67
ASCC Annual Cost Factor		
		0.0000
		0.0014
		0.0372
erial 822C		0.0299
irled 845C		0.0235
		0.0220
		0.0294
onduit 4C		0.0146
nnual Cost	Algorithm 1	\$6.96
oss Receipts Tax Factor		1.0153
ASCC Monthly Cost	(Ln29xLn30)/12	\$0.59
	ried iderground iles induit ital ides ides ides ides ides ides ides ides	ried WP6 Ln 14, Investment derground WP6 Ln 15, Investment WP6 Ln 16, Investment WP6 Ln 16, Investment wP6 Ln 17, Investment wP6 Ln 17, Investment Sum Ln 9 - Ln 16  SCC Annual Cost Factor and 20C wilding 10C wi

1	CCS7 SIGNALING		FLORIDA
	TERMINATION		WORKPAPER 3
3			PAGE 1 OF 2
4	DIRECT		
5			-
6	DESCRIPTION	SOURCE	AMOUNT -
7			
8	VENDOR A		
9	Investment per Port	<u> </u>	
10	Hardware Discount Factor		
11	Total Investment	Ln 9 x Ln 10	
12	Direct Annual Cost Factor (377C)		0.2412
	Monthly Cost Per Port	(Ln 11 x Ln 12)/12	
14			
15	VENDOR B		
	Investment per Port		
	Hardware Discount Factor		
18	Total Investment	Ln 16 x Ln 17	
	Direct Annual Cost Factor (377C)		0.2412
	Monthly Cost Per Port	(Ln 18 x Ln 19)/12	
21			NAME OF TAXABLE PARTY.
22	Software per Port		
	Software Discount Factor		
medical Advisor Section 1	Total Software Expense	Ln 22 x Ln 23	
	Annuity Factor		0.2723
	Equivalent Monthly Cost per Port	(Ln 24 x Ln 25)/12	
	Total Monthly Cost per Port	Ln 20 + 26	-
28			
	Port Ratio, Vendor A	PN F	0.53
	Port Ratio, Vendor B		0.47
31	Average Monthly Cost per Port	(Ln13xLn29) + (Ln27xLn30)	\$96.10
32			
33	Gross Receipts Tax Factor		1.0153
34			
35	Direct Monthly Cost per Port	Ln 31 x Ln 33	\$97.57
	Note: There is no software Port expen	nse associated with Vendor	A
	PRIVATE/PROPRIETARY		
-	Contains Private and/or Proprietary Inf		
	May not be used or Disclosed Outside		
	Except Pursuant to a Written Agreeme		

1	CCS7 SIGNALING		FLORIDA
	TERMINATION		WORKPAPER 3
3	75.23.4		PAGE 2 OF 2
4	DIRECTLY ATTRIBUTABLE SHARED AND	1	
5			
6	DESCRIPTION	SOURCE	AMOUNT -
7			
8	VENDOR A		
	Investment per Port		\$13,315.00
	Hardware Discount Factor	(1 - 0.65)	0.3
	Total Investment	Ln 9 x Ln 10	\$4,660.25
12	DASCC Annual Cost Factor (377C)		0.043
13	Monthly Cost Per Port	(Ln 11 x Ln 12)/12	\$16.85
14			1
15	VENDOR B		
	Investment per Port		\$5,621.00
	Hardware Discount Factor	(1 - 0.52)	0.4
	Total Investment	Ln 16 x Ln 17	\$2,698.08
	DASCC Annual Cost Factor (377C)		0.043
	Monthly Cost Per Port	(Ln 18 x Ln 19)/12	\$9.76
21			
22			
23			
24			
25			1
26			
27			
28			1
	Port Ratio, Vendor A		0.53
	Port Ratio, Vendor B		0.47
	Average Monthly Cost per Port	(Ln13xLn29) + (Ln20xLn30)	\$13.52
32			
33	Gross Receipts Tax Factor	and the same of th	1.015
34			
35	DASCC Monthly Cost per Port	Ln 31 x Ln 33	\$13.73
	PRIVATE/PROPRIETARY		
	Contains Private and/or Proprietary Information		
	May not be used or Disclosed Outside 1 Except Pursuant to a Written Agreeme	-	

1	DEVELOPMENT OF CCS7 SIGNALING COST	TO THE POLICE OF THE PARTY OF T	FLORIDA
2	PER OCTET FOR STP'S AND C LINKS		WORKPAPER 4
3			PAGE 1 OF 4
-	DIRECT COST		
5		Lisas viol of service	
	DESCRIPTION	SOURCE	_ AMOUNT
	STP	1	-
8	Investment per Link Pair (Excluding Port Term.)	WP 4 Pg 4 Ln 33	\$17,064.32
9	Company Engineering and Installation		1.165
10	Miscellaneous Common Equipment and Power		1.0980
11	Total Investment per Link Pair (Hardware)	Ln8xLn9xLn10	\$21,831.91
12	Land Factor		0.004
	Building Factor		0.070
14	Direct Annual Cost Factor, Hardware (377C)		0.241
15	Direct Annual Cost Factor, Land (200)		0.148
16	Direct Annual Cost Factor, Building (10C)		0.167
	Annual Cost Hardware	Ln 11 x Ln 14	\$5,265.86
	Annual Cost Land	Ln 11 x Ln 12 x Ln 15	. \$13.63
	Annual Cost Building	Ln 11 x Ln 13 x Ln 16	\$258.79
20	Annual Cost Building Annual Cost per Link Pair (Hardware) (VS)	Ln 17+Ln18+Ln19	\$5,538.28
20	Software Expense per Link Pair (Excluding Port Termination)	WP 4 Pg 4 Ln 34	\$3,633.53
21	Annuity Factor	W 419-411-4	0.272
22	Equivalent Annual Cost per Link Pair (Software) (VIS)	Ln 21 x Ln 22	\$989.41
	Monthly Cost per Link Pair	LII STATION	7,500.41
24	-Hardware, Land & Building - Volume Sensitive	Ln 20 / 12	\$461.52
25	-Software - Volume insensitive	Ln 23 / 12	\$82.45
27	-SOFTWARE - VOIGITIE INSCRIBITIVE	1	1
	Average Pair Links		72
20	Monthly Cost per Port Pair & C Link	(2)(WP5 Pg1 Ln 31) + (WP6 Pg1 Ln19)	\$196.01
29	Monthly Cost per Link Pair, (Volume Insensitive)	Ln 29 / Ln 28	\$2.72
74	Octets per month per Link Pair	WP 7 Ln 18	689,472,000
22	Direct Cost per Octet	(Ln 25 + Ln26 + Ln30)/Ln31	\$0.0000079
52	birect cost per occer		
	PRIVATE/PROPRIETARY		
	Contains Private and/or Proprietary Information		
	May not be used or Disclosed Outside The BellSouth Com Except Pursuant to a Written Agreement	panies	

1 DEVELOPMENT OF CCS7 SIGNALING COST		FLORIDA
2 PER OCTET FOR STP'S AND C LINKS		WORKPAPER 4
		PACE 2 OF 4
4 DIRECTLY ATTRIBUTED SHARED AND COMMON COST (DASCC)		Contract of the Contract of th
6 DESCRIPTION	SOURCE	AMOUNT
7 STP		-
8 Investment per Link Pair (Excluding Port Term.)	WP 4 Pg 4 Ln 33	\$17,064.32
9 Company Engineering and Installation		1.1652
10 Miscellaneous Common Equipment and Power		1.0980
11 Total Investment per Link Pair (Hardware)	Ln8xLn9xLn10	\$21,831.91
12 Land Factor		0.004
13 Building Factor		0.0706
14 DASCC Annual Cost Factor, Hardware (377C)		0.0434
15 DASCC Annual Cost Factor, Land (20C)		0.0000
16 DASCC Annual Cost Factor, Building (10C)		0.0014
17 Annual Cost Hardware	Ln 11 x Ln 14	\$947.50
18 Annual Cost Land	Ln 11 x Ln 12 x Ln 15	\$0.00
19 Annual Cost Building	Ln 11 x Ln 13 x Ln 16	\$2.16
20 Annual Cost per Link Pair (Hardware) (VS)	Ln 17+Ln18+Ln19	\$949.66
21		
22		1
23		i
24 Monthly Cost per Link Pair		
25 Hardware, Land & Building - Volume Sensitive	Ln 20 / 12	\$79.14
26		
27		
28 Average Pair Links		72
29 Monthly Cost per Port Pair & C Link	(2)(WP5 pg2 Ln 31) + (WP6 pg2 Ln19)	\$27.64
30 Monthly Cost per Link Pair, (Volume Insensitive)	Ln 29 / Ln 28	\$0.38
31 Octets per month per Link Pair	WP 7 Ln 18	689,472,000
32 DASCC per Octet	(Ln 25 + Ln30)/Ln31	\$0.0000012
PRIVATE/PROPRIETARY		
Contains Private and/or Proprietary Information		
May not be used or Disclosed Outside The BellSouth Com	panles	
Except Pursuant to a Written Agreement		

1 DEVELOPMENT OF CCS7 SIGNALING COST		FLORIDA
2 PER LINK PAIR FOR STP'S		WORKPAPER 4
3		PAGE 3 OF 4
4		
5		
6 DESCRIPTION	SOURCE	AMOUNT -
7 VENDOR A		
8 Required Switches		16
9 Ratio to Total		0.53
10 Average Link Pairs (Excluding C Links)		72
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 Ins	ensitive) Ln 28 / Ln 10	
PRIVATE/PROPRIETARY		
Contains Private and/or Proprietary Information	n	
May not be used or Disclosed Outside The BellSo	outh Companies	
Except Pursuant to a Written Agreement	Car and a second	

1	DEVELOPMENT OF CCS7 SIGNALING COST		FLORIDA
2	PER LINK PAIR FOR STP'S		WORKPAPER 4
3			PAGE 4 OF 4
4			1
5			
6	DESCRIPTION	SOURCE	AMOUNT
	VENDOR B	-	
8	Required Switches	•	
	Ratio to Total		0.
10	Average Link Pairs (Excluding C Links)		
11			
12	Hardware Investment		
13	Software Investment		
14	Engineering Investment		
	Installation Investment		
	Hardware Discount Factor		
	Software Discount Factor		
	Engineering Discount Factor	Marie Control of the	
10	Installation Discount Factor		<del> </del>
	Total Hardware Investment	Ln 12 x Ln 16	
	Total Software Investment	Ln 13 x Ln 17	
	Total Engineering Investment	Ln 14	
22	Total Installation Investment	U: 15	
	Total investment	Sum(Ln20-Ln23)	:
25		- Journal of Bridge	-
	Software Expense	<del> </del>	Ť
	Software Discount Factor	+	•
	Total Software Expense	Ln 26 x Ln 27	1
29	Total software Expense	- United Addition	
40	Investment per Link Pair (Volume Sensitive)	Ln 24/ Ln 10	
50	Software Expense per Link Pair (Volume Insensitive)	Ln 28 / Ln 10	+
	SOFTWARE EXPENSE PER LINK PAIR (VOIUME INSENSITIVE)	LII 20 / LII 10	+
32	and the day of the second part link Bala (Values Canalalus)	WP4 pg 3 (Ln9xLn30) + (Ln9xLn30)	\$17,064.3
55	Weighted Avg investment per Link Pair (Volume Sensitive) Weighted Avg Software Expense per Link Pair (Volume Insensitive)	WP4 pg 3 (Ln9xLn30) + (Ln9xLn30) WP4 pg 3 (Ln9xLn31) + (Ln9xLn31)	\$3,633.5
54	Weighted Avg Sortware expense per Link Pair (volume insensitive)	Whe ba o remarens 11 + remarens 11	33,033.3
-	PRIVATE/PROPRIETARY		
-	Contains Private and/or Proprietary Information		
	May not be used or Disclosed Outside The BellSouth Companies	+	-
-	Except Pursuant to a Written Agreement	<del> </del>	,
_	Except Fursualit to a Wilter Agreement		

1 DEVELOPMENT OF CCS7 SIGNALING COST		FLORIDA
2 PER OCTET FOR STP PORTS		WORKPAPER 5
3		PAGE 1 OF 2
4 DIRECT COST		
5		-
6 DESCRIPTION	SOURCE	- AMOUNT
7		
8 VENDOR A		
9 Investment per Port		
10 Hardware Discount Factor		
11 Total Investment	Ln 9 x Ln 10	
12 Direct Annual Cost Factor 377C		0.241
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 Direct Annual Cost Factor 377C		0.241
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		0.272
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		0.53
30 Port Ratio, Vendor B		0.47
Average Monthly cost per Port	(Ln13xLn29) + (Ln27xLn30)	\$96.12
32		
33 Octets per Month per Port	WP 7 Ln 18	689,472,000
34		000/112/000
35 Direct Cost per Octet per Port	Ln 31/ Ln 33	\$0.0000014
NOTE: There is no software Port expense a	ssociated with Vendor A.	
PRIVATE/PROPRIETARY		
Contains Private and/or Proprietary Informa	ation	
May not be used or Disclosed Outside The B		
Except Pursuant to a Written Agreement	Chicouni Companies	

1 DEVELOPMENT OF CCS7 SIGNALING COST		FLORIDA
2 PER OCTET FOR STP PORTS		WORKPAPER 5
3		PAGE 2 OF 2
4 DIRECTLY ATTRIBUTED SHARED AND COMMO	N COST (DASCC)	
5		
6 DESCRIPTION	SOURCE	- AMOUNT
7	NUMBER AND ADDRESS OF THE PROPERTY OF THE PROP	
8 VENDOR A		
9 Investment per Port		\$13,315.00
10 Hardware Discount Factor	(1 - 0.65)	0.35
11 Total Investment	Ln 9 x Ln 10	\$4,660.25
12 DASCC Annual Cost Factor 377C		0.0434
13 Monthly Cost Per Port	(Ln 11 x Ln 12)/12	\$16.86
14		
15 VENDOR B		
16 Investment per Port		\$5,621.00
17 Hardware Discount Factor	(1 - 0.52)	0.48
18 Total Investment	Ln 16 x Ln 17	\$2,698.08
19 DASCC Annual Cost Factor 377C		0.0434
20 Monthly Cost Per Port	(Ln 18 x Ln 19)/12	\$9.76
21		
22		
23		
24		
25		
26		
27		
28		
29 Port Ratio, Vendor A		0.53
30 Port Ratio, Vendor B		0.47
31 Average Monthly cost per Port	(Ln13xLn29) + (Ln20xLn30)	\$13.53
32		
33 Octets per Month per Port	WP 7 Ln 18	689,472,000
34		
35 DASCC per Octet per Port	Ln 31/ Ln 33	\$0.00000002
PRIVATE/PROPRIETARY		
Contains Private and/or Proprietary Informat		
May not be used or Disclosed Outside The Be	lisouth Companies	
Except Pursuant to a Written Agreement		

1	CCS7 COST						FLORIDA
2	PER OCTET FOR C LIN	KS AND S	SP A LIN	IKS			WORKPAPER 6
3							PAGE 1 OF 2
4	DIRECT COST						
5							
6	C LINK/SSP A LINK,	30 AIR	MILES				
7							
8			PER			DIRECT	TOTAL
9		FIXED	MILE	MILES	INVESTMENT	ACF	ANNUAL COST
10	LAND 20C	0.34	0	30	\$0.34	0.1486	\$0.05
11	BUILDING 10C	5.58	0.06	30	\$7.38	0.1679	\$1.24
12	CIRCUIT 357C	134.45	1.4	30	\$176.45	0.2327	\$41.06
13	AERIAL 822C		0.08	30	\$2.40	0.1849	\$0.44
14	BURIED 845C		0.32	30	\$9.60	0.1747	\$1.68
15	UNDERGROUND 85C		0.08	30	\$2.40	0.1781	\$0.43
16	POLES 1C		0.02	30	\$0.60	0.1922	\$0.12
17	CONDUIT 4C		0.05	30	\$1.50	0.1395	\$0.21
18	TOTAL		E - 13005		\$200.67		\$45.23
19	TOTAL MO. COST						\$3.77
20	OCTETS/MO - WP 7 Lr	18					689,472,000
21	DIRECT COST PER OC	TET (VOL	UME SEN	ISITIVE)			\$0.000000055
	PRIVATE/PROPRIET/ Contains Private and May not be used or D	or Propr	Married or Contraction and	CONTRACTOR AND ADDRESS OF	The second secon	poloc	
	Except Pursuant to a	Market S. C. C. C. Carpellon and Carpet Service Service Co.	segue of the second season was been	MINISTERNA PROPERTY	South Compa	ai iles	<del> </del>

1	CCS7 COST						FLORIDA	
2	PER OCTET FOR C LIN	KS AND S	SP A LIN	IKS			WORKPAPER 6	
3							PAGE 2 OF 2	
4	DIRECTLY ATTRIBUTA	ABLE SHA	RED AN	D COMN	MON COST (DA	SCC)		
5								
6	C LINK/SSP A LINK,	30 AIR	MILES					
7								
8			PER			DASCC	TOTAL	
9		FIXED	MILE	MILES	INVESTMENT	ACF	ANNUAL COST	
10	LAND 20C	0.34	0	30	\$0.34	0.0000	\$0.00	
11	BUILDING 10C	5.58	0.06	30	\$7.38	0.0014	\$0.01	
12	CIRCUIT 357C	134.45	1.4	30	\$176.45	0.0372	\$6.56	
13	AERIAL 822C		0.08	30	\$2.40	0.0299	\$0.07	
14	BURIED 845C		0.32	30	\$9.60	0.0235	\$0.23	
15	UNDERGROUND 85C		0.08	30	\$2.40	0.0220	\$0.05	
16	POLES 1C		0.02	30	\$0.60	0.0294	\$0.02	
17	CONDUIT 4C		0.05	30	\$1.50	0.0146	\$0.02	
18	TOTAL		1,500		\$200.67		\$6.96	
19	TOTAL MO. COST	746	180.9				\$0.58	
20	OCTETS/MO - WP 7 Lr	n 18		135-1476			689,472,000	
21	DASCC PER OCTET (V	OLUME S	ENSITIV	E)			\$0.000000009	
	PRIVATE/PROPRIETARY							
	<b>Contains Private and</b>	or Propr	ietary Ir	ion				
	May not be used or Disclosed Outside The BellSouth Companies							
	<b>Except Pursuant to a</b>	Written	Agreem	ent				

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1	CCS7 SIGNALING TRANSPORT SER	VICE	FLORIDA
2			WORKPAPER 7
3	DEMAND		PAGE 1 OF 1
4			
5			-
6			
7	DESCRIPTION	SOURCE	AMOUNT
8			
9	LINK OCTET UTILIZATION		
10	CCS7 bits per second		56,000
11	Bits per Octet		8
	Total octets per second	Ln 10 / Ln 11	7,000
13	Average Utilization		0.10
14	Total Average Octets per sec	Ln 12 x Ln 13	700
15	Seconds per busy hour		3,600
	Total octets per busy hour	Ln 14 x Ln 15	2,520,000
	Ratio, Avg. Calendar day to busy	. 9	
18	Octets per month per link	Ln 16xLn17x30.4	689,472,000
19			
20	OCTETS - CCSAC LINKS		
21/	Access MOU - 1996		86,347,735,000
	CCSAC Links - 1996		646
23	Monthly MOU per CCSAC Link	(Ln 21/ Ln 22)/12	11,138,769
	MOU per Message		3.7
	Monthly Messages per CCSAC Link	Ln 23 / Ln 24	3,010,478
	Octets per Message		125.1
27	Monthly Octets per CCSAC Link	Ln 25 x Ln 26	376,610,798
	PRIVATE/PROPRIETARY		
(	Contains Private and/or Proprieta	ry Information	
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	Except Pursuant to a Written Agre		

# FLORIDA

# CCS7 SIGNALING TRANSPORT SERVICE COST DEVELOPMENT - NONRECURRING

IN PROGRESS

#### FLORIDA

#### CCS7 SIGNALING TRANSPORT SERVICE

#### SPECIFIC STUDY ASSUMPTIONS

## Cost study assumptions are as follows:

Software expenses were projected to the 1997-1999 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.

### **FLORIDA**

## CCS7 SIGNALING TRANSPORT SERVICE

## **FACTORS AND LOADINGS**

Following are the Annual TELRIC factors, miscellaneous loadings and labor rates used in the Common Channel Signaling Transport Service cost study.

Hardware Inflation Rate Fro	m 1996 (Regional)	1.0000
Amortization Factor (5 Year	rs @ 11.25%)	0.2723
Engineering & Installation F	Factor 377C (Regional)	1.1652
Land Factor 20C (Regiona	1)	0.0042
Building Factor 10C (Reg	0.0706	
Miscellaneous Common Equ	uipment	
and Power Factor	377C (Regional)	1.0980
Gross Receipts Tax Factor (	Florida)	1.0153
Annual TELRIC Factors	(Attached)	

Image Table: ACF.WIK1

# 1996 BELLSOUTH TELECOMMUNICATIONS ACCOUNT AVERAGE ANNUAL COST FACTORS

\* FOR USE IN SERVICE COST STUDIES ONLY \*

Directly

	Field Code	Depreciation	ACFC COM	ACFC Inc Tax	Cap Exp	A.CFC Pit Specific Exp	ACFC Adval Tax	Attributed Shared and Common g	TELRIC
		a	ь						
***************************************			11.25%		(a+b+c)				(d+e+f+g)
		0.0000	0.0947	0.0426	0.1373	0.0000		0.0000	0.1486
LAND - COE	200	0.0330	0.0826		0.1525	0.0041	0.0113	0.0014	0.1693
BUILDINGS - COE	10C, 110C	0.1157	0.0555		0.1966	0.0333		0.0434	0.2846
DIGITAL ELEC SWITCH OPERATOR SYSTEMS	377C, 587C 117C,417C	0.1157	0.0647		0.2100	0.0071	0.0113	0.0500	0.2784
			0.057	5 0.0256	0,2439	0.0060	0.0113	0.0394	0.3006
DIGTL CIRC-DDS	157C	0.1608			0.2127	F1875			0.2688
DIGTL CIRC-PAIR GAIN DIGTL CIRC-OTHER	R GAIN 257C,D257C,F257C	0.1314 0.1314			0.2130		A() 1.55 (1.59 (1.50 pt))		0.2699
		u - 340	0.000	9 0.0254	0.1574	0.0235	5 0.0113	0.0294	0.2216
POLES	1C	0.0721			DEPT. TO A STATE OF THE PARTY O		AND THE RESERVE OF THE PARTY OF		0.3149
AERIAL CA - METAL AERIAL CA - FIBER	22C, 12C 822C, 812C,D22C,	0.1023 0.0746		THE RESERVE OF THE PERSON OF T	0.1689				0.2148
ALMAL ON - I IDEA	F22C,T22C,D12C,F12C,T12C				20404	0.017	2 0.0113	0.0351	0.2764
UNGROUND CA - METAL	5C	0.1184							
UNGROUND CA-FIBER	85C,D5C,F5C,T5C	0.0686					TO 1	5.717070054000	
BURIED CA - METAL	45C	0.0885	A COLOR OF THE STREET, THE STR						\$100 PK SA
BURIED CA - FIBER	845C, D45C, F45C, T45C	0.0613				TO THE RESERVE OF THE PARTY OF			
SUBMARINE CA-METAL	6C	0.0937			CODE IN COLUMN TO THE PARTY OF				
SUBMARINE CA-FIBER	86C,D6C,F6C,T6C	0.0937		AND THE RESERVE OF THE PARTY OF					
INTRBLD NTWK-METAL	52C	0.075	Action to the second second	Mark Carrier Street Hall Land Berger Street					
INTRBLD NTWK-FIBER CONDUIT SYSTEMS	852C,D52C,F52C,T52C 4C	0.075 0.020	A CONTRACTOR OF THE STREET					Application of the second second second	

DDC-25

# FLORIDA



# UNBUNDLED LOCAL USAGE

TELRIC COST STUDY DOCUMENTATION

SECTIONS A THRU 7

# Florida Unbundled Local Usage

# 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

### Florida Unbundled Local Usage

#### PROPRIETARY RATIONALE

The Florida Unbundled Local Usage 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 Unbundled Local Usage Cost Study is considered proprietary.

### Florida Unbundled Local Usage

#### INTRODUCTION AND OVERVIEW

This Total Element Long Run Incremental Cost (TELRIC) study is being provided to support Local Measured Usage. The costs presented in this study are based on TELRIC methodology established by the FCC's First report and Order in CC Docket 96-98 (FCC Order) released August 8, 1996.

Unbundled Local Usage provide Alternate Local Exchange Companies (ALECs) with the ability to access the local switched network, and usage of the local switched network. Use of the local switched network consumes additional resources, such as traffic sensitive switching resources and if necessary, interoffice facilities. The costs for network usage are included in this study.

The study methodology uses the Network Analysis Tool (NCAT) model to develop the incremental cost involved in the provisioning of Local Measured Usage. This model was developed and is maintained by Bellcore. The version used to develop the study results is 4.1. All costs are calculated on a forward-looking basis. This implies that the most cost-effective technology approved for use will be deployed.

A long run analysis is performed to ensure that the time period studied is sufficient to capture all forward looking costs affected by the business decision. Recurring costs developed in this study are levelized to be appropriate for the 1997-1999 study period. These costs are developed by using 1996 level TELRIC loadings and annual cost factors designed to produce TELRIC results.

# Florida . Unbundled Local Usage

#### DESCRIPTION OF STUDY PROCEDURES

This section describes the general principles for the development of Total Element Long Run Incremental Costs (TELRIC) supporting the Unbundled Local Usage Cost Study.

The purpose of the TELRIC methodology established by the FCC order is to set the rates for interconnection and unbundled network elements. The basis for a TELRIC study is forward-looking long run economic cost methodology. TELRIC methodology anticipates pricing of network elements in a wholesale network company. Many costs regarded as common or shared would be included as directly attributable in a TELRIC study. The FCC pricing methodology also specifies that, over and above TELRIC, the additional portion of forward-looking common costs that cannot be directly attributed to any particular network element will be allocated among cost elements. This TELRIC study include both recurring (capital and operating expenses) and nonrecurring (provisioning) costs.

#### THE DEVELOPMENT OF RECURRING COSTS

Recurring costs represent a forward-looking view of technology and deployment and include capital and operating costs. While capital costs include depreciation, cost of money and income tax, operating costs consist of plant specific expenses and ad valorem taxes. These expenses contribute to the ongoing cost to the Company associated with the initial capital investment. Also included in the recurring TELRIC are shared and common costs directly attributable to the network element. Gross receipts tax is calculated on the TELRIC.

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.

### Florida Unbundled Local Usage

### SUMMARY OF RESULTS

This section contains a cost summary for the Total Element Long Run Incremental Cost (TELRIC).

TELRIC- End Office Switching per Conv. Min. per Switch	\$0.002273
Common Cost Allocation Factor	1.0804
Total	\$0.002456
TELRIC- Tandem Switching per Conv. Min. per Switch	\$0.001326
Common Cost Allocation Factor	1.0804
Total	\$0.001433
TELRIC- Common Transport per Conv. Min. per Link	\$0.000297
Common Cost Allocation Factor	1.0804
Total	\$0.000321

### Florida Unbundled Local Usage

#### COST DEVELOPMENT - RECURRING

Network Cost Analysis Tool - Production Module (NCAT), Version 4.1, is used to develop TELRIC for Local Usage. NCAT is a large scale personal computer system, maintained and developed by Bellcore. NCAT calculates the incremental cost of traffic on the public switched telephone network on a per minute and message charging basis.

NCAT calculates the cost (capital related and operation) of traffic, starting with the originating switch, over the network through the available trunk groups, the tandem switches, and ends at the terminating switch. Costs are calculated for all possible network routes, and a composite cost is developed on the overflow traffic characteristics of the network.

Workpaper 100 page 1 of 3 develops End Office switching costs per minute. Note that End Office switching cost includes measurement costs.

Workpaper 100 page 2 of 3 develops Tandem switching costs per minute.

Workpaper 100 page 3 of 3 develops Common Transport cost per minute. Note that common transport cost includes facility, terminating and SS7 costs.

# Unbundled Local Usage Costs End Office Switching Cost per Minute

State: Florida Workpaper: 100

Page: 1 of 3 Date: 4-OCT-96

Source	Workpaper 200 P 1, Ln 23, Col E	Workpaper 200 P 2, Ln 21, Col D		Workpaper 200 3, Ln 24, Col D		Workpaper 200 P 2, Ln 21, Col F				
(a)	(b)	(c)	(d)=(c/b)	(e)	(f)=(d+e)	(g)	(h)=(g/b)	(i)=(h+f)	0	(k)=(i*j)
Distance Band LN	Avg. Min./Mag.	End Office Set-up Cost/Msg.	End Office Set-up Cost/Min.	End Office Duration Cost/Min.	End Office Switching Cost/Min.	Set-up Meas. Cost/Msg.	Set-up Meas. Cost/Min.	E.O. Meas. & Switching Cost/Min.	Conv.** Factor	End Office Switching Cost per Min. per Switch
1 Direct Cost 2 ALL										\$0.001930
5 ALL	ted Shared & Commo	n Cost								\$0.000343
7 TELRIC 8 ALL										\$0.002273

#### Notes

\*\* Conversion factor must be applied to the per minute switching costs in order to account for the fact that inter-office switching costs are shared between each end office.

This factor is developed by taking the total minutes of use and dividing by the IAO minutes of use plus 2 times the inter-office minutes of use.

Conversion factor = (Total Minutes/(Intraoffice Minutes+(2\*Interoffice Minutes))

# Unbundled Local Usage Costs Tandem Switching Cost Per Minute

State: Florida

Workpaper: 100 Page: 2 of 3 Date: 4-OCT-96

Ln	(A)	(G) Source	(C) Direct Cost	Directly Attributed (D) Shared & Common Cost	(E) TELRIC
	1 Tandem Costs	WP 200, P 4, L2			
	2 Common Minutes	WP 200, P 4, L3			ya.
	3 Access Tandem Cost Per Minute without adj.	L 1/L 2			
	4 Conversion Factor **				
	5 Switching Tandem Cost Per Minute Per Switch	L3°L4	\$0.001126	\$0.000200	\$0.001326
7.3	6				

#### Note:



<sup>\*\*</sup> Conversion factor must be applied to the Access Tandem Cost per Minute in order to convert cost per access minute to cost per conversation minute.

### Unbundled Local Usage Costs Common Transport Cost per Minute

State: Florida Workpaper: 100 Page: 3 of 3 Date: 4-OCT-96

Source	Workpaper 200 P 1, Ln 23, Cal E	Workpaper 200 P 2, Ln 21, Cal G		Washpepur 200 P 3, Ln 24, Col F		Workpaper 200 P 2, Ln 21, Col I		Workpaper 200 P 2, Ln 21, Cal H		Workpaper 200 P 3, Ln 24, Col G				
(a)	(0)	(c)	(d)=(c/b)	(0)		(g)	(h)=(g/b)	(4)	(j)=(sb)	(k)	(I)=(j+k)	(m)=(f+h+l)	(n)	(o)=(m*n
Distance Band LN	Avg Min.Mag.	Facility Sel-up CostMag.	Facility Set-up CostMin.	Facility Duration CostMin.	Facility Costillin	SS7 Set-up CostAteg	SS7 Set-up CostMin	Terminations Set-up CostMag	Terminations Set-up CostRiin	Terminations Duration CostMin.	1	Com Transport CostMin without adj.	Conversion Fector	CostMin.A.ink
1 Direct Cost														
2 ALL														
4 Directly Alter	buted Shared & C	emmon Cost												
5 ALL														
7 TELRIC														
8 ALL														

#### Note

"Conversion factor must be applied to the per minute common transport costs in order to account for the fact that common transport costs are only applicable to interoffice cells. This factor is developed by telling the total minutes of use and dividing by the inter-office minutes of use.

Conversion factor = (Tatal Minutes/Interoffice Minutes)

\*\* This assumes that each transport trib, "EO-EO", "EO-TDM". "TDM-TDM" would be rated and billed separatedly.

# NETWORK COST ANALYSIS TOOL (NCAT) TELRIC

STATE: FLORIDA WORKPAPER: 200 PAGE: 1 OF 4 DATE: 04-OCT-96

# ANNUALIZED INCREMENTAL MESSAGES AND MINUTES

			BY DISTANC	E BAND BY RAT	
	(A)	(8)	(C)	(D) .	(E) =(D/C)
1	DISTANCE	RATE		TOTAL	
2	BAND	PERIOD	MESSAGES	MINUTES	AVG MIN./MSG
5	IAO	09-11			
5		14-20			
6		08			
7		12-13			
8		21-07			
9		TOTAL			
10					
11	0.0-9999.9	09-11			
12		14-20			
13		08			
14		12-13			
15		21-07			
16		TOTAL			
17					
18	ALL	09-11			
19		14-20			
20		08			
21		12-13			
22		21-07			
23		TOTAL			

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

BELLCORE CONFIDENTIAL - RESTRICTED ACCESS

# NETWORK COST ANALYSIS TOOL (NCAT) TELRIC

STATE: FLORIDA WORKPAPER: 200 PAGE 2 OF 4 DATE: 4-OCT-96

				TR	AFFIC SENSI	TIVE UNIT	COST . SET		0.00
	(A)	(8)	(C)	(0)	(E)	(F)	(0)	(H)	(1)
			(D+E+F+G+H	(14		٠.			
1	DISTANCE		TOTAL	1	SWITCHING			KING	
2	BAND	RP		EO	TDM	HEAS	FAC	TERM	\$87
3						•••••			•••••
4				1					
5	IAO	09-11							
6		14-20							
7		AVG							
8									
9	0.0-9999.9	09-11							
10		14-20							
11		08							
12		12-13							
13		21-07							
14		AVG							
15									
16	ALL	09-11							
17		14-20							
18		08							
19		12-13							
20		21-07							
21		AVG							

# NETWORK COST ANALYSIS TOOL (NCAT) TELRIC

STATE: FLORIDA WORKPAPER: 200 PAGE: 3 OF 4 DATE: 4-OCT-96

		TRAFFIC SENSITIVE UNIT COST - DURATION RELATED								
	(A)	(B)	(C) =(D+E+F+G)	(D)	(E)	(F)	(G)			
1	DISTANCE		TOTAL	Sk		TRU				
2	BAND	RP		EO	TOM	FAC	TERM			
3		•••••		•••••		• •••••	•••••			
4										
5	IAO	09-11								
6		14-20								
7		80								
8		12-1								
9		21-0								
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								

### HETWORK COST ANALYSIS TOOL (HCAT) FL FG B&D (TELRIC)

STATE: FLORIDA WORKPAPER: 200 PAGE: 4 OF 4 DATE: 4-OCT-96

- 1 "Distance Band", "Total",
- 2 "Tandem Costs",
- 3 "Common Minutes"

# NETWORK COST ANALYSIS TOOL (NCAT) DIRECT COST

STATE: FLORIDA WORKPAPER: 200 PAGE: 1 OF 4 DATE: 04-OCT-96

### ANNUALIZED INCREMENTAL MESSAGES AND MINUTES BY DISTANCE BAND BY RATE PERIOD

			BY DISTANCE	BAND BY RATE	E PERIOD
	(A)	(8)	(C)	(0)	(E) =(D/C)
1	DISTANCE	RATE		TOTAL	3-
2	BAND	PERIOD	MESSAGES	MINUTES	AVG HIN./HSG
3					
4	IAO	09-11			
5		14-20			
6		08			
7	20	12-13			
8		21-07			
9		TOTAL			
10					
11 .	0.0-9999.9	09-11			
12		14-20			
13		08			
14		12-13			
15		21-07			
16		TOTAL			
17					
18	ALL	09-11			
19		14-20			
20		08			
21		12-13			
22		21-07			
23		TOTAL			* 1

# NETWORK COST ANALYSIS TOOL (NCAT) DIRECT COST

STATE: FLORIDA WORKPAPER: 200 PAGE: 2 OF 4 DATE: 04-OCT-96

			TR	AFFIC SENSI	TIVE UNIT	COST - SET	UP RELATED	-	
	(A)	(8)	(C)	(0)	(E)	(F)	(0)	(H)	(1)
	2	=(0	+E+F+G+H	•1)					
1	DISTANCE		TOTAL	1	-SWITCHING		TRUN	KING	
2	BAND	RP		EO	TDM	MEAS	FAC	TERM	387
3						•••••	•••••		•••••
4									
5	IAO	09-11							
6		14-20							
7		AVG							
8									
9	0.0-9999.9	09-11							
10		14-20							
11		08							
12		12-13							
13		21-07							
14		AVG							
15									
16	ALL	09-11							
17		14-20							
18		08							
19		12-13							
20		21-07							
21		AVG							
• •									

# NETWORK COST ANALYSIS TOOL (NCAT)

STATE: FLORIDA WORKPAPER: 200 PAGE: 3 OF 4 DATE: 04-OCT-96

	TRAFF	IC SEN	SITIVE UNI	T COST	- DURATION REL	ATED	
	(A)	(8)	(C) =(D+E+F+G)	(0)	(E)	(F)	(G)
1	DISTANCE		TOTAL	s	WITCHING	TRU	MKING
2	BAND	RP		EO	TDM	FAC	TERM
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		80					
22		12-13					
23		21-07					
24		AVG					

### NETWORK COST ANALYSIS TOOL (NCAT) FL FG 8&D (DIRECT COST)

STATE: FLORIDA WORKPAPER: 200 PAGE: 4 OF 4 DATE: 4-OCT-96

- 1 "Distance Band", "Total",
- 2 "Tandem Costs",
- 3 "Common Minutes

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

BELLCORE CONFIDENTIAL - RESTRICTED ACCESS

# Florida Unbundled Local Usage

COST DEVELOPMENT - NONRECURRING

N/A

## Florida . Unbundled Local Usage

### SPECIFIC STUDY ASSUMPTIONS

The cost study for Unbundled Local Usage is based on economic theory and assumptions, plus specific Network deployment strategies and provisioning guidelines.

## Cost study assumptions are as follows:

- Trunk attempt and CCS (Centum(100) Call Seconds) busy hours are the same as the originating office attempt and CCS busy hours.
- 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.
- The ratio of average busy season daily traffic load to average business day traffic load is
- All tandems are assumed to perform both originating and terminating functions.
- Signaling System 7 (SS7) is assumed for all trunks.
- Interoffice trunks are engineered to overflow of the peak traffic load.
- Trunk utilization is percent.
- A stimulation rate of ten percent is used to obtain a meaningful and manageable increment of usage.
- 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.

# Florida Unbundled Local Usage

### SPECIFIC STUDY ASSUMPTIONS CONTINUED

- 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 .01.
- 14. The number of annual business days is 250(i.e. excludes weekends and holidays).
- 15. Average business day load to average calender day load is
- 16. The number of digits dialed is 7.

### Florida Unbundled Local Usage

### FACTORS AND LOADINGS

Following are the Total Element Long Run Incremental Cost (TELRIC) annual cost factors, in-plant factor, gross receipts factor and miscellaneous loadings used in the Unbundled Local Usage cost study.

Miscellaneous Common Equipment & Power	1.0974
In-plant Factor 377C	1.1705
Loading Factors:	
Land	0.0047
Building	0.0657
Gross Receipts Tax Factor	0.0153

Image Table: ACF.WK1

#### 1996 FLORIDA ACCOUNT AVERAGE ANNUAL COST FACTORS

• FOR USE IN SERVICE COST STUDIES ONLY •

	Field Code	Depreciation	ACFC COM	ACFC Inc Tax	Сар Ехр	ACFC Pit Specific Exp	ACFC Adval Tax	Directly Attributed Shared and Common	TELRIC	GRT	TELRIC INC GRT
		•	b	c	d	•	1	9		ı	k
	vist.		11.25%		(a+b+c)				(d+e+f+g)	dia .	i x (1+j)
LAND - COE	20C	0.0000	0.0947	0.0426	0.1373	0.0000		0.0000	0.1493	- 0.0153	0.1516
BUILDINGS - COE	10C, 110C	0.0330	0.0626	0.0389	0.1525	0.0081	0.0120	0.0014	0.1720	0.0153	0.1747
DIGITAL ELEC SWITCH	377C, 587C	0.1157	0.0555	0.0254	0.1966	0.0236	0.0120	0.0434	0.2758	0.0153	0.2798
OPERATOR SYSTEMS	117C,417C	0.1157	0.0847	0.0288	0.2100	0.0033	0.0120	0.0500	0.2753	0.0153	0.2795
DIGTL CIRC-DDS	157C	0.1608	0.0575	0.0256	0.2439	0.0076	0.0120	0.0394	0.3029	0.0153	0.3076
DIGTL CIRC-PAIR GAIN	257C.D257C.F257C	0.1314	0.0564	0.0249	0.2127	0.0082	0.0120	0.0366	0.2695	0.0153	0.2736
DIGTL CIRC-OTHER	357C,T357C,F357C,557C	0.1314	0.0564	0.0252	0.2130	0.0093	0.0120	0.0372	0.2715	0.0153	0.2757
POLES	1C	0.0721	0.0500	0.0254	0.1574	0.0175	0.0120	0.0294	0.2163	0.0153	0.2190
AERIAL CA - METAL	22C, 12C	0.1023	0.0679		0.1956	0.0705		0.0619	0.3400	0.0153	
AERIAL CA - FIBER	822C, 812C,022C, F22C,T22C,D12C,F12C,T12C	0.0748	0.0862		0.1689	100000000000000000000000000000000000000		0.0299	0.2137	0.0153	0.2170
UNGROUND CA - METAL	5C	0.1184	0.0681	0.0263	0.2128	0.0192	0.0120	0.0351	0.2791	0.0153	0.283
UNGROUND CA - FIBER	85C.D5C.FSC.TSC	0.0686	0.0855	0.0284	0.1625	0.0036	0.0120	0.0220	0.2001	0.0153	0.203
DURIED CA - METAL	45C	0.0885	0.0678	0.0277	0.1840	0.0522	0.0120	0.0468	0.2950	0.0153	0.299
BURIED CA - FIBER	845C, D45C, F45C, T45C	0.0613	0.0670	0.0295	0.1578	0.0040	0.0120	0.0235	0.1973	0.0153	0.2003
SUBMAPINE CA-METAL	ec .	0.0037	0.0686		0.1932	0.0046	0.0120	0.0208	0.2304	0.0153	0.233
SUBMARIME CA-FIBER	88C,D8C,F8C,T8C	0.0037	0.0888	0.0310	0.1935	0.0046	0.0120	0.0209	0.2310	0.0153	0.234
INTROLD NIWK-METAL	52C	0.0751	0.0869	0.0201	0.1711	0.0192	0.0120	0.0315	0.2338	0.0153	0.2374
INTROLD NTWK-FIBER	852C,D52C,F52C,T52C	0.0751	0.0800	0.0292	0.1712	0.0011	0.0120	0.0270	0.2113	0.0153	0.214
CONDUIT SYSTEMS	40	0.0205	0.0727	0.0325	0.1257	0.0031	0.0120	0.0146	0.1554	0.0153	0.1570

#### 1996 FLORIDA ACCOUNT AVERAGE ANNUAL COST FACTORS

\* FOR USE IN SERVICE COST STUDIES ONLY \*

	Field Cede	Depreciation a	ACFC COM	ACFC Inc Tax	Cap Exp	ACFC Pit Specific Exp	ACFC Advall Tax	Directly Attributed Shared and Common g	ACF Direct	GRT J	Direct including GRT k
			11.25%	1.475.00	(a+b+c)	74 5			(d+e+f+g)		ix (1+)
LAND - COE	200	0.0000	0.0847	0.0426	0.1373	0.0000		0.0000	0.1493	0.0153	0.1516
BUILDINGS - COE	18C, 118C	0.0330	0.0828	0.0369	0.1525	0.0081	0.0120	0.6000	0.1706	0.0153	0.1732
DIGITAL ELEC SWITCH	377C, 587C	0.1157	0.0555	0.0254	0.1986	0.0236	0.0120	0.0000	0.2322	0.0153	0.2358
OPERATOR SYSTEMS	117C,417C	0.1157	0.0647	0.0298	0.2100	0.0033	0.0120	0.0000	0.2253	0.0153	0.2288
DIGTL CIRC-DDS	157C	9,1608	0.0575	0.0256	0.2439	0.0076	0.0120	0.0000	0.2635	0.0153	0.2676
DIGTL CIRC-PAIR GAIN	257C.D257C.F257C	0.1314	0.0564		0.2127	0.0082		0.0000	0.2329	0.0153	0.2365
DIGTL CIRC-OTHER	357C, T357C, F357C, 557C	0.1314	0.0564	The second secon	0.2130	0.0003		0.0000	0.2343	0.0153	0.2379
POLES	10	0.0721	0.0500	0.0254	0.1574	0.0175	0.0120	0.0000	0.1869	0.0153	0.1890
AERIAL CA - METAL	22C, 12C	0.1023	0.0679	0.0254	0.1958	0.0705	0.0120	0.0000	0.2781	0.0153	0.2824
AERIAL CA - FIBER	822C, 812C,D22C, F22C,T22C,D12C,F12C,T12C	0.0748	0.0862	0.0281	0.1689	0.0029	0.0120	0.0000	0.1838	0.0153	0.1860
UNGROUND CA - METAL	•	0.1184	0.0681	0.0263	0.2128	0.0192	0.0120	0.0000	0.2440	0.0153	0.2478
JINGROUND CA - FIBER	#SC.DSC.FSC.TSC	0.0586	0.0855	0.0284	0.1625	0.0036	0.0120	0.0000	0.1781	0.0153	0.1806
BURIED CA - METAL		0.0885	0.0878		0.1840	0.0522	0.0120	0.0000	0.2482	0.0153	0.2520
BURIED CA - FIBER	BASC, DASC, FASC, TASC	0.0813	0.0670		0.1578	0.0040	0.0120	0.0000	0.1738	0.0153	0.1765
SUMMARINE CA-METAL	•	0.0037	0.0888	60 HE HELLING OUR TRANSPORTED TO SERVICE AND ADMINISTRATION OF THE PROPERTY OF	0.1932	0.0046		0.0000	0.2008	0.0153	0.2130
SUBMARINE CA-FIBER	BBC.DBC.FBC.TBC	0.0937	0.0588	0.0310	0.1935	0.0046	0.0120	0.0000	0.2101	0.0153	0.213
INTRBLD NTWK-METAL	SEC	0.0751	0.0000	Committee of the Commit	0.1711	0.0192	CONTRACTOR OF THE PROPERTY OF THE PARTY OF T	0.0000	0.2023	0.0153	0.205
INTROLD NTWK-FIRER	853C.052C.P52C.T52C	0.0751	0.0080		0.1712	0.0011		0.0000	0.1843	0.0153	0.187
CONDUIT SYSTEMS	2	0.0205	0.0727	Particular Control of the Control of	0.1257	0.0031		0.0000	0.1408	0.0153	0.1430