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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
800 Data Base Access Tariffs and the	)	CC Docket No. 93-129
800 Service Management System Tariff	)	DA 94-150

SUPPLEMENT TO DIRECT CASE OF BELL ATLANTIC
ALTERNATE COST SUPPORT

Bell Atlantic[1] respectfully submits the attached alternative cost support data for 800 Data Base Access Service. This filing is made in compliance with the Bureau's January 31, 1994 and February 14, 1994 Orders mandating that alternative cost support be filed or cost model disclosure be made by March 15, 1994.[2]

Bell Atlantic's March 1, 1993 Transmittal No. 560 and its Direct Case responding to questions presented in the Designation Order included extensive cost support for the basic query exogenous costs and vertical feature package charges.[3] This cost support was based, in part, on results obtained from the Common Channel Signalling Cost Information System ("CCSCIS") model. In the Cost

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[1] The Bell Atlantic telephone companies ("Bell Atlantic") are Bell Atlantic-Delaware, Inc.; Bell Atlantic-Maryland, Inc.; Bell Atlantic-New Jersey, Inc.; Bell Atlantic-Pennsylvania, Inc.; Bell Atlantic-Virginia, Inc.; Bell Atlantic-Washington, DC, Inc.; Bell Atlantic-West Virginia, Inc.

[2] *800 Data Base Access Tariffs and the 800 Service Management System Tariff,* CC Docket No. 93-129, *Order,* DA 94-99 (released January 31, 1994), Application for Review pending, *Order,* DA 94-150 (released February 14, 1994) ("Cost Model Orders").

[3] *See Order Designating Issues for Investigation*, 8 FCC Rcd 5132 (1993) ("Designation Order").

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Model Orders, the Commission required Bell Atlantic either to disclose this model, including vendor inputs, to intervenors, or to provide alternative cost support without using the model.[4] Bell Atlantic is contractually prohibited, however, from divulging proprietary vendor-specific data used in the CCSCIS model. Accordingly, it has no choice but to submit alternative cost support for its 800 data base service exogenous costs and rates as shown in Attachment A.[5]

The cost support provided herein not only justifies the rates filed but it would justify a basic query rate 35% higher than the currently effective rate, and a vertical feature package charge more than 600% higher than the effective rate. Without use of a cost model such as CCSCIS, however, Bell Atlantic cannot provide the optimal forward-looking cost support needed for this and other complex rate structures.

Respectfully submitted,

The Bell Atlantic Telephone Companies

By Their Attorney

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Edward D. Young, III
Of Counsel

March 15, 1994

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[4] Jan. 31, 1994 Cost Model Order at ¶¶ 14-15.

[5] A detailed description of 800 data base service may be found in Transmittal No. 560, Description and Justification, Section 1.

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ATTACHMENT A

BELL ATLANTIC

800 DATA BASE ACCESS SERVICE

ALTERNATIVE COST SUPPORT - DIRECT CASE

MARCH 15, 1994

Section	**Item**
1.0	Cost Development, Demand, Rates, Revenues
2.0	Workpapers

COST DEVELOPMENT, DEMAND, RATES, REVENUE

1.0 Application of Rates

The basic query recurring rate element is applied each time an 800 query is passed to Bell Atlantic's Service Control Point ("SCP") for screening and call routing information. The basic query includes the 10-digit turnaround, ANI, area of service and the carrier identification code.

The vertical feature package charge is applied each time an 800 query uses Bell Atlantic's SCP for any of the vertical features. The vertical feature package charge is assessed on a per query basis.

1.1 Exogenous Cost Development

Capital-related costs: The investment components Bell Atlantic included in its exogenous costs are Local Signal Transfer Point ("LSTP") ports at the "D" link terminations, "D" links between the LSTP and the Regional Signal Transfer Point ("RSTP") ports (where the "D" and "A" links terminate at the RSTP), "A" links between the RSTP and the Service Control Point ("SCP"), and SCPs. For each of these components, Bell Atlantic identified current investment amounts, and for some components, a multi-year forecast.

<u>LSTPs</u> The 800-specific LSTP investment was determined in three steps. First, Bell Atlantic identified total LSTP investment -- existing and planned. Bell Atlantic is

currently deploying additional LSTPs, and plans to deploy more in 1995. Second, the total number of links terminating at the LSTPs was determined. Out of the total links, only the "D" links carry 800 and other queries up to the RSTP. The proportion of "D" links to total links terminating at the LSTP was used to determine the LSTP investment associated with "D" links. Third, the LSTP investment associated with the "D" link was further refined based on the percentage of 800 octets per busy hour second to total octets carried by the links.

Workpaper 1 shows that the percentage of "D" links to total links terminating at the LSTP is rather small (about 3.5 percent), but that the percentage of 800 queries to total queries carried by the "D" links to the RSTP is very large (about 95 percent). These percentages show that specific portions of the LSTP and most of the "D" links are used to provide 800 data base, and their inclusion in the calculation of exogenous costs is appropriate.

<u>RSTPs</u> The 800-specific RSTP investment was determined in five steps. First, the existing RSTP investment was identified. Bell Atlantic has no immediate plans to augment its RSTPs; therefore, a multi-year forecast was not warranted. Second, the total number of links terminating at one RSTP was determined. Of these, the "D" links from the LSTP terminate at the RSTP. The proportion of "D" links to total RSTP links was used to determined the RSTP investment associated with "D" links. Third, this investment was further refined based on the percentage of 800

octets per busy hour second to total octets carried by the "D" links.

Fourth, the proportion of SCP "A" links to total RSTP links was used to determine the RSTP investment associated with "A" links. 800 and LIDB traffic are carried over the "A" links to the SCPs. Fifth, this investment was further refined based on the percentage of 800 queries to 800 plus LIDB queries.

Workpaper 1 shows that about 30 percent of the RSTP is associated with both the "D" links from the LSTPs and the "A" links to the SCPs. A sizeable proportion of the RSTP is associated with 800 data base service and inclusion of a portion of the RSTP in the exogenous cost calculation is appropriate.

<u>SCPs</u> Bell Atlantic identified the investment amounts for the SCP pairs dedicated to 800 and the investment amounts for the SCP pair shared by 800 and LIDB. In addition to the existing SCPs, more SCPs are currently being deployed in 1994, and these additional SCPs will be dedicated to 800 data base service. The 800 portion of the shared SCPs was calculated based on the relative proportion of 800 queries to total 800 and LIDB queries. The vast majority of the SCP investment is associated with 800 service, and, therefore, its inclusion in the exogenous cost calculation is appropriate.

<u>"D" Links</u> These links are between the LSTP and the RSTP and were estimated based on the number of link miles and associated terminations (two terminations per link). These amounts were refined based on the percentage of 800 octets per busy hour

second to total octets. Workpaper 1 shows that the majority (about 95 percent) of traffic carried over the "D" links is 800 queries, and therefore, the inclusion of the "D" links in the exogenous cost calculation is appropriate.

The total number of "D" link terminations shown on Workpaper 1, lines 4 and 5, differs from the link amounts used in lines 1 and 2 to allocate the LSTP and RSTP (aside from the fact that each link has two terminations), because the number of links used to develop the allocation percentages are based on a mid-period snapshot of the forecast, while the terminations are stated on a year-by-year incremental basis.

"A" Links These links are between the RSTP and the SCP and were estimated based on the number of link miles and associated terminations. The 800 portion of the "A" links was calculated based on queries. Most traffic on the "A" links is for 800 database, and, of course, inclusion of the "A" links in the exogenous costs is appropriate.

Annual cost factors were applied to the investments to calculate annual costs. The SCP costs were adjusted downward to exclude the portion of the SCP associated with vertical features. The basic query investment-related unit cost was calculated by dividing the annual costs by total levelized basic query demand. This calculation is shown on Workpaper 2.

Non-capital related costs: Non-capital related

expenses were also incurred for the May 1, 1993 provisioning of the basic query for 800 Data Base Access. These expense items include the following:

- 800 trunking -- the installation cost for additional interoffice trunks to allow for reduced access times;[6]
- SMS administration -- port charges, SCP network validation and maintenance for Bell Atlantic's SCPs from the Number Administration Service Center ("NASC");[7]
- Switch translation -- the cost of labor to transition 800 calls from the switch level to the 800 SCP;
- Modifications to Bell Atlantic's billing systems;
- Dedicated circuits from Bell Atlantic's SCP to the SMS;
- 800 Repair Center -- operating costs for the 800 Repair Center in Bridgewater, New Jersey. This center handles repair calls

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[6] See *Provision of Access for 800 Service, Order,* 7 FCC Rcd 4973 (1992).

[7] The NASC is the operations center that administers the Service Management System (SMS) on a day-to-day basis. The SMS is the centralized data base system that provides a national coordinated system for the assignment of 800 numbers, the entry of 800 customer records, and the loading of customer records into the regional SCPs owned and operated by the LECs. See *Provision of Access for 800 Service, Order,* 8 FCC Rcd 1423 at ¶ 19 (1992).

from interexchange carriers and from other customers unable to complete an 800 call;

- SCP technical support -- software and systems support from Bellcore, including development work on the SCP/AMA billing measurements, software enhancements, and technical assistance for the SCP.

Bell Atlantic developed a five-year forecast for the recurring expenses, added the one-time expenses, and calculated the non-capital unit cost per query based on the present value of five-years' worth of query demand. These costs are shown on Workpapers 7 through 11.

Overhead Loadings: Overhead loadings were not applied in the exogenous cost calculation.

Total Exogenous Costs: The basic query investment-related unit cost (excluding overhead) was added to the expense-related unit cost to develop the unit cost for the basic query. This unit cost was multiplied by levelized interstate demand to calculate the interstate costs for 800 Data Base Access Service. The revenues from the 800-NXX service were subtracted from these interstate costs to calculate the interstate exogenous costs. These calculations are shown on Workpaper 2.

1.3 New Service Cost Development

Vertical Features: The costs for the vertical features were developed by determining the portion of the SCP annual costs associated with handling the vertical feature portion of a query. The portion of the SCP associated with vertical features was estimated based on 1993 annualized vertical feature demand compared to annualized basic query demand. This relationship of vertical feature demand to basic queries is very small -- .34 percent. The vertical feature unit cost was calculated by dividing the SCP vertical feature annual costs by vertical feature demand.

Overhead Loading: The vertical feature overhead loading factor is based on the relationship of total Bell Atlantic local transport costs to direct costs. This relationship is calculated from ARMIS data, adjusted to reflect the reallocation of general support facilities. The overhead factor is applied to the direct cost and provides a reasonable method of calculating overhead associated with vertical features. The overhead loading factor development is shown in Workpaper 6.

Ratios: Bell Atlantic calculated ratios to compare cost and investment and unit cost and rate. These ratios are shown on Workpaper 4. The annual interstate vertical feature package costs and revenues are also shown on Workpaper 4.

1.4 Demand Forecast

A five-year basic query demand forecast was developed using a regression analysis based on five years' worth of

historical data for originating interstate and intrastate 800 minutes of use. Bell Atlantic adjusted these minutes to reflect demand stimulation expected from increased 800 competition and number portability.

In addition, Bell Atlantic analyzed 1992 actuals to determine the average length of an 800 call -- on average, each 800 call is about 2.32 minutes in length. The 800 minutes were divided by the average call length to determine the query forecast.

The relationship of 1992 interstate 800 minutes to total 800 minutes was used to calculate the proportion of interstate queries to total queries, and the data indicate that 82 percent of total queries will be interstate in nature.

Bell Atlantic used its five-year query forecast to calculate annual levelized demand. All present value factors were calculated using 11.25 percent, which accounts for the slight change in the demand forecast from Transmittal No. 560. Actual query demand for 1993 (annualized) is within 4 percent of the year 1 query demand forecast, therefore, no adjustments (other than using 11.25 in the present value calculations) were warranted. The five-year forecast is shown on Workpaper 5.

In Transmittal No. 560, Bell Atlantic forecast the vertical feature demand to be 30 percent of the basic queries for an initial 12-month period. However, actual demand figures indicate that vertical feature demand is only .34 percent of basic query demand. The difference between the original forecast and actuals is large and warranted an adjustment to the vertical

feature demand forecast. Workpaper 4 contains the revised vertical feature demand.

1.5 Proposed Rates

This filing does not propose to change the existing query or vertical feature rates. However, Workpaper 3 shows that a 35 percent increase in the basic query over the currently effective rate is fully supportable. Workpaper 4 shows that the vertical feature package charge should be increased dramatically over the currently effective rate.

1.6 Revenue Forecast

The projected revenues for the vertical features were calculated by multiplying the proposed rates by the vertical feature interstate demand. The vertical feature projected revenues are shown in Workpaper 4.

1.7 Charts from Appendix A of the Designation Order

Workpaper 12 contains summarized cost information as required by Appendix A of the Designation Order. In order to complete an alternative cost study by the required filing date, Bell Atlantic did not attempt to maintain its cost detail by the

six cost components of depreciation, cost of money, income taxes, maintenance, administration, and other taxes. Instead, the cost study used investment-specific total annual cost factors (sum of the six components) to calculate the annual costs for the investment used to provide 800 Data Base Service. Therefore, Workpaper 12 shows unit investment and total unit costs and all other requested information, but not the six cost component detail.

ATTACHMENT A

WORKPAPERS

Workpaper	Description
1	800 Data Base Investment
2	Exogenous Cost Calculation
3	Basic Query Rate
4	Vertical Features
5	Basic Query Demand
6	Overhead Loading Factor
7	Summary - Non-Capital Costs
8	Non-Capital Costs - Breakdown
9	SMS Administration Costs
10	Switch Translations Costs
11	Dedicated SMS Circuits and Repair Center Costs
12	Charts from Appendix A, Designation Order

BELL ATLANTIC

800 DATA BASE – INVESTMENT

INVESTMENT	SOURCE	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
1. LSTP INVESTMENT	PROPERTY RECORDS/FORECAST	$37,017,519	$8,731,067	$4,250,000		
A. TOTAL LINKS TERMINATING AT LSTP	ENGINEERING FORECAST	4,638				
B. "D" LINKS TO RSTP	ENGINEERING FORECAST	164				
C. % OF LSTP ASSOCIATED WITH D LINK	B/A	3.54%	3.54%	3.54%		
D. TOTAL OCTETS PER BUSY HOUR SEC. TO RSTP	DEMAND FORECAST	92,634				
E. 800 OCTETS PER BUSY HOUR SECOND TO RSTP	DEMAND FORECAST	87,505				
F. % OF D LINK ASSOCIATED WITH 800	E/D	94.46%	94.46%	94.46%		
G. LSTP PORT INVEST. ASSOCIATED WITH 800	L1*C*F	$1,236,468	$291,637	$141,960	$0	$0
H. PRESENT VALUE FACTORS @ 11.25	CALCULATED	0.9481	0.8522	0.7660	0.6886	0.6189
I. CUMULATIVE PRESENT VALUE	G*H	$1,529,568				
J. ANNUAL COST FACTOR	STUDY	0.3123				
K. ANNUAL COSTS	I*J	$477,684				
2. RSTP INVESTMENT	PROPERTY RECORDS	$14,294,014				
A. TOTAL LINKS TERMINATING AT RSTP	ENGINEERING FORECAST	856				
B. TOTAL D LINKS FROM LSTP	ENGINEERING FORECAST	164				
C. % OF RSTP ASSOCIATED WITH D LINK	B/A	19.16%				
D. RSTP PORT INVEST. AT D LINK TERM. ASSOC. W/ 800	L2*C*L1F	$2,586,942				
E. 800 AND LIDB "A" LINKS TO SCP	ENGINEERING FORECAST	64				
F. % RSTP ASSOC. WITH "A" LINK	E/A	7.48%				
G. LIDB QUERIES	1992 PRICE CAP DEMAND	212,692,698				
H. 800 QUERIES	WP5, L1, COL B	2,731,679,097				
I. % OF "A" LINK ASSOC. WITH 800	H/(G+H)	92.78%				
J. RSTP PORT INVEST. AT "A" LINK TERM. ASSOC.W/ 800	L2*F*I	$991,511				
K. RSTP INVESTMENT TOTAL	D+J	$3,578,453	$0	$0	$0	$0
L. PRESENT VALUE FACTORS @ 11.25	CALCULATED	0.9481	0.8522	0.7660	0.6886	0.6189
M. CUMULATIVE PRESENT VALUE	K*L	$3,392,699				
N. ANNUAL COST FACTOR	STUDY	0.3123				
O. ANNUAL COSTS	M*N	$1,059,540				

800 DATA BASE – INVESTMENT

INVESTMENT	SOURCE	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
3. SCPs	ENGINEERING RECORDS	$16,408,186				
A. DEDICATED 800 INVESTMENT	ENG. RECORDS/FORECAST	$7,500,000	$4,400,000			
B. 800 AND LIDB SCP INVESTMENT	ENGINEERING RECORDS	$8,908,186				
C. LIDB QUERIES	1992 PRICE CAP DEMAND	212,692,686				
D. 800 QUERIES	WP5, L1, COL B	2,731,679,097				
E. % SHARED SCP ASSOC. WITH 800	D/(C+D)	92.78%				
F. 800 PORTION OF SHARED SCP INVESTMENT	B*E	$8,264,685				
G. 800 SCP INVESTMENT	A+F	$15,764,885	$4,400,000	$0	$0	$0
H. PRESENT VALUE FACTORS @ 11.25	CALCULATED	0.9481	0.8522	0.7660	0.6886	0.6189
I. CUMULATIVE PRESENT VALUE	G*H	$18,696,106				
J. ANNUAL COST FACTOR	STUDY	0.3123				
K. ANNUAL COSTS	I*J	$5,838,794				
4. "D" LINKS – LSTP TO RSTP						
A. UNIT INVESTMENT PER TERMINATION	STUDY	$586.79	$586.79	$586.79	$586.79	$586.79
B. UNIT INVESTMENT PER MILE	STUDY	$3.28	$3.28	$3.28	$3.28	$3.28
C. NO. "D" LINK TERMINATIONS	ACTUALS/FORECAST	240	320	16	80	0
D. NO. "D" LINK MILES	ACTUALS/FORECAST	21,175	35,699	1,718	3,428	0
E. "D" LINK INVESTMENT – TERMINATIONS	A*C	$140,830	$187,773	$9,389	$46,943	$0
F. "D" LINK INVESTMENT – MILEAGE	B*D	$69,454	$117,093	$5,635	$11,244	$0
G. PRESENT VALUE FACTORS @ 11.25	CALCULATED	0.9481	0.8522	0.7660	0.6886	0.6189
H. CUMULATIVE PRESENT VALUE – TERM. INVEST.	E*G	$333,056				
I. CUMULATIVE PRESENT VALUE – MILEAGE INVEST.	F*G	$177,696				
J. "D" LINK TERM. INVEST. ASSOC. WITH 800	L1F*H	$314,617				
K. "D" LINK MILEAGE INVEST. ASSOC. WITH 800	L1F*I	$167,857				
L. ANNUAL COST FACTOR – TERMINATIONS	STUDY	0.2893				
M. ANNUAL COST FACTOR – MILEAGE	STUDY	0.2591				
N. ANNUAL COST – "D" LINK TERMINATIONS	J*L	$91,019				
O. ANNUAL COST – "D" LINK MILEAGE	K*M	$43,492				
P. ANNUAL COST – "D" LINK	N+O	$134,511				

800 DATA BASE – INVESTMENT

INVESTMENT	SOURCE	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
5. "A" LINKS – RSTP TO SCP						
A. UNIT INVESTMENT PER TERMINATION	STUDY	$609.45	$609.45	$609.45	$609.45	$609.45
B. UNIT INVESTMENT PER MILE	STUDY	$3.32	$3.32	$3.32	$3.32	$3.32
C. NO. "A" LINK TERMINATIONS	FORECAST	128	48	0	0	0
D. NO. "A" LINK MILES	FORECAST	223	108	0	0	0
E. "A" LINK INVESTMENT – TERMINATIONS	A*C	$78,010	$29,254	$0	$0	$0
F. "A" LINK INVESTMENT – MILEAGE	B*D	$740	$359	$0	$0	$0
G. % OF "A" LINK ASSOC. WITH 800	L2I OR 100%	92.78%	100%	100%	100%	100%
H. CUMULATIVE PRESENT VALUE – TERM. INVEST.	L4G*E*G	$93,548				
I. CUMULATIVE PRESENT VALUE – MILEAGE INVEST.	L4G*F*G	$957				
J. ANNUAL COST – "A" LINK TERMINATIONS	H*L4L	$27,063				
K. ANNUAL COST – "A" LINK MILEAGE	I*L4M	$248				
L. ANNUAL COST – "A" LINK	J+K	$27,311				
6. TOTAL LINK INVESTMENT						
A. "A" AND "D" LINK INVESTMENT	L4J+L4K+L5H+L5I	$576,979				
B. "A" AND "D" LINK ANNUAL COST	L4P+L5L	$161,822				
7. TOTAL 800 INVESTMENT	L1I+L2M+L3I+L6A	$24,195,354				
8. ANNUAL COSTS	L1K+L2O+L3K+L6B	$7,537,840				
NOTE 1:						
RSTP "D" LINK PORT INVESTMENT SHOWN ON WP12, PAGE 2, ADJUSTED FOR PRESENT VALUE	L2D*L2L,YR 1	$2,452,656				
RSTP "A" LINK PORT INVESTMENT SHOWN ON WP12, PAGE 2, ADJUSTED FOR PRESENT VALUE	L2J*L2L,YR1	$940,042				
SCP ASSOCIATED WITH BASIC QUERY SHOWN ON WP12, PAGE 2 (LESS PORTION ASSOC. WITH VERTICAL)	L3I–(L3I*.34%)	$18,632,541				

EXOGENOUS COST CALCULATION

	ITEM	SOURCE	BASIC QUERY AMOUNT
1.	SCP ANNUAL COSTS	WP1,L3K	$5,838,794
2.	% VERT. FEAT. DEMAND TO QUERY DEMAND	ACTUALS	0.34%
3.	SCP BASIC COSTS	L1−(L1*L2)	$5,818,943
4.	LSTP, RSTP, LINK COSTS	WP1,L1K+L2O+L6B	$1,699,046
5.	BASIC QUERY COSTS	L3+L4	$7,517,989
6.	LEVELIZED TOTAL DEMAND	WP5,L8D	4,043,699,592
7.	UNIT COST	L5/L6	$0.001859
8.	NON−CAPITAL UNIT COST	WP7,L10	$0.000627
9.	TOTAL UNIT COST	L7+L8	$0.002486
10.	LEVELIZED INTERSTATE DEMAND	WP5, L8E	3,314,296,126
11.	INTERSTATE COSTS	L9*L10	$8,239,956
12.	NXX REVENUES	TRANS. 560,WP5−1,L16	$559,792
13.	800 DB EXOGENOUS COSTS	L11−L12	$7,680,164
14.	CURRENT EXOGENOUS COSTS (3/1/93 AMT LESS OVERHEAD: $9,732,018−$2,848,656)	TRANS. 560, WP5−1,L17 TRANS. 566, WP5−1,L6	$6,883,362
15.	DIFFERENCE IN EXOGENOUS AMOUNTS	L13−L14	$796,802

BASIC QUERY RATE

	ITEM	SOURCE	AMOUNT
1.	UNIT COSTS	WP2,L9	$0.002486
2.	OVERHEAD FACTOR	WP6,L30	1.6631
3.	FULLY LOADED COST (RATE)	L1*L2	$0.004135
4.	EFFECTIVE RATE	FCC NO. 1	$0.003054
5.	DIFFERENCE	L3–L4	$0.001081
6.	% DIFFERENCE	L5/L4	35%

VERTICAL FEATURES

	ITEM	SOURCE	AMOUNT
1.	SCP ANNUAL COSTS	WP1,L3K	$5,838,794
2.	% VERT. FEAT. DEMAND TO QUERY DEMAND	ACTUALS	0.34%
3.	SCP VERT. FEATURE COSTS	L1*L2	$19,852
4.	TOTAL LEVELIZED DEMAND	WP5, L8, COL D	4,043,699,592
5.	VERTICAL FEATURE DEMAND	L2*L4	13,748,579
6.	VERT. FEATURE UNIT COST	L3/L5	$0.001444
7.	OVERHEAD FACTOR	WP6, L30	1.6631
8.	VERTICAL FEATURE PACKAGE RATE	L6*L7	$0.002401
9.	EFFECTIVE RATE	FCC NO. 1	$0.000327
10.	DIFFERENCE	L8–L9	$0.002074
11.	% DIFFERENCE	L10/L9	634%

RATIOS

12.	SCP INVESTMENT	WP1,L3I	$18,696,108
13.	SCP VERT. FEATURE INVESTMENT	L12*L2	$63,567
14.	COST/INVESTMENT	L3/L13	0.3123
15.	COST/RATE	L6/L8	0.6013

ANNUAL INTERSTATE COSTS AND REVENUES

13.	LEVELIZED INTERSTATE DEMAND	WP5,L8E	3,314,296,126
14.	VERTICAL FEATURE INTERSTATE DEMAND	L2*L13	11,268,607
15.	INTERSTATE COSTS	L6*L14	$16,271
16.	INTERSTATE REVENUES	L8*L14	$27,061

800 DATA BASE ACCESS SERVICE
Development of Basic Query Demand

	A Total Demand	B Interstate Demand	C Present Value Factor Note 1	D Total Discounted Demand Col. A * Col. C	E Interstate Discounted Demand Col. B * Col. C
1 Year 1	3,332,861,407	2,731,679,097	0.9481	3,159,855,659	2,589,880,165
2 Year 2	3,613,155,051	2,961,413,309	0.8522	3,079,190,579	2,523,765,472
3 Year 3	3,893,174,568	3,190,922,841	0.7660	2,982,317,168	2,444,366,109
4 Year 4	4,173,483,137	3,420,669,285	0.6886	2,873,747,419	2,355,380,196
5 Year 5	4,453,523,855	3,650,196,194	0.6189	2,756,472,693	2,259,259,512
6 TOTAL	19,466,198,018	15,954,880,726		14,851,583,518	12,172,651,455
7 Annuity Factor			0.2723		
8 Levelized Demand: L6 * L7				4,043,699,592	3,314,296,126
9 Percentage of Interstate Queries: L8E/L8D					82%

Note 1: These factors are calculated using 11.25% as the interest rate.

BELL ATLANTIC OVERHEAD CALCULATION WORPAPER 6

LOCAL TRANSPORT 1992 ARMIS DATA – FILED IN 1993
ADJUSTED TO REFLECT RE–ALLOCATION OF GSF

		ARMIS 43–04 LINE NO.	POST–GSF AMOUNT ($000)
	INVESTMENT		
1	INVESTMENT – COE, CWF	1410+1530	$1,326,424
2	INVESTMENT – GSF	1004	$233,050
3	TOTAL	L1+L2	$1,559,474
4	COE, CWF FACTOR	L1/L3	0.8506
5	GSF FACTOR	L2/L3	0.1494
	NET INVESTMENT		
6	NET INVESTMENT – COE, CWF	L1–3020–3030–3040–3060–3360–3370–3380–3400	$652,902
7	NET INVESTMENT – GSF	L2–3010–3350	$138,258
8	TOTAL NET INVESTMENT	L6+L7	$791,160
9	NET INVESTMENT FACTOR – COE,CWF	L6/L8	0.8252
10	NET INVESTMENT FACTOR – GSF	L7/L8	0.1748
	COSTS		
11	PLANT SPECIFIC EXPENSE – COE,CWF	5026+5076	$69,803
12	PLANT SPECIFIC EXPENSE – GSF	5013	$37,215
13	DEPR/AMORT – COE, CWF	6030+6040+6050+6070	$114,332
14	DEPR/AMORT – GSF	6020	$18,281
15	FIT	8020	$25,825
16	FIT – COE,CWF	L9*L15	$21,312
17	FIT – GSF	L10*L15	$4,513
18	NET RETURN – COE,CWF	L6*.1125	$73,451
19	NET RETURN – GSF	L7*.1125	$15,554
20	NETWORK OPERATIONS – DIRECT	L6010* % DIRECT (.3574)	$16,190
21	DIRECT COSTS	LNS 11+13+16+18+20	$295,088
	OTHER COSTS		
22	STATE & LOCAL INCOME TAXES	8007	$21,974
23	ST & LOC INC TAXES – COE, CWF	L9*L22	$18,134
24	ST & LOC TAXES – GSF	L10*L22	$3,840
25	PLANT NON–SPECIFIC	43–04,6000+L6010	$46,120
26	CUSTOMER OPERATIONS – MARKETING	43–04,7000	$18,118
27	CUSTOMER OPERATIONS – SERVICES	43–04,7310	$11,730
28	CORPORATE	43–04,7334	$40,363
29	TOTAL COSTS LNS 11+12+13+14+16+17+18+19+23+24+25+26+27+28		$490,767
30	OH FACTOR – TOTAL COSTS/DIRECT COSTS	L29/L21	1.6631

800 DATA BASE ACCESS SERVICE
Basic Query Cost
NON–CAPITAL ITEMS

ITEM		SOURCE	AMOUNT
1	800 Trunking	WP8, L8	$599,375
2	SMS Administration	WP8, L9	$4,626,797
3	Switch Translation	WP8, L16	$550,956
4	Billing Systems Modifications	WP8, L19	$65,500
5	Dedicated Circuits for SCP	WP8, L20	$384,300
6	SCP Technical Support	WP8, L21	$951,800
7	Repair Center	WP8, L26	$2,138,669
8	Total Expenses	L1..L7	$9,317,396
9	Total 5–Year Query Demand	WP5, L6D	14,851,583,518
10	Total Expenses Per Query	L8/L9	$0.000627

800 DATA BASE ACCESS SERVICE
Expense–Related Items
Breakdown of Costs

ITEM		SOURCE	AMOUNT
800 Trunking			
1	Total Number of Trunks	Company Study	9,366
2	Number of Initial Trunks	L1/24	391
3	Charge Per Initial Trunk	3/1/93 rate – FCC No. 1, Sec. 6.9.1 (B)	$500
4	Initial Trunk Charges	L2 * L3	$195,500
5	Number of Additional Trunks	L1 – L2	8,975
6	Cost Per Additional Trunk	3/1/93 rate – FCC No. 1, Sec. 6.9.1 (B)	$45
7	Additional Trunk Charges	L5 * L6	$403,875
8	Total 800 Trunking Costs	L4 + L7	$599,375
SMS Administration			
9	SCP Port Charges	WP9, L1 COL I	$920,228
10	SCP Network Validation	WP9, L2 COL I	$1,329,185
11	SCP Maintenance	WP9, L3, COL I	$2,377,384
12	Total SMS Administration Costs	L9..L11	$4,626,797
Switch Translation			
13	Six–Digit Translation	WP10, L7	$169,089
14	Operator Services Translation	WP10, L8	$2,867
15	Software – Foreign Area Translator	WP10, L9	$379,000
16	Total Translation Costs	L13..L15	$550,956

800 DATA BASE ACCESS SERVICE
Expense–Related Items
Breakdown of Costs

ITEM		SOURCE	AMOUNT
Billing Systems Modifications			
17	CABS	Company Study	$47,000
18	CRIS	Company Study	$18,500
19	Total Billing Systems Costs	L17 + L18	$65,500
Dedicated Circuits for SCP			
20	Annual Circuit Costs	WP 11, L3	$384,300
SCP Technical Support			
21	Software Enhancements, User and Product Support	WP9, L10	$951,800
Repair Center			
22	Labor Costs	WP11, L5	$1,627,021
23	Software Development	Company Study	$288,800
24	Software Usage Costs	WP 11, L7	$138,002
25	Annual Circuit Costs	WP 11, L9	$84,845
26	Total Repair Center Costs	L22..L25	$2,138,669