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STATE UNIVERSAL SERVICE FUNDING MECHANISMS: RESULTS OF THE NRRI'S SURVEY

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This paper is one of a series of focused and timely NRRI analyses of high-priority issues in state telecommunications policy that derive from passage of the Telecommunications Act of 1996, which creates both challenges and opportunities for state regulators. The views and opinions expressed herein are those of the authors. They are not necessarily those of The National Regulatory Research Institute, the National Association of Regulatory Utility Commissioners (NARUC), or any NARUC-member Commissions.

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Introduction

At the state level, ensuring universal telephone service is an important public policy goal, and one method of ensuring universal service is by means of a state universal service fund (USF). Although several states have had USFs in place for some time, and state interest in funding universal service did not originate with passage of the Telecommunications Act of 1996¹ (the Act), state interest in funding universal telephone service will undoubtedly increase as a result of the Federal legislation. Under the provisions of the Act, although most telecommunications markets must be opened to competition, universal telephone service is explicitly maintained as a national policy goal, and state commissions have a major role in defining national and state universal service goals and in developing funding mechanisms to meet those goals.

State interest in funding universal telephone service is, if anything, likely to increase as a result of the Act, which contains a number of sections with implications for state universal service policy and funding. For example, Subsection 254 (a)(1) directed the Federal Communications Commission (FCC) to establish a Federal-State Joint Board to consider the definition of universal service and universal service funding mechanisms. The Joint Board was established, and is considering universal service issues under FCC Docket 96-45.²

¹ Public Law 104-104.

² The Joint Board held an open meeting on April 12, 1996 to hear from experts on universal service issues. There is great interest in this issue, and more than 230 parties, including many state commissions, filed comments in this proceeding. See "Federal-State Joint Board on Universal Service Holds Open Meeting," *USTA Weekly* (April 19, 1996): 1.

Subsection 254 (b) enunciates a set of "universal service principles" upon which the Joint Board and the FCC are to base policy. These include:

(1) QUALITY AND RATES-

Quality services should be available at just, reasonable, and affordable rates.

(2) ACCESS TO ADVANCED SERVICES-

Access to advanced telecommunications and information services should be provided in all regions of the Nation.

(3) 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.

(4) EQUITABLE AND NONDISCRIMINATORY CONTRIBUTIONS-

All providers of telecommunications services should make an equitable and nondiscriminatory contribution to the preservation and advancement of universal service.

(5) SPECIFIC AND PREDICTABLE SUPPORT MECHANISMS-

There should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service.

Subsection 254 (c) (1) states that:

universal service is an evolving level of telecommunications services . . . taking into account advances in telecommunications and information technologies and services. . . .

Subsection 254 (c)(2) offers several standards for determining which services will be eligible for Federal support and states that

The Joint Board may, from time to time, recommend to the [FCC] modifications in the definition of the services that are supported by Federal universal service support mechanisms.

Subsection 254 (c)(3) notes that

the [FCC] may designate additional services for such support mechanisms for schools, libraries, and health care providers.

Subsection 254 (f) discusses state universal service authority and states that:

A State may adopt regulations not inconsistent with the [FCC's] rules to preserve and advance universal service. Every telecommunications carrier that provides intrastate telecommunications services shall contribute, on an equitable and nondiscriminatory basis, in a manner determined by the State to the preservation and advancement of universal service in that State. A State may adopt regulations to provide for additional definitions and standards to preserve and advance universal service within that State only to the extent that such regulations adopt additional specific, predictable, and sufficient mechanisms to support such definitions or standards that do not rely on or burden Federal universal service support mechanisms.

In addition to the existing freedom states have, the Act further confirms the state commissions' ability to define universal service goals and establish funding mechanisms to meet state needs and goals. Although the Joint Board has just begun to receive comments and hold hearings on the matter, and its recommendations are not due until November 8, 1996, it appears that a state commission may adopt its own universal service definitions and funding mechanisms so long as they are "not inconsistent with" whatever Federal rules result. State universal service plans that are competitively neutral with respect to both collection of money and distribution of support will almost certainly meet that test.

The NRRI Survey of State Universal Service Funding

Beginning in November 1995, as part of a technical assistance contract with the Georgia Public Service Commission, the NRRI surveyed the state commissions regarding the existence, structure, and operation of state universal service funds. Responses were received from all commissions surveyed. The results are presented in the following tables. In some cases, the original survey responses have been updated based on information obtained after the survey was returned. Also, some state information is based on descriptions of universal service funds that have been proposed but not yet approved.

Summary and Comments on the Findings

Approximately one third of the states currently have state universal service funds in operation or planned for implementation, although some of the state funds are only lifeline programs. There is considerable interest in such funds, as most of the states either have a universal service fund or are investigating the possibility of instituting one. A number of states have indicated that they are studying universal service funds as part of an investigation of local competition. In fact, some states with existing universal service funds are considering revising their funds in light of the advent of local competition. Also, it is possible that some states may decide to revise their funds to conform with the Telecommunications Act of 1996 and the forthcoming recommendations of the Universal Service Joint Board.

For those states that have a universal service fund or have a fairly concrete proposal for one, it is most common for the fund to be supported by a surcharge on telecommunications services provided within the state, although a variety of support mechanisms are used or proposed, including charges on a per-line or minutes-of-use basis. The amount of the surcharge (whether it is on revenues, lines, or minutes of use) is most often determined by estimating the total amount required for universal

service support then setting the surcharge to collect that amount based on estimated revenues, lines, or minutes of use.

The service most often eligible for universal service support is basic residential service for customers in high-cost areas or for customers qualifying for lifeline assistance. The survey did not attempt to determine which elements or functions are included in basic local service, but the basic package is likely to include a single-party voice-grade line, connection to the public switched network, local usage, touch-tone capability, provision of a local telephone directory, access to operator services and directory assistance, access to TRS and other services designed for persons with disabilities, and access to emergency services (911 or E911).

Some states also support additional services, and low-income support may provide a variety of options. For example, Wisconsin's new fund offers support for a variety of situations that might arise including special programs to provide voice mail for certain homeless individuals and support for specialized equipment needs. Wisconsin's High-Rate Assistance Plan is also notable in that its level of support for a given area depends on both the carrier's cost of service and a measure of median household income in the area.

Results of the Survey

Existence of State Universal Service Funds

The NRRI asked the state commissions about the existence of state universal service funds. The answers are summarized in Tables 1, 2, and 3. Table 1 indicates that twenty-five commissions had implemented, approved, or proposed a universal service fund, and most of the rest have a universal service fund under formal consideration. Some states with an existing universal service fund are studying the issue again, which is why some states are included in multiple categories. Also, universal service funding issues are often considered or reconsidered as part of the discussion surrounding the opening of local exchange markets to local competition.

	•	TABLE 1		
STATUS OF	STATE	UNIVERSAL	SERVICE FUNDS	

Response		STATES
	s proposed, approved, l a state universal (26)	AZ, AR, CA, CO, CT, GA, HI, ID, IL, IN, KS, KY, ME, MN, NV, NM, OK, OR, PA, RI, TX, UT, VT, WA, WI, WY
State universal service fund is being considered by Legislature or Commission (26)		AL, AR, AZ, CO, DC, FL, HI, IA, KY, LA, ME, MA, MI, MS, MT, NE, NJ, NY, OH, OK, SC, TN, VT, VA, WV, WY
State universal	Legislature and Commission (9)	CA, CO, GA, NV, RI, TX, UT, VT, WA
service fund Was Approved by the:	Legislature Only (1)	WY
	Commission Only (5)	AR, CT, MN, OK, WI

Table 2 shows that, as of May 1996, fifteen states had universal service funds in operation (Georgia's is scheduled for July 1, 1996, Kansas's begins operation in March 1997, and Minnesota's is scheduled for August 1997). However, as noted in Table 1, most of the other states are actively considering implementing such funds.

TABLE 2 YEAR OF IMPLEMENTATION OF ACTIVE OR APPROVED STATE UNIVERSAL SERVICE FUNDS

YEAR	STATE(S)
1983	California (Lifeline Fund)
1984	Rhode Island (Lifeline Program)
1985	California (High-Cost Fund)
1986	Illinois (High-Cost Fund)
1987	Arkansas Texas
1988	Idaho
1989	Arizona Indiana
1990	Utah Washington
1991	Colorado
1993	Illinois (Low-Income Fund)
1994	Oklahoma Vermont
1995	
1996	Wisconsin (May 1) Georgia (July 1) Wyoming (summer 1996)
1997	Kansas (implementation planned for March 1) Minnesota (Implementation planned for August 1)



Figure 1. Universal Service Funds Proposed, Approved, or Implemented.



Figure 2. State Universal Service Funds in Operation in 1996.

Table 3 presents the comments made by the respondents about the existence and status of various state universal service funds. Some of the comments have been updated based on information gathered after the survey. Note that several states are considering universal service funds as part of the issues surrounding the implementation of local exchange competition.

TABLE 3 COMMENTS ON THE EXISTENCE AND STATUS OF STATE UNIVERSAL SERVICE FUNDS		
Alabama	The commission currently has underway a universal service docket and workshop. The purpose of the docket and workshop is to determine whether there is a need for a state universal service fund, who such a fund should address, who should collect from the fund, and who should contribute to the fund.	
Arizona	Only one company is currently eligible to receive high-cost support from the Arizona Universal Service Fund. A new universal service fund that makes allowances for competition is under study. A staff proposal has been developed, and the matter is set for hearing by the commission. Responses to this survey are based on the draft rules that have not been approved by the commission.	
Arkansas	The current mechanism is described in Docket No. 86-159-U. It is currently being reconsidered by the commission. The funding mechanism is a collection from cellular carriers and IXCs based on their retail billed minutes of use.	
California	California's High-Cost Fund distributes money to small and medium size local exchange carriers to keep basic rates reasonable. Companies file in October to request a funding level for the next year, and they must prove that they are not earning an excessive rate of return. California also has a Lifeline Program which allows qualified low-income customers to receive discounted rates. Both programs are currently under review and the commission released a proposal in July 1995.	
Colorado	The existing fund applies to small LECs. US WEST will be eligible July 1, 1996. For an area to receive support through the Colorado High-Cost Fund, an area's "book" revenue requirement must be above 115% of "average" cost. Possible expansion of the fund is being reviewed via a work group process. Final expanded rules will be in place by July 1, 1996.	

TABLE 3 (continued) COMMENTS ON THE EXISTENCE AND STATUS OF STATE UNIVERSAL SERVICE FUNDS

Georgia	On February 7, 1996, the commission issued a Notice of Proposed Rulemaking in Docket No. 5825-U, in which the commission is considering establishing a Universal Access Fund. The proposed rule calls for all telecommunications companies to contribute to the fund in proportion to gross revenues from end users. The proposed rule also would require LECs seeking reimbursement from the fund to provide the commission with information on the actual and	
Illinois	reasonable cost of basic local exchange service. Illinois has two universal service funds. One is a low-income fund, which relies on voluntary customer contributions. The other is a high-cost fund, which is supported by toll carriers based on intrastate minutes of use.	
Indiana	The Indiana High-Cost Fund was established in Cause No. 38269, Phase I, April 12, 1989. The fund applies to companies with less than 50,000 access lines and is capped at \$1.5 million per year. In 1994, \$646,700 was paid out to 14 eligible LECs (Seven companies provided funding.).	
Kansas ³	The Kansas Corporation Commission's Order in Docket 192,492-U directed LECs to remove implicit universal service subsidies from their intrastate carrier access charges and established a \$1.60 monthly enduser intrastate common line charge, which takes effect March 1, 1997 and will increase to \$2.60 monthly on March 1, 1998.	
	Collections will go into a state USF, and lifeline customers will be exempted from paying the charge. IXCs will support the state USF through assessments based on intrastate billed minutes of use, and they are expected to pass the reduced access costs on to consumers by reducing intrastate toll rates.	
	Both LECs and competitive providers will be able to collect from the fund if they serve customers in identified high-cost areas. High-cost areas will be identified by use of a proxy-cost formula, and providers will be able to receive payments for serving customers outside the base-rate area (the most densely populated portions of the service area).	

³ See Herb Kirchhoff, "Kansas Orders End-User Charge to Support Universal Service," *State* Telephone Regulation Report 14, no. 8 (April 18, 1996): 7.

TABLE 3 (continued) COMMENTS ON THE EXISTENCE AND STATUS OF STATE UNIVERSAL SERVICE FUNDS

Maine	A preliminary rule has been issued in a local competition docket. An antirate-deaveraging, anti-cherry-picking mechanism has been proposed that serves as a <i>de facto</i> universal service fund. To maintain the current geographic cross-subsidies, local rates would be unbundled into economic cost plus or minus a subsidy. Rates would move toward economic cost, and the subsidy would be explicit. Ubiquitous providers of last resort in high-cost areas can receive the subsidy if they serve the entire exchange area. Providers in low-cost areas would contribute to the high-cost subsidy by means of their interconnection charges, which would include a per-line subsidy for high-cost areas. The matter is also under study in a Notice of Inquiry proceeding that is part of the local competition docket.	
North Carolina	A hearing to consider the issue is scheduled for June 25, 1996.	
Ohio	The commission currently has an open docket on local competition in which universal service and its funding are key issues.	
Oklahoma	The Oklahoma fund is not a typical universal service fund. Currently, the Fund is targeted to fund local toll service. The issue is under consideration in RM 19 as well as 95-117 and 95-119.	
Pennsylvania	The proposed rulemaking concentrates on high-cost service areas, (those in which the cost of providing basic universal service exceeds the "universal service rate"). The "universal service rate" is defined as the maximum rate level that can be charged without affecting penetration rates; this rate may vary within the state.	
Rhode Island	Rhode Island telephone customers are eligible to receive monthly savings on their bill if they receive financial assistance from one or more of the following plans: Supplemental Security Income (SSI); Aid to Families With Dependent Children (AFDC); General Public Assistance (GPA); Food Stamps (FDST); Low Income Home Energy Assistance Program (LIHEAP); Rhode Island Pharmaceutical Assistance to the Elderly (RIPAE); or the Rhode Island Medical Assistance Program (RIMAP).	
South Carolina	The commission established a Task Force to review issues related to competition. A universal service fund is one of the issues identified by the Task Force.	

TABLE 3 (continued) COMMENTS ON THE EXISTENCE AND STATUS OF STATE UNIVERSAL SERVICE FUNDS

Utah	The Utah fund provides high-cost assistance to independent local exchange carriers for local and switched access rates. As mandated by state statute and commission rules, all wireline and wireless carriers contribute to the fund regardless of whether they are otherwise regulated by the commission.	
Vermont	The TRS, E911, and Lifeline parts of the Vermont USF is in operation. Details of the high-cost support part of the USF are under consideration. The commission requested a maximum surcharge of 5 percent to fund the high-cost part of the USF, but the legislature did not make the authorization.	
Virginia	The commission has a local competition proceeding pending which may shortly initiate a separate universal service docket.	
Washington	A state universal service fund (USF) was established to provide partial support for LECs whose loop costs exceed the statewide average by 115%. The amount of the fund is determined each year based on the amount necessary to provide high loop cost companies with sufficient support to keep their loop costs at no more than 115% above the statewide average. This amount is divided by total intrastate toll minutes of use to determine the USF rate. This rate is charged by all LECs on all intrastate minutes of use, but only companies whose loop costs exceed the statewide average by more than 115% are able to receive distributions from the fund.	
	Washington also has a Lifeline Telephone Assistance Program. Eligible customers pay \$9.25 per month for basic service and receive a discount on connection fees. This program is funded through an excise tax of 13 cents per month charged on each switched access line in Washington.	
West Virginia	As part of Docket 94-1102-T-GI, "In the Matter of Competition in the Local Exchange," a Task Force is considering a universal service fund, among other things. The commission is considering what cost methodology should be used, and a directive on this matter is expected to be issued if the near future. A rulemaking is expected in 1996.	
Wisconsin	Legislation passed in 1994 required the commission to establish a universal service fund. A Final Proposed Order adopting rules was approved October 31, 1995 and sent to the Legislature. The program went into effect May 1, 1996.	

DESCRIPTION OF STATE UNIVERSAL SERVICE FUNDS

The NRRI also asked state commissions to describe the operation and structure of their universal service funds. These descriptions are shown in Tables 4 through 14.

Table 4 indicates that the service most often eligible for universal service support is basic residential service. The survey did not attempt to determine which elements or functions are included in basic local service, but the basic package is likely to include a single-party voice-grade line, connection to the public switched network, local usage, touch-tone capability, provision of a local telephone directory, access to operator services and directory assistance, access to TRS and other services designed for persons with disabilities, and access to emergency services (911 or E911).

Some states also provide support for additional services, and low-income support may provide a variety of options. For example, Wisconsin's new fund offers support for a variety of situations that might arise including special programs to provide voice mail for certain homeless individuals and support for specialized equipment needs.

TABLE 4	
SERVICES ELIGIBLE FOR SUPP	PORT

STATE	ELIGIBLE SERVICES	
Arizona	One-party residential service with a voice-grade line.	
California	High-Cost Fund: distributions to the companies are supposed to go toward keeping basic rates affordable.	
	Lifeline Fund: discounted basic service, installation, and waiver of the Federal end-user common line charge.	
Colorado	Residential and Business basic service in high-cost areas.	
Connecticut	No distinction based on service.	
Georgia	Basic service.	
Hawaii	Basic service.	

TABLE 4 (continued) SERVICES ELIGIBLE FOR SUPPORT

STATE	ELIGIBLE SERVICES	
Idaho	Basic service.	
Indiana	No distinction based on service.	
Illinois	lifeline: installation charges. HCF: Basic service for high-cost companies.	
Kansas	Basic service.	
Maine	Local access service.	
Nevada	Basic service.	
Oklahoma	Toll and access.	
Oregon	Single-party residential service.	
Pennsylvania	Basic service (including a single-party voice-grade line, connection to the public switched network, local usage, touch-tone capability, a local telephone directory, access to operator services and directory assistance, access to TRS and other services designed for persons with disabilities, and access to emergency services.	
Rhode Island	Basic service with 60 message units (each unit is 5 minutes, or a fraction thereof).	
Tennessee	Basic local exchange service and carrier-of-last-resort obligation.	
Texas	Telephone Assistance Program, Dual Party Relay Service, High-Cost Assistance.	
Vermont	Dial tone, Touch Tone, line quality sufficient for modems.	
Washington	Lifeline: connection fees. USF: basic local exchange service.	
Wisconsin	Link-up & lifeline, voice mail for the homeless, special needs purchase voucher, specialized telecommunications customer assistance, high local rate assistance, rate-shock mitigation, rate discounts for institutions, and intralata toll provider-of-last-resort.	
Wyoming	Essential services, such as 911 access.	

Source: Authors' construct from state responses to the NRRI's Universal Service Fund Survey and authors' updates.

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As shown in Table 5, eligibility for universal service support depends on both customers and area served. In general, customer eligibility is most commonly used for low-income support programs or specialized support (e.g., Wisconsin's assistance for individuals with special needs), and area eligibility is most common for high-cost support. The most common means of funding universal service support is by means of surcharges on some measure of telecommunications revenues. Line charges are also used, and some states use a combination of line charges, revenue surcharges, and other charges (such as a charge on intrastate toll minutes of use).

TABLE 5
ELIGIBILITY CRITERIA FOR RECEIVING UNIVERSAL
SERVICE SUPPORT AND FUNDING MECHANISM

Response		STATES
	Customers (4)	CA (lifeline), IL (lifeline), RI, TX
Eligibility for support is	Service Areas (10)	AZ, CA (high cost), CO, ID, IL (high cost) , KS, ME, OK, PA, VT
determined by:	Customers and Service Areas (4)	HI, OR, WI, WA
	Other (5)	CT, GA, IN, TN, WY
	Surcharge on Telecommunication Revenues (13)	AZ, CA, CO, CT, GA, HI, ID, NV, OK, PA, UT, VT, WY
Fund relies on:	Line Charge (6)	AZ, CO, ID, KS, ME, UT, WA (lifeline)
	Other (9)	AR, IL, IN, KS, OR, RI, TX, VT, WA (USF), WI

As shown in Table 6, a variety of funding mechanisms are in place or proposed. Although a variety of devices are used, the most common funding mechanism is to impose a surcharge on some measure of total intrastate telecommunications revenues. The amount of the surcharge is most often determined by estimating the required amount of universal service support and the revenues subject to the surcharge. The rate of surcharge is then adjusted to collect the amount of support required from available sources.

TABLE 6
REVENUES SUBJECT TO THE SURCHARGE AND RATES OF SURCHARGE

STATE	REVENUES SUBJECT TO THE SURCHARGE AND RATES OF SURCHARGE
Arizona	One half the fund total will be obtained from a surcharge on intrastate toll revenues. The percent of revenue surcharge for a given year will be calculated by the administrator using the annual Arizona intrastate revenue for all Category Two service providers for the previous year.
California	All telecommunications revenues on a customer's bill are subject to the surcharge, except the revenue from one-way paging company customers. The need for the fund is determined during the prior year and the surcharge amount is calculated as a percentage of the total California billing base.
Colorado	The fund relies on a line charge and on a charge based on IXC interexchange traffic. 50% of funding comes from a line charge, and 50% comes from charges that are bulk billed to the IXCs based on each IXC's percentage of Inter-exchange traffic minutes. The line surcharge is determined by dividing half the total fund by the number of access lines in the state.
Connecticut	Percentage of revenues varies by carrier.
Georgia	All telecommunications companies providing service within Georgia shall contribute in proportion to their gross revenues from sale to end users. The rate of contribution will be determined by the commission based on the total contributions required to balance the fund.
Hawaii	Based on a percentage of a telecommunication carrier's gross operating revenues from the provision of intrastate telecommunication services during the preceding calendar year.

TABLE 6 (continued) REVENUES SUBJECT TO THE SURCHARGE AND RATES OF SURCHARGE

STATE	REVENUES SUBJECT TO THE SURCHARGE AND RATES OF SURCHARGE
Idaho	The commission determines a rate to be assessed on minutes of use. Each carrier reports monthly minutes to the Universal Service Fund Administrator. The same procedure can be applied for any carrier desiring to remit a percentage of toll revenue. The commission conducts an annual review and adjusts surcharge amounts as required to maintain an adequate balance to ensure that distributions can be made for the year.
Kansas	The USF will be funded by (a) a state end-user common line charge of \$1.60 per month beginning March 1, 1997, which will increase to \$2.60 per month on March 1, 1988, and (b) an assessment on IXCs' intrastate billed minutes of use.
Maine	All carriers and all lines are subject.
Nevada	All certified telecommunications providers receive a levy on their retail intrastate revenues. The levy rate is based on estimated retail service revenues and the amount of funding needed for the following year.
Oklahoma	Toll revenues are subject to surcharge. The rate of the surcharge is determined by dividing required revenues by minutes of use.
Pennsylvania	The proposed USF will rely on an assessment rate that will apply to the total gross intrastate operating revenues of all contributing telecommunications providers.
Utah	Revenues subject to the surcharge are based on toll (or equivalent) minutes of use billed to customers by all wireline or wireless providers. The rate of the surcharge is determined by annual evaluation of the requirements to maintain residential local rates at or below \$11.50 per month and business rates at or below \$23.00 per month, excluding extended area service charges. The requirements include maintaining switched access rates at reasonable levels, computed annually. Special access services also receive universal service fund assistance when specifically decided by the commission.

TABLE 6 (continued) REVENUES SUBJECT TO THE SURCHARGE AND RATES OF SURCHARGE

STATE	REVENUES SUBJECT TO THE SURCHARGE AND RATES OF SURCHARGE
Vermont	All revenues billed to Vermont customers are subject to the surcharge. The rate of the surcharge is determined by the Public Service Board, which looks at: (1) appropriations for E-911, (2) estimated contractual cost for TRS, and (3) estimated benefits under lifeline.
Washington	All intrastate toll minutes of use are subject to the USF rate, which is charged by the LECs. All in-state access lines are subject to the lifeline rate surcharge.
Wisconsin	Total gross intrastate telecommunications revenues are subject to the surcharge. There is no offset for access or other potentially double-counted revenues. When the commission sets the anticipated annual budget for the fund, a percentage surcharge will be calculated as follows: Surcharge Rate = (Fund Budget/Total Revenues Subject to Assessment)
Wyoming	As rules are currently proposed, all retail telecommunications revenues, excluding wholesale revenues such as access, will be subject to the surcharge. The rate of the surcharge is based on calculation of need for funding. The level of funding is set so that reimbursements to providers will be sufficient to ensure that no customer pays more than 130% of the statewide average rate.

As shown in Table 7, it is most common for all telecommunications carriers offering intrastate services to be responsible for remitting the surcharge.

	TABLE 7
Wно	REMITS THE SURCHARGE?

STATE	CARRIERS THAT MUST REMIT THE SURCHARGE
Arizona	All telecommunications service providers that interconnect to the public switched network are required to participate in the Arizona Universal Service Fund. Half the fund requirements will come from a surcharge on intrastate toll revenues.
California	All telecommunications carriers in California, including wireless carriers, are required to collect and remit the surcharge. One-way paging companies are excluded.
Colorado	Certified IXCs such as AT&T, MCI, SPRINT, US WEST, etc.
Connecticut	All telecommunications carriers.
Georgia	All telecommunications companies.
Hawaii	All telecommunications carriers operating or providing telecommunication services within Hawaii.
Idaho	All providers of MTS and WATS type services.
Nevada	Certified telecommunications providers.
Oklahoma	IXCs and LEC toll providers.
Oregon	All providers.
Pennsylvania	Under proposed rules, the assessment would apply to all certificated telecommunications utilities providing regulated telecommunications services with intrastate operating revenues exceeding \$500,000. Comments have been solicited and received on the issue of whether the commission has the authority to impose the assessment on cellular and other providers not subject to its jurisdiction.
Rhode Island	New England Telephone absorbs the Lifeline Credit, which means that the cost of the Lifeline program is not explicitly passed along to other customers.

TABLE 7 (continued) Who Remits the Surcharge?

STATE	Carriers That Must Remit the Surcharge
Utah	All providers of toll (or equivalent) retail services billed to customers. All 13 LECs, 85 interexchange providers and all cellular and enhanced specialized mobile radio companies are now participating in Utah. 1994 collections were approximately \$4,000,000.
Vermont	All carriers who are certified for in-state service or who provide interstate service in Vermont are subject. Basically, any telecommunications provider who sends bills to Vermont customers must remit the surcharge.
Washington	All carriers are subject to the surcharge.
Wisconsin	All carriers with revenues over \$200,000 per year.
Wyoming	All telecommunications providers.

Table 8 indicates that, when line or customer charges are used, the charge is most often applicable to all access lines or equivalent. The amount of the line charge is typically the amount to be collected divided by the number of access lines.

TABLE 8 LINE OR CUSTOMER CHARGES	
STATE	Lines and Carriers Subject to the Charge and Amount of the Charge
Arizona	The per-line surcharge will be calculated by the administrator using the total number of access lines and equivalent access lines derived from interconnecting trunks that were in service for all Category One service providers on October 1 of the previous year. The number of access lines includes business and residence lines, public access lines, and other identifiable access lines. All Category One providers are required to participate.
Colorado	Local exchange carriers hold exclusive certificates of public convenience and necessity. All access lines are surcharged. The line charge is based on half the total fund divided by the total state access lines.
Connecticut	All carriers are subject to the charge, but they are not required to pass it on to customers. The charge is based on revenues.
Idaho	All local exchange carriers remit a cents-per-line surcharge with a business-residential differential equal to the statewide average business-residential price ratio. The commission conducts an annual review and adjusts surcharge amounts as required to maintain an adequate balance and ensure that distributions can be made for the year.
Kansas	LECs must align their intrastate access charges with their interstate charges and collect a state end-user common line charge from their customers.
Maine	All carriers and all lines are subject. The amount of the surcharge depends on the difference between economic cost (which may not be the incumbent's embedded cost) and the existing access rate. In high-cost areas, the ubiquitous carrier would receive a subsidy; in low-cost areas, the carrier would pay a per-line subsidy, which would be used to support high-cost areas.
Utah	All local exchange lines of all LECs or competitive LECs are subject to the line charge, which is a maximum of \$.07 per month, as mandated by statute. However, the charge has never been imposed.

Table 9 indicates that other funding mechanisms commonly include charges based on some measure of minutes of use.

TABLE 9 OTHER FUNDING MECHANISMS

STATE	Mechanism Used
Arkansas	The funding is collected from cellular carriers and IXCs on the basis of their proportion of retail billed minutes of use.
Colorado	IXCs pay half the total fund based on their percentage of interexchange traffic minutes.
Illinois	The low-income fund relies on voluntary customer contributions. The high-cost fund is supported by toll carriers based on intrastate minutes of use.
Kansas	IXCs will contribute to the USF based on their intrastate billed minutes of use.
Oklahoma	IXCs pay a flat amount based on minutes of use.
Rhode Island	Funding for the lifeline program is by New England Telephone, which absorbs the credit granted on Lifeline customers' bills.
	Currently the credit is \$7 per eligible customer per month per eligible customer, which is twice the subscriber line charge. This credit is subtracted from the \$9.25 monthly charge, so that the subscriber pays a net charge of \$2.25 per month.
Texas	Expenses of the dual party relay provider, the universal service fund administrator, and associated commission expenses are totaled monthly. Assessment is based generally on minutes of use. Dual party relay expenses are allocated to the LECs and IXCs based on their share of total minutes of use. The LEC share is then divided among them based on each LEC's number of access lines. The IXC share of the allocation is divided among all IXCs based on minutes of use.

As shown in Table 10, the Administrator of the universal service fund is most often either an industry representative or a neutral third party. Table 10 also indicates that the fund administrator is generally selected either on the basis of a competitive bidding process or by the commission.

TABLE 10 FUND ADMINISTRATION		
Response		STATES
The Fund is Administered by:	Industry Representative (8)	AZ, AR, CA (High-Cost Fund), IN, OR, RI, TX, VT
	Neutral Third Party (7)	CA (Lifeline Fund), HI, ID, KS, PA, WI, WY
	Commission (4)	CO, CT, UT, WY
	State Agency (1)	WA
The Fund Administrator is Selected by:	Competitive Bid (6)	CO, ID, KS, NV, VT, WI
	Commission (5) Selection or Appointment	AZ, GA, HI, OK, TX
	Mandate by Statute (1)	UT
	Other (2)	AR, RI

Table 11 indicates that eligibility to receive universal service support requires a company to be a certified telecommunications carrier, serve high-cost areas, and/or provide service to identified, low-income customers.

TABLE 11 CARRIER ELIGIBILITY TO RECEIVE SUPPORT	
STATE	CRITERIA
Arizona	Eligibility to receive support shall be based upon the difference between the benchmark rates (rates approved by the commission for a provider of basic local exchange service, plus the FCC approved CCLC), and the appropriate cost to provide basic local exchange telephone service (net of any universal service support from federal sources) as determined by the commission,
Arkansas	Fixed as part of the determination of how the LEC's carrier common line revenue requirement is recovered.
California	Currently, only certified local exchange carriers can receive money from the fund.
Colorado	Under the existing plan, a telecommunications provider must be a certified local exchange carrier with a "book" revenue requirement (per access line per month) more than 115% of the "average."
Connecticut	The telecommunications provider must provide lifeline credit.
Georgia	The commission will require any LEC seeking reimbursement from the fund to file the information reasonably necessary to determine the actual and reasonable cost of providing local exchange service. Reimbursement will be based on the commission's estimates of the difference between the reasonable actual costs of basic local exchange service throughout Georgia, and the maximum amount that may be charged for such services, which may be based on standard cost or benchmark rates.
Hawaii	Telecommunication carriers providing basic telephone service to qualified high-cost areas or to qualified low-income customers.
Illinois	Eligibility is determined on the basis of being identified as a high-cost company.

TABLE 11 (continued) CARRIER ELIGIBILITY TO RECEIVE SUPPORT	
STATE	CRITERIA
Kansas	Any LEC or competitive provider serving a high-cost area will be eligible to receive payments from the USF. In addition, the commission will allow providers to receive payments from the fund for serving customers outside the "base rate area" (the most densely populated portion of the service territory.
Maine	To receive support, a carrier must be a ubiquitous carrier of last resort and serve an entire exchange area.
Nevada	The carrier must provide basic service in the market. Its basic service rates must be geographically averaged, and the carrier must provide lifeline and link-up programs.
	Small providers of basic service must have interstate and intrastate switched access rates in parity, monthly rates for residential customers must be between \$8 and \$16 and between \$16 and \$20 for business customers. (A small provider must have less than 10,000 lines and must have a rate of return below the authorized level.)
Oklahoma	A LEC's costs must be high enough to require support.
Pennsylvania	Each local service provider with basic universal service subscribers in a high cost of service area will receive USF assistance. USF assistance will be channeled to end-user subscribers in the form of high-cost assistance credits. Comments have been invited regarding the competitive neutrality of USF payments to local service providers.
Texas	LECs submit monthly reports indicating lost revenue associated with telephone assistance. Eligibility for high-cost assistance support is currently undergoing a review based on the new law.
Utah	Eligibility is determined by law, rules, and joint stipulation of carriers and regulators.

TABLE 11 (continued) CARRIER ELIGIBILITY TO RECEIVE SUPPORT	
STATE	CRITERIA
Vermont	The distribution method has not yet been determined. Consideration is being given to a "virtual voucher" plan which would provide support where rates would exceed 130 percent of the state-wide average.
Wisconsin	Eligibility varies by program. Rate-shock mitigation is available only to rate regulated companies, since only these companies will have large ordered rate increases. The other programs, including high-cost support, are available to all providers, including new competitors.
Wyoming	Eligibility to receive support is based on a statutory provision that without such support the rate would "(exceed) 130% of state-wide average rate."

Table 12 indicates that the amount to be raised is most often determined based on estimated future or recent historical requirements.

TABLE 12 DETERMINATION OF THE AMOUNT TO BE RAISED BY THE FUND	
STATE	How is the amount to be raised by the fund determined?
Arizona	The administrator will calculate the total Arizona Universal Service Fund support due all local exchange carriers who have been granted Arizona Universal Service Fund support by the commission. Administrative costs and audit fees will be added to this amount.
Arkansas	The amount was fixed by Order 38 in Docket No. 83-042-U.
California	For the High-Cost Fund, small and mid-sized carriers determine their need, but they must pass a means test. For Lifeline, the number is estimated from the previous year's need.
Colorado	Total estimated cost of the program plus administrative cost for each fiscal year.
Connecticut	Total costs of program and administrative costs are estimated for the forthcoming year.
Georgia	The commission will make an annual determination of the total contributions required to balance the fund based on the difference between the reasonable actual costs of basic local exchange service throughout Georgia, and the maximum amount that may be charged for such services.
Hawaii	Based on the fund's income and revenue forecasts and projections.
Maine	The amount is determined by the amount necessary to ensure that basic service rates in high-cost areas do not increase as a result of competitive entry in low-cost areas.
Nevada	An assessment determined by the commission.

С	TABLE 12 (continued) Determination of the Amount to be Raised by the Fund		
STATE	How is the amount to be raised by the fund determined?		
Oklahoma	Commission determines the required amount for each year.		
Pennsylvania	The amount to be raised will be determined primarily by the support requirement of high-cost areas.		
Rhode Island	The amount of the fund is implicitly an amount sufficient to give each eligible lifeline customer a credit of \$7.00 per month.		
Texas	LECs submit monthly information showing the amount of revenue lost due to participation in the Telephone Assistance (low-income) program.		
Utah	There is an annual evaluation of requirements to maintain reasonable rates.		
Vermont	The amount to be raised is determined by the Public Service Board, which considers: (1) appropriations for E-911, (2) estimated contractual cost for TRS, and (3) estimated benefits under lifeline.		
Wisconsin	The commission sets an anticipated budget based on projected funding needs. This is based on the estimated cost of providing the supported services.		
Wyoming	Based on calculations using prior year's rates to determine qualifying amount to be paid to providers.		

Table 13 indicates that customers are not generally made explicitly aware of the subsidy they are receiving, although they may be aware that the subsidy is portable between providers. The lack of portability between providers may be due to the fact that until now customers have generally not had any alternative providers of local exchange service. As local exchange competition becomes a reality, universal service support will be increasingly portable. For example, Colorado's response indicated that the subsidy will become portable when local competition is allowed. Indeed, the Telecommunications Act of 1996's mandate to remove barriers to local exchange competition appears to require subsidy portability — at least among designated "eligible telecommunications carriers."

TABLE 13	÷
CUSTOMER INFORMATION AND SUPPORT PORTA	BILITY

Response		STATES
Customers are made aware of the	Yes (6)	CT, OR, RI, WA, WI, WY
subsidy on their bills:	No (9)	AR, CA, CO, HI, ID, IN, NV, OK, UT
The subsidy is	Yes (6)	CO, CT, ME, OR, WA, WI
portable between providers:	No (8)	AR, CA, HI, ID, IN, OK, UT, WY
Customers are made aware of the	Yes (3)	CT, OR, WA
subsidy's portability between providers:	No (2)	ME, WI

Source: Authors' construct from state responses to the NRRI's Universal Service Fund Survey and authors' updates.

⁴ Section 102 of the Act makes the state commissions responsible for designating one or more providers as "eligible telecommunications carriers" in an area. Only providers so designated can receive payments from whatever Federal support mechanisms are adopted as a result of the Joint Board process.

Table 14 presents the respondents' comments about state universal service funds. The comments indicate a variety of approaches to funding universal service. Among the interesting variations are Indiana's plan, which considers both average cost and revenues in determining support levels for individual companies and Wisconsin's plan, which uses both the cost of local service and median household income to determine support levels.

TABLE 14 COMMENTS ON UNIVERSAL SERVICE FUNDING	
California	The commission is currently in the process of completely overhauling its entire universal service program. The commission is trying to ensure that its universal service mechanisms are compatible with a competitive local exchange market. Draft rules were released this past July. The responses to this survey are based on the commission's current programs, not the proposed changes.
Hawaii	The discussion of universal service is contained in Act 225, 1995 Session Laws of Hawaii and Draft Administrative Rules on the Universal Service Fund, Chapter 81.
Indiana	The Indiana High-Cost Fund pays two kinds of support: (1). An annual payment to qualifying companies to help cover high loop costs. (2). End-user offset payments ordered paid to ten companies in Cause Number 37905 (September 19, 1989). Amounts per access line are fixed for these companies and no new companies may apply for this type of support. These payments amount to approximately \$80,000 annually, and payout is determined accordingly.
	Qualifying companies are paid a percentage of the difference between 25 percent of their loop costs and the sum of Carrier Common Line Revenue and Residence and Business End User Common Line Charge Revenue. No payment is made if the difference is zero or negative (i.e., if 25 percent of loop costs is less than or equal to these revenues). If the difference is positive and the company's average Residence Revenue per line is less than 100% of the statewide average, no payment is made. If the difference is positive and the company's average Residence Revenue per line is between 100% and 115% of the statewide average, 50% of the difference is paid. If the company's average Residence Revenue per line is greater than 115% of the statewide average, 100% of the difference is paid.

TABLE 14 (continued) COMMENTS ON UNIVERSAL SERVICE FUNDING	
Kansas ⁵	The USF plan will make explicit the universal service subsidies paid by businesses and customers in large exchange areas. A state end-user common line charge will be instituted, intrastate carrier access charges will be aligned with interstate rates, and intrastate toll rates will be reduced. A proxy model will be developed to determine high-cost areas, and any provider serving customers in identified areas will be eligible to receive payments from the fund. Lifeline customers will not pay the common line charge, and the plan is designed to prevent entrants from receiving USF support for serving only a few relatively large business customers in a rural exchange.
Louisiana	The universal service fund is under consideration in Docket Number U- 20883, Subdocket A.
Michigan	The Legislature is currently rewriting telecommunications law. The current version before the Legislature calls for the creation of a Task Force to study changes in the Federal USF and the need for a state USF to promote and maintain basic local exchange service in high-cost, rural areas at affordable rates. The Task Force is to report to the Governor on or before December 31, 1996.
New Mexico	New Mexico has a state universal service fund in place, but no one is currently contributing to or drawing from it. The original funding mechanism was a surcharge levied on all LEC customers. This has since been set to \$0.00.
	The New Mexico Exchange Carriers Association is the board that was set to oversee the fund. The commission sits on the board as observers. They have proposed some draft rules but they have not yet been acted on. The independent LECs felt that they should be able to draw from the fund whenever they said that they needed dollars.
	Staff thought that eligibility to receive support should be based on a standard that, without support, the LEC's coverage ratio (times interest earned) would be below three. Alternatively, a "mini" rate case should be held every two years or so to determine eligibility.
	Since the companies did not agree, they stopped drawing from the fund.

⁵ See "Kansas Commission Orders Rate 'Rebalancing'," *Telecommunications Reports* 62, no. 14 (April 8, 1996): 15.

TABLE 14 (continued) COMMENTS ON UNIVERSAL SERVICE FUNDING

Rhode Island	There is currently Docket 2252, "Comprehensive Review of Telecommunications Competition," that could affect the funding of universal service. The current plan, under which NYNEX absorbs the cost, is not consistent with a competitive environment, in which all providers should share in universal service funding.
Utah	The commission is evaluating the plans proposed to the FCC in their docket. The existing plan expires in 1996. Hearings are planned to decide any future changes.
Vermont	A portion of the universal service fund is in operation. Monies are being collected to fund TRS, E911, and Lifeline services. Monies are not currently being collected for the high-cost fund, because the legislature has not, as yet, authorized it.
Wisconsin	The amounts providers are assessed for the universal service fund may not be placed on customers bills. The commission has approved link-up and lifeline programs for all LECs operating in Wisconsin. It has also created a program to provide spare voice mail boxes to homeless shelters, for use by the homeless. The state universal service fund Pays voice mail providers the incremental cost of the boxes provided.
	The draft rules allow use of USF money for rate-shock mitigation. This allows the commission to phase in large rate increases, while allowing the LEC to earn its authorized rate of return. Large increases are primarily a function of LECs' avoiding rate cases as long as possible, then needing large increases. The commission allows rate-shock mitigation only for commission-ordered rates. In practice, this means that rate-shock mitigation is only given to some rate-of-return regulated LECs, although it is theoretically available to all providers.
	In contrast, high-rate assistance credits, which pay a portion of the bill for local loops, are available to all providers. The eligible portion is tied to median (monthly) household income (MHI) for the customer's area, and uses a progressive scale.
	The customer pays all of the rate up to 0.75% of MHI. For the amount between 0.75% and 1.5%, the fund pays half, and the customer pays half. For the portion of the rate above 1.5% of median household (and other, higher trigger levels), the fund pays increasingly higher percentages.

TABLE 14 (continued) COMMENTS ON UNIVERSAL SERVICE FUNDING

Wisconsin (continued)

The progressive scale provides protection for the customer, while not preventing market forces from operating. Unlike rate ceilings, customers will always pay less for a provider with lower rates, but keep the option of paying more for better service or more features. The high-rate assistance credit plan allows providers to set rates as the market dictates, and will continue to function even if the provider deaverages its local rates. The Wisconsin plan does not provide incentives for skewed rates. The plan also does not rely on cost studies or designated providers of last resort, with the inherent incentives to "game" those requirements.

Source: Authors' construct from state responses to the NRRI's Universal Service Fund Survey and authors' updates.