



CIRF

Converging Industries Research Foundation

Practical Solutions for Communications Policy

Options for the Universal Service Fund

October 2, 1997; Revised October 15, 1997

*Presentation at the November 1997 NARUC Meeting,
Boston, MA*

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Telecommunications Industries Analysis Project:

Options for the Universal Service Fund

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October 2, 1997; Revised October 15, 1997

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The views expressed in this paper do not necessarily reflect the viewpoints of individual participants.

The Telecommunications Industries Analysis Project is associated with the Public Utility Research Center at the University of Florida College of Business Administration.

Graphics were produced by Mark Carroll.

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List of Acronyms

List of Acronyms

ARMIS	Automated Reporting Management Information System
BCPM	Benchmark Cost Proxy Model
CL	Common Line
CLEC	Competitive Local Exchange Carrier
CMRS	Commercial Mobile Radio Services
CTIA	Cellular Telecommunications Industry Association
DEM	Dial Equipment Minutes
FCC	Federal Communications Commission
ILECs	Incumbent Local Exchange Carriers
IS	Interstate
IXC	Interexchange Carrier
LEC	Local Exchange Carrier
LTS	Long Term Support
NARUC	National Association of Regulatory Utility Commissioners
NECA	National Exchange Carrier Association
PCIA	Personal Communications Industry Association
PCS	Personal Communications Services
RHC	Rural Health Care
SLC	Subscriber Line Charge
SOCC	Statistics of Communications Common Carriers
TIAP	Telecommunications Industries Analysis Project
U.S.	United States
USAC	Universal Service Administrative Company
USF	Universal Service Fund
REA	Rural Electrification Administration

Project Information

List of Participants in the Telecommunications Industries Analysis Project

October 1997

State Regulators

NARUC Representatives from:
California Public Utilities Commission
Florida Public Service Commission
Illinois Commerce Commission
Iowa Utilities Board
Massachusetts Department of Public
Utilities

Companies and Governments

AT&T
Bell Atlantic
BellSouth
Corning
France
France Telecom
GTE
Kalona Cooperative Telephone
MCI
Nortel
NTT America
SBC Communications
Sprint
Sprint Local Telecom Division
360° Communications
U S WEST

Sponsors:

Corporation for Public Broadcasting

Assisting with *public* data:

Bellcore
Federal Communications Commission
National Exchange Carrier Association
National Telecommunications and Information Administration

Project Information, cont.

Background on the Telecommunications Industries Analysis Project

The Telecommunications Industries Analysis Project (TIAP), a seven-year-old research consortium, conducts and reports impartial research in the areas where network planning, business financials, and public policy (regulation and legislation) intersect. The participants actively work together to develop new options for telecommunications policies to meet the needs of consumers, governments, and companies in a changing, competitive environment. Participants include regulators, domestic and foreign telecommunications companies, materials and equipment manufacturers, and other communications-based organizations.

The purpose of the Project is to produce research and analysis that will assist policy makers in making informed decisions.

TIAP incorporates the following features:

- **Neutral setting**
The Project provides a neutral setting, free of partiality, thereby ensuring objective and independent research.
- **Multiple viewpoints**
Participants play an active role in the research and analysis, represent their own interests, and understand and assist in developing others' perspectives.
- **Analysis and results of alternatives**
The Project provides research data, tools, and models for critical decision making.
- **Public distribution of research**
Data used by this Project are publicly available. Research products become public domain information.

I. Introduction

Objective

This paper will model options for the federal universal service fund (USF) on a comparable basis that will allow the reader to examine the effect on customers and states.

This paper models the current Federal Communications Commission (FCC) plan and two other options for funding universal service. It should be noted that many other options are also possible; for example, a third option is described. Time constraints limited the modeling and description of options in this paper. Other options that use variations of the mechanisms described in this paper or that use completely different mechanisms are possible.

This paper only focuses on universal service support for high-cost areas and omits new support mechanisms required by the *Telecommunications Act of 1996*, such as funding telecommunications for schools, libraries, rural health care, and low-income households.¹ The focus is on the universal service support for the large local exchange carriers (LECs), called "non-rural companies" in this paper. Universal service support for the rural LECs is omitted from this discussion. This paper only looks at states on the basis of net payers and receivers. It does not recommend any method of reduction in prices for services.

The sections in this paper cover the following items:

- **Section II, How is Universal Service Currently Funded?:** Provides a brief overview of how affordable residential rates have been maintained.
- **Section III, What Questions Need to be Asked about the FCC's New Fund?:** Presents some of the questions that should be answered to determine if the new universal service fund meets the requirements of the *Act of 1996* and accomplishes the goal of supporting truly high-cost areas.
- **Section IV, What are Some New Options?:** Describes and models the FCC's plan and two options for funding universal service to high-cost areas. The results allow comparisons of which states pay and which states receive universal service dollars. This section also describes a third option.
- **Section V, Where is the Subsidy?:** Summarizes the results and lists major issues that still need to be answered, such as who actually receives the subsidy and how reductions would be implemented for those receiving the benefit of the subsidy.
- **Section VI, Cash Flow Diagrams:** Shows the cash flows for the FCC's new universal service plan for current subsidy mechanisms: USF, Lifeline/Link-up, long term support (LTS), and weighted dial equipment minutes (DEM).
- **Section VII, Sources, Calculations, and Assumptions:** Provides background on sources, calculations, and assumptions used to model the options.
- **Section VIII, Input Data:** Provides the input data for developing the net payer and receiver charts for the FCC's plan, **Option 1** (Telephone Numbers), and **Option 2** (Percentage of Retail Revenues).
- **Section IX, Notes:** Provides sources and additional technical background.

II. How is Universal Service Currently Funded?

History and Current Subsidies

The telephone industry and regulatory agencies have historically maintained affordable residential rates through programs that provide subsidies and through pricing policies. The goal of universal service has been accomplished without the customer being aware that the programs exist. Historically, the support mechanisms that have kept many residential rates below their cost have been like the shell game. You know they are in there somewhere; identifying exactly where can be a guessing game.²

Currently, some of the subsidies are explicit in terms of intercompany payments (while not necessarily explicit to the customer). The cost of these programs, approximately \$1.6 billion, is included in the toll rates of interexchange customers.³ The programs provide assistance to companies serving high-cost areas and to low-income customers.⁴ See **Section VI** for cash flow diagrams of current subsidy mechanisms.⁵

The subsidies provided through pricing policies are not as easily identified or quantified. However, we do know that average pricing by large local exchange companies has masked the real cost to the customer of providing telephone service in rural areas. In the 1993 TIAP paper *What is the Price of Universal Service? Impact of Deaveraging Nationwide Urban/Rural Rates*, it was shown that the estimated nationwide cost of providing rural service exceeded the revenue paid by rural customers by \$8.7 billion dollars.⁶

Subsidies have also been provided through pricing some services above cost. For example, on average, the single line business rate is 2.3 times the average residential rate.⁷ Rate averaging and above cost pricing are policies that cannot be sustained in a competitive industry. The *Act of 1996* recognized the need to establish a new method of maintaining universal service.

III. What Questions Need to be Asked about the FCC's New Fund?

The New Fund

As the new universal service fund is developed, there are certain questions that should be answered to determine if the fund meets the requirements of the *Act of 1996*, the needs of a competitive industry, and accomplishes the goal of supporting truly high-cost areas. Some of these questions are as follows:

- *Does the fund accomplish the goal of providing sufficient support to high-cost areas so that rates can be affordable?*

The *Act of 1996* requires rates between urban and rural areas to be reasonably comparable.⁸ The size of the fund is a balancing act. At one end, if the fund is too large, it may be a burden to all customers. For example, a low-cost customer might have a rate increase that would make service prohibitively expensive. At the other end, if the fund is too small, it may not provide adequate support to the high-cost areas. The intent is to not have the fund force people off the network.

- *Is the fund competitively neutral?*

The universal service fund should not give one company an advantage over another. It should be structured so that everyone pays a fair share and every eligible competitor has the opportunity to pass on to qualified customers the benefits of the fund. The fund should not create market distortions that give customers incentives to choose one competitor, service or technology over another. The FCC's definition of competitively neutral is as follows:

Universal service support mechanisms and rules should be competitively neutral. In this context, competitive neutrality means that universal service support mechanisms and rules neither unfairly advantage nor disadvantage one provider over another, and neither unfairly favor nor disfavor one technology over another.⁹

- *Is the fund revenue neutral?*

No company should receive a windfall profit from universal service funding. If a company is able to increase profits from the universal service fund, those profits could be used to unfairly compete with those companies supporting the fund.

- *Is the fund explicit?*

For years regulators and the industry have played the shell game with the cost of universal service. The cost has been moved among services and customers. Now the *Act of 1996* requires that the fund be explicit. There is a disagreement as to whether this means that the cost of the fund should be explicit to companies or explicit to customers. Regulators and the industry must determine which method will best meet the requirements of the *Act of 1996*, be competitively neutral, and meet the goals of the universal service fund.

IV. What are Some New Options?

Options for the New Universal Service Fund

Currently, the FCC, in cooperation with the Federal-State Joint Board, is in the process of determining the amount of subsidy that should be provided to high-cost areas. Two forward-looking cost models, the Benchmark Cost Proxy Model (BCPM) and the Hatfield Model, are under consideration for this task.¹⁰ This paper will not address nor make any judgments on the models. The purpose of this paper is to demonstrate, in a comparable manner, the effect on customers and states, assuming a federal fund of various sizes, collected using diverse options. This is modeled by using six differently sized funds.

All assumptions in this paper represent the universal service fund as it will exist on January 1, 1999, for non-rural companies. While this paper only focuses on one aspect of the subsidy issue, there are other subsidies that will also have an impact on which states are net payers and receivers. The following is a list of some other subsidies, excluding the 1995 support for non-rural companies. Therefore, the results in this paper understate the impact of the subsidy issue. This paper only explores the impact of subsidies for the non-rural companies. The 1995 USF non-rural payment was \$201.9 million.¹¹ The total subsidy amount, with 1995 rural company payments and the new schools, libraries and rural health care payments, is \$4 billion.

1995 Subsidies: Covered by Paper	Dollars (in Millions)
Universal Service Fund (USF) for Non-Rural Companies (26%)*	\$202

Some 1995 Subsidies and New Subsidies : Not Covered by Paper	
Lifeline/Link-up	\$156
Weighted Dial Equipment Minutes (DEM)	300
Long-Term Support (LTS)	382
Universal Service Fund (USF) for Rural Companies (74%)*	575
Schools and Libraries	2,250
Rural Health Care Providers	400
Subtotal	\$4,063

Total	\$4,265
--------------	----------------

* Rural companies are those with a total of 100,000 access lines or less. Non-rural companies are those with a total of more than 100,000 access lines.

The report will show the net impact of payers and receivers into the universal service fund. The fund is sized at three revenue benchmarks (\$30, \$40, and \$50) using both the BCPM and the Hatfield models.¹² The reader is cautioned that the size of the fund produced with these benchmarks will probably not be the amount produced in the final model adopted by the FCC.

IV. What are Some New Options?, cont.

The illustrations and the range of amounts shown should be used as *indicators* for the size of the fund and the impact on the states and the customers. This paper also looks at funding of universal service only on the federal level. It makes no assumptions regarding the method of collecting a state fund. Individual states may want to provide universal service support for prices that fall below the benchmarks modeled in this paper or states may determine that the state support needed is less than that produced by the model. In other words, a state may need more or less than the amounts modeled in this paper.

FCC Plan: 25% Interstate/75% State

This is the current FCC plan for funding universal service. (For a cash flow diagram of the FCC's plan, see **Section VI**).¹³ The FCC funds only an interstate percentage and the states fund the remainder. The FCC described this plan as follows:

Beginning on January 1, 1999, the Commission will modify universal service assessments to fund 25 percent of the difference between cost of service defined by the applicable forward-looking economic cost method less the national benchmark, through a percentage contribution on interstate end-user telecommunications revenues.¹⁴

The FCC's USF plan assesses the federal contribution to USF (25% of the total requirement identified by the FCC) on interstate retail revenues. The plan also allows for an adjustment to interstate access to reflect the net of the following:

1. Increases in interstate access to recover payments made by the LECs into the fund for high-cost areas/low-income households, schools and libraries, and rural health care subsidy requirements; and
2. Decreases in interstate access to reflect support received by the LECs from the fund for their high-cost areas.

The following are the nationwide surcharges that, under the FCC's Plan, would generate 25% of the support calculated by the two proxy models (BCPM and Hatfield) at the three benchmarks. This surcharge is the interstate fund generated from each model for a given benchmark divided by 1995 interstate retail revenues. The surcharge is for comparison purposes only. Actual collection is through service rates.

Amount of Benchmark (in dollars)	FCC Plan Surcharge* on Interstate Retail Revenues (%)			Interstate Fund (in millions)			Remaining State Responsibility (in millions)		
	\$30	\$40	\$50	\$30	\$40	\$50	\$30	\$40	\$50
BCPM	3.2%	2.0%	1.3%	\$2,100 m	\$1,323 m	\$865 m	\$6,299 m	\$3,968 m	\$2,595 m
Hatfield	0.8%	0.4%	0.2%	\$510 m	\$244 m	\$124 m	\$1,529 m	\$731 m	\$373 m

*This surcharge is for comparison purposes only. Actual collection is through service rates. Surcharge is based on 25% of 1995 interstate retail revenues.

IV. What are Some New Options?, cont.

Figures 1 and 2 illustrate the option proposed by the FCC's May 8, 1997 *Universal Service Order*, to fund 25% of the necessary support for high-cost providers.¹⁵ The table shows the amount needed per month per line to support the federal fund using the BCPM and Hatfield model inputs at the three benchmark levels. These charts indicate net payers and receivers from the fund. This difference between what a state receives minus what it pays determines whether the state is a net payer or a net receiver. Therefore, a positive amount in **Figures 1 and 2** indicates a net receiver; a negative amount indicates a net payer. The monthly per line amount for each state is calculated by subtracting from the interstate subsidy for this state the product of the interstate surcharge on retail revenues times the interstate retail revenues for this state. This result is then divided by the number of access lines (USF loops) in the state and by twelve months to produce payers and receivers on a per line basis.

Figures 3 and 4 demonstrate the per month per line amount for each state that would be needed should a state determine it is necessary to fund the remaining 75% of the amounts determined by the model of the FCC's plan. The monthly per line amount for each state is calculated by dividing the remaining amount of the subsidy (total minus 25% interstate) in each state by the number of access lines in the state and by twelve months. Also illustrated are the nationwide average state payment amounts for each of the three benchmarks.

IV. What are Some New Options?, cont.

Figure 1: FCC Plan, Net Payers and Receivers per Access Line per Month, BCPM Interstate

State	BCPM Interstate \$30	State	BCPM Interstate \$40	State	BCPM Interstate \$50	
MS	\$2.91	WV	\$2.24	SD	\$1.89	
WV	\$2.86	MS	\$2.19	WV	\$1.66	
SD	\$2.33	SD	\$2.13	MS	\$1.60	
ID	\$1.68	WY	\$1.60	WY	\$1.55	
KY	\$1.61	ID	\$1.52	ND	\$1.41	
WY	\$1.61	ND	\$1.47	ID	\$1.34	
AL	\$1.52	KY	\$1.22	KY	\$0.87	
ND	\$1.46	AL	\$1.02	NM	\$0.75	
VT	\$1.39	VT	\$0.96	MT	\$0.75	
ME	\$1.36	ME	\$0.86	NE	\$0.69	
NC	\$1.05	NM	\$0.79	AL	\$0.65	
AR	\$0.92	MT	\$0.78	VT	\$0.52	
MO	\$0.89	NE	\$0.77	MO	\$0.51	
NM	\$0.87	MO	\$0.67	AR	\$0.48	
NE	\$0.82	AR	\$0.67	OK	\$0.47	
OK	\$0.80	OK	\$0.61	ME	\$0.46	
IN	\$0.79	NC	\$0.59	IN	\$0.29	
MT	\$0.77	IN	\$0.49	NC	\$0.28	
LA	\$0.61	LA	\$0.39	MN	\$0.26	
TN	\$0.52	IA	\$0.32	TX	\$0.26	
IA	\$0.45	MN	\$0.32	IA	\$0.25	
TX	\$0.41	TX	\$0.31	LA	\$0.24	
SC	\$0.40	TN	\$0.28	KS	\$0.18	
MN	\$0.40	SC	\$0.20	OR	\$0.17	
OH	\$0.38	KS	\$0.19	TN	\$0.12	
MI	\$0.28	OH	\$0.19	SC	\$0.07	
NH	\$0.20	OR	\$0.14	OH	\$0.07	
KS	\$0.20	VA	\$0.13	VA	\$0.07	
WI	\$0.19	MI	\$0.12	WI	\$0.05	
VA	\$0.17	WI	\$0.11	WA	\$0.04	
OR	\$0.08	WA	(\$0.01)	MI	\$0.03	Receivers
PA	\$0.05	PA	(\$0.01)	IL	(\$0.02)	Payers
WA	(\$0.03)	IL	(\$0.04)	UT	(\$0.03)	
GA	(\$0.04)	NH	(\$0.08)	PA	(\$0.06)	
IL	(\$0.05)	GA	(\$0.10)	HI	(\$0.10)	
HI	(\$0.14)	UT	(\$0.12)	GA	(\$0.12)	
UT	(\$0.24)	HI	(\$0.13)	CO	(\$0.14)	
DE	(\$0.43)	CO	(\$0.26)	AZ	(\$0.16)	
CO	(\$0.45)	AZ	(\$0.30)	NH	(\$0.18)	
AZ	(\$0.50)	CA	(\$0.34)	CA	(\$0.22)	
MD	(\$0.53)	DE	(\$0.39)	MD	(\$0.34)	
CA	(\$0.54)	MD	(\$0.42)	DE	(\$0.34)	
FL	(\$0.62)	FL	(\$0.48)	FL	(\$0.34)	
CT	(\$0.69)	NY	(\$0.52)	NY	(\$0.36)	
MA	(\$0.71)	RI	(\$0.59)	MA	(\$0.44)	
RI	(\$0.74)	MA	(\$0.60)	RI	(\$0.45)	
NY	(\$0.80)	CT	(\$0.63)	DC	(\$0.48)	
NJ	(\$1.15)	DC	(\$0.74)	CT	(\$0.49)	
DC	(\$1.17)	NJ	(\$0.79)	NJ	(\$0.54)	
NV	(\$3.91)	NV	(\$2.37)	NV	(\$1.44)	

IV. What are Some New Options?, cont.

Figure 2: FCC Plan, Net Payers and Receivers per Access Line per Month, Hatfield Interstate

State	Hatfield Interstate \$30	State	Hatfield Interstate \$40	State	Hatfield Interstate \$50	
WV	\$1.13	WY	\$0.67	NE	\$0.51	
MS	\$1.11	NE	\$0.65	WY	\$0.48	
WY	\$0.92	MS	\$0.59	MT	\$0.29	
NE	\$0.81	WV	\$0.53	MS	\$0.25	
ME	\$0.59	MT	\$0.34	WV	\$0.19	
VT	\$0.57	VT	\$0.27	SD	\$0.17	
AL	\$0.56	ME	\$0.27	ID	\$0.15	
MT	\$0.42	AL	\$0.25	ND	\$0.15	
MO	\$0.41	MO	\$0.25	MO	\$0.15	
OK	\$0.34	ID	\$0.24	ME	\$0.13	
ID	\$0.32	SD	\$0.21	NM	\$0.13	
SD	\$0.27	ND	\$0.21	MN	\$0.13	
NM	\$0.27	OK	\$0.19	KS	\$0.12	
MN	\$0.27	NM	\$0.18	OK	\$0.11	
KY	\$0.26	MN	\$0.18	VT	\$0.10	
ND	\$0.22	KS	\$0.14	AL	\$0.09	
AR	\$0.17	TX	\$0.10	TX	\$0.07	
NC	\$0.17	HI	\$0.10	CO	\$0.06	
TX	\$0.14	AR	\$0.09	AZ	\$0.05	
KS	\$0.14	KY	\$0.06	HI	\$0.05	
LA	\$0.14	CO	\$0.05	AR	\$0.05	
VA	\$0.13	IA	\$0.05	WA	\$0.04	
HI	\$0.11	LA	\$0.05	UT	\$0.03	
IA	\$0.08	WA	\$0.04	IA	\$0.02	
IN	\$0.06	VA	\$0.03	NV	\$0.01	
TN	\$0.05	AZ	\$0.03	LA	\$0.01	Receiver
CO	\$0.04	NC	\$0.01	OR	(\$0.01)	Payer
MI	\$0.01	UT	\$0.00	WI	(\$0.02)	
WA	\$0.01	IN	(\$0.01)	MI	(\$0.02)	
WI	\$0.00	MI	(\$0.02)	IL	(\$0.02)	
NH	(\$0.00)	WI	(\$0.02)	VA	(\$0.02)	
OR	(\$0.04)	OR	(\$0.02)	CA	(\$0.02)	
PA	(\$0.04)	IL	(\$0.03)	KY	(\$0.03)	
AZ	(\$0.05)	PA	(\$0.05)	NC	(\$0.03)	
OH	(\$0.05)	TN	(\$0.05)	IN	(\$0.03)	
UT	(\$0.05)	NH	(\$0.05)	PA	(\$0.04)	
GA	(\$0.05)	GA	(\$0.05)	GA	(\$0.04)	
IL	(\$0.07)	CA	(\$0.06)	NY	(\$0.04)	
SC	(\$0.09)	OH	(\$0.06)	NH	(\$0.04)	
NY	(\$0.12)	NY	(\$0.07)	OH	(\$0.05)	
CA	(\$0.14)	SC	(\$0.09)	TN	(\$0.05)	
MD	(\$0.19)	FL	(\$0.11)	FL	(\$0.06)	
FL	(\$0.21)	MD	(\$0.11)	SC	(\$0.06)	
DE	(\$0.25)	MA	(\$0.13)	MD	(\$0.07)	
MA	(\$0.27)	DC	(\$0.14)	DC	(\$0.07)	
RI	(\$0.28)	DE	(\$0.15)	MA	(\$0.07)	
DC	(\$0.28)	RI	(\$0.16)	RI	(\$0.08)	
CT	(\$0.32)	NJ	(\$0.16)	DE	(\$0.08)	
NJ	(\$0.33)	CT	(\$0.17)	NJ	(\$0.08)	
NV	(\$0.77)	NV	(\$0.22)	CT	(\$0.09)	

IV. What are Some New Options?, cont.

Figure 3: FCC Plan, Remaining State Responsibility per Access Line per Month, BCPM

State	BCPM State \$30	State	BCPM State \$40	State	BCPM State \$50
MS	\$12.22	SD	\$9.07	SD	\$7.42
WV	\$12.16	WV	\$8.97	WY	\$6.53
SD	\$11.23	MS	\$8.76	WV	\$6.46
ID	\$9.41	WY	\$7.65	MS	\$6.23
WY	\$9.36	ID	\$7.32	ID	\$5.83
VT	\$9.23	ND	\$6.76	ND	\$5.77
KY	\$8.67	KY	\$6.09	KY	\$4.20
ND	\$8.11	VT	\$6.07	NM	\$4.10
AL	\$7.74	NM	\$5.19	MT	\$3.87
ME	\$7.72	AL	\$5.06	VT	\$3.66
NM	\$7.07	ME	\$4.88	NE	\$3.53
NC	\$6.76	MT	\$4.83	AL	\$3.26
MT	\$6.29	NE	\$4.54	MO	\$2.89
AR	\$6.11	AR	\$4.12	ME	\$2.89
MO	\$6.01	MO	\$4.10	AR	\$2.84
NE	\$5.98	NC	\$4.06	OK	\$2.73
OK	\$5.63	OK	\$3.85	NC	\$2.32
NH	\$5.49	IN	\$3.41	IA	\$2.19
IN	\$5.44	IA	\$3.16	MN	\$2.18
SC	\$5.05	LA	\$3.08	IN	\$2.12
TN	\$5.04	MN	\$3.08	OR	\$2.08
LA	\$4.86	SC	\$3.03	TX	\$1.99
IA	\$4.81	TN	\$3.03	LA	\$1.98
MN	\$4.56	VA	\$2.86	KS	\$1.97
VA	\$4.43	NH	\$2.83	VA	\$1.82
OH	\$4.29	OR	\$2.80	SC	\$1.80
TX	\$4.16	KS	\$2.78	TN	\$1.79
KS	\$4.09	TX	\$2.78	NV	\$1.71
GA	\$4.06	OH	\$2.55	WA	\$1.64
OR	\$4.02	GA	\$2.33	UT	\$1.56
WA	\$3.58	WA	\$2.30	OH	\$1.51
Nationwide Avg.	\$3.44	Nationwide Avg.	\$2.17	NH	\$1.46
MI	\$3.35	UT	\$2.16	Nationwide Avg.	\$1.42
WI	\$3.34	NV	\$2.14	CO	\$1.36
PA	\$3.29	WI	\$2.10	GA	\$1.36
UT	\$3.26	CO	\$1.96	WI	\$1.31
CO	\$3.01	MI	\$1.95	AZ	\$1.31
NV	\$2.93	PA	\$1.95	IL	\$1.18
HI	\$2.91	AZ	\$1.83	MI	\$1.13
IL	\$2.88	IL	\$1.80	PA	\$1.12
AZ	\$2.82	HI	\$1.69	HI	\$1.07
DE	\$2.81	DE	\$1.42	DE	\$0.67
CT	\$2.53	MD	\$1.03	MD	\$0.49
MD	\$2.06	CT	\$1.01	FL	\$0.47
RI	\$1.86	FL	\$0.87	CA	\$0.42
FL	\$1.81	RI	\$0.78	CT	\$0.42
MA	\$1.65	CA	\$0.61	NY	\$0.35
NY	\$1.04	NY	\$0.61	RI	\$0.32
CA	\$1.01	MA	\$0.57	MA	\$0.22
NJ	\$0.75	NJ	\$0.27	NJ	\$0.09
DC	\$0.01	DC	\$0.00	DC	\$0.00

IV. What are Some New Options?, cont.

Figure 4: FCC Plan, Remaining State Responsibility per Access Line per Month, Hatfield

State	Hatfield State \$30	State	Hatfield State \$40	State	Hatfield State \$50
WV	\$4.25	WY	\$2.54	NE	\$1.75
MS	\$4.19	NE	\$2.37	WY	\$1.72
WY	\$3.86	MS	\$2.16	MT	\$1.10
NE	\$3.28	WV	\$2.01	MS	\$0.96
VT	\$2.94	MT	\$1.49	NV	\$0.90
ME	\$2.66	VT	\$1.40	WV	\$0.77
AL	\$2.44	ID	\$1.24	SD	\$0.76
MT	\$2.23	ME	\$1.22	ID	\$0.71
MO	\$2.03	SD	\$1.13	ND	\$0.67
ID	\$2.01	MO	\$1.12	NM	\$0.64
NM	\$1.90	AL	\$1.11	MO	\$0.64
SD	\$1.84	NM	\$1.07	VT	\$0.60
OK	\$1.79	ND	\$1.06	ME	\$0.60
KY	\$1.71	NV	\$1.05	MN	\$0.58
MN	\$1.62	OK	\$0.95	KS	\$0.57
ND	\$1.58	MN	\$0.94	OK	\$0.53
NC	\$1.37	KS	\$0.84	AL	\$0.46
VA	\$1.34	HI	\$0.69	CO	\$0.43
AR	\$1.32	CO	\$0.66	AZ	\$0.41
KS	\$1.28	AR	\$0.65	TX	\$0.39
NV	\$1.26	TX	\$0.65	HI	\$0.35
CO	\$1.18	KY	\$0.61	AR	\$0.34
NH	\$1.18	AZ	\$0.58	WA	\$0.34
LA	\$1.15	IA	\$0.56	UT	\$0.31
TX	\$1.15	VA	\$0.55	IA	\$0.27
HI	\$1.13	WA	\$0.54	LA	\$0.21
IA	\$1.08	LA	\$0.49	Nationwide Avg.	\$0.20
TN	\$0.99	UT	\$0.47	OR	\$0.19
WA	\$0.93	NC	\$0.46	VA	\$0.18
AZ	\$0.92	NH	\$0.43	NH	\$0.16
IN	\$0.91	Nationwide Avg.	\$0.40	KY	\$0.15
GA	\$0.86	OR	\$0.38	GA	\$0.14
Nationwide Avg.	\$0.84	IN	\$0.33	NC	\$0.13
UT	\$0.83	GA	\$0.33	IL	\$0.13
OR	\$0.81	WI	\$0.27	WI	\$0.12
WI	\$0.69	IL	\$0.27	MI	\$0.10
SC	\$0.68	TN	\$0.27	IN	\$0.09
MI	\$0.65	MI	\$0.25	CA	\$0.09
PA	\$0.65	PA	\$0.23	PA	\$0.08
OH	\$0.63	NY	\$0.19	NY	\$0.08
IL	\$0.53	OH	\$0.19	TN	\$0.05
NY	\$0.47	SC	\$0.18	FL	\$0.05
MD	\$0.33	CA	\$0.12	SC	\$0.05
FL	\$0.27	FL	\$0.11	OH	\$0.04
DE	\$0.23	MD	\$0.08	MD	\$0.02
CA	\$0.20	MA	\$0.04	MA	\$0.01
CT	\$0.15	CT	\$0.03	CT	\$0.00
RI	\$0.14	DE	\$0.02	DE	\$0.00
MA	\$0.11	RI	\$0.00	DC	\$0.00
NJ	\$0.02	NJ	\$0.00	NJ	\$0.00
DC	\$0.00	DC	\$0.00	RI	\$0.00

IV. What are Some New Options?, cont.

Option 1: Telephone Numbers

This option is an overall approach to funding universal service without regard to past interstate/state jurisdictional distinctions. The entire fund is recovered from one mechanism.

This option assumes the federal fund will recover 100% of the support calculated at the representative benchmarks. The universal service charge is assessed to customers based upon phone numbers in service.

The following are the nationwide surcharges that would apply to each telephone number per month under **Option 1**. This surcharge is calculated using the total fund (interstate and state) generated from each model for a given benchmark divided by the total number of telephone numbers divided by twelve months.

Amount of Benchmark (in dollars)	Option 1: Nationwide Surcharge* per Telephone Number per Month (in dollars)			Total Fund (in millions)		
	\$30	\$40	\$50	\$30	\$40	\$50
BCPM	\$3.34	\$2.10	\$1.38	\$8,399 m	\$5,291 m	\$3,459 m
Hatfield	\$0.81	\$0.39	\$0.20	\$2,039 m	\$975 m	\$497 m

*This surcharge would apply to each telephone number per month. To be competitively neutral, this surcharge should be applied entirely to the end user and must be applied by all companies to their customers.

To be competitively neutral, this surcharge should be applied entirely to the end user and must be applied by all companies to their customers.

Figures 5 and 6 indicate the amount paid and received per month per number in each state. The monthly per line amount for each state is calculated by subtracting from the total subsidy for each state the product of the surcharge per telephone number per month times the number of telephone numbers in the state times twelve. The result is then divided by the number of access lines in the state and by twelve months to produce payers and receivers on a per line basis.

As with the earlier charts, a positive amount indicates a net receiver and a negative amount indicates a net payer. Since the results are on a per access line basis instead of on a per telephone number basis, in all cases the amount paid is overstated. In reality, no customer with a single phone number would pay more than the estimated surcharge listed above.

IV. What are Some New Options?, cont.

Figure 5: Option 1: Telephone Numbers, Net Payers and Receivers per Access Line per Month, BCPM

State	BCPM \$30	State	BCPM \$40	State	BCPM \$50	
MS	\$11.74	SD	\$9.18	SD	\$7.99	
WV	\$11.68	WV	\$9.11	WY	\$6.82	
SD	\$10.36	MS	\$8.81	WV	\$6.75	
ID	\$7.98	WY	\$7.31	MS	\$6.43	
WY	\$7.90	ID	\$6.89	ID	\$5.89	
VT	\$7.73	ND	\$6.14	ND	\$5.82	
KY	\$7.01	KY	\$5.25	KY	\$3.73	
ND	\$6.27	VT	\$5.21	NM	\$3.58	
AL	\$5.76	NM	\$4.05	MT	\$3.30	
ME	\$5.74	AL	\$3.88	VT	\$2.99	
NM	\$4.86	ME	\$3.63	NE	\$2.83	
NC	\$4.41	MT	\$3.59	AL	\$2.47	
MT	\$3.86	NE	\$3.18	ME	\$1.97	
AR	\$3.60	AR	\$2.63	MO	\$1.96	
MO	\$3.42	MO	\$2.57	AR	\$1.91	
NE	\$3.41	NC	\$2.52	OK	\$1.77	
OK	\$2.95	OK	\$2.26	NC	\$1.20	
NH	\$2.75	IN	\$1.66	IA	\$1.05	
IN	\$2.67	IA	\$1.35	MN	\$1.02	
SC	\$2.19	LA	\$1.23	IN	\$0.94	
TN	\$2.14	MN	\$1.23	OR	\$0.88	
LA	\$1.93	SC	\$1.17	TX	\$0.76	
IA	\$1.87	TN	\$1.15	LA	\$0.76	
MN	\$1.51	VA	\$0.91	KS	\$0.75	
VA	\$1.29	NH	\$0.89	SC	\$0.53	
OH	\$1.14	OR	\$0.85	VA	\$0.52	
TX	\$0.96	KS	\$0.83	TN	\$0.51	
KS	\$0.89	TX	\$0.81	NV	\$0.34	
GA	\$0.82	OH	\$0.52	WA	\$0.31	
OR	\$0.78	GA	\$0.21	UT	\$0.20	
WA	\$0.20	WA	\$0.19	OH	\$0.13	
WI	(\$0.11)	UT	(\$0.01)	NH	\$0.06	Receiver
MI	(\$0.11)	WI	(\$0.08)	CO	(\$0.07)	Payer
PA	(\$0.19)	NV	(\$0.12)	GA	(\$0.08)	
UT	(\$0.23)	CO	(\$0.27)	WI	(\$0.14)	
CO	(\$0.56)	MI	(\$0.28)	AZ	(\$0.14)	
HI	(\$0.72)	PA	(\$0.29)	IL	(\$0.32)	
IL	(\$0.77)	AZ	(\$0.44)	MI	(\$0.39)	
NV	(\$0.80)	IL	(\$0.51)	PA	(\$0.39)	
AZ	(\$0.81)	HI	(\$0.64)	HI	(\$0.47)	
CT	(\$1.23)	DE	(\$1.29)	DE	(\$1.18)	
DE	(\$1.30)	MD	(\$1.52)	MD	(\$1.24)	
MD	(\$1.86)	CT	(\$1.54)	FL	(\$1.26)	
RI	(\$2.14)	FL	(\$1.74)	CT	(\$1.34)	
FL	(\$2.19)	RI	(\$1.87)	CA	(\$1.34)	
MA	(\$2.40)	CA	(\$2.08)	NY	(\$1.43)	
NY	(\$3.21)	NY	(\$2.09)	RI	(\$1.48)	
CA	(\$3.26)	MA	(\$2.14)	MA	(\$1.60)	
NJ	(\$3.61)	NJ	(\$2.54)	NJ	(\$1.77)	
DC	(\$4.52)	DC	(\$2.85)	DC	(\$1.87)	

IV. What are Some New Options?, cont.

Figure 6: Option 1: Telephone Numbers, Net Payers and Receivers per Access Line per Month, Hatfield

State	Hatfield \$30	State	Hatfield \$40	State	Hatfield \$50	
WV	\$4.57	WY	\$2.86	NE	\$2.06	
MS	\$4.48	NE	\$2.62	WY	\$2.02	
WY	\$4.03	MS	\$2.35	MT	\$1.20	
NE	\$3.26	WV	\$2.16	MS	\$1.01	
VT	\$2.81	MT	\$1.46	NV	\$0.92	
ME	\$2.44	VT	\$1.33	WV	\$0.76	
AL	\$2.15	ID	\$1.13	SD	\$0.73	
MT	\$1.87	ME	\$1.10	ID	\$0.68	
MO	\$1.60	SD	\$0.97	ND	\$0.63	
ID	\$1.58	MO	\$0.97	NM	\$0.59	
NM	\$1.42	AL	\$0.95	MO	\$0.58	
SD	\$1.34	NM	\$0.89	VT	\$0.54	
OK	\$1.28	ND	\$0.88	ME	\$0.53	
KY	\$1.18	NV	\$0.85	MN	\$0.50	
MN	\$1.05	OK	\$0.74	KS	\$0.49	
ND	\$1.00	MN	\$0.72	OK	\$0.44	
NC	\$0.72	KS	\$0.59	AL	\$0.34	
VA	\$0.67	HI	\$0.38	CO	\$0.30	
AR	\$0.66	CO	\$0.35	AZ	\$0.28	
KS	\$0.60	AR	\$0.34	TX	\$0.25	
NV	\$0.54	TX	\$0.34	HI	\$0.19	
CO	\$0.47	KY	\$0.29	AR	\$0.19	
NH	\$0.46	AZ	\$0.25	WA	\$0.19	
LA	\$0.43	IA	\$0.21	UT	\$0.14	
TX	\$0.42	VA	\$0.20	IA	\$0.09	
HI	\$0.39	WA	\$0.19	LA	\$0.01	Receiver
IA	\$0.34	LA	\$0.13	OR	(\$0.01)	Payer
TN	\$0.21	UT	\$0.10	VA	(\$0.04)	
WA	\$0.13	NC	\$0.07	NH	(\$0.06)	
AZ	\$0.11	NH	\$0.04	KY	(\$0.07)	
IN	\$0.11	OR	(\$0.02)	GA	(\$0.09)	
GA	\$0.03	IN	(\$0.09)	NC	(\$0.10)	
UT	(\$0.01)	GA	(\$0.10)	IL	(\$0.10)	
OR	(\$0.03)	WI	(\$0.16)	WI	(\$0.11)	
WI	(\$0.19)	IL	(\$0.17)	MI	(\$0.14)	
SC	(\$0.20)	TN	(\$0.18)	IN	(\$0.15)	
MI	(\$0.24)	MI	(\$0.20)	CA	(\$0.15)	
PA	(\$0.25)	PA	(\$0.23)	PA	(\$0.17)	
OH	(\$0.27)	NY	(\$0.28)	NY	(\$0.17)	
IL	(\$0.41)	OH	(\$0.28)	TN	(\$0.21)	
NY	(\$0.49)	SC	(\$0.29)	SC	(\$0.21)	
MD	(\$0.68)	CA	(\$0.37)	FL	(\$0.21)	
FL	(\$0.76)	FL	(\$0.39)	OH	(\$0.22)	
CA	(\$0.85)	MD	(\$0.43)	MD	(\$0.25)	
DE	(\$0.92)	MA	(\$0.48)	MA	(\$0.25)	
CT	(\$0.92)	CT	(\$0.50)	DC	(\$0.27)	
RI	(\$0.94)	DC	(\$0.53)	CT	(\$0.27)	
MA	(\$0.97)	RI	(\$0.53)	NJ	(\$0.27)	
NJ	(\$1.09)	NJ	(\$0.53)	RI	(\$0.27)	
DC	(\$1.10)	DE	(\$0.56)	DE	(\$0.30)	

IV. What are Some New Options?, cont.

Option 2: Percentage of Retail Revenues

This option is an overall approach with the entire fund being recovered using one mechanism. The basis for assessment of the dollars is a uniform percent charge on total retail revenues.

Like the previous telephone numbers option, the revenues option assumes the federal fund recovers 100% of the support calculated at the three benchmark levels. The universal service charge is assessed as a percentage of retail revenues on the customer's bill.

The uniform percent surcharge is calculated by using the total fund (interstate and state) generated from each model for a given benchmark divided by total (interstate and state) 1995 retail revenues.

Amount of Benchmark (in dollars)	Option 2: Nationwide Surcharge* on Percentage of Retail Revenues per Access Line per Month (%)			Total Fund (in millions)		
	\$30	\$40	\$50	\$30	\$40	\$50
BCPM	5.03%	3.17%	2.07%	\$8,399 m	\$5,291 m	\$3,459 m
Hatfield	1.22%	0.58%	0.30%	\$2,039 m	\$975 m	\$497 m

*This surcharge is based on 1995 total (interstate and state) retail revenues. To be competitively neutral, this surcharge should be applied entirely to the end user and must be applied by all companies to their customers.

To be competitively neutral, this surcharge should be applied entirely to the end user and must be applied by all companies to their customers.

Figures 7 and 8 compare the amount paid and received as a percentage of retail revenues in each state. The monthly per line amount for each state is calculated by subtracting from the total subsidy for each state the product of the surcharge on percentage of retail revenues and the total retail revenues (interstate and state) for this same state. The result is then divided by the number of access lines in the state and by twelve months to produce payers and receivers on a per line basis. As with the earlier charts, a positive amount indicates a net receiver and a negative amount indicates a net payer.

IV. What are Some New Options?, cont.

Figure 7: Option 2: Percentage of Retail Revenues, Net Payers and Receivers per Access Line per Month, BCPM

State	BCPM \$30	State	BCPM \$40	State	BCPM \$50	
MS	\$11.48	SD	\$9.10	SD	\$7.94	
WV	\$11.39	WV	\$8.92	WY	\$6.80	
SD	\$10.24	MS	\$8.64	WV	\$6.63	
ID	\$7.92	WY	\$7.28	MS	\$6.32	
WY	\$7.86	ID	\$6.85	ID	\$5.87	
VT	\$7.10	ND	\$6.16	ND	\$5.83	
KY	\$6.46	KY	\$4.90	KY	\$3.50	
ND	\$6.30	VT	\$4.82	NM	\$3.41	
AL	\$5.79	AL	\$3.89	MT	\$3.23	
ME	\$5.65	NM	\$3.78	VT	\$2.73	
NM	\$4.43	ME	\$3.57	NE	\$2.64	
NC	\$4.02	MT	\$3.48	AL	\$2.48	
AR	\$3.73	NE	\$2.90	MO	\$2.03	
MT	\$3.69	AR	\$2.70	OK	\$1.97	
MO	\$3.60	MO	\$2.69	AR	\$1.96	
OK	\$3.44	OK	\$2.57	ME	\$1.93	
NE	\$2.97	NC	\$2.27	MN	\$1.13	
IN	\$2.85	IN	\$1.77	IA	\$1.10	
TN	\$2.30	IA	\$1.42	NC	\$1.03	
NH	\$2.25	MN	\$1.40	IN	\$1.02	
LA	\$2.07	LA	\$1.32	OR	\$0.91	
IA	\$1.99	TN	\$1.25	TX	\$0.86	
MN	\$1.78	TX	\$0.97	LA	\$0.82	
SC	\$1.51	KS	\$0.91	KS	\$0.80	
TX	\$1.21	OR	\$0.89	TN	\$0.57	
VA	\$1.15	VA	\$0.82	VA	\$0.46	
KS	\$1.01	SC	\$0.75	WA	\$0.29	
OR	\$0.85	NH	\$0.57	UT	\$0.28	
OH	\$0.77	OH	\$0.28	SC	\$0.25	
WI	\$0.42	WI	\$0.25	WI	\$0.08	Receiver
PA	\$0.33	WA	\$0.15	OH	(\$0.03)	Payer
MI	\$0.23	UT	\$0.12	AZ	(\$0.11)	
GA	\$0.22	PA	\$0.04	IL	(\$0.14)	
WA	\$0.14	MI	(\$0.07)	NH	(\$0.15)	
UT	(\$0.03)	GA	(\$0.17)	PA	(\$0.17)	
DE	(\$0.18)	IL	(\$0.23)	CO	(\$0.23)	
IL	(\$0.32)	AZ	(\$0.40)	MI	(\$0.25)	
HI	(\$0.58)	CO	(\$0.51)	GA	(\$0.33)	
AZ	(\$0.74)	HI	(\$0.55)	HI	(\$0.41)	
CO	(\$0.94)	DE	(\$0.57)	DE	(\$0.72)	
MD	(\$1.77)	MD	(\$1.47)	CA	(\$1.20)	
RI	(\$1.92)	RI	(\$1.73)	MD	(\$1.20)	
CT	(\$2.15)	FL	(\$1.75)	FL	(\$1.28)	
FL	(\$2.22)	CA	(\$1.87)	RI	(\$1.39)	
MA	(\$2.59)	CT	(\$2.13)	NY	(\$1.51)	
CA	(\$2.93)	NY	(\$2.21)	DC	(\$1.59)	
NY	(\$3.41)	MA	(\$2.26)	MA	(\$1.68)	
NJ	(\$3.76)	DC	(\$2.42)	CT	(\$1.72)	
DC	(\$3.84)	NJ	(\$2.63)	NJ	(\$1.83)	
NV	(\$8.71)	NV	(\$5.11)	NV	(\$2.92)	

IV. What are Some New Options?, cont.

Figure 8: Option 2: Percentage of Retail Revenues, Net Payers and Receivers per Access Line per Month, Hatfield

State	Hatfield	State	Hatfield	State	Hatfield	
	\$30		\$40		\$50	
WV	\$4.50	WY	\$2.85	NE	\$2.03	
MS	\$4.42	NE	\$2.57	WY	\$2.01	
WY	\$4.02	MS	\$2.32	MT	\$1.19	
NE	\$3.15	WV	\$2.12	MS	\$0.99	
VT	\$2.66	MT	\$1.44	WV	\$0.74	
ME	\$2.41	VT	\$1.26	SD	\$0.73	
AL	\$2.16	ID	\$1.12	ID	\$0.68	
MT	\$1.83	ME	\$1.09	ND	\$0.63	
MO	\$1.64	MO	\$0.99	MO	\$0.59	
ID	\$1.56	SD	\$0.96	NM	\$0.56	
OK	\$1.40	AL	\$0.95	ME	\$0.52	
NM	\$1.32	ND	\$0.89	MN	\$0.52	
SD	\$1.31	NM	\$0.84	VT	\$0.50	
MN	\$1.12	OK	\$0.80	KS	\$0.49	
KY	\$1.05	MN	\$0.75	OK	\$0.46	
ND	\$1.01	KS	\$0.60	NV	\$0.46	
AR	\$0.69	HI	\$0.40	AL	\$0.35	
VA	\$0.64	TX	\$0.36	CO	\$0.28	
KS	\$0.63	AR	\$0.35	AZ	\$0.28	
NC	\$0.62	CO	\$0.31	TX	\$0.26	
TX	\$0.48	AZ	\$0.26	HI	\$0.20	
LA	\$0.46	IA	\$0.23	AR	\$0.20	
HI	\$0.43	KY	\$0.23	WA	\$0.18	
CO	\$0.38	VA	\$0.19	UT	\$0.16	
IA	\$0.37	WA	\$0.18	IA	\$0.10	
NH	\$0.34	LA	\$0.14	LA	\$0.02	Receiver
TN	\$0.25	UT	\$0.12	OR	(\$0.01)	Payer
IN	\$0.15	NC	\$0.03	VA	(\$0.05)	
AZ	\$0.13	OR	(\$0.02)	IL	(\$0.07)	
WA	\$0.11	NH	(\$0.02)	WI	(\$0.08)	
UT	\$0.04	NV	(\$0.07)	NH	(\$0.09)	
OR	(\$0.01)	IN	(\$0.07)	KY	(\$0.10)	
WI	(\$0.06)	WI	(\$0.10)	MI	(\$0.12)	
GA	(\$0.12)	IL	(\$0.12)	NC	(\$0.12)	
PA	(\$0.12)	TN	(\$0.16)	GA	(\$0.13)	
MI	(\$0.16)	MI	(\$0.16)	CA	(\$0.13)	
IL	(\$0.31)	PA	(\$0.16)	IN	(\$0.14)	
OH	(\$0.36)	GA	(\$0.17)	PA	(\$0.14)	
SC	(\$0.36)	NY	(\$0.30)	NY	(\$0.18)	
NY	(\$0.54)	OH	(\$0.32)	TN	(\$0.20)	
DE	(\$0.64)	CA	(\$0.33)	FL	(\$0.21)	
MD	(\$0.66)	SC	(\$0.37)	DC	(\$0.23)	
CA	(\$0.76)	FL	(\$0.40)	DE	(\$0.23)	
FL	(\$0.77)	MD	(\$0.42)	OH	(\$0.24)	
RI	(\$0.89)	DE	(\$0.43)	MD	(\$0.24)	
DC	(\$0.94)	DC	(\$0.45)	SC	(\$0.25)	
MA	(\$1.01)	MA	(\$0.51)	RI	(\$0.26)	
NJ	(\$1.12)	RI	(\$0.51)	MA	(\$0.26)	
CT	(\$1.15)	NJ	(\$0.55)	NJ	(\$0.28)	
NV	(\$1.38)	CT	(\$0.61)	CT	(\$0.32)	

IV. What are Some New Options?, cont.

State Commission Block Grant Option

This option is proposed by an ad hoc National Association of Regulatory Utility Commissioners (NARUC) work group. This option sends block grant funds to those states with average costs above an established nationwide average. The proposal is funded entirely from interstate revenues. The distribution mechanism of these block grant funds is determined by each state's public utility commission. The Block Grant Option includes the following steps:

1. Calculate for each state a statewide average cost.
2. Calculate a nationwide average cost.
3. Then compare the two. The mechanism would work the way the USF fund does today. Any state that has an established percentage above that of the nationwide average cost would receive USF funds.
4. Each state receives funds in the form of a block grant. Money goes back to the state public utility commission and not directly to the customers or to the companies. The state can use these funds in whatever manner it wishes as long as their use is related to telecommunications services.

Other Options

Time constraints limited the modeling and description of options in this paper. Other options that use variations of the mechanisms described in this paper or that use completely different mechanisms are possible.

V. Where is the Subsidy?

Where is the Subsidy?

The cost to serve high-cost areas has not changed. Today, high-cost customers are provided service through the current revenue paid by themselves and by others. When the new fund is implemented, regardless of the mechanism, customers will pay for it. There is no need for total revenue to increase for the high-cost fund.¹⁶ Universal service revenue should not create a windfall profit for any company. The dollars collected through the new universal service charge will replace the subsidy dollars that now exist in the prices of other services. As those subsidies are replaced by the new universal service funding mechanism, the cost of the other services should decrease.

Since it has never been clear where *all* the subsidies exist, how that reduction takes place will be very contentious. Policy makers will have a formidable task in determining where the subsidies exist and the amount of subsidy in the individual services. Industry, political, and consumer groups will seek to have those reductions benefit their particular interest. If the fund is implemented in such a way that all customers pay an equitable amount, and the rates of services are reduced to reflect the shift in the payment of the subsidy, the result will be a total communications bill increase for some customers and a decrease for others. This results from the fact that, previously, some customers have not provided support for universal service.

If policy makers are successful, the new high-cost fund will not cause a disproportionate burden on any class of customer and will not affect the customers' market decisions.

VI. Cash Flow Diagrams

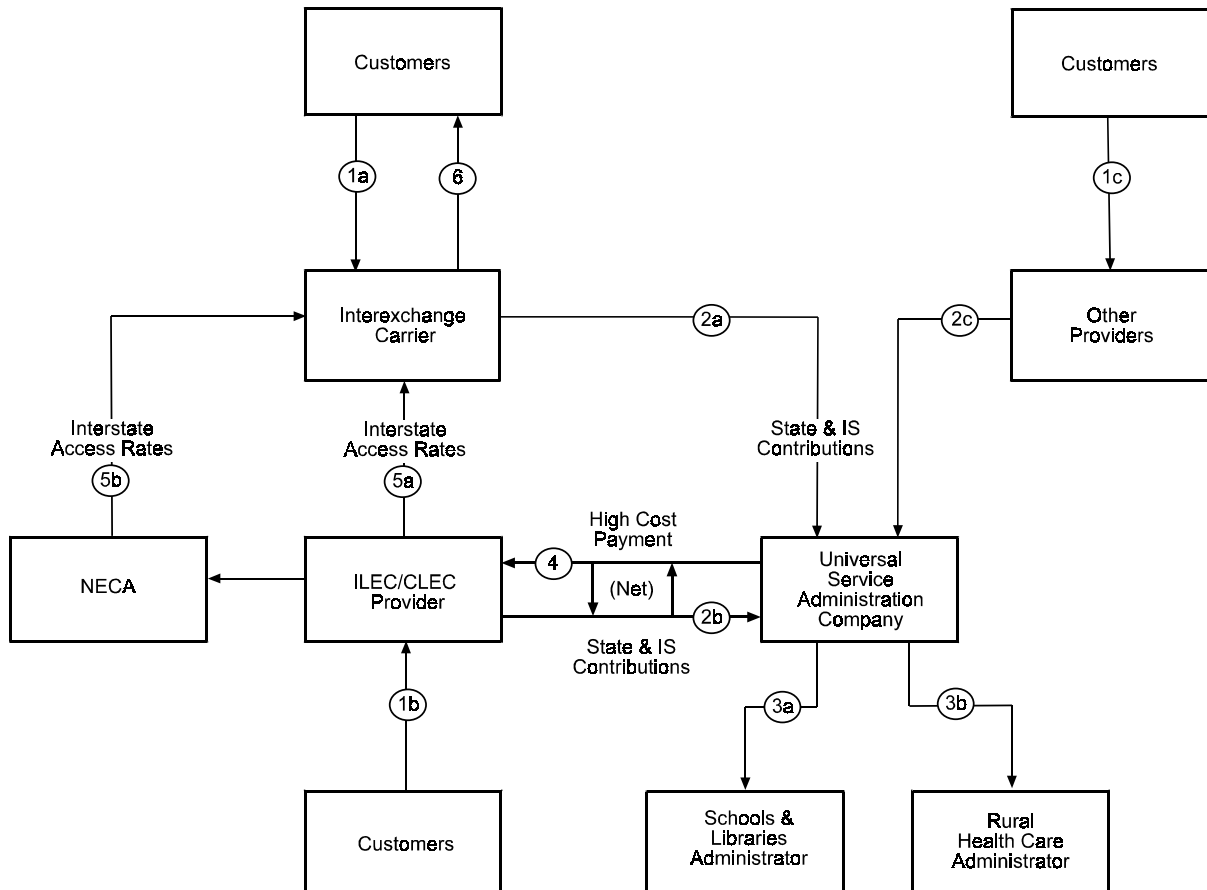
Cash Flow Diagrams

Figure 9 illustrates the FCC's current plan for universal service and other support mechanisms.

Figures 10, 11, and 12 illustrate the cash flow of three programs designed to assist companies serving high-cost areas and low-income customers.

VI. Cash Flow Diagrams, cont.

Figure 9: Cash Flow for the FCC's Plan for the New Universal Service Fund



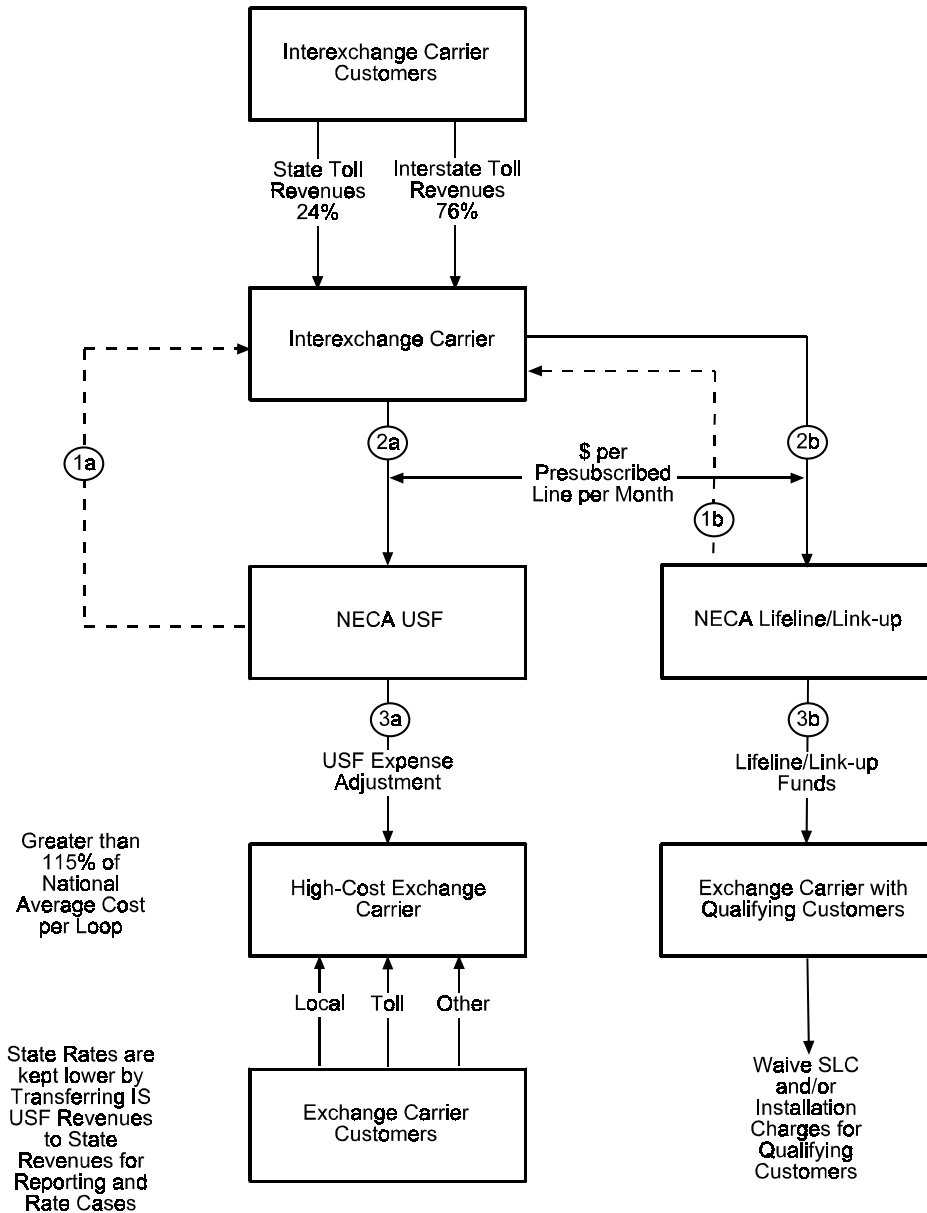
VI. Cash Flow Diagrams, cont.

Figure 9: Cash Flow for the FCC's Current Plan to Fund Universal Service, cont.

- 1a. Total state and interstate revenues from interexchange carrier (IXC) customers.
- 1b. Total state and interstate revenues from incumbent local exchange carrier (ILEC) customers and from competitive local exchange carrier (CLEC) customers.
- 1c. Total state and interstate revenues from other service providers.
- 2a. State and interstate contributions to schools, libraries and health care providers fund plus interstate contributions to high-cost/low-income fund (the contributions are netted with the schools/libraries/health care high-cost fund receipts).
- 2b. Same as above.
- 2c. Same as above.
- 3a. Universal Service Administrative Company (USAC) passes the schools and libraries contributions to the Schools and Libraries Corporation.
- 3b. USAC passes the health care provider contributions to the Rural Health Care Corporation (RHC).
4. USAC calculates the high-cost, schools, libraries, and health care settlements and passes them to the ILEC or CLEC.
- 5a. The non-NECA pool ILECs/CLECs pass on the net of (all) universal service contributions less Schools and Libraries Corporation/RHC high-cost fund receipts to the IXCs in the form of increases/decreases in access rates.
- 5b. The NECA pool ILECs/CLECs pass on the net of (all) universal service contributions less Schools and Libraries Corporation/RHC high-cost fund receipts to the IXCs in the form of increases/decreases in access rates.
6. The IXC passes on the increased access charges to its customers in the form of increased rates.

VI. Cash Flow Diagrams, cont.

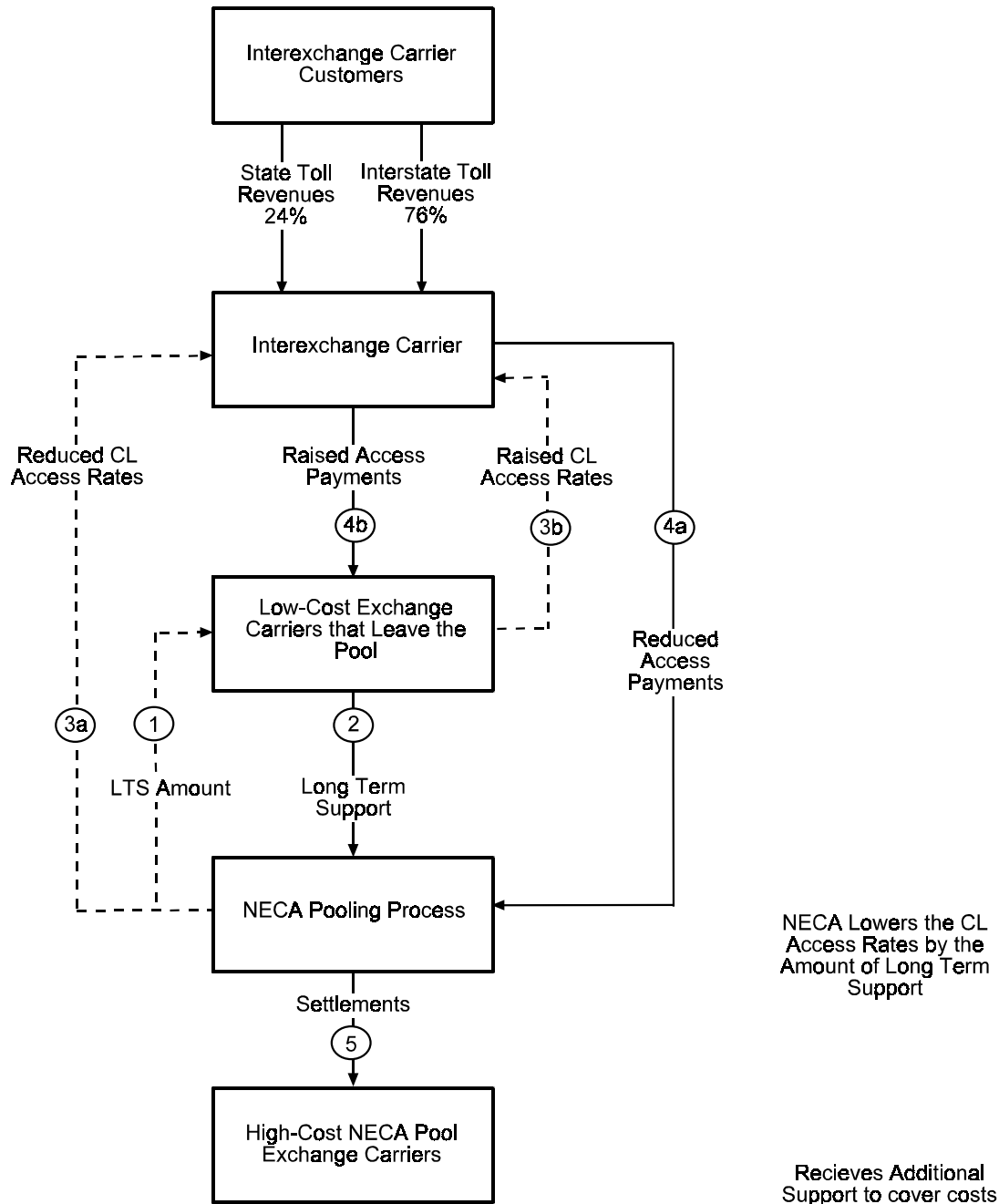
Figure 10: Cash Flow for Current Universal Service Fund (USF) and Lifeline/Link-up



- 1a. NECA calculates the total USF and Lifeline/Link-up amounts due high-cost study areas and bills the IXC's on a per prescribed line basis.
- 1b. Same as above.
- 2a. The IXC's pay NECA.
- 2b. Same as above.
- 3a. NECA passes the revenues to the USF high-cost study areas.
- 3b. NECA passes the revenues to the exchange carriers with customers that qualify for Lifeline and Link-up services.

VI. Cash Flow Diagrams, cont.

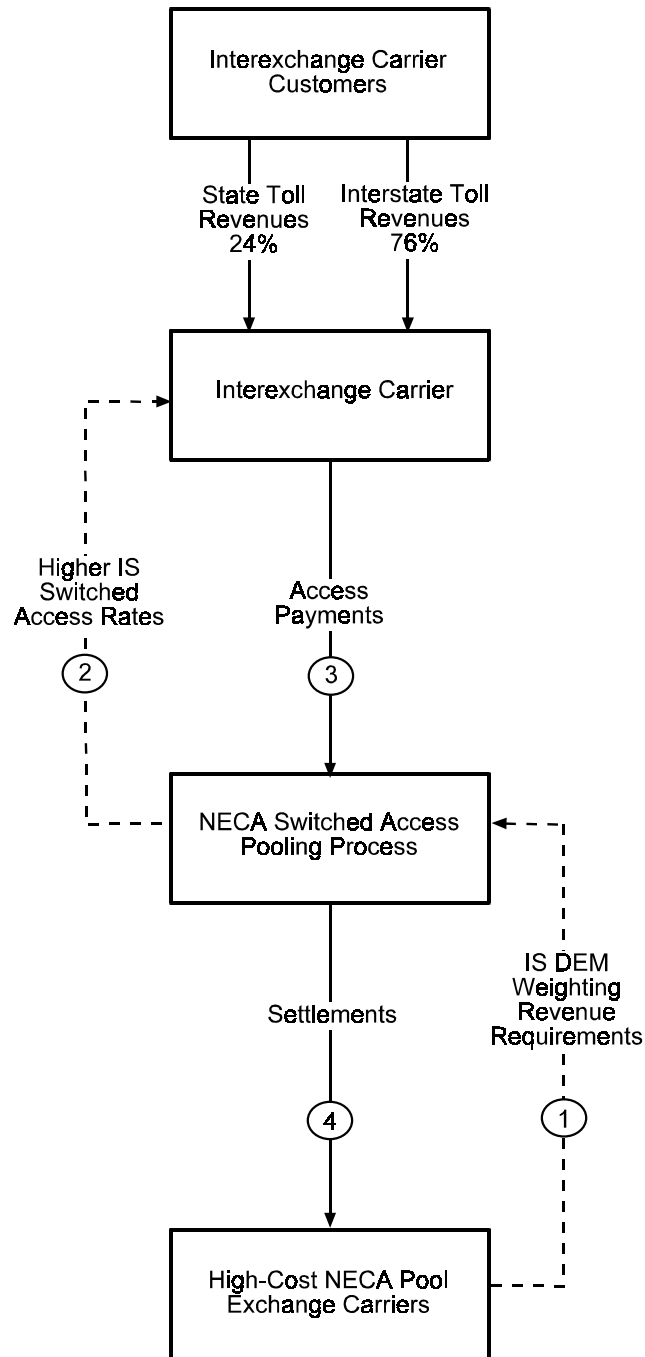
Figure 11: Cash Flow for Current Long Term Support (LTS)



1. NECA calculates the Long Term Support (LTS) amount and bills to the low-cost LECs that left the pool.
2. The low-cost LECs pay NECA.
- 3a. NECA files reduced access rates to the IXCs.
- 3b. At the same time, the low-cost LECs file increased access rates to the IXCs.
- 4a. The IXCs pay NECA the reduced access rates.
- 4b. At the same time, the IXCs pay the low-cost LECs the increased access rates.
5. NECA passes the revenues (which include LTS) to the high-cost pool members.

VI. Cash Flow Diagrams, cont.

Figure 12: Cash Flow for Current Interstate Weighted Dial Equipment Minutes (DEM)



Support

1. LECs which have less than 50,000 access lines report the weighted DEM revenue requirements to NECA.
2. NECA files increased access rates to the IXC's.
3. The IXC's pay NECA the increased access rates to the IXC's.
4. NECA passes the revenues (which include the DEM weighting) to the high-cost pool members.

VII. Sources, Calculations, and Assumptions

General Caveats

1. This paper models the current FCC proposal and two other options for funding universal service. It should be noted that many other options are also possible.
2. This paper does not model universal service funding mechanisms within a state.
3. This paper focuses only on subsidies for high-cost areas for the non-rural LECs. It omits subsidies for USF rural LECs, low-income households, schools, libraries, and rural health care providers.

Modeling Assumptions

4. Revenue benchmarks:
The options use \$30, \$40, and \$50 revenue benchmarks to create three sizes of universal service funds for each cost model. The result is six differently sized funds.
5. The BCPM model results are based on census block groups and the Hatfield model results are based on wire centers.
6. This paper uses the models in their form as of September 1997.
7. The models exclude data for Alaska, Puerto Rico, the Marianas, Virgin Islands, and Micronesia.
8. All data reflect end-of-year data for 1995.

Retail Revenue Data

9. Retail revenue data are from the FCC, Industry Analysis Division, James Eisner, *Distribution of Intrastate and Interstate Telephone Revenue by States* (hereinafter referred to as *Distribution of Revenues by States*), January 1997. This report distributes 1995 revenues among individual states. The data in this FCC report are primarily from the FCC's Common Carrier Bureau, Industry Analysis Division, "TRS Fund Worksheet Data," *December 1996 Telecommunications Industry Revenue Worksheet Data*. The 1996 TRS contains: Fund revenues for LECs, IXCs, wireless, and other companies providing telecommunications services. The data exclude Alaska, Puerto Rico, Micronesia, and the Virgin Islands.

The definition of retail revenue "includes revenue from local exchanges, wireless, end user access charges, intralata toll revenue and 95 percent of interstate and intrastate-interlata toll revenue." The FCC estimates "that 5% of interstate toll revenue and intrastate-interlata toll revenue are payments to carriers for telecommunication services for resale." *Distribution of Revenues by States*, page 1.

VII. Sources, Calculations, and Assumptions, cont.

Sources and Assumptions for Option 1: Telephone Numbers

Figure 13 shows the sources and assumptions for developing the number of telephone numbers. The following points provide further details on the calculations for the total number of telephone numbers and their distribution among the states.

10. Assignment of numbers to individual states is different for each category of telephone numbers. The USF loop data are state specific and therefore directly assigned to the states. Data for other service customers, such as wireless or 800 numbers use other methods to distribute the total amount among the states. For example, for the wireless customers (broadband and narrowband CMRS), the state distribution is assumed to be the same as the USF loops. For the 800 and 888 numbers, the state distribution is based on each state's percentage of total business lines.
11. *Traditional Wireline Numbers:*
For traditional wireline telephone company customers, USF loops (switched loops) were used as a surrogate for telephone numbers. Total loops include both switched and special access. To use total loops would require making the funding mechanism more of a "per connection" rather than a "per number" charge. Individual state amounts are based on state-specific USF loop data.
12. *Wireless Numbers:*
The wireless numbers are for 1995. They include cellular, PCS, and paging numbers based on number of subscribers.
13. Special access and private line are excluded from this approach because their customers do not have telephone numbers.

Sources and Assumptions for Option 2: Percentage of Retail Revenues

14. Retail revenues are based on the FCC's *Distribution of Revenues by States*. See the above discussion on retail revenues in this section.

VII. Sources, Calculations, and Assumptions, cont.

Figure 13: Sources and Assumptions for the Number of Telephone Numbers

Item:	Source:	Method of Distributing Totals Among the States:
USF Loops	<i>1996 USF Submission</i> by NECA.	Allocation based directly on number of USF loops for each state. Data are aggregated from the study area to the state level.
Broadband CMRS (Cellular & Broadband PCS)	CTIA, website at http://www.wow-com.com/professional/index.cfm on September 1997, "CTIA's Semi-Annual Data Survey Results."	Percentage of Total USF Loops.
Narrowband CMRS (Paging & Narrowband PCS)	PCIA, <i>Wireless Market Portfolio: A Collection of Forecasts on the Wireless Industry.</i>	Percentage of Total USF Loops.
800/888 Numbers	FCC, <i>1995/1996 Statistics of Communications Common Carriers</i> , Table 8.14.	Percentage of Total Number of Business Lines.
Business Lines	FCC, <i>1995 ARMIS 43-08 Reports</i> for Tier 1 companies supplemented with REA data for small companies.	Not applicable.

VIII. Input Data

Sources and Assumptions for Input Data

Figure 14 is a list of the names of the states and their acronyms. The model omits the state of Alaska, since it is excluded from the proxy models (BCPM and Hatfield).

Figure 15 provides the input data for the 1995 number of access lines, telephone numbers, and retail revenues (state and interstate). The number of access lines is based on 1995 USF loops. For a description of retail revenues and for the development of 1995 telephone numbers, see **Section IV**.

Figure 16 is the data from the BCPM and Hatfield cost proxy models which provide the amounts for USF by state for three benchmarks (\$30, \$40, and \$50). **Figures 17 and 18** calculate the amounts for each model for the FCC Plan for a 25% interstate/75% state fund.

VIII. Input Data, cont.

Figure 14: State Names and Acronyms

State Name	Acronym for State Name
Alabama	AL
Alaska*	AK
Arizona	AZ
Arkansas	AR
California	CA
Colorado	CO
Connecticut	CT
Delaware	DE
D. C.	DC
Florida	FL
Georgia	GA
Hawaii	HI
Idaho	ID
Illinois	IL
Indiana	IN
Iowa	IA
Kansas	KS
Kentucky	KY
Louisiana	LA
Maine	ME
Maryland	MD
Mass.	MA
Michigan	MI
Minnesota	MN
Mississippi	MS
Missouri	MO
Montana	MT

State Name	Acronym for State Name
Nebraska	NE
Nevada	NV
New Hamp.	NH
New Jersey	NJ
New Mexico	NM
New York	NY
North Car.	NC
North Dakota	ND
Ohio	OH
Oklahoma	OK
Oregon	OR
Pennsylvania	PA
Rhode Island	RI
South Car.	SC
South Dakota	SD
Tennessee	TN
Texas	TX
Utah	UT
Vermont	VT
Virginia	VA
Washington	WA
West Virginia.	WV
Wisconsin	WI
Wyoming	WY

* Alaska is omitted from the model.

VIII. Input Data, cont.

Figure 15: Access Lines, Telephone Numbers, and Retail Revenue Input Data

State	1995 Access Lines (in Millions)	1995 Number of Telephone Numbers (in Millions)	1995 Interstate Retail Revenues (Dollars in Millions)	1995 State Retail Revenues (Dollars in Millions)
AL	2.2	3.0	868	1,500
AZ	2.3	3.1	1,232	1,225
AR	1.3	1.7	526	803
CA	19.4	26.8	6,322	13,488
CO	2.3	3.1	1,236	1,465
CT	1.9	2.6	1,082	1,406
DE	0.5	0.7	237	198
DC	0.8	1.2	372	409
FL	9.0	12.4	4,099	5,860
GA	4.0	5.5	2,085	2,884
HI	0.7	0.9	269	424
ID	0.6	0.8	321	329
IL	7.2	9.9	2,701	4,408
IN	3.1	4.2	1,177	2,070
IA	1.5	2.0	629	908
KS	1.4	2.0	629	904
KY	1.9	2.5	892	1,381
LA	2.3	3.1	871	1,552
ME	0.7	0.9	302	439
MD	3.1	4.3	1,414	1,942
MA	3.8	5.3	1,804	2,594
MI	5.7	7.8	1,776	3,949
MN	2.6	3.5	1,075	1,557
MS	1.2	1.7	529	872
MO	2.9	4.0	1,207	1,869
MT	0.5	0.7	239	304
NE	0.9	1.2	400	688
NV	0.9	1.3	1,710	1,113
NH	0.7	0.9	421	419
NJ	5.4	7.5	2,844	3,345
NM	0.8	1.1	448	513
NY	11.6	15.9	4,964	8,298
NC	4.0	5.4	1,781	2,932
ND	0.4	0.5	177	233
OH	6.1	8.3	2,391	4,791
OK	1.8	2.5	725	1,033
OR	1.7	2.4	820	1,051
PA	7.2	9.9	2,831	4,171
RI	0.6	0.8	289	311
SC	1.9	2.5	893	1,429
SD	0.4	0.5	192	221
TN	2.9	4.0	1,257	1,817
TX	10.2	14.1	3,743	6,873
UT	0.9	1.3	457	505
VT	0.3	0.4	199	193
VA	3.8	5.3	1,871	2,473
WA	3.1	4.2	1,416	2,004
WV	0.9	1.2	384	606
WI	3.0	4.1	1,041	1,856
WY	0.3	0.4	159	152
Total	152.5	209.6	65,305	101,770

VIII. Input Data, cont.

Figure 16: Input Data from the Two Proxy Models, Amounts for USF by State

State	BCPM Total USF (Dollars in Millions)			Hatfield Total USF (Dollars in Millions)		
	\$30	\$40	\$50	\$30	\$40	\$50
AL	271	177	114	86	39	16
AZ	103	67	48	34	21	15
AR	123	83	57	27	13	7
CA	313	191	130	64	39	28
CO	110	72	50	43	24	16
CT	76	31	13	4	1	0
DE	21	11	5	2	0	0
DC	0	0	0	0	0	0
FL	261	126	68	39	15	7
GA	260	149	87	55	21	9
HI	30	18	11	12	7	4
ID	89	69	55	19	12	7
IL	330	205	135	61	31	15
IN	269	169	105	45	16	5
IA	112	74	51	25	13	6
KS	95	64	46	30	19	13
KY	259	182	126	51	18	5
LA	179	113	73	42	18	8
ME	82	52	31	28	13	6
MD	103	51	25	16	4	1
MA	102	35	14	7	2	1
MI	303	177	102	59	22	9
MN	187	126	89	67	38	24
MS	238	171	121	82	42	19
MO	281	192	135	95	53	30
MT	49	37	30	17	12	9
NE	87	66	51	48	34	25
NV	44	32	26	19	16	14
NH	61	31	16	13	5	2
NJ	65	24	8	2	0	0
NM	91	67	53	24	14	8
NY	192	112	65	87	35	14
NC	427	257	147	87	29	8
ND	49	41	35	10	6	4
OH	417	248	147	61	18	4
OK	163	111	79	52	28	15
OR	112	78	58	23	11	5
PA	381	226	130	75	27	9
RI	17	7	3	1	0	0
SC	151	90	54	20	5	1
SD	66	53	43	11	7	4
TN	235	141	84	46	12	2
TX	682	455	326	188	107	64
UT	48	32	23	12	7	5
VT	46	31	18	15	7	3
VA	271	175	111	82	34	11
WA	177	114	81	46	27	17
WV	167	123	89	58	28	11
WI	161	101	63	33	13	6
WY	42	34	29	17	11	8
Total	8,399	5,291	3,459	2,039	975	497

VIII. Input Data, cont.

Figure 17: Calculated 25% Interstate and 75% State Amounts, BCPM Model

State	BCPM Interstate (Dollars in Millions)			BCPM State (Dollars in Millions)		
	\$30	\$40	\$50	\$30	\$40	\$50
AL	68	44	29	203	133	86
AZ	26	17	12	77	50	36
AR	31	21	14	92	62	43
CA	78	48	33	235	143	98
CO	27	18	12	82	54	37
CT	19	8	3	57	23	9
DE	5	3	1	16	8	4
DC	0	0	0	0	0	0
FL	65	31	17	196	94	51
GA	65	37	22	195	112	65
HI	8	4	3	23	13	8
ID	22	17	14	66	52	41
IL	82	51	34	247	154	101
IN	67	42	26	202	126	79
IA	28	18	13	84	55	38
KS	24	16	11	71	48	34
KY	65	45	31	194	136	94
LA	45	28	18	134	85	55
ME	21	13	8	62	39	23
MD	26	13	6	77	39	18
MA	25	9	3	76	26	10
MI	76	44	25	227	133	76
MN	47	32	22	140	95	67
MS	60	43	30	179	128	91
MO	70	48	34	211	144	101
MT	12	9	7	37	28	22
NE	22	17	13	65	50	39
NV	11	8	6	33	24	19
NH	15	8	4	46	24	12
NJ	16	6	2	49	18	6
NM	23	17	13	68	50	40
NY	48	28	16	144	84	49
NC	107	64	37	321	193	110
ND	12	10	9	37	31	26
OH	104	62	37	313	186	110
OK	41	28	20	122	83	59
OR	28	19	14	84	58	43
PA	95	56	33	286	169	98
RI	4	2	1	13	5	2
SC	38	23	13	113	68	40
SD	16	13	11	49	40	33
TN	59	35	21	176	106	63
TX	170	114	82	511	341	245
UT	12	8	6	36	24	17
VT	12	8	5	35	23	14
VA	68	44	28	203	131	83
WA	44	28	20	133	85	61
WV	42	31	22	125	92	67
WI	40	25	16	121	76	47
WY	11	9	7	32	26	22
Total	2,100	1,323	865	6,299	3,968	2,595

VIII. Input Data, cont.

Figure 18: Calculated 25% Interstate and 75% State Amounts, Hatfield Model

State	Hatfield Interstate (Dollars in Millions)			Hatfield State (Dollars in Millions)		
	\$30	\$40	\$50	\$30	\$40	\$50
AL	21	10	4	64	29	12
AZ	8	5	4	25	16	11
AR	7	3	2	20	10	5
CA	16	10	7	48	29	21
CO	11	6	4	32	18	12
CT	1	0	0	3	1	0
DE	0	0	0	1	0	0
DC	0	0	0	0	0	0
FL	10	4	2	29	11	5
GA	14	5	2	41	16	7
HI	3	2	1	9	5	3
ID	5	3	2	14	9	5
IL	15	8	4	45	23	11
IN	11	4	1	34	12	3
IA	6	3	2	19	10	5
KS	7	5	3	22	15	10
KY	13	5	1	38	14	3
LA	11	5	2	32	14	6
ME	7	3	2	21	10	5
MD	4	1	0	12	3	1
MA	2	1	0	5	2	1
MI	15	6	2	44	17	7
MN	17	10	6	50	29	18
MS	20	11	5	61	32	14
MO	24	13	7	71	39	22
MT	4	3	2	13	9	6
NE	12	9	6	36	26	19
NV	5	4	3	14	12	10
NH	3	1	0	10	4	1
NJ	1	0	0	2	0	0
NM	6	3	2	18	10	6
NY	22	9	3	65	26	10
NC	22	7	2	65	22	6
ND	2	2	1	7	5	3
OH	15	5	1	46	14	3
OK	13	7	4	39	21	11
OR	6	3	1	17	8	4
PA	19	7	2	56	20	7
RI	0	0	0	1	0	0
SC	5	1	0	15	4	1
SD	3	2	1	8	5	3
TN	12	3	1	35	9	2
TX	47	27	16	141	80	48
UT	3	2	1	9	5	3
VT	4	2	1	11	5	2
VA	21	8	3	62	25	8
WA	11	7	4	34	20	13
WV	15	7	3	44	21	8
WI	8	3	1	25	10	4
WY	4	3	2	13	9	6
Total	510	244	124	1,529	731	373

IX. Notes

Notes

- ¹ *Telecommunications Act of 1996*, Pub. L. No. 104-104, February 8, 1996 (hereinafter referred to as the *Act of 1996*). For more details, see U.S. Congress, House of Representatives, 104th Congress, 2d Session, Report 104-458, *Telecommunications Act of 1996, Conference Report to Accompany S. 652* (hereinafter referred to as the *Conference Report*).
- ² For an overview of universal service see Carol Weinhaus, Bob Lock, et al., *Overview of Universal Service*, Presentation at the Communications Media Center, New York Law School, Telecommunications Industries Analysis Project, December 6, 1995. Also see the section on residual rate making in Carol L. Weinhaus and Anthony G. Oettinger, *Behind the Telephone Debates*, Ablex Publishing Company, Norwood, NJ, 1988, pages 64 through 66 (hereinafter referred to as *Behind the Telephone Debates*).
- ³ See **Section IV, Options for the New Universal Service Fund** for the background on this total amount for Lifeline/Link-up, weighted dial equipment minutes (DEM), long term support (LTS), and the current USF fund (both rural and non-rural companies). These subsidies are explicit except for weighted DEM.
- ⁴ See **Section VI, Figures 10, 11, and 12** for diagrams of these cash flows.
- ⁵ See **Section VI, Figure 9** for the current cash flow diagram.
- ⁶ Carol Weinhaus, Sandra Makeeff, et al., *What is the Price of Universal Service? Impact of Deaveraging Nationwide Urban/Rural Rates*, Presentation at the July 1993 National Association of Regulatory Utility Commissioners (NARUC) Meeting, San Francisco, CA, Telecommunications Industries Analysis Project, July 26, 1993, Figure 3, page 11.
- ⁷ Carol Weinhaus, Sandra Makeeff, et al., *Loop Dreams: The Price of Connection for Local Service Competition*, Presentation at the July 1995 NARUC Meeting, San Francisco, CA, Telecommunications Industries Analysis Project, July 21, 1995, Figure 8, page 16. The 1993 nationwide average business rate was \$38.55 and the nationwide average residential rate was \$16.75.
- ⁸ The *Act of 1996* states the following: "Access in rural and high-cost areas: Consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high-cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas." Sec. 254 (b)(3).

The *Act of 1996* also has similar provisions for rural health care providers: "Health care providers for rural areas: A telecommunications carrier shall, upon receiving a bona fide request, provide telecommunications services which are necessary for the provision of health care services in a State, including instruction relating to such services, to any public or nonprofit health care provider that serves persons who reside in rural areas in that State at rates that are reasonably comparable to rates charged for similar services in urban areas in that State. A telecommunications carrier providing service under this paragraph shall be entitled to have an amount equal to the difference, if any, between the rates for services provided to health care providers for rural areas in a State and the rates for similar services provided to other customers in comparable rural areas in that State treated as a service obligation as a part of its obligation to participate in the mechanisms to preserve and advance universal service." Sec. 254 (h)(1)(A).
- ⁹ FCC, *In the Matter of Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, *Report and Order*, FCC No. 97-157, May 8, 1997, ¶ 47 (hereinafter referred to as *Universal Service Joint Board*).
- ¹⁰ For information on these models, see the model sponsors. For the BCPM, Version 1.1, see U S WEST, Sprint, and BellSouth. For the Hatfield Model, see Hatfield, Release 4.0, Hatfield Associates, Inc., Boulder, CO, August 1, 1997.
- ¹¹ The total USF amount for 1995 was \$776.5 million. Non-rural companies are those with a total of more than 100,000 access lines. The non-rural amount is based on the *1994 USF Submission* by the

IX. Notes, cont.

National Exchange Carrier Association (NECA) where non-rural companies were 26.0% of the total USF payment, or \$201.9 million. The weighted DEM and LTS amounts for 1995 are from NECA. Lifeline support (\$137.1 million) and Link-up support (\$18.4 million) are from the FCC, *Monitoring Report, Prepared by Federal and State Staff for the Federal-State Joint Board in CC Docket No. 80-286, CC Docket No. 87-339, May 1996, pages 57 and 59.* The support for schools, libraries, and rural health care providers is based on the amount of the annual cap set in the *Code of Federal Regulations (CFR)*. "The annual cap on federal universal support for schools and libraries shall be \$2.25 billion per funding year." 47 C.F.R. § 54.507 (August 1, 1997). "The annual cap on federal universal service support for health care providers shall be \$400 million per funding year." 47 C.F.R. § 54.623 (August 1, 1997).

¹² See **Section VII** for the assumptions and selections regarding these benchmarks.

¹³ See **Section VI, Figure 9** for the cash flow diagram and an outline of the steps in this process.

¹⁴ *Universal Service Joint Board*, ¶ 833, page 426. In July 1997, the FCC stated that this *Order* "recognized that 25 percent is the current interstate allocation factor applied to loop costs in the Part 36 separations process, and concluded that because loop costs will be the predominant cost that varies between high-cost and non-high-cost areas, this factor best approximates the interstate portion of universal service costs. In adopting this approach, the Commission anticipated that states will participate fully in a federal-state partnership and that the contributions collected by both jurisdictions will be sufficient to fund universal service," *Order on Reconsideration*, July 10, 1997, ¶ 27.

¹⁵ *Universal Service Joint Board*, ¶ 834.

¹⁶ There will be an increase to fund schools, libraries, and rural health care providers.