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ORGANIZATION FOR THE PROMOTION AND ADVANCEMENT OF SMALL TELECOMMUNICATIONS COMPANIES

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UNIVERSAL SERVICE IN RURAL AMERICA: A CONGRESSIONAL MANDATE AT RISK

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The Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO) is a national trade association representing approximately 500 small incumbent local exchange carriers serving primarily rural areas throughout the United States. OPASTCO members provide a wide array of services, including local exchange service, Internet access, high-speed and advanced services, mobile wireless services, long distance resale, and cable television. Collectively, OPASTCO members serve over 2.6 million customers in 42 states.

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TABLE OF CONTENTS

OPASTCO RURAL UNIVERSAL SERVICE FUND POLICY PRINCIPLES

1. Rural consumers should have affordable telecommunications services, comparable in quality and price to urban areas.

2. Funding should be sufficient to provide for critical infrastructure in rural areas.

3. The Universal Service Fund is a scarce national resource. Therefore, supporting multiple carriers is in the public interest only when benefits exceed costs.

4. The Universal Service Fund should not be used to create uneconomic competition.

5. All carriers receiving support should be held to the same service obligations and regulatory standards.

6. Funding should come from the broadest base of providers and services.

EXECUTIVE SUMMARY

The goal of universal service policy is to ensure that every American, regardless of location, has affordable, high-quality access to the public switched network and thereby benefits from a variety of telecommunications and information services. Rural incumbent local exchange carriers (ILECs) are the embodiment of the universal service concept, having built the infrastructure that provides ubiquitous, high-quality local telecommunications service to some of the country's most remote and difficult to serve areas. The provision of a robust infrastructure in these areas would never have been possible were it not for the nation's long-established policy of universal service and the federal Universal Service Fund (USF, the Fund). Sadly, the availability of high-quality, modern service to rural consumers is being threatened by state and federal policy decisions that have placed the future financial health of rural ILECs at risk.

In the Telecommunications Act of 1996 (1996 Act, the Act), Congress expanded the purpose of federal universal service funding beyond its historical purpose of cost recovery for carriers serving high-cost areas to include discounted services for schools, libraries and rural health care facilities. The Act also allowed for more than one carrier in a local service area to be eligible to receive universal service support. In addition, the reform of interstate access charges since the passage of the 1996 Act has shifted more of a LEC's costs to the USF for recovery. Collectively, these policy changes have caused the size of the Fund to grow significantly and have placed its sustainability in serious jeopardy. This paper focuses on the second of the aforementioned policy shifts: *the ability of state regulatory commissions and the Federal Communications Commission (FCC) to designate more than one carrier in a service area to be eligible to receive high-cost universal service support.*

THE 1996 ACT: BALANCING THE GOALS OF UNIVERSAL SERVICE AND COMPETITION

Under the 1996 Act, in order to be eligible to receive high-cost universal service support, a carrier must first be designated as an Eligible Telecommunications Carrier (ETC) by a state commission or, in limited circumstances, by the FCC. In areas served by a non-rural ILEC (*ex.*, Verizon, SBC, BellSouth, Qwest), the Act requires state commissions and the FCC to designate additional ETCs, so long as the applying carrier meets certain prerequisites. However, in areas served by a rural telephone company, the Act provides state commissions and the FCC with the discretion to determine whether or not providing more than one carrier with universal service support would be in the best interest of those communities. More specifically, it requires state commissions and the FCC to find that the designation of an additional ETC in a rural service area is *in the public interest* before such a designation is made. This additional requirement demonstrates Congress's recognition that supported competition would not always serve the public interest in the areas served by rural telephone companies. Unfortunately, in many instances, state commissions and the FCC have not been following the intent of Congress

and have been quick to designate additional ETCs in rural telephone company service areas without thoughtfully and thoroughly considering all of the factors that determine the public interest.

HIGH-COST UNIVERSAL SERVICE IS NOT A SUBSIDY PROGRAM; IT IS A COST RECOVERY PROGRAM DESIGNED TO ENCOURAGE INVESTMENT IN INFRASTRUCTURE

High-cost universal service support is not a subsidy program for end-user customers. It is a cost recovery program designed to promote infrastructure investment in areas where it would not otherwise be feasible for carriers to provide quality services at rates that are affordable and reasonably comparable to urban areas of the country. Without high-cost support, this investment would not have occurred in the past and cannot occur in the future. Therefore, encouragement of private infrastructure investment must continue to be the primary purpose of the High-Cost universal service program, and funding must remain sufficient to achieve this objective.

THE FUTURE OF HIGH-COST SUPPORT FOR RURAL CARRIERS IS IN JEOPARDY

Since 1996, the federal USF has nearly quadrupled in size, with funding for all programs projected to be approximately $6.3 billion in 2003. In addition, the high-cost support going to wireless competitive ETCs has grown from less than $500,000 in 1999, to a projection of more than $100 million in 2003. It is estimated that if all wireless providers nationwide were granted ETC status that the annual funding level of the USF would grow by approximately $2 billion. Clearly, an increase of this magnitude would not be sustainable. Carriers need sufficient funding to continue investing in infrastructure in high-cost rural areas. If the size of the USF reaches a point where further growth is prohibited, yet the number of carriers receiving support continues to grow, then no carrier will have the funding necessary to provide affordable, high-quality telecommunications services and rural consumers will be denied the benefits promised by the Act.

Rural ILECs are the only providers of ubiquitous, high-quality, facilities-based service throughout their respective service areas. Thus, if rural ILECs lose the ability or incentive to continue investing in their networks – or worse yet, if their existence is placed at risk – then some rural areas may be deprived of basic universal service, where high-quality, reliable telecommunications services are available and affordable for all. Insufficient funding also threatens these carriers' ongoing efforts to offer advanced services to greater numbers of consumers, as well as to schools, libraries and rural health care facilities. Such an outcome would be entirely at odds with the universal service principles Congress codified in the 1996 Act.

THE MARKET HAS SPOKEN: COMPETITION IS NOT ALWAYS IN THE PUBLIC INTEREST

The telecommunications industry has experienced a financial collapse as a result of the rush to competition and uneconomic investment in facilities for which there was not sufficient market demand. If this type of market failure can occur in the most urban areas of the country, where it seems logical that competition would be able to flourish, then funding competition in high-cost rural areas where the market cannot naturally support even one service provider clearly carries with it significant risks. FCC Commissioner Kevin Martin explained it best when he stated:

> I have some concerns with the Commission's policy…of using universal service support as a means of creating "competition" in high cost areas. I am hesitant to subsidize multiple competitors to serve areas in which costs are prohibitively expensive for even one carrier. This policy may make it difficult for any one carrier to achieve the economies of scale necessary to serve all of the customers in a rural area, leading to inefficient and/or stranded investment and a ballooning universal service fund.[1]

In today's uncertain environment, it is more important than ever for each and every American to have access to a proven telecommunications carrier that provides "critical infrastructure." This is a carrier that is capable of providing its customers with reliable, ubiquitous, facilities-based service of the highest quality. Such a carrier must have the ability to ensure that telecommunications services remain available in the event of an emergency. Rural ILECs have historically fulfilled this role and remain committed to doing so in the future. This is a role that most competitive carriers may be unable to fulfill due to a reliance on other carriers' networks, internal financial limitations and/or service quality issues.

Therefore, it is essential that the granting of ETC status to competitive carriers be properly managed in the areas served by rural telephone companies to ensure that the universal service goals of the 1996 Act are achieved. If the overall demand for funding grows to an unsustainable level, then support payments will need to be frozen or even curtailed, resulting in serious operating challenges for many rural carriers. Such a situation will ultimately lead to deteriorating service quality, substantially higher rates, or even the financial failure of the carrier that serves as the "lifeline" for the most remotely located consumers.

Regulators must learn from the disastrous implosion of the telecommunications industry and not further compound the situation by allowing it to spread to geographic areas with the most fragile markets. The proliferation of uneconomic competition within

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[1] *Multi-Association Group (MAG) Plan for Regulation of Interstate Services of Non-Price Cap Incumbent Local Exchange Carriers and Interexchange Carriers*, CC Docket No. 00-256, Second Report and Order and Further Notice of Proposed Rulemaking, *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Fifteenth Report and Order, *Access Charge Reform for Incumbent Local Exchange Carriers Subject to Rate-of-Return Regulation*, CC Docket No. 98-77, Report and Order, *Prescribing the Authorized Rate of Return for Interstate Services of Local Exchange Carriers*, CC Docket No. 98-166, Report and Order, Separate Statement of Commissioner Kevin J. Martin, 16 FCC Rcd 19613, 19770 (2001).

rural service areas could unintentionally jeopardize the ubiquity of the nation's telecommunications network.

STATE PUCS AND THE FCC HAVE GENERALLY FAILED TO PROPERLY EVALUATE THE PUBLIC INTEREST IN THEIR DECISIONS ON ETC APPLICATIONS FOR RURAL SERVICE AREAS

A substantial number of the decisions on ETC applications for rural service areas that have been made thus far have placed an over-emphasis on the perceived benefits of competition, and have equated the introduction of financially supported competition to serving the public interest. On the other hand, less attention has been paid to ensuring that all consumers in the area will retain, and gain, access to affordable, high-quality services, including advanced services, that are reasonably comparable to the services and rates offered in urban areas. These decisions have overlooked or ignored the often significant costs and detriment to rural consumers that Congress recognized could result from financially supporting competition in rural service areas. As a result of these designation decisions, it is clear that a set of principles must be developed to guide state commissions and the FCC in making the important public interest determinations that are at the core of considering ETC applications for rural service areas.

PUBLIC INTEREST PRINCIPLES TO GUIDE STATE PUCS AND THE FCC WHEN CONSIDERING ETC APPLICATIONS FOR RURAL SERVICE AREAS

State commissions and the FCC should adopt the following universal service public interest principles to guide them in their consideration of ETC applications for rural telephone company service areas:

1. Rural consumers should receive access to affordable, high-quality telecommunications and information services, including advanced services, that are reasonably comparable to those services provided in urban areas and at reasonably comparable rates.

2. The high-cost support mechanisms should not be used to incent uneconomic competition in the areas served by rural telephone companies.

3. The USF is a scarce national resource that must be carefully managed to serve the public interest.

4. Rural universal service support reflects the difference between the cost of serving high-cost rural areas and the rate levels mandated by policymakers.

5. The public interest is served only when the benefits from supporting multiple carriers exceed the costs of supporting multiple networks.

6. In areas where the costs of supporting multiple networks exceed the public benefits from supporting multiple carriers, the public interest dictates providing support to a single carrier that provides critical telecommunications infrastructure.

7. The cost of market failure in high-cost rural America could be severe.

THE FCC SHOULD ADOPT A STANDARDIZED SET OF MINIMUM QUALIFICATIONS, REQUIREMENTS AND POLICIES TO BE APPLIED TO POTENTIAL AND EXISTING ETCS IN RURAL SERVICE AREAS

Along with the adoption of public interest principles, a standardized set of minimum qualifications, requirements and policies should be adopted by the FCC. These federal criteria should be applied by state commissions and the FCC to potential and existing ETCs in rural telephone company service areas. Using these federal criteria as a template would assist states and the FCC in determining whether or not the public interest would be served by a particular carrier's designation as an ETC. It would also improve the long-term sustainability of the USF as only the most qualified carriers that are capable of, and committed to, being true providers of universal service would be able to receive and keep the ETC designation.

In order to be considered for ETC status in a rural telephone company service area, a carrier should be required to demonstrate to the state commission or FCC that it meets, and will abide by, all of the following qualifications and requirements:

1. A carrier must demonstrate its ability and willingness to provide all of the services supported by the federal High-Cost program throughout the service area.

2. In fulfilling the requirement to advertise its services and rates, an ETC must emphasize its universal service obligation to offer service to all consumers in the service area.

3. A carrier must have formal arrangements in place to serve customers where facilities have yet to be built out.

4. A carrier must have a plan for building out its network once it receives ETC designation and must make demonstrative progress toward achieving its build-out plan in order to retain ETC designation.

5. A carrier must demonstrate that it is financially stable.

State commissions and the FCC should also adopt the following policies regarding ETC designations in rural telephone company service areas:

1. ETC designations in rural telephone company service areas should be made at the study area level (an ILEC's entire service territory within one state).

2. State commissions and the FCC should ensure that competitive ETCs will be capable of providing high-quality service to all of the customers in the service area should the rural ILEC find it necessary to relinquish its own ETC designation.

3. Any service quality standards, reporting requirements and customer billing requirements established by the state commission should be applied equally to all ETCs in the state.

4. State commissions have the authority to decertify any ETC that is not meeting any of the qualifications or requirements enumerated above.

State commissions should be required to certify annually to the FCC that they are applying the established standardized list of minimum qualifications, requirements and policies to potential and existing ETCs in rural telephone company service areas. In addition, the FCC should direct the administrator of the USF support mechanisms to develop auditing procedures for reported lines.

CONCLUSION

It is essential that regulators treat the USF as the scarce national resource that it is, and take greater care when considering additional ETC designations in the areas served by rural telephone companies. At risk is the continued success of the nation's long-held policy of universal service and rural consumers' continued ability to participate in the telecommunications revolution.

UNIVERSAL SERVICE IN RURAL AMERICA: A CONGRESSIONAL MANDATE AT RISK

I. INTRODUCTION

Universal service has a long legacy in federal and state public policy. In fact, the concept of universal service was first stated in the Communications Act of 1934:

> …to make available, so far as possible, to all the people of the United States…a rapid, efficient, Nation-wide and world-wide wire and radio communication service with adequate facilities at reasonable charges…[1]

The ultimate goal of universal service policy is to ensure that every citizen, regardless of location, has affordable, high-quality access to the public switched telecommunications network and thereby benefits from a myriad of telecommunications and information services. Public policy that seeks to maximize the level of subscribership to the network also maximizes the utility of the network for all who are connected to it.[2]

For more than 100 years, small independent local exchange carriers (LECs) have provided local telecommunications service throughout rural America. These carriers are the embodiment of the universal service concept, having built the infrastructure that provides ubiquitous, high-quality local exchange service and exchange access (as well as a variety of other services) to some of the country's most remote and difficult to serve areas. This would never have been possible were it not for the nation's policy of universal service. Unfortunately, these rural carriers now find their proud tradition of providing high-quality, modern service being jeopardized by state and federal policy decisions that have placed their future financial health at risk. To understand how we have gotten to this point necessitates a bit of background on how universal service policy has evolved over the years.[3]

In 1982, AT&T signed a Consent Decree with the U.S. Department of Justice, which stipulated that on January 1, 1984, AT&T would divest itself of the wholly owned Bell Operating Companies (BOCs) that provide local telephone service. Prior to divestiture, AT&T and independent LECs were partners to ensure universal service. More specifically, in the areas served by independent LECs, universal service was accomplished through "settlements," which were payments the BOCs made to the independent carriers

[1] 47 U.S.C. §151.

[2] The value of telecommunications service grows with the number of subscribers. One phone is worthless, two phones allows one connection, three phones allows three connections, four phones allows six connections, etc. The more subscribers added to the network, the greater the value to each individual subscriber.

[3] For a more thorough treatment of the history of the high-cost universal service mechanisms, *see, National Exchange Carrier Association Guide to Telephone Regulation, FCC Rules Annotated*. For a broader overview of the entire history of independent LECs and the preservation of universal service in rural areas, *see,* the OPASTCO white paper *Rural America: Connections to the Future, A Historical Perspective of Public Policy, Independent Telephone Companies and Universal Service* by John N. Rose (Nov. 1998).

that interconnected with them. These settlements enabled the independents to recover the costs they incurred in the transmission of toll calls and also keep local rates affordable.

Coincident with the breakup of AT&T, the Federal Communications Commission (FCC, the Commission) implemented interstate access charges, which interexchange carriers (IXCs) pay to LECs to initiate and complete interstate toll calls on the local network. Since the inception of the access charge regime, competition in the market for long distance service has placed downward pressure on access rates. Shortly after their initial implementation, the FCC, through a series of rule changes, began gradually lowering the interstate access rates that LECs could charge IXCs. This was done to encourage IXCs to lower their long distance rates and to promote increased toll usage. Some of the LECs' interstate access costs were shifted into federally mandated Subscriber Line Charges (SLCs) assessed on end-user customers. But, due to maximum levels imposed on SLCs, many high-cost LECs serving rural areas were not able to recover all of their network costs and still maintain affordable local service rates.

Consequently, during the middle to late 1980s, the FCC established three new network cost recovery mechanisms for small, rural and high-cost LECs: the high cost assistance fund (also, at that time, referred to as the Universal Service Fund), the Dial Equipment Minute (DEM) weighting program and Long Term Support (LTS).[4] Collectively, these three mechanisms have allowed customers in high-cost rural areas to receive access to network connections and services that are affordable and reasonably comparable to the rates and services offered in urban areas. Today, these mechanisms are part of the High-Cost program within the larger federal Universal Service Fund (USF, the Fund).

It was not until the Telecommunications Act of 1996 (1996 Act, the Act) that Congress specifically provided for federal universal service support mechanisms in law.[5] With the 1996 Act, Congress greatly expanded the purposes of universal service funding beyond its historical purpose of cost recovery for high-cost carriers (and assistance for low-income subscribers) to include discounted services for schools, libraries and rural health care facilities. It also allowed for more than one carrier in a local service area to be eligible to receive universal service support and empowered the states (and in limited circumstances, the FCC) to make these eligibility determinations. In addition, further reform of the access charge regime since the passage of the 1996 Act has shifted an even greater portion of a LEC's costs from interstate access charges to the USF for recovery. Collectively, these three changes to universal service policy – discount funding for schools, libraries and rural health care facilities, support for multiple carriers within a service area, and the shift of additional access revenues into the USF – have caused significant growth in the size of the Fund since the passage of the Act. As a result, the USF's sustainability and thus, the provision of true universal service in rural areas, is in serious jeopardy.

[4] Around the same time, the FCC also implemented two low-income assistance programs, Lifeline and Link-up America. Lifeline reduces qualifying low-income consumers' monthly charges. Link-up America reduces the one-time installation charges associated with initiating telephone service.
[5] 47 U.S.C. §254.

The focus of this paper is on the second of the aforementioned policy shifts: *the ability of state public utility commissions (PUCs) and the FCC to designate more than one carrier in a service area to be eligible to receive universal service funding.* In many instances, state PUCs and the FCC have not been following the intent of Congress with regard to the service areas of rural telephone companies[6] and have been quick to make additional carriers eligible for support without thoughtfully and thoroughly considering all of the factors that determine the public interest. If the size of the USF reaches a point where further growth is no longer sustainable, yet the number of carriers receiving support continues to grow, then no carrier will have the funding necessary to provide affordable, high-quality telecommunications services and rural consumers will be denied the benefits promised by the Act. In other words, because this needless growth in the size of the Fund threatens its viability, the viability of the networks that serve rural consumers is also threatened.

Rural incumbent LECs (ILECs) are the only providers of ubiquitous, high-quality, facilities-based telecommunications service throughout their respective service areas. For these carriers, universal service support has always been, and continues to be, a critical means of genuine cost recovery that has made the provision of modern, affordable service possible in high-cost areas. Thus, if rural ILECs lose the ability or incentive to continue investing in their networks – or worse yet, if their existence is placed at risk – then some rural areas may be deprived of basic universal service where high-quality, reliable telecommunications services are available and affordable for all. Insufficient funding also threatens these carriers' ongoing efforts to offer advanced services to their customers, as well as to schools, libraries and rural health care facilities, for which the FCC has provided universal service discounts. Such an outcome would be completely at odds with our nation's historic commitment to universal service and with the universal service principles Congress codified in the 1996 Act.

This paper explores how we have arrived at this critical juncture and offers recommendations to better ensure that universal service, as envisioned by Congress, will be fully realized in the areas served by rural telephone companies. Section II of the paper provides some background on the universal service provisions of the 1996 Act, and state and federal regulators' implementation of those provisions. Section III dispels the notion

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[6] The 1996 Act defines the term "rural telephone company" to mean a local exchange carrier operating entity to the extent that such entity –

(A) provides common carrier service to any local exchange carrier study area that does not include either-
  (i) any incorporated place of 10,000 inhabitants or more, or any part thereof, based on the most recently available population statistics of the Bureau of the Census; or
  (ii) any territory, incorporated or unincorporated, included in an urbanized area, as defined by the Bureau of the Census as of August 10, 1993;

(B) provides telephone exchange service, including exchange access, to fewer than 50,000 access lines;

(C) provides telephone exchange service to any local exchange carrier study area with fewer than 100,000 access lines; or

(D) has less than 15 percent of its access lines in communities of more than 50,000 on the date of enactment of the Telecommunications Act of 1996. 47 U.S.C. §153(37).

that high-cost universal service support is a subsidy program. High-cost universal service funding has always been, and continues to be, a cost recovery program that provides the necessary means and incentive for network infrastructure investment in areas where it would not otherwise occur, while providing for affordable local rates. Section IV illustrates how the FCC's reform and augmentation of the USF since the passage of the Act has caused the size of the Fund to explode, placing the future of high-cost support for rural carriers in great peril. Section V examines the financial collapse that has occurred in the telecommunications industry as a result of the rush to competition and uneconomic investment in facilities for which there was not sufficient market demand. If this type of market failure can occur in the most urban areas of the country, then funding competition in rural areas where the market cannot naturally support even one service provider clearly carries with it significant risks. Section VI provides some examples of state PUC and FCC decisions on whether or not to make additional carriers eligible to receive universal service funding in rural service areas. These decisions, by and large, have focused almost entirely on the perceived benefits of competition and have failed to consider any other ramifications. To address this unfortunate and troubling trend, Section VII recommends a set of public interest principles to guide state PUCs and the FCC in their determinations on whether or not to support additional carriers in the areas served by rural telephone companies. Finally, Section VIII recommends a standardized set of minimum qualifications, requirements and policies to be applied by state PUCs and the FCC to all carriers seeking, and that already receive, universal service support in rural service areas.

II. THE 1996 ACT: BALANCING THE GOALS OF UNIVERSAL SERVICE AND COMPETITION

Prior to 1996, the market for local telecommunications service was generally regulated as a monopoly in all regions of the country and therefore only one carrier serving each local market could receive universal service support. When Congress passed the 1996 Act, it opened the local service market to competition. At the same time, however, Congress sought to preserve and, in some respects, even expand the nation's policy of universal service and make it work in an environment with multiple carriers. To accomplish this, the Act established the Eligible Telecommunications Carrier (ETC) designation.[7] In order to be eligible to receive universal service support, a common carrier must first be designated as an ETC. The Act generally confers on state PUCs the critical responsibility for deciding which common carriers will be designated as ETCs in the service areas within their states.[8] In those limited instances where a common carrier is not subject to the jurisdiction of a state commission, the FCC has the authority to make an ETC determination.[9]

In order to be designated as an ETC in any service area, the law establishes two requirements that every common carrier must fulfill. It must, throughout the service area

[7] 47 U.S.C. §214(e)(1).
[8] 47 U.S.C. §214(e)(2).
[9] 47 U.S.C. §214(e)(6).

for which the designation is received: (1) offer the services that are supported by the universal service mechanism, either using its own facilities or a combination of its own facilities and resale of another carrier's services, and (2) advertise the availability of the supported services and charges using media of general distribution.[10] However, for areas served by rural telephone companies,[11] the Act establishes a third critical requirement that must be satisfied before an additional ETC may be designated: The state commission must find that the designation is *in the public interest*.[12] Moreover, while the Act requires state commissions to designate more than one ETC in areas served by a non-rural ILEC, it invests PUCs with the discretion to determine whether or not supporting more than one carrier in areas served by a rural telephone company would be in the best interest of those communities.[13] Section 214(e)(2) states:

> …the State commission may, in the case of an area served by a rural telephone company, and shall, in the case of all other areas, designate more than one common carrier as an eligible telecommunications carrier for a service area designated by the State commission, so long as each additional requesting carrier meets the requirements of paragraph (1). Before designating an additional eligible telecommunications carrier for an area served by a rural telephone company, the State commission shall find that the designation is in the public interest.

Congress directed the FCC, with the input of a Federal-State Joint Board on Universal Service (Joint Board), to reform the universal service mechanisms in order to conform with the new law. Section 254(b) of the Act provides six specific principles on which the FCC and the Joint Board must base its policies for the preservation and advancement of universal service. Those principles are:

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 informa-

[10] 47 U.S.C. §214(e)(1).
[11] Collectively, rural telephone companies serve approximately nine percent of the nation's access lines but cover over 38 percent of the nation's land area. Thus, they typically serve sparsely populated areas with a widely dispersed customer base. Indeed, the average population density is only 13 persons per square mile for areas served by rural carriers, compared with 105 persons per square mile in areas served by non-rural carriers. Because of their lack of economies of scale and subscriber density, rural telephone companies face numerous operational challenges in the provision of service. For more information on what makes rural telephone companies substantially different than their non-rural counterparts, *see, The Rural Difference*, Rural Task Force White Paper 2 (Jan. 2000). www.wutc.wa.gov/rtf.
[12] 47 U.S.C. §214(e)(2).
[13] *Id.*

tion 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.

6. ACCESS TO ADVANCED TELECOMMUNICATIONS SERVICES FOR SCHOOLS, HEALTH CARE, AND LIBRARIES. Elementary and secondary schools and classrooms, health care providers, and libraries should have access to advanced telecommunications services as described in subsection (h).

In addition to the six specific principles, Section 254(b) allows the Joint Board and the Commission to establish additional principles that they determine "are necessary and appropriate for the protection of the public interest, convenience, and necessity and are consistent with this Act." As a result of this provision, the Joint Board and FCC added a seventh principle:

7. COMPETITIVE NEUTRALITY. Universal service support mechanisms and rules should be competitively neutral. In this context, competitive neutrality means that universal service support mechanisms and rules should neither unfairly advantage nor disadvantage one provider over another, and neither unfairly favor nor disfavor one technology over another.[14]

On its surface, the added principle of competitive neutrality appears to be a reasonable one. Sadly, however, many FCC and state decisions have turned the concept on its head, resulting in policies that are decidedly biased in favor of the competitor and not at all competitively neutral. Some examples include:

- State PUCs and the FCC designating competitive ETCs (CETCs) for service areas that are smaller than the area the rural ILEC is required to serve. This makes it much easier for competitors to meet the requirements for ETC designation and to "creamskim" the best customers.

- State PUCs not holding CETCs to the same service quality standards and reporting and billing requirements as the ILEC.

[14] *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 8801, para. 47 (1997). (*Universal Service First Report and Order*)

- The FCC, thus far, not adding equal access to interexchange service to the list of supported services. This allows wireless carriers to become ETCs without being required to provide equal access, even though all LECs are required by law to provide it.

In the 1996 Act, Congress did not specifically address how to implement a universal service support mechanism that allows for more than one carrier in a service area to receive support. However, in implementing regulations, the FCC concluded that its principle of competitive neutrality requires that CETCs receive the same per-line support amount as the ILEC would receive for serving a particular customer.[15] This rule is commonly referred to as support "portability."

III. HIGH-COST UNIVERSAL SERVICE IS NOT A SUBSIDY PROGRAM; IT IS A COST RECOVERY PROGRAM DESIGNED TO ENCOURAGE INVESTMENT IN INFRASTRUCTURE

As the implementation of the 1996 Act's pronouncements on universal service have evolved, a key concept seems to have been eroded. Section 254(e) of the Act requires that high-cost universal service support be used "only for the provision, maintenance, and upgrading of facilities and services for which the support is intended." Section 254(b)(3) states, in part, that consumers in rural and high-cost areas should have access to telecommunications services that are reasonably comparable to those in urban areas and at reasonably comparable rates. Taken together, the two provisions indicate that support should be utilized for infrastructure investment in areas where it would not otherwise be economically feasible to provide services at rates that are affordable and reasonably comparable to urban areas of the country. Thus, affordable and reasonably comparable services and rates are the result of a federal high-cost universal service program that promotes investment by allocating a greater portion of a carrier's costs to the federal or interstate jurisdiction. High-cost support should never be confused with a program to simply reduce the rates for telecommunications service charged to an individual end user.[16]

This distinction seems to have even been lost on the administrator of the universal service support mechanisms. Specifically, the Universal Service Administrative Company (USAC)[17] describes the High-Cost program as a "telecommunications discount program" on its Web site.[18] The misperception that the high-cost mechanisms provide a discount or subsidy has led to a backlash against the program from some policymakers, particularly as the overall USF has grown significantly over the past several years. Clear understanding of the intended purpose of these mechanisms is essential to formulating

[15] 47 C.F.R. §54.307.
[16] This is the purpose of the Low Income program.
[17] USAC is the entity designated by the FCC to administer the universal service support mechanisms, including billing contributors, collecting contributions and disbursing universal service support funds.
[18] *See*, www.universalservice.org/hc/overview/.

policy that will truly maintain and enhance America's superior telecommunications systems.

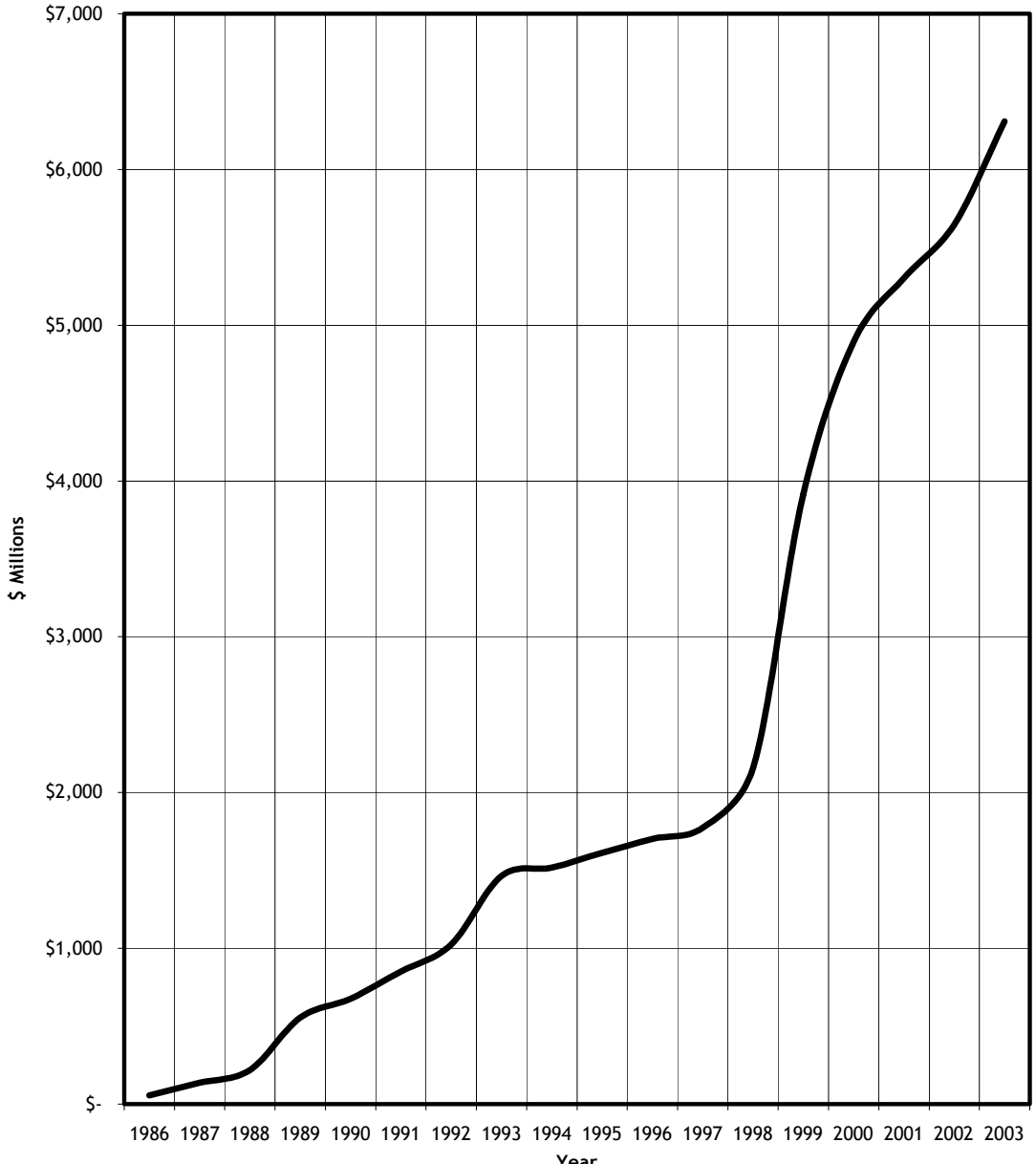
If the High-Cost program is considered simply a "telecommunications discount program," it will fail. Its ultimate success or failure should be judged by whether or not its existence results in continued investment in the high-quality infrastructure that provides universal service in high-cost areas. Without adequate high-cost support, this investment will not continue to occur, and rural subscribers will no longer have access to the affordable and reasonably comparable services and rates called for by the Act. Moreover, without high-cost support, schools, libraries and rural health care facilities will not have access to a high-quality network from which to obtain services. Encouragement of private sector infrastructure investment must therefore be the primary purpose of the High-Cost universal service program and funding must remain sufficient to achieve this objective.

IV. THE FUTURE OF HIGH-COST SUPPORT FOR RURAL CARRIERS IS IN JEOPARDY[19]

Based on the universal service provisions of the 1996 Act, the FCC both reformed and augmented the federal universal service support programs. As a result, the combined size of these programs has increased significantly since the Act's passage. Chart 1 shows the growth of all universal service support programs in the aggregate (what is now referred to as the USF) from 1986 to 2003. Note that in 1996, the year that the Act was passed, total funding for the support programs was $1.7 billion. By year end 2003, funding for all programs is projected to be approximately $6.3 billion. Thus, over seven years, the Fund will have nearly quadrupled in size.

[19] The data used to develop the charts in this section can be found in Appendix A.

Chart 1: Total Federal Universal Service Support Funding Levels
1986-2003



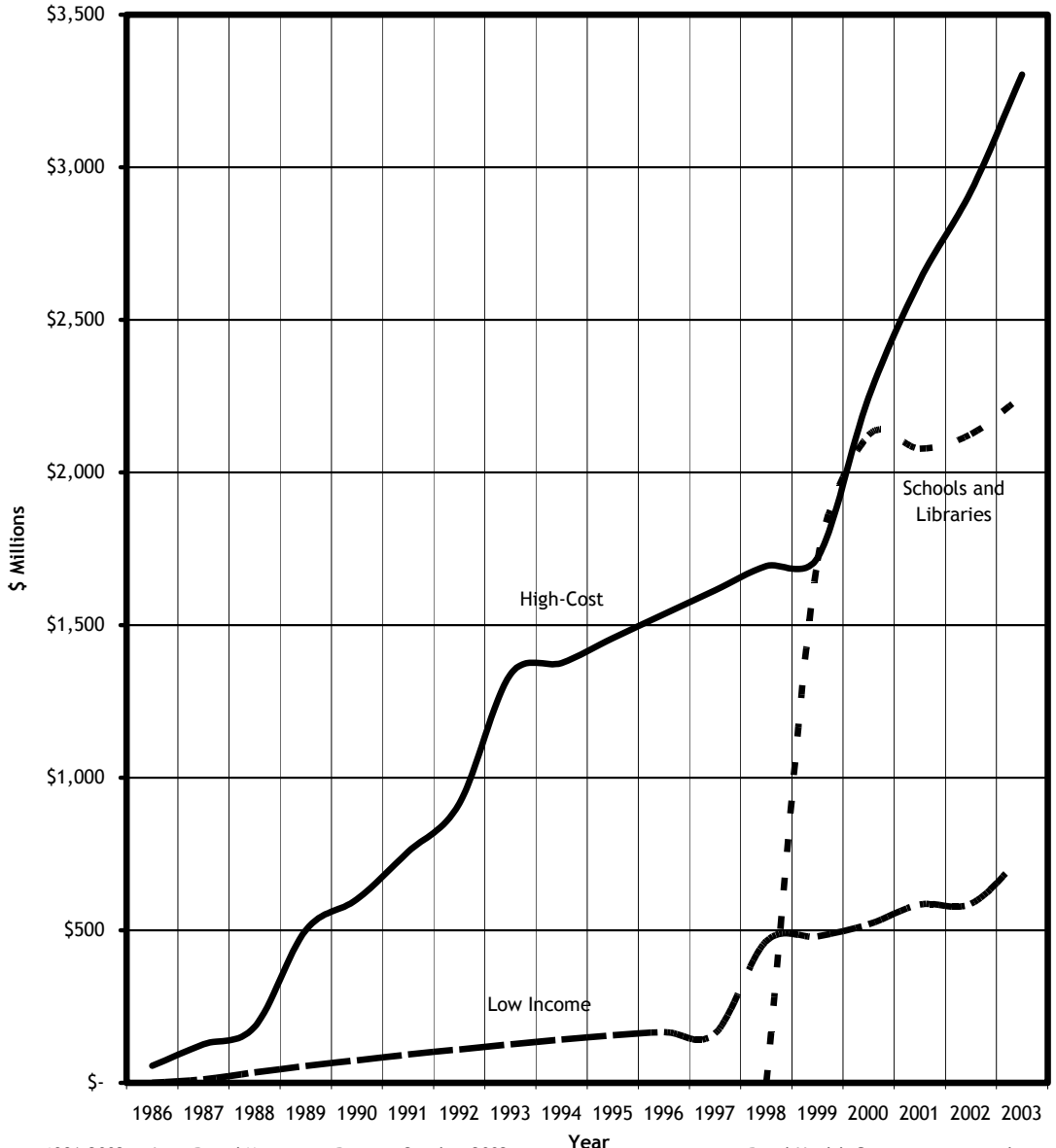
Source: 1986-2002 — Joint Board Monitoring Report, October 2002
2003 — Annualized 1Q:2003 USAC Projections

The rapid growth of the USF since the passage of the 1996 Act is clearly identified in the aggregate. However, this is only one view of the story. Today, the USF is divided into four major programs: High-Cost, Low Income, Schools and Libraries and Rural Health Care. Again, the High-Cost and Low Income programs are the historical programs that existed prior to the 1996 Act; the Schools and Libraries and Rural Health Care programs came into existence as part of the Commission's implementation of the new law.

The High-Cost program is directed at maximizing subscribership to a defined set of telecommunications services (presently voice-grade) by spreading the high cost of rural network infrastructure nationwide. On the other hand, the Schools and Libraries and Rural Health Care programs have nothing to do with nationwide cost recovery to achieve "universally" available services. Instead, these programs provide discounts to community institutions for access to telecommunications and information services. This includes discounts for some services – such as Internet access and internal connections – that extend well beyond the list of services supported by the High-Cost program.

Chart 2 illustrates the size and growth of the USF programs from 1986 to 2003.

Chart 2: Federal Universal Service Support Funding Levels by Program 1986-2003



Source: 1986-2002 — Joint Board Monitoring Report, October 2002
2003 — Annualized 1Q:2003 USAC Projections

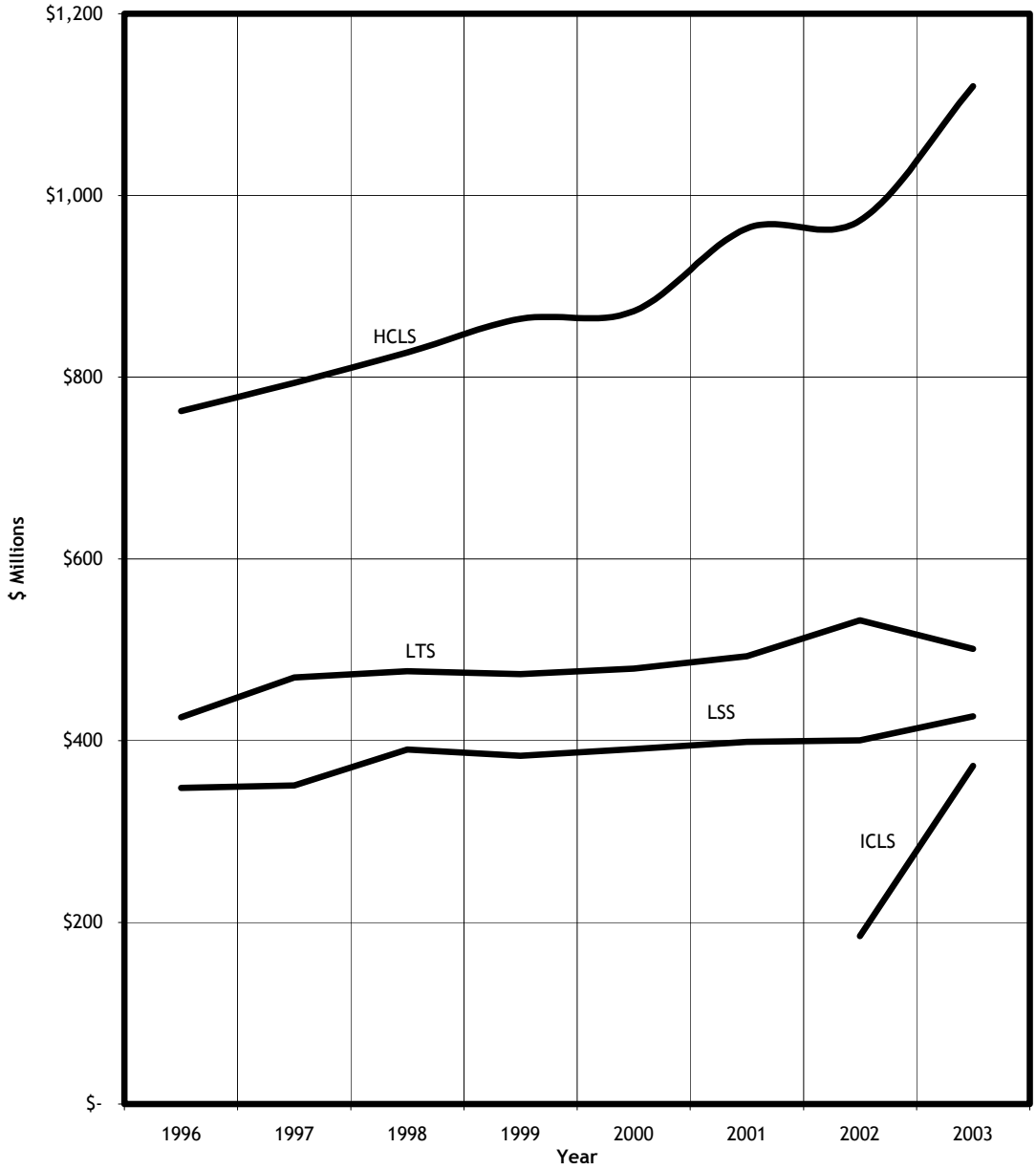
Rural Health Care program not shown due to very low funding level.

It is clear from Chart 2 that the large increase in the total USF since the passage of the 1996 Act is partially a result of implementing the Schools and Libraries program. Whereas prior to 1998 the program did not even exist, in 2002 more than $2.1 billion was collected for Schools and Libraries. This amount accounted for approximately 38 percent of the total USF in 2002. The increased burden of the federal USF is often blamed entirely on the High-Cost program, when in reality a large portion of the increase is attributable to the Commission's implementation of a Congressional mandate directed at schools and libraries.[20]

Charts 3.1 and 3.2 isolate the High-Cost program and break out the six high-cost support mechanisms contained within the program. The four mechanisms shown in Chart 3.1 provide support primarily to the areas served by rural telephone companies. These mechanisms are: High-Cost Loop Support (HCLS), Local Switching Support (LSS), Long Term Support (LTS) and Interstate Common Line Support (ICLS). The remaining two mechanisms shown in Chart 3.2 provide support primarily to the high-cost areas served by non-rural ILECs. They are: High-Cost Model Support (HCMS) and Interstate Access Support (IAS).

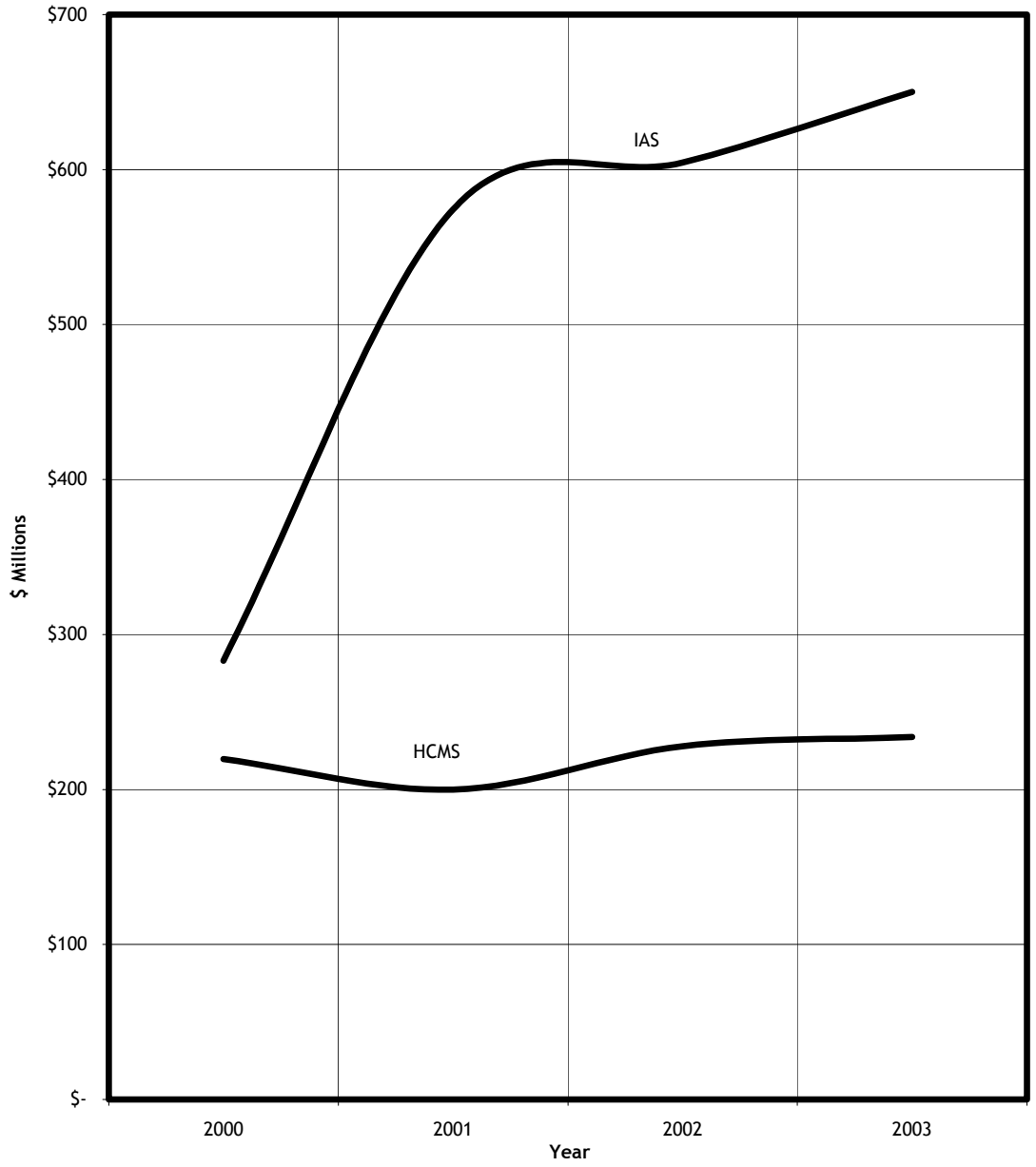
[20] While not the primary focus of this paper, the pressure the Schools and Libraries program places on the sufficiency of high-cost funding for rural carriers is a serious concern that will need to be addressed by policymakers.

Chart 3.1: Federal High-Cost Support Funding Levels by Mechanism 1996-2003



Source: 1996-2002 — Joint Board Monitoring Report, October 2002
2003 — Annualized 1Q:2003 USAC Projections

Chart 3.2: Federal High-Cost Support Funding Levels by Mechanism 2000-2003



Source: 2000-2002 — Joint Board Monitoring Report, October 2002
2003 — Annualized 1Q:2003 USAC Projections

What follows is a brief explanation of the purpose of each mechanism.

High-Cost Loop Support

The FCC's jurisdictional separations rules assign 25 percent of an ILEC's loop costs to the interstate jurisdiction for recovery.[21] Loop costs refer to the costs of cable, telephone wires, poles and other facilities that link each customer's premises to the public switched network, and provide subscribers with access to both intrastate and interstate telecommunications services. Rural ILECs often have high loop costs due to their service areas, which are geographically large and sparsely populated. This necessitates longer, more expensive loops and having to spread these fixed costs over fewer customers. The Commission itself has found that the cost of providing a local loop in a rural area may be approximately 100 times greater than the cost in an urban area.[22] The HCLS mechanism (previously known as the high cost assistance fund or Universal Service Fund)[23] allocates a higher percentage of a rural telephone company's actual loop costs to the interstate jurisdiction that are in excess of 115 percent of the national average cost per loop.[24] Permitting rural carriers with high loop costs to shift a greater portion of these costs to the interstate jurisdiction for recovery has assisted in providing for rates in rural areas that are reasonable and affordable.

Local Switching Support

The LSS mechanism (previously known as DEM weighting)[25] provides support to ILECs with fewer than 50,000 access lines to help defray their higher switching costs.[26] The LSS mechanism recognizes that providing interexchange access requires smaller carriers to buy switching features and functionalities over and above what would be required solely for local service. In addition, small carriers have a smaller base of customers over which to spread the costs of switch upgrades. Accordingly, LSS allows small ILECs to assign a greater proportion of their network switching costs to the interstate jurisdiction for recovery. The LSS mechanism has helped to encourage the deployment of digital switching and digital networks in rural service areas.

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[21] 47 C.F.R. §36.154(c).

[22] *Multi-Association Group (MAG) Plan for Regulation of Interstate Services of Non-Price Cap Incumbent Local Exchange Carriers and Interexchange Carriers*, CC Docket No. 00-256, Second Report and Order and Further Notice of Proposed Rulemaking, *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Fifteenth Report and Order, *Access Charge Reform for Incumbent Local Exchange Carriers Subject to Rate-of-Return Regulation*, CC Docket No. 98-77, Report and Order, *Prescribing the Authorized Rate of Return for Interstate Services of Local Exchange Carriers*, CC Docket No. 98-166, Report and Order, 16 FCC Rcd 19613, 19636, para. 45 (2001). (*MAG Plan Second Report and Order)*

[23] 47 C.F.R. Part 36, Subpart F.

[24] Prior to 2000, the HCLS mechanism provided high-cost loop support to both rural telephone companies and non-rural ILECs based on their actual embedded or historic costs. Beginning in 2000, non-rural ILECs began receiving support for their high-cost loops based on a mechanism that uses forward-looking costs.

[25] 47 C.F.R. §54.301.

[26] Prior to 1998, LSS was recovered through higher interstate access charges paid by IXCs. Today it is recovered through the USF.

Long Term Support

The LTS mechanism[27] provides support to the National Exchange Carrier Association (NECA) Common Line revenue pool.[28] It allows the ILEC members of the pool to charge a below-cost Carrier Common Line (CCL)[29] interstate access rate to IXCs that is uniform for all carriers in the pool. The CCL access charge is a per-minute charge that recovers a portion of an ILEC's loop costs that are assigned to the interstate jurisdiction. Reducing the amount of loop costs that high-cost ILECs have to recover from IXCs through the CCL charge was intended to facilitate the availability of long distance service in rural areas that is reasonably comparable to the service options and rates available in urban areas.

Interstate Common Line Support

The ICLS mechanism[30] became effective on July 1, 2002 for rate-of-return regulated ILECs (typically higher-cost, small ILECs).[31] Its purpose is to replace revenues that were recovered through the CCL access charge element. The FCC believes that the CCL charge is an inefficient cost recovery mechanism and implicit subsidy because it recovers fixed loop costs through a per-minute rate. Therefore, as of July 1, 2003, the CCL charge will be eliminated and the revenues that it generated will instead be recovered primarily through a combination of higher end-user SLCs[32] and ICLS. It is important to recognize that ICLS does not provide rate-of-return ILECs with any additional revenues than they received prior to its implementation. It is simply a revenue-neutral shift of cost recovery that previously occurred through interstate access charges.

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[27] 47 C.F.R. §69.612.

[28] Pooling is a payment system under which the access revenues collected by ILECs are not kept, but instead are combined and redistributed based on each ILEC's cost of providing service. Pooling allows participants to reduce the volatility of their individual company revenues by dissipating those risks among numerous carriers. Prior to 1989, all ILECs were required to be part of the NECA Common Line pool and Carrier Common Line access rates were uniform nationwide. In 1989, carriers were permitted to withdraw from the Common Line pool. As a result, the LTS mechanism was established to reduce disparities in Carrier Common Line rates among ILECs. LTS originally consisted of payments from those companies that withdrew from the pool. Since 1998, the funds for LTS have been recovered through the USF.

[29] 47 C.F.R. §69.105.

[30] 47 C.F.R. Part 54, Subpart K.

[31] Rate-of-return regulation is designed to limit the profits an ILEC may earn from interstate access service. ILECs governed by rate-of-return regulation calculate their access charge rates using projected costs and projected demand for access services. The ILECs are limited to recovering their costs plus a prescribed return on investment, and are potentially obligated to provide refunds if their interstate rate of return exceeds the authorized level. The current authorized rate of return is 11.25 percent. *See, generally,* 47 C.F.R. Part 65.

[32] 47 C.F.R. §69.104.

High-Cost Model Support

The HCMS mechanism[33] provides support to non-rural ILECs with high loop costs. HCMS bases non-rural ILECs' high-cost loop support on their forward-looking costs, as estimated by an FCC cost model. More specifically, it compares the statewide average cost per line for non-rural ILECs, as estimated by the Commission's cost model, to a nationwide cost benchmark to determine eligibility for support. The Joint Board has acknowledged that because rural carriers lack the economies of scale and scope of the generally larger non-rural carriers, statewide averaging may not be appropriate for the high-cost mechanism providing support to rural carriers.[34]

Interstate Access Support

On July 1, 2000, the FCC began implementation of the IAS mechanism[35] for price cap-regulated ILECs (typically lower-cost, large ILECs)[36] to replace certain revenues previously collected through interstate access charges. Similar to the LTS and ICLS mechanisms for rate-of-return regulated carriers, the purpose of IAS is to facilitate comparable long distance rates nationwide and promote long distance competition in the high-cost rural areas served by price cap carriers.

Chart 4 shows the aggregate amount of high-cost funding, from all of the high-cost support mechanisms, that has been received by ILECs from 1999 to 2003.

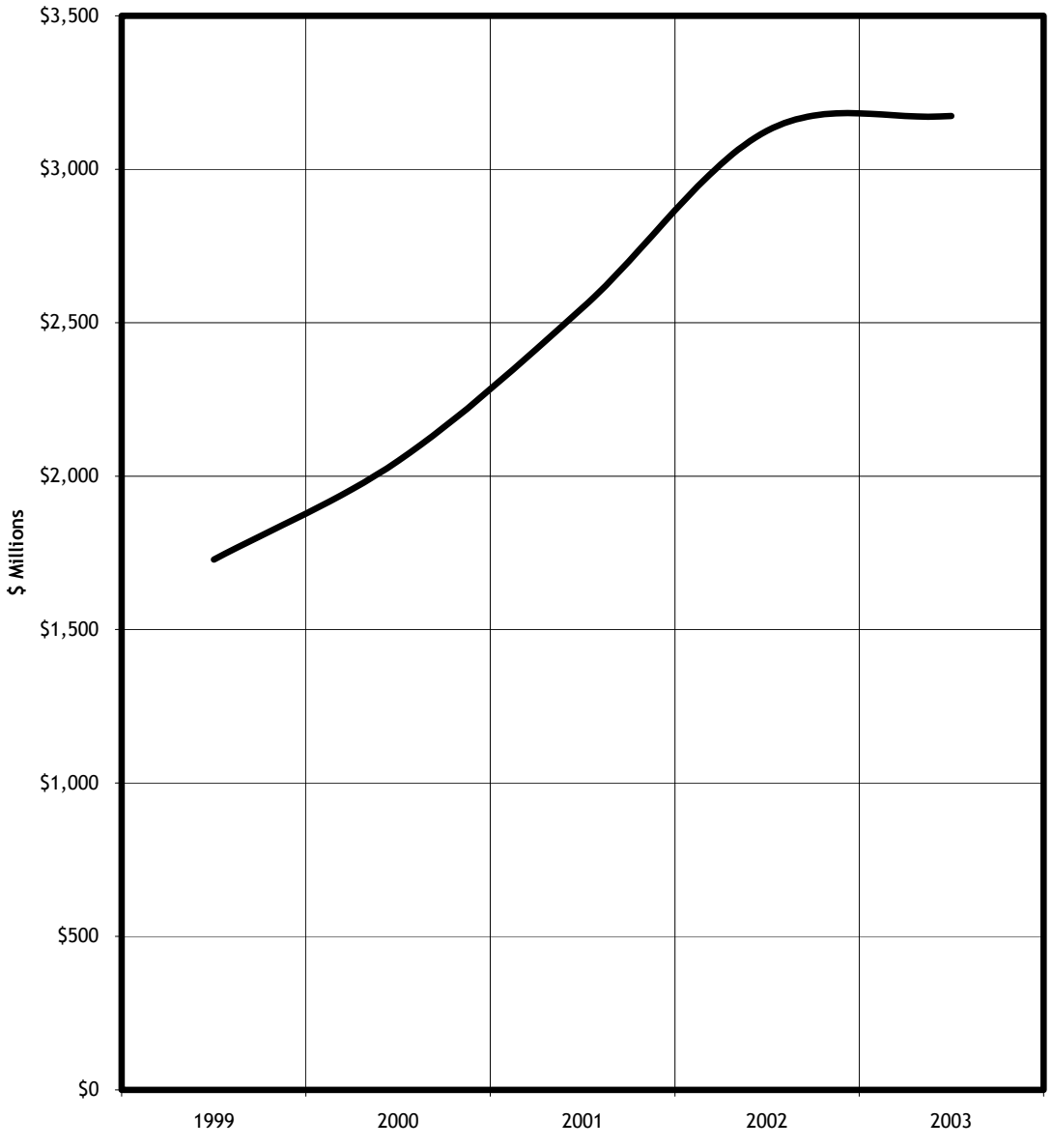
[33] 47 C.F.R. §54.309.

[34] *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Recommended Decision, FCC 02J-2, para. 28 (rel. Oct. 16, 2002).

[35] 47 C.F.R. Part 54, Subpart J.

[36] In the early 1990s, the largest ILECs were required to switch from rate-of-return regulation to a form of incentive regulation called price caps. The access charges of these carriers originally were set at the cost-of-service levels that existed when they initially entered price caps. Since that time, their access rates have been limited by price indices that are adjusted annually pursuant to a formula developed by the FCC. Price cap carriers are permitted to earn returns significantly higher than those ILECs that continue to be governed by rate-of-return regulation. *See*, 47 C.F.R. §§61.41-61.59.

Chart 4: Total Federal High-Cost Support Funding Levels for All ILECs
1999-2003



Source: 1999-2002 — Annualized 4Q USAC Projections
2003 — Annualized 1Q:2003 USAC Projections

There are two primary factors that have caused the recent growth in the high-cost funding being received by ILECs. First, there is the addition of the IAS mechanism for price cap-regulated carriers and the ICLS mechanism for rate-of-return regulated carriers. These mechanisms are a result of access charge reform efforts undertaken by the FCC.[37] These reforms have removed what the Commission believes to be implicit support built into interstate access charges and have shifted recovery of those revenues to explicit mechanisms within the High-Cost program. While there are legitimate reasons for these reforms, the introduction of the new mechanisms has nevertheless placed additional pressure on the size of the Fund. Projections indicate that IAS and ICLS combined will add more than $1 billion to the funding requirement for the High-Cost program in 2003.

Second, since 1993, caps have arbitrarily limited the amount of support available from the HCLS mechanism. From 1996 through the first half of 2001, the caps prevented ILECs serving high-cost areas from receiving $508.6 million in cost recovery.[38] In 2001, to ensure that rural ILECs continue to have appropriate incentives to maintain existing facilities and invest in network upgrades, the Commission decided that these caps should be increased or "re-based."[39] Certainly, the Commission's decision to re-base the caps was a welcome one. However, capping the Fund for rural ILECs fails to ensure that support remains sufficient to achieve the purposes of the universal service provisions of the 1996 Act.

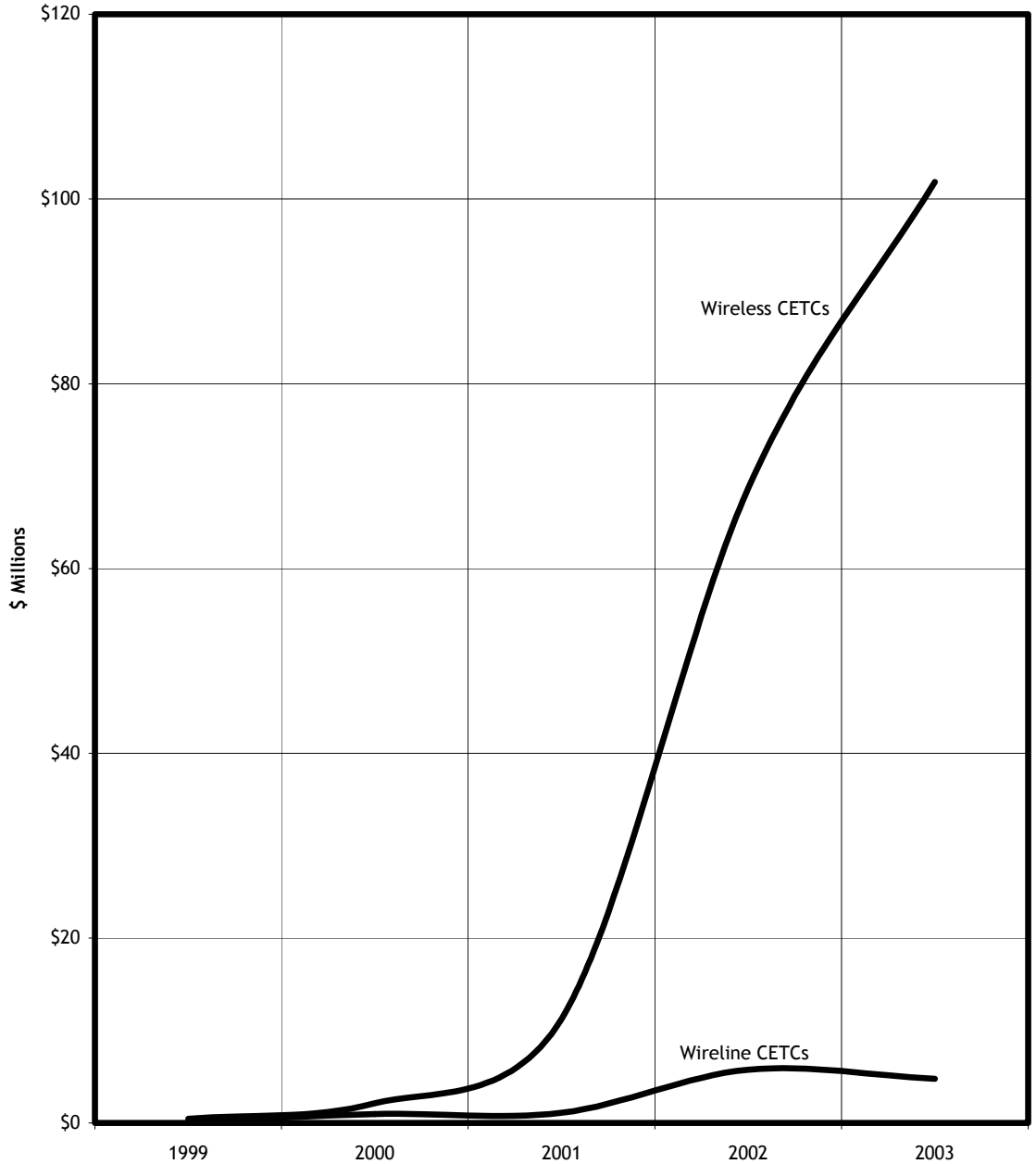
The distribution of federal high-cost support to CETCs is a relatively new phenomenon that began in earnest in 1999. Chart 5 shows the dramatic increase in support distributed to CETCs since that time.

[37] *See*, *generally, Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers*, CC Docket Nos. 96-262 and 94-1, Sixth Report and Order, *Low-Volume Long Distance Users*, CC Docket No. 99-249, Report and Order, *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Eleventh Report and Order, 15 FCC Rcd 12962 (2000). *See also, MAG Plan Second Report and Order*, 16 FCC Rcd 19613.

[38] *See*, Letter from Dorothy Attwood, Chief, Common Carrier Bureau, FCC, to the Honorable Max S. Baucus, United States Senate (Nov. 5, 2001). Prior to 2000, non-rural carriers also received support under the HCLS mechanism and were therefore also impacted by the caps.

[39] 47 C.F.R. §§36.603-36.604.

Chart 5: Total Federal High-Cost Support Funding Levels for All CETCs by Technology Type 1999-2003



Source: 1999-2002 — Annualized 4Q USAC Projections
2003 — Annualized 1Q:2003 USAC Projections

Includes support received by CETCs in both rural and non-rural service areas.

The data illustrated in Chart 5 indicates an alarming trend. The support going to wireless CETCs has grown from less than $500,000 in 1999 to a projection of more than $100 million in 2003. If state and federal regulators continue their liberal granting of ETC status to wireless carriers in high-cost rural service areas, this amount could grow significantly and rapidly. The wireless market is highly competitive, with multiple providers serving most markets. It is estimated that if all wireless carriers nationwide were granted ETC status that the annual funding level of the High-Cost program would grow by approximately $2 billion.[40] An increase of this magnitude would totally overwhelm the ability of the High-Cost program to continue supporting the provision of affordable, high-quality service – or in some cases, any service – to customers living in high-cost, remote areas of the nation. This would be an inefficient use of scarce universal service resources and is not in the public interest.

V. THE MARKET HAS SPOKEN: COMPETITION IS NOT ALWAYS IN THE PUBLIC INTEREST

Media headlines have been filled with poignant examples of the financial catastrophe that the telecommunications market has endured since 2000. Companies such as Williams Communications, Winstar, Northpoint Communications and Teligent have been driven into bankruptcy before being able to make competitive local telecommunications service a profitable venture.[41] According to Business Week, as much as $2 trillion in investor losses have occurred[42] as a result of a rush to competition in the telecommunications markets. In addition, FCC Chairman Michael Powell indicated at a hearing before the U.S. Senate in July 2002 that over 500,000 jobs in the telecommunications sector had been lost during the prior two years.[43]

Many of these now defunct carriers found that competitive markets do not guarantee future profitability, even in the most urban areas of the nation where it seems logical that the market could support multiple service providers. At the FCC's October 2002 *en banc* hearing on the financial state of the telecom sector, Lara Warner of Credit Suisse

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[40] This estimate was determined by taking the current 69 percent ratio of wireless to wireline lines and multiplying it by the projected $3.2 billion of portable ILEC high-cost funding for 2003. This estimate is considered to be conservative, since it assumes that wireless carriers will not increase the number of lines that they report in the service areas with the highest per-line support payments.

[41] In its ongoing analysis of global and domestic corporate defaults, Standard and Poor's has indicated that, from 1996 through the second quarter of 2002, nearly $90 billion in telecommunications debt has gone into default as a result of company bankruptcies. *See, "Telecommunications' Debt Debacle No Big Surprise,"* Standard and Poor's, May 27, 2001, pp 1-2. *See also,* Brooks Brady and Diane Vazza, "*Standard and Poor's Periodic Global Default Summaries*," Standard and Poor's, May 2, 2002 and July 26, 2002, pp. 1-2.

[42] Charles Haddad, *"Inside the Telecom Game,"* Business Week, August 5, 2002, p. 34.

[43] Statement of FCC Chairman Michael K. Powell on *"Financial Turmoil in the Telecommunications Marketplace,"* Before the U.S. Senate Committee on Commerce, Science, and Transportation, July 30, 2002, p. 6.

First Boston agreed, noting that the market did not respond well to competition created by regulation.[44]

Even a carrier as large as WorldCom, with approximately $30 billion in annual revenues, is not immune to the harsh realities of an unforgiving market. WorldCom's bankruptcy is particularly worrisome when one considers that UUNet, the Internet backbone provider owned by WorldCom, carries an estimated 65 percent of the world's Internet traffic flow.[45] Were UUNet's operations to be disrupted, global communications would be severely hampered, with monumental ramifications worldwide.

Although not of the same magnitude as WorldCom, a similar market failure in rural America would have significant and profound impacts. Problems in the urban markets were created when potential competitors reacted to uneconomic signals by constructing more capacity than could reasonably be supported by market demand. Such an overcapacity situation could easily be created in rural markets, if regulators support multiple carriers in sparsely populated areas where sufficient demand does not exist.

Many rural ILECs rely on high-cost funding for a significant portion of their operating cash flow and competitive carriers are understandably lured by the prospect of receiving this portable support. If the overall funding requirement grows to an unsustainable level, then support payments will either need to be frozen or scaled back, resulting in serious operating challenges for many rural carriers. At greatest risk would be continued service to customers in the most remote and highest-cost areas.

In today's uncertain environment, it is more important than ever for each and every American to have access to a proven telecommunications carrier that provides "critical infrastructure." A Presidential Executive Order[46] defines critical infrastructures as systems whose incapacity or destruction would have a debilitating impact on the defense or economic security of the nation. Telecommunications is among the critical infrastructures listed in the Executive Order.

Looking at the definition another way, a provider of critical telecommunications infrastructure must be one that is capable of providing its customers with reliable, ubiquitous, facilities-based service of the highest quality. Such a carrier must have the ability to ensure that telecommunications services remain available in the event of a regional or national emergency. Rural ILECs have a proud history of fulfilling this role and remain committed to doing so in the future. This is a role that most competitive carriers may be unable to fulfill due to a reliance on other carriers' networks, internal financial limitations, and/or service quality issues.

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[44] Edie Herman, *"Analysts, Economists Give FCC Pessimistic Outlook on Telecom Health,"* Communications Daily, October 8, 2002, p. 1.
[45] Stacey Cowley, *"UUNet Backbone Problems Slow Down the 'Net,"* IDG News Service, Oct. 3, 2002. *See,* www.nwfusion.com/news/2002/1003uunet.html.
[46] *Executive Order 13010 – Critical Infrastructure Protection*, 61 Fed. Reg. 37347 (1996).

For example, customers of mobile wireless carriers inherently accept lower levels of service quality and reliability as a trade-off for mobility. Particularly in rural service areas, wireless calls are often unable to be completed or are dropped.[47] This is due to gaps in service coverage or "dead spots," some of which may be due to geographic roadblocks such as mountains and trees. Although this lower level of service quality and reliability may be acceptable for a service that complements wireline service, it is certainly not satisfactory to serve as the critical telecommunications infrastructure in rural areas.

Therefore, it is essential that the granting of ETC status to competitive carriers be properly managed in the areas served by rural telephone companies to ensure that the universal service goals spelled out in the 1996 Act are achieved. It is foolhardy to support multiple carriers merely for the sake of artificially creating competition in areas where there is not a natural market that can sustain even one telecommunications carrier without support. Ignoring the economic lessons learned from the turn of events in the telecommunications sector, and continuing the rapid proliferation of CETC designations in rural service areas, will further strain the USF and make it more difficult for the established provider of critical infrastructure to continue serving that role.

Wireline telecommunications service is a high fixed-cost business.[48] These fixed costs remain even when a competitor captures some of the incumbent's customers or network usage. Thus, with fewer customers or less revenue-producing network usage, the incumbent's cost of serving each remaining customer increases. In America's high-cost rural service areas, if finite universal service resources are divided among multiple providers, there may no longer be sufficient support to maintain even one critical infrastructure provider. Such a situation will ultimately lead to deteriorating service quality, substantially higher rates, or even the financial failure of the carrier that serves as a "lifeline" for the most remotely located consumers.

In addition, without the continued presence and strength of rural ILECs, alternative telecommunications networks would be unable to maximize the benefit of their services as they all rely in some fashion on the universal nature of the existing wireline network. For instance, it is common knowledge that in rural areas, most calls involving a wireless subscriber either originate or terminate on the wireline network. Thus, if a rural ILEC was unable to continue providing universal service, there would probably be fewer wireless minutes of use, and some calls from wireless customers would go uncompleted. In other words, if the foundation crumbles, the house cannot stand.

Regulators must learn from the disastrous implosion of the telecommunications industry and not further compound the situation by allowing it to spread to geographic

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[47] According to a study by J.D. Power & Associates, in 2001 about 30 percent of wireless subscribers' calls to customer service centers were complaints related to dropped calls, bad reception, or calls not going through. This percentage is up from 19 percent in 2000. Simon Romero, "*Cellphone Service Hurt By Success,"* New York Times, Nov. 18, 2002, p. A1.

[48] Indeed, William J. Rouhana, former chief executive of now defunct Winstar Communications Inc., has noted that because telecommunications infrastructure requires so much capital, "… to have more than one competitor who controls the physical network may just not be possible." Peter S. Goodman, "*Telecom Sector May Find Past is Its Future,"* The Washington Post, July 8, 2002, p. A1.

areas with the most fragile markets. The proliferation of uneconomic competition within rural service areas could unintentionally jeopardize the ubiquity of America's telecommunications network. The prosperity and safety of the nation is far too critical to allow this to occur.

VI. STATE PUCS AND THE FCC HAVE GENERALLY FAILED TO PROPERLY EVALUATE THE PUBLIC INTEREST IN THEIR DECISIONS ON ETC APPLICATIONS FOR RURAL SERVICE AREAS

Section 214(e)(2) of the Act provides for ETC designations to be treated differently in the areas served by rural telephone companies as opposed to non-rural ILECs. Specifically, before a competitive carrier can be designated as an ETC in these areas, the state PUC or FCC must determine that it is in the public interest. However, a number of the determinations that have been made by state commissions and the FCC thus far have placed an over-emphasis on the benefits of competition and have equated the introduction of financially supported competition to serving the public interest. These decisions have overlooked or ignored the often significant costs and detriment to rural consumers that Congress obviously recognized could result from financially supporting competition in rural service areas.

In addition, it is apparent that the driving principle in these designation decisions has been competitive neutrality, with less attention paid to ensuring that all consumers in the area will retain, and gain, access to affordable and reasonably comparable telecommunications and information services, including advanced services. Yet, the Act has no mention of any one of its universal service principles being more important than any other, and the FCC's *First Report and Order on Universal Service* could not be clearer that all of the principles must be applied in a balanced fashion:

> We agree with the Joint Board's recommendation that our universal service policies should strike a fair and reasonable balance among all of the principles identified in section 254(b) and the additional principle of competitive neutrality to preserve and advance universal service. Consistent with the recommendations of the Joint Board, we find that promotion of any one goal or principle should be tempered by a commitment to ensuring the advancement of each of the principles enumerated above.[49]

What follows are examples of state and federal decisions on applications for ETC status in rural telephone company service areas. The first three examples demonstrate this almost singular focus on competition and competitive neutrality as the guiding principles in the public interest determination. The final example, which occurred in Utah, illustrates a more balanced approach to evaluating the costs and benefits of designating a CETC in a rural service area. It is worth noting that in the Utah case, designation of the

[49] *Universal Service First Report and Order*, 12 FCC Rcd 8803, para. 52.

CETC would have also permitted the carrier to draw support from the state universal service fund.

WASHINGTON

The Washington Utilities and Transportation Commission was one of the first state commissions to approve ETC status for a wireless carrier. The following are several excerpts from the Washington commission's December 1999 Order[50] designating U S Cellular (USC) as a CETC in 72 exchanges served by rural telephone companies:

> In considering whether USC should be designated as an ETC, the Commission is mindful that USC now competes with wireline carriers that receive universal service support. The fact that its competitors receive universal service support puts USC at a disadvantage in its ability to make cellular technology more widely available at competitive prices.[51]
>
> While the Commission also is concerned about erosion of universal service support, we view as overly speculative…that designating USC as an ETC will result in such erosion...Indeed, we believe it advances universal service by increasing affordable access to more types of service.[52]

While the Washington state commission voted to designate USC as an ETC in the service areas of rural telephone companies, one commissioner, William Gillis, dissented. In a well-reasoned statement, Commissioner Gillis opined:

> Not only is it my view that the 1996 Act and federal policy support separate consideration and implementation of appropriate universal service mechanisms and policies for Rural Carriers, I believe it is good policy. Rural Telephone Companies are fundamentally different in both their operations and market opportunities from large, urban-oriented telecommunications companies. In general terms, Rural Telephone Companies lack the economies of scope and scale available to non-rural companies, putting the financial viability of these companies at greater risk when competitors enter. In fact, the potential for effective and sustainable competition that delivers service universally under these circumstances may be limited.[53]

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[50] Washington Utilities and Transportation Commission, *United States Cellular Corporation; USOC of Washington RSA-4, Inc.; Western Sub-RSA Ltd. Partnership; McDaniel Cellular Telephone Company; Oregon RSA No. 2 Limited partnership; United States Cellular Operating Co. of Richland; Yakima, Washington MSA Limited Partnership. For designation as Eligible Telecommunications Carriers*, Docket No. UT-97-0345, Third Supplemental Order Granting Petition For Designation As Eligible Telecommunications Carrier (rel. Dec. 29, 1999).

[51] *Id.*, para. 43.

[52] *Id.*, para. 46.

[53] *Id.*, para. 73.

NORTH DAKOTA

In October 2001, the North Dakota Public Service Commission issued an Order[54] approving the designation of Western Wireless Corp. as an ETC in the study areas of 11 rural telephone companies in North Dakota. In the Order, the North Dakota commission found that:

> …designating Western as an additional ETC in the study area of each rural telephone company will facilitate competition, will provide choices for consumers of universal services, and will promote deployment of new technologies in rural areas. We find that effective competition is the surest incentive for carriers to provide quality telecommunications services in the most efficient and cost effective manner…We find that access to high cost subsidies on an equal footing with incumbents may facilitate competition for universal services in rural, high-cost areas that would not otherwise receive the benefits of competition.[55]

WYOMING

In August 1999, the Wyoming Public Service Commission dismissed an application for ETC status from Western Wireless Corp. on the grounds that the commission lacked jurisdiction to regulate cellular technology under state law. The following month, Western Wireless petitioned the FCC seeking ETC designation in the study areas of five rural telephone companies in Wyoming. Acting pursuant to Section 214(e)(6) of the Act, which provides the FCC with the authority to consider ETC designation requests that are not subject to the jurisdiction of a state commission, the FCC granted ETC status for Western Wireless in the requested areas. In the Order, the FCC noted that:

> …an important goal of the Act is to open local telecommunications markets to competition. Designation of competitive ETCs promotes competition and benefits consumers in rural and high-cost areas by increasing customer choice, innovative services, and new technologies…In addition, we find that the provision of competitive services will facilitate universal service to the benefit of consumers in Wyoming by creating incentives to ensure that quality services are available at "just, reasonable and affordable rates."[56]

UTAH

An exception to the trend of perfunctorily designating a CETC on the premise that it would increase competition occurred in the state of Utah. In upholding a decision of

[54] State of North Dakota Public Service Commission, *Western Wireless Corporation Designated Eligible Carrier Application*, Case No. PU-1564-98-428, Order on Remand (rel. Oct. 3, 2001).
[55] *Id.*, para. 19.
[56] *Federal-State Joint Board on Universal Service; Western Wireless Corporation Petition for Designation as an Eligible Telecommunications Carrier in the State of Wyoming*, CC Docket 96-45, Memorandum Opinion and Order, 16 FCC Rcd 48, 55, para. 17 (2000).

the Utah Public Service Commission that denied ETC status for Western Wireless Corp., the Utah Supreme Court[57] noted the cost/benefit analysis the Utah commission undertook as part of its deliberation:

> The PSC found that it would not be in the public interest to designate WWC as an additional ETC in rural areas served by incumbent carriers. It found that designation of WWC as an ETC in these areas would increase demands on the state universal service fund without any offsetting benefits and consequently declined to designate WWC as an ETC in these areas.[58]

The Utah Supreme Court went on to point out that:

> …the [Utah Commission's] Order says that in the absence of corresponding public benefits, increasing the burdens on the State [universal service] Fund is not in the public interest…Thus, the [Utah Commission's] Order is not against competition per se, but, rather, merely recognizes that in some instances competition in rural areas by multiple ETCs receiving state universal service support may not be in the public interest.[59]

Based on the majority of the forgoing designation decisions, it is clear that an additional set of principles must be developed to guide state PUCs and the FCC in making the important public interest determinations that are at the core of considering ETC applications in rural telephone company service areas. In particular, for the public interest to be served, it will be necessary to demonstrate that the benefits to be derived from supporting multiple carriers will exceed the costs created by supporting multiple networks.

VII. PUBLIC INTEREST PRINCIPLES TO GUIDE STATE PUCS AND THE FCC WHEN CONSIDERING ETC APPLICATIONS FOR RURAL SERVICE AREAS

The current practice of liberally designating additional ETCs in the service areas of rural telephone companies is not sustainable, based on the current rate of growth of CETC support payments and the overall size of the USF. Just as important, however, is that in many cases, multiple ETC designations in a rural service area will not serve the public interest. This includes the interests of rural consumers – for whom access to critical telecommunications infrastructure and high-quality, ubiquitous service may be jeopardized – and consumers nationwide who are the ultimate contributors to the USF.

[57] *WWC Holding Co. Inc. v. Public Service Commission of Utah, et al*, Case No. 20000835, 2002 UT 23 (fil. March 5, 2002).
[58] *Id.*, para. 5.
[59] *Id.*, para. 13.

Therefore, state PUCs and the FCC should adopt the following universal service public interest principles to guide them in their consideration of ETC applications for rural telephone company service areas:

1. Rural consumers should receive access to affordable, high-quality telecommunications and information services, including advanced services, that are reasonably comparable to those services provided in urban areas and at reasonably comparable rates.

This principle incorporates several of the universal service principles adopted by Congress in Section 254(b) of the 1996 Act. Section 254(b)(1) of the Act states that quality services should be available at just, reasonable and affordable rates. Section 254(b)(2) states that access to advanced telecommunications and information services should be provided in all regions of the nation. And, Section 254(b)(3) states that consumers living in rural and high-cost areas should have access to telecommunications and information services, including advanced services, that are reasonably comparable to those services provided in urban areas and at reasonably comparable rates. In sum, the designation of a CETC in a rural service area must not have the potential to degrade or inhibit rural consumers' access to affordable, high-quality telecommunications and information services, including advanced services, that are reasonably comparable to the services and rates offered to urban consumers.

2. The high-cost support mechanisms should not be used to incent uneconomic competition in the areas served by rural telephone companies.

Competitive entry that is motivated solely by the prospect of universal service support does not serve the public interest. Instead, it unnecessarily swells the Fund and weakens the ability of the incumbent carrier to continue providing high-quality and reasonably comparable services and rates – especially to the most remotely located, highest-cost customers. FCC Commissioner Kevin Martin succinctly explained the problem when he stated:

> …I have some concerns with the Commission's policy…of using universal service support as a means of creating "competition" in high cost areas. I am hesitant to subsidize multiple competitors to serve areas in which costs are prohibitively expensive for even one carrier. This policy may make it difficult for any one carrier to achieve the economies of scale necessary to serve all of the customers in a rural area, leading to inefficient and/or stranded investment and a ballooning universal service fund.[60]

Rural ILECs have already made substantial investments in the high-cost rural portions of the nation based, at least in part, on a system of support that would allow full cost recovery. If these costs cannot continue to be recovered through universal service, other revenue sources will need to be pursued, including local rate increases that could quickly exceed levels that are reasonably comparable to rates in urban areas. If an alternative re-

[60] *MAG Plan Second Report and Order*, Separate Statement of Commissioner Kevin J. Martin, 16 FCC Rcd 19770.

covery method cannot be found or is not permitted by regulators, then these costs are "stranded," and the incumbent is unable to achieve full cost recovery. This hampers the incumbent's efforts to continue investing in the network, provide high-quality service throughout the service area, and deploy new and advanced services.

3. The USF is a scarce national resource that must be carefully managed to serve the public interest.

Political pressures and fiscal responsibility require that the USF be kept at the levels necessary to serve the purposes stated in the 1996 Act. The Act provides that consumers in all regions of the nation should have access to services that are reasonably comparable to those available in urban areas and at reasonably comparable rates. To accomplish this, investment in rural infrastructure needs to be encouraged, and funding must remain robust enough for this to occur.

Universal service funds should not be used, however, to create artificial competition. If ETC status continues to be granted with minimal restriction in rural service areas, then the size of the fund will grow to an unsustainable level[61] and ultimately leave no carrier with sufficient support to provide universal service. Moreover, consumers nationwide should not be unnecessarily burdened by excessive universal service surcharges. After all, end-user customers are the ones who ultimately fund universal service support and there is a limit to how much they reasonably can and should be expected to pay.

Generally, state commissions are the guardians of the high-cost portion of the federal USF. However, state PUCs often have made their ETC designations in rural service areas on the misguided assumption that competition needs to be jump-started using limited federal high-cost support. Moreover, since state commissions are not responsible for the funding of federal universal service support, it is tempting for them to designate CETCs in their states in order to receive additional federal dollars. State determinations must avoid these assumptions and temptations to ensure that scarce national resources are properly applied to serve the public interest.

4. Rural universal service support reflects the difference between the cost of serving high-cost rural areas and the rate levels mandated by policymakers.

High-cost universal service support reflects the legitimate costs of rural ILECs serving as the ubiquitous, facilities-based common carriers in high-cost rural areas. Absent this support, consumers in high-cost regions of the nation would not have access to affordable, high-quality telecommunications services that are reasonably comparable to the services and rates available in urban areas. Any attempts to artificially limit the size of the Fund or the amounts that individual carriers receive will affect the ability of rural ILECs to deliver universal service at the established local rates. However, universal service must not be a "creamskimmer's subsidy" to be doled out to carriers that only seek to serve the most lucrative customers.

[61] As mentioned previously, if blanket ETC status was granted to all wireless service providers nationwide, it is estimated that the annual funding level of the federal High-Cost program would increase by approximately $2 billion. *See, supra,* p. 21.

5. The public interest is served only when the benefits from supporting multiple carriers exceed the costs of supporting multiple networks.

Competition alone is not a sufficient reason for designating additional ETCs in rural service areas. Both costs and benefits must be carefully weighed if limited federal funding is to be managed for the optimal public benefit. The costs of supporting multiple networks include both the increased funding requirements for any additional ETC, as well as the decreased network efficiency of all carriers that results when multiple carriers serve sparsely populated areas.

It is not in the public interest when high-cost support is provided to carriers that serve only low-cost or high-volume customers.[62] Moreover, the local presence and commitment to community economic development that is characteristic of many rural ILECs is an intangible that must be considered in applying the public interest test. The burden of proof must be on the petitioning competitive carrier to demonstrate that their designation as an ETC would be in the public interest.

6. In areas where the costs of supporting multiple networks exceed the public benefits from supporting multiple carriers, the public interest dictates providing support to a single carrier that provides critical telecommunications infrastructure.

The local telecommunications market is not a homogenous market nationwide. In many high-cost areas served by rural telephone companies, the costs of supporting multiple carriers exceed the public benefits from having multiple suppliers. Such areas exhibit the classic characteristics of a natural monopoly. The 1996 Act specifically provides for different ETC policies in these markets. If Congress had intended that additional ETCs be approved in all areas served by rural telephone companies, then it would not have made the explicit exception to the policy established for the markets of non-rural ILECs. This clearly indicates that Congress anticipated there would be some rural service areas in which the support of multiple ETCs would not be in the public interest because it would inhibit investment in critical infrastructure or cause local rates to increase to unreasonable levels. In these areas, there should only be one ETC that is capable of, and committed to, providing all customers with reliable, facilities-based service of the highest quality.

7. The cost of market failure in high-cost rural America could be severe.

Our nation has observed the inevitable market failures that occur when excessive investment is made in response to uneconomic market signals created by policymakers. These experiences have shown that the market can be cruel and unforgiving when well-intentioned policy collides head-on with actions and plans that do not also have sound economic underpinnings. In rural service areas, alternative carriers may not emerge to serve the most remote and highest-cost customers if the established provider of high-quality, facilities-based service is forced into bankruptcy or is no longer able to serve

[62] For example, in many cases mobile wireless service providers have constructed facilities only in town and along major highways where customer density is relatively high and support is not needed.

throughout the area. Our heightened awareness of the needs of a ubiquitous telecommunications infrastructure to serve the public safety and national security needs of the nation requires caution in pursuing unwarranted market experimentation.

VIII. THE FCC SHOULD ADOPT A STANDARDIZED SET OF MINIMUM QUALIFICATIONS, REQUIREMENTS AND POLICIES TO BE APPLIED TO POTENTIAL AND EXISTING ETCS IN RURAL SERVICE AREAS

As previously demonstrated, state PUCs and the FCC are generally approaching ETC designations in rural service areas with a mindset that regards financially supported competition, in and of itself, as serving the public interest without thoroughly considering other factors. This approach to public interest determinations is problematic as Congress did not presume that supported competition would serve the public interest in all areas served by rural telephone companies. If it had, there would have been no need for the Act to say that state commissions "may" designate more than one carrier in rural telephone company service areas, as opposed to "shall" for all other service areas, or require a public interest determination just for these service areas. Thus, factors *other than* the promotion of competition in rural service areas must play the dominant role in state PUCs' and the FCC's public interest determinations.

If a carrier is going to be eligible to receive universal service funding, then regulators have a duty to ensure that the carrier can, and will, provide true universal service. Therefore, a standardized set of minimum qualifications, requirements and policies should be adopted by the FCC. These federal criteria should be applied by state PUCs and the Commission itself to potential and existing ETCs in rural telephone company service areas. Using these federal criteria as a template would assist state commissions and the FCC in determining whether or not the public interest would be served by a particular carrier's designation as an ETC. It would also improve the long-term sustainability of the USF as only the most qualified carriers that are capable of, and committed to, being true providers of universal service would be able to receive and keep the ETC designation. There must be a high degree of confidence that these obligations can and will be met prior to the granting of ETC status.

In order to be considered for ETC status in a rural telephone company service area, a carrier should be required to demonstrate to the state commission or FCC that it meets, and will abide by, all of the following qualifications and requirements:

1a. A carrier must demonstrate its ability and willingness to provide all of the services supported by the federal High-Cost program throughout the service area.

Presently, there are nine services supported by the federal High-Cost program. They are: (1) voice grade access to the public switched network; (2) local usage; (3) dual tone multi-frequency signaling or its functional equivalent; (4) single-party service or its functional equivalent; (5) access to emergency services; (6) access to operator services;

(7) access to interexchange service; (8) access to directory assistance; and (9) toll limitation for qualifying low-income consumers.[63] A carrier must demonstrate to the state PUC or FCC that upon designation as an ETC, it will be capable of, and committed to, providing all of the supported services to all consumers in the service area upon reasonable request. To the extent that additional services may be added to the universal service definition in the future, all potential and existing ETCs must demonstrate that they are capable of, and committed to, providing them as well.

1b. A carrier's local usage offering should be evaluated as part of the public interest determination.

Local usage is one of the services presently supported by the USF. Under the FCC's rules, local usage is defined as "an amount of minutes of use of exchange service, prescribed by the Commission, provided free of charge to end users."[64] This definition is ambiguous due to the fact that the FCC has never prescribed an actual number of minutes that is necessary to fulfill the local usage requirement. It is therefore incumbent on each state PUC and the FCC to determine whether or not a carrier seeking ETC status is offering a reasonable amount of local usage. Part of this determination should focus on whether or not the offering contains sufficient "free" local minutes to result in rates that are comparable to the rates available in urban areas. ETC status should not be granted to carriers that provide less local usage than is required of the ILEC by the state PUC.

1c. In addition, equal access to interexchange service should be added to the list of supported services.

Equal access to interexchange service is providing consumers with the ability to access the toll service providers to which they are presubscribed by dialing 1+ number; that is, without having to dial an access code. Congress believed that this capability was so important that it required all LECs – both ILECs and competitive LECs (CLECs) – to provide it.[65] The 1996 Act does not require mobile service providers to provide equal access. However, pursuing an ETC designation is a *choice*, not a requirement. And with that designation comes the responsibility to provide rural consumers with a baseline level of service. If a mobile service provider *chooses* to seek ETC status, receive universal service funds, and offer services that are designed to substitute for a LEC's services, then it too should be capable of offering equal access to interexchange service. The FCC's universal service principle of competitive neutrality demands it. Moreover, equal access facilitates comparable access to interexchange services in all regions of the nation, as required by Section 254(b) of the Act.

[63] 47 C.F.R. §54.101.
[64] 47 C.F.R. §54.101(a)(2).
[65] 47 U.S.C. §251(b)(3).

2a. In fulfilling the requirement to advertise its services and rates, an ETC must emphasize its universal service obligation to offer service to all consumers in the service area.

A competitor's ability to limit its advertising to only those customers and portions of the ILEC's service area that provide the greatest revenue and profit potential (*ex.,* high-volume business customers, "downtown" areas) gives the competitor an unfair advantage over the incumbent that continues to function as the ubiquitous, facilities-based common carrier. Thus, it is essential that all consumers in the service area, including those residing in the most remote regions, are made aware that the CETC is obligated to offer the supported services to everyone. As an ETC, a carrier cannot target its advertising only to the most desirable customers and segments of the service area. ETC designation is a commitment to serve all, and this commitment must be vigorously enforced.

2b. An ETC must actively advertise to Lifeline-qualifying (low-income) consumers.

The FCC's rules state that all ETCs must publicize the availability of Lifeline service in a manner reasonably designed to reach those likely to qualify for the service.[66] State commissions should make sure that this rule is adhered to so that low-income consumers are aware of the carrier and service choices they have available to them. As an ETC, a carrier cannot advertise only to those consumers that provide the greatest revenue potential.

3. A carrier must have formal arrangements in place to serve customers where facilities have yet to be built out.

The 1996 Act requires that in order to be designated as an ETC, a carrier must be able to provide all of the services included in the universal service definition "throughout the service area for which the designation is received."[67] This means to the extent that a carrier is not capable of providing service entirely through its own facilities, it will need to enter into formal arrangements with the ILEC or other carriers to purchase unbundled network elements (UNEs) and/or resell services.[68] The FCC has stated that although the law does not require the provision of service throughout the service area prior to ETC designation, a new entrant does need to make a "reasonable demonstration" to the state commission of its capability and commitment to provide universal service upon designa-

[66] 47 C.F.R. §54.405(b).
[67] 47 U.S.C. §214(e)(1).
[68] It should be noted that Section 251(f) of the Act exempts rural telephone companies from, *inter alia*, the duty to provide requesting carriers with unbundled access to network elements and the duty to offer its services to other carriers for resale at wholesale rates. This exemption remains in place until (1) the rural telephone company has received a bona fide request for interconnection, services, or network elements, and (2) the state commission determines that the request is not unduly economically burdensome, is technically feasible, and is consistent with Section 254 (the universal service provisions) of the Act. However, resale of a rural ILEC's services at retail rates is always an option under Section 251(b)(1) of the Act.

tion.[69] The Commission cautions that "a demonstration of the capability and commitment to provide service must encompass something more than a vague assertion of intent on the part of the carrier to provide service."[70] One of the methods the FCC lists for demonstrating an ability to provide service throughout the service area is "a description of the extent to which the carrier has entered into interconnection and resale agreements."[71] It is essential for state commissions and the FCC to carefully review such agreements to ensure that the competitor is capable of serving all of the consumers in the rural service area upon designation as an ETC.

4a. A carrier must have a plan for building out its network once it receives ETC designation and must make demonstrative progress toward achieving its build-out plan in order to retain ETC designation.

Granting ETC status to a carrier whose long-term business plan assumes that facilities and services will always be available from the ILEC in a rural service area is not in the public interest. The economics of providing high-quality, facilities-based telecommunications service in sparsely populated, high-cost rural areas is tenuous at best. A competitor's long-term reliance on a rural ILEC's unbundled facilities and/or the resale of its services may reduce the capability or incentive of the ILEC to continue investing in infrastructure. This is exactly the concern that led Congress to establish an exemption for rural telephone companies from the UNE and resale requirements that the Act otherwise imposes on incumbents.[72]

Granting ETC status to a carrier that has no plans or ability to build out its network throughout the service area indefinitely maintains its dependence on the viability of the ILEC's network. Congress did not intend for ETCs to rely on another carrier's network as a long-term strategy as the Act affords any carrier, including the incumbent, the right to relinquish its ETC designation in areas with multiple ETCs.[73] Therefore, ETC status should only be granted to carriers who can demonstrate the ability and commitment to invest in infrastructure and build out their networks to serve all of the consumers in the service area. Progress should be monitored to ensure that infrastructure build-out commitments are being fulfilled in a timely manner.

4b. A carrier should be evaluated on the ability of its network to remain functional in times of emergency and the extent of its dependence on other carriers' networks to remain functional.

This need has never been so apparent as it is today. Surveys of infrastructure users show that a major failure of telecommunications would have a significant impact on

[69] *Federal-State Joint Board on Universal Service, Western Wireless Corporation Petition for Preemption of an Order of the South Dakota Public Utilities Commission*, CC Docket No. 96-45, Declaratory Ruling, 15 FCC Rcd 15168, 15178, para. 24 (2000).
[70] *Id.*
[71] *Id.*
[72] 47 U.S.C. §251(f).
[73] 47 U.S.C. §214(e)(4).

business operations.[74] In Spring 2002, Howard Schmidt, vice chairman of the President's Critical Infrastructure Protection Board, stated that "private-sector participation is vital to efforts to devise the plan to protect critical assets because for the first time in the nation's history the military alone cannot protect the country from an attack to critical assets."[75] The security of a carrier's network and the ability to protect critical telecommunications infrastructure should be a major consideration in evaluating the public interest before granting ETC status.

5. A carrier must demonstrate that it is financially stable.

A carrier should be required to provide sufficient evidence that it has the expectation of long-term financial stability. In light of the recent spate of investor losses, unemployment and local economic disruptions caused by telecommunications company bankruptcies, it will not serve the public interest if a financially unsound carrier is provided universal service support and is still unable to achieve long-term profitability that is sufficient to sustain its operations. It makes no sense to disrupt a rural service area by designating a carrier that does not have the financial strength to make a long-term commitment.

In addition, state PUCs and the FCC should adopt the following policies regarding ETC designations in rural telephone company service areas:

1. ETC designations in rural telephone company service areas should be made at the study area level.

A study area is generally defined as an ILEC's entire service territory within one state.[76] In the 1996 Act, Congress specifically recognized the unique challenges faced by rural telephone companies when defining the area in which a competitor would be required to offer service as a prerequisite to receiving ETC designation. Specifically, Section 214(e)(5) of the Act states:

> The term "service area" means a geographic area established by a State commission for the purpose of determining universal service obligations and support mechanisms. In the case of an area served by a rural telephone company, "service area" means such company's "study area" unless and until the Commission and the States, after taking into account recommendations of a Federal-State Joint Board instituted under section 410(c), establish a different definition of service area for such company.

Thus, Congress established a presumption that a rural telephone company's entire study area would be the area that a competitor would have to agree to serve before it

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[74] *Public Confidence*, Report of the President's Commission on Critical Infrastructure Protection, p. 6 (1997). *See*, www.ciao.gov/resource/pccip/PublicConfidence.pdf.

[75] Heather Harreld, *"Bush Urges Private Sector to Shore Up Networks,"* InfoWorld, June 19, 2002. *See,* www.infoworld.com/articles/hn/xml/02/06/19/020619hnbushinfra.xml.

[76] Holding companies may own multiple operating companies and thus have multiple study areas within a state.

could become eligible for universal service support. If ETC designation is granted for sections of a rural telephone company's study area, competitors will be incented to seek designation only in those sections where the profit potential is greatest and the cost to serve is lowest, while ignoring the less lucrative, higher-cost areas. This impedes the rural ILEC's ability to offer services throughout the study area that are reasonably comparable to those offered in urban areas and at reasonably comparable rates, and therefore is not in the public interest.

It is critical for state commissions and the FCC to recognize that the primary purpose of the High-Cost program is not to promote competition. It is to ensure that all consumers – particularly those living in the most remote and highest-cost areas – have access to high-quality telecommunications services that are affordable and reasonably comparable to the services and rates offered in urban areas. The ability of competitors to cream-skim through the adoption of more narrowly defined service areas does nothing to promote true universal service. It only increases the cost of providing service to the remaining customers that only the incumbent has the obligation to serve. This, in turn, places at risk the incumbent's ability and incentive to continue investing in the infrastructure that brings high-quality services to these customers.

In addition, when a rural ILEC loses a customer, it loses the revenue earned from access charges and vertical services. These revenues are critical to funding the network upgrades that extend new and advanced services to greater numbers of consumers. Thus, designation of CETCs for service areas that are smaller than the ILEC's study area obstructs the availability of advanced services in high-cost rural areas, contrary to the universal service objectives of the Act.

Furthermore, CETCs that are designated for smaller service areas are able to target their marketing to a smaller group of customers than the ILEC, giving them an unfair competitive advantage to attract the best customers. This is inconsistent with the Commission's principle of competitive neutrality.

Some state commissions have begun to take the mistaken position that now that rural telephone companies have been permitted to target or "disaggregate" their universal service support to below the study area level,[77] this justifies designating CETCs for smaller service areas. However, disaggregation addresses only one component of the arbitrage opportunities an essentially unregulated competitor has in comparison to a rate-regulated incumbent. With access charges and local rates generally averaged throughout their study areas, incumbents continue to be disadvantaged targets for competitors whose rates can reflect cost differences with greater granularity.

Clearly, the implications of adopting a different service area definition for a CETC are great and, therefore, CETCs should only be designated for a rural telephone

[77] *See, Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Fourteenth Report and Order, Twenty-Second Order on Reconsideration, and Further Notice of Proposed Rulemaking, *Multi-Association Group (MAG) Plan for Regulation of Interstate Services of Non-Price Cap Incumbent Local Exchange Carriers*, CC Docket No. 00-256, Report and Order, 16 FCC Rcd 11244, 11299-11309, paras. 136-164 (2001). *See also*, 47 C.F.R. §54.315.

company's entire study area. Nevertheless, if a state commission decides to designate a CETC for a service area other than the rural telephone company's study area, the Act requires that it seek the concurrence of the FCC. Under FCC rules, if the Commission does not act on a state's petition to redefine a rural telephone company service area within 90 days of issuing a Public Notice, it is deemed approved.[78] This rule should be modified to require the FCC to fully review the petition and issue an order before it can take effect. The decision to designate a CETC for a service area other than the rural telephone company's study area is far too consequential to be permitted to take effect by the default of the Commission's non-action.

2. State PUCs and the FCC should ensure that CETCs will be capable of providing high-quality service to all of the customers in the service area should the rural ILEC find it necessary to relinquish its own ETC designation.

In any area served by more than one ETC, the Act permits an ETC to relinquish its designation by giving advance notice to the state commission. Within one year after the PUC approves the relinquishment of ETC status, the remaining ETCs must be capable of serving all of the customers served by the relinquishing carrier.[79] This flexibility to withdraw as an ETC has the potential result of the incumbent carrier discontinuing service in areas where it is no longer economically feasible or sufficiently profitable. By allowing any ETC – including the ILEC – to relinquish its designation in areas with multiple ETCs, it is clear that Congress intended for state commissions and the FCC to make such designations prudently and with the knowledge that a carrier, once designated, may be required to serve all of the customers in the service area. The FCC recognized this in a 2002 ETC designation Order:

> …Congress expressed a specific intent to preserve and advance universal service in rural areas as competition emerges. Specifically, we believe that Congress sought to ensure that consumers in areas served by rural telephone companies continue to be adequately served should the incumbent telephone company seek to relinquish its ETC designation under section 214(e)(4).[80]

The possibility of a rural ILEC relinquishing its ETC designation is not as remote as it once seemed. Recent bankruptcies demonstrate that rapidly changing business and economic conditions could place existing ETCs at risk. It is therefore essential that state commissions and the FCC fully evaluate a carrier's capability and commitment to serve as the sole provider of ubiquitous, high-quality service prior to granting ETC status. As previously discussed, this includes making sure that the carrier has a network build-out plan, is financially sound and is able to remain functional in times of emergency.

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[78] 47 C.F.R. §54.207(c).
[79] 47 U.S.C. §214(e)(4).
[80] *Federal-Sate Joint Board on Universal Service, Guam Cellular and Paging, Inc. d/b/a/ Guamcell Communications Petition for Designation as an Eligible Telecommunications Carrier In the Territory of Guam*, CC Docket No. 96-45, Memorandum Opinion and Order, 17 FCC Rcd 1502, 1508-1509, para. 16 (2002).

3. Any service quality standards, reporting requirements and customer billing requirements established by the state PUC should be applied equally to all ETCs in the state.

State commissions have a public interest obligation to impose the same service quality standards,[81] reporting requirements[82] and customer billing requirements on all ETCs that it imposes on the ILEC. Because an ETC designation connotes an ability to serve as the sole service provider throughout the designated area, states should ensure that every carrier it designates is capable of meeting whatever minimum levels of service quality that it expects from the ILEC. The Fifth U.S. Circuit Court of Appeals determined that states are free to impose their own ETC eligibility requirements in addition to those in the 1996 Act,[83] and states may wish to make the ability to meet certain service quality standards a prerequisite to ETC status.

Once designated, all CETCs should be required to meet the same service quality standards and adhere to the same reporting and billing requirements imposed on the ILEC in order to retain ETC status. Certainly, state PUCs should continue to have the autonomy to decide what service quality standards, reporting requirements and customer billing requirements are appropriate for the carriers in their state. But, whatever it decides on should be applied equally to all ETCs, not just the ILEC. In addition to serving the public interest, evenly applied service quality standards, and reporting and billing requirements is competitively neutral and promotes a more level playing field among ETCs.

4. State PUCs have the authority to decertify any ETC that is not meeting any of the qualifications or requirements enumerated above.

An ETC that ceases to meet any of the recommended qualifications and requirements may no longer be serving the public interest. If the PUC makes that determination, it has a duty to decertify that carrier.

State PUCs should be required to certify annually to the FCC that they are applying the established standardized list of minimum qualifications, requirements and policies to potential and existing ETCs in rural telephone company service areas.

Under FCC rules, states are required to file annual certifications with the Commission stating that all federal high-cost support provided to carriers within the state will be used only for the provision, maintenance and upgrading of facilities and services for which the support is intended.[84] This rule recognizes the need for accountability and good stewardship by state commissions in their administration of limited federal high-cost funding.

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[81] *Ex*., emergency operation provisions, completion of called numbers, voice quality specifications.
[82] *Ex.*, reports on customer troubles, reports on quality of service, traffic studies.
[83] *Texas Office of Public Utility Counsel v. FCC*, 183 F.3d 393, 418 (5th Cir. 1999).
[84] 47 C.F.R. §§54.313(a), 54.314(a).

For the same reason, states should be required to certify annually to the FCC that they are applying the established standardized list of minimum qualifications, requirements and policies to potential and existing ETCs in rural service areas. This would ensure that ETC applications for rural telephone company service areas were being evaluated in a relatively consistent manner using the same set of criteria. More importantly, it would help to ensure that the carriers designated as ETCs in rural service areas will truly serve the public interest. Because ETC designation allows for the receipt of scarce federal universal service resources, it is critical that states are held accountable for their designation decisions in rural service areas.

Finally, the FCC should direct USAC to develop auditing procedures for reported lines.

Auditing procedures for reported lines are necessary to minimize the waste, fraud and abuse that may occur within the High-Cost program. This, in turn, helps to: (1) minimize the contribution obligations imposed on carriers and customers, (2) maintain a favorable public perception of the program, and (3) improve the long-term sustainability of the Fund.

For example, the Commission's rules allow mobile wireless service providers to use customer "billing addresses" to identify the service location of their mobile customers.[85] This rule provides wireless carriers with the opportunity to encourage customers to establish a billing presence in high-cost areas where support is available, even if this is not where the customer lives or even uses the service. If this were to occur, it would waste limited universal service resources that are ultimately collected from the nation's ratepayers and further endanger the sustainability of the Fund. The public should have the utmost confidence that the USF that they pay for is being used judiciously, for the purposes for which it is intended, and is not being abused. If the public's faith in the program is compromised, so too is the future of a fund that has played a significant role in ensuring the ubiquity of the nation's high-quality telecommunications network, and making it accessible and affordable for all.

IX. CONCLUSION

The future of universal service in high-cost rural America is in jeopardy. The size of the federal USF has experienced tremendous growth in recent years, raising the concern that funding may, at some point, no longer be permitted to grow or even be curtailed. If the liberal designation of CETCs in rural service areas continues unabated, then funding may not be sufficient in some high-cost areas for any carrier to offer quality services at rates that are affordable and that are reasonably comparable to the services and rates offered in urban areas, as required by the 1996 Act. Moreover, in many instances, financially supported competition in the areas served by rural telephone companies will not further the goals of universal service. Just the opposite, it will only make it more dif-

[85] 47 C.F.R. §54.307(b).

ficult for the sole provider of ubiquitous, high-quality, facilities-based service to continue serving the most remote customers and may even threaten their viability. It will also weaken rural carriers' ability and incentive to continue making the upgrades to their critical infrastructure that would extend advanced services to greater numbers of consumers.

Congress clearly recognized the unique challenges faced by rural telephone companies in their provision of service when it required state PUCs and the FCC to make a public interest determination prior to designating additional ETCs in these service areas. It is therefore of paramount importance that regulators treat the USF as the scarce national resource that it is, and take greater care when contemplating additional ETC designations in the areas served by rural telephone companies. In particular, state PUCs and the FCC should adopt the public interest principles recommended herein to guide them in their consideration of ETC applications for rural service areas. The FCC should also adopt the recommended standardized set of minimum qualifications, requirements and policies for state PUCs and the Commission to apply to potential and existing ETCs in rural service areas.

To be sure, these recommendations are not the panacea for all that ails the High-Cost universal service program. There is more that needs to be done. Nonetheless, they are an important and essential first step to ensuring that the success of the nation's nearly 70-year-old policy of universal service is continued, and that rural consumers can continue to participate in the telecommunications revolution.

Appendix A:
Universal Service Funding Data

Table 1
Total Federal Universal Service Support Funding Levels and Federal Universal Service Support Funding Levels by Program 1986-2003 ($ Millions)

		Universal Service Programs			
Year	Total Federal Universal Service Support Funding Levels	High-Cost Support	Low Income Support	Schools and Libraries	Rural Health Care
1986	$ 55.63	$ 55.63	$ -	$ -	$ -
1987	$ 137.29	$ 125.69	$ 11.60	$ -	$ -
1988	$ 217.27	$ 183.27	$ 34.00	$ -	$ -
1989	$ 555.65	$ 500.25	$ 55.40	$ -	$ -
1990	$ 675.64	$ 601.74	$ 73.90	$ -	$ -
1991	$ 849.34	$ 756.54	$ 92.80	$ -	$ -
1992	$ 1,024.20	$ 915.10	$ 109.10	$ -	$ -
1993	$ 1,464.87	$ 1,338.77	$ 126.10	$ -	$ -
1994	$ 1,517.88	$ 1,375.98	$ 141.90	$ -	$ -
1995	$ 1,612.80	$ 1,457.10	$ 155.70	$ -	$ -
1996	$ 1,702.72	$ 1,536.32	$ 166.40	$ -	$ -
1997	$ 1,774.98	$ 1,613.68	$ 161.30	$ -	$ -
1998	$ 2,158.35	$ 1,693.85	$ 464.50	$ -	$ -
1999	$ 3,915.68	$ 1,720.38	$ 480.20	$ 1,711.70	$ 3.40
2000	$ 4,892.80	$ 2,245.20	$ 519.00	$ 2,121.50	$ 7.10
2001	$ 5,302.53	$ 2,629.43	$ 584.00	$ 2,078.30	$ 10.80
2002	$ 5,646.13	$ 2,922.15	$ 586.98	$ 2,125.00	$ 12.00
2003	$ 6,308.98	$ 3,303.98	$ 740.00	$ 2,250.00	$ 15.00

Source: 1986-2002 ─ Joint Board Monitoring Report, October 2002
2003 ─ Annualized 1Q:2003 USAC Projections

Table 2
Total Federal High-Cost Support Funding Levels and Federal High-Cost Support Funding Levels by Mechanism 1986-2003 ($ Millions)

		High-Cost Support Mechanisms					
Year	Total High-Cost Support	High-Cost Loop Support	Long Term Support	Local Switching Support	Interstate Access Support	High-Cost Model Support	Interstate Common Line Support
1986	$ 55.63	$ 55.63	$ -	$ -	$ -	$ -	$ -
1987	$ 125.69	$ 125.69	$ -	$ -	$ -	$ -	$ -
1988	$ 183.27	$ 183.27	$ -	$ -	$ -	$ -	$ -
1989	$ 500.25	$ 264.55	$ 235.70	$ -	$ -	$ -	$ -
1990	$ 601.74	$ 339.18	$ 262.56	$ -	$ -	$ -	$ -
1991	$ 756.54	$ 484.81	$ 271.73	$ -	$ -	$ -	$ -
1992	$ 915.10	$ 609.36	$ 305.74	$ -	$ -	$ -	$ -
1993	$ 1,338.77	$ 705.12	$ 322.65	$ 311.00	$ -	$ -	$ -
1994	$ 1,375.98	$ 725.43	$ 346.64	$ 303.90	$ -	$ -	$ -
1995	$ 1,457.10	$ 749.55	$ 382.26	$ 325.30	$ -	$ -	$ -
1996	$ 1,536.32	$ 762.70	$ 425.62	$ 348.00	$ -	$ -	$ -
1997	$ 1,613.68	$ 793.56	$ 469.52	$ 350.60	$ -	$ -	$ -
1998	$ 1,693.85	$ 827.29	$ 476.32	$ 390.25	$ -	$ -	$ -
1999	$ 1,720.38	$ 864.18	$ 473.07	$ 383.13	$ -	$ -	$ -
2000	$ 2,245.20	$ 872.48	$ 479.13	$ 390.83	$ 283.14	$ 219.61	$ -
2001	$ 2,629.43	$ 963.63	$ 492.97	$ 398.60	$ 574.39	$ 199.85	$ -
2002	$ 2,922.15	$ 972.48	$ 532.37	$ 400.22	$ 604.49	$ 227.85	$ 184.73
2003	$ 3,303.98	$ 1,120.25	$ 500.86	$ 426.72	$ 650.00	$ 233.81	$ 372.34

Source: 1986-2002 ─ Joint Board Monitoring Report, October 2002
2003 ─ Annualized 1Q:2003 USAC Projections

Table 3
Total Federal High-Cost Support Funding Levels for All ILECs and for All CETCs by Technology Type
1999-2003 ($ Millions)

		CETC	
Year	**ILEC**	**Wireline**	**Wireless**
1999	$1,727.83	$0.10	$0.44
2000	$2,049.90	$0.95	$2.13
2001	$2,548.36	$1.10	$11.27
2002	$3,125.06	$5.77	$68.68
2003	$3,173.74	$4.78	$101.85

Source: 1999-2002 ─ Annualized 4Q USAC Projections
2003 ─ Annualized 1Q:2003 USAC Projections

Note: The division of CETC funding levels between wireline and wireless carriers was determined by the presence or absence of words such as "wireless" or "cellular" in each company's name (with the exception of wireless carrier Smith Bagley, Inc.).

Appendix B:
Glossary

GLOSSARY

A

Access charges – An **incumbent local exchange carrier's (ILECs)** customers, both end-user subscribers and **interexchange carriers (IXCs)**, pay access charges for connection to the ILEC's network. End-user subscribers pay a federally mandated flat-rated **Subscriber Line Charge (SLC)**, while IXCs pay both flat-rated and usage-based access charges.

Access line – The circuit connecting the subscriber's premises to the **local exchange carrier's (LECs) switching** center. Generally, a LEC's number of access lines is approximately the same as its number of subscribers. Access lines may also be referred to as **"loops."**

B

Bell Operating Companies (BOCs) – The local telephone companies that used to be wholly owned by AT&T prior to its **divestiture** in 1984, which separated the BOCs from AT&T's long distance operations.

C

Carrier Common Line (CCL) charge – A usage-based **access charge** that **interexchange carriers (IXCs)** pay to **incumbent local exchange carriers (ILECs)**. The CCL charge recovers a portion of an ILEC's fixed **loop** costs that are allocated to the interstate jurisdiction. The **National Exchange Carrier Association (NECA)** files a CCL tariff on behalf of those ILECs participating in its Common Line **pool**. The **Federal Communications Commission (FCC)** has determined that for **rate-of-return regulated** ILECs, the CCL charge will be eliminated by July 1, 2003. The revenue generated by the CCL charge will instead be recovered through higher **Subscriber Line Charges (SLCs)** and a new high-cost **universal service** mechanism, **Interstate Common Line Support (ICLS)**.

Common carrier – A company that furnishes communications services indiscriminately to the general public. Typically, a state or federal government agency licenses common carriers.

Competitive eligible telecommunications carrier (CETC) – The Telecommunications Act of 1996 provided for the possibility of more than one carrier in a service area being eligible to receive **universal service** support. A CETC refers to any carrier, other than the **incumbent local exchange carrier (ILEC)**, that a state public utility commission or the **Federal Communications Commission (FCC)** designates as eligible to receive universal service support for a particular service territory.

Competitive local exchange carrier (CLEC) – A **local exchange carrier (LEC)** that competes with the already established **incumbent local exchange carrier (ILEC)**. A CLEC may offer service through the resale of the ILEC's services, the leasing of **unbundled network elements (UNEs)** from the ILEC, the CLEC's construction of its own facilities, or some combination of all of these strategies.

Creamskimming – The practice of targeting only the customers that are the least expensive to serve, thereby undercutting an **incumbent local exchange carrier's (ILECs)** ability to provide service throughout the area.

Critical infrastructure – A term defined in a 1996 Presidential Executive Order as a system whose incapacity or destruction would have a debilitating impact on the defense or the economic security of the United States. Telecommunications networks are among the systems that fall under this designation.

Critical infrastructure provider – A company which is responsible for the operation and management of a portion of the domestic critical infrastructure. Rural **incumbent local exchange carriers (ILECs)** are examples of critical infrastructure providers.

D

Dial equipment minute (DEM) weighting – DEM is a measurement of how long a **local exchange carrier's (LECs) switch** is in use to complete a call. DEM weighting was a mechanism that provided support to small **incumbent local exchange carriers (ILECs)** to help defray their higher switching costs. This was accomplished by allowing ILECs with fewer than 50,000 **access lines** to apply a weighting factor to their interstate DEM. This resulted in more local switching investment being allocated to the interstate jurisdiction. DEM weighting was recovered through higher **access charges** paid by **interexchange carriers (IXCs)**. Since 1998, the costs recovered through DEM weighting have been recovered through **Local Switching Support (LSS)**, an explicit high-cost **universal service** mechanism.

Disaggregation – The process by which a **rural telephone company** is permitted to calculate its **portable** per-line high-cost **universal service** support using the costs of serving more narrowly defined geographic areas within its **study area**. Consequently, a rural telephone company that disaggregates will have per-line universal service support amounts that vary within its study area to reflect the different cost levels of providing service in more narrowly defined geographic zones. Disaggregation helps to limit uneconomic incentives for competitive entry and to reduce opportunities for **creamskimming**.

Divestiture – Prior to 1984, AT&T owned both long distance and local telephone operations. In January 1982, AT&T signed a Consent Decree with the United States Department of Justice, which stipulated that AT&T would dispossess or divest itself of its local telephone operations, the **Bell Operating Companies (BOCs)**, on January 1, 1984.

E

Eligible telecommunications carrier (ETC) – A **common carrier** that has been designated as eligible to receive **universal service** funding. This designation is typically made by a state public utility commission or, in limited circumstances, by the **Federal Communications Commission (FCC)**. In order to be designated as an ETC in any service area, a common carrier must, throughout the area for which the designation is received: 1) offer the services that are supported by the federal **Universal Service Fund**, and 2) advertise the availability of the supported services and charges using media of general distribution. Before designating an additional ETC in an area served by a **rural telephone company**, the state commission or FCC must find that the designation is in the public interest.

Equal access – A technology that provides consumers with the ability to access the toll service providers to which they are presubscribed by dialing 1 + number; that is, without having to dial an access code.

Exchange – Generally the area served by one **local exchange carrier (LEC)** central office. A central office is the building or location that houses the equipment that the LEC uses to **switch** calls.

Exchange access – The offering of local telephone **exchange** services or facilities for the purpose of origination or termination of toll services.

F

Federal Communications Commission (FCC) – An independent U.S. government agency, responsible directly to Congress, established by the Communications Act of 1934, and charged with regulating interstate and international communications by radio, television, wire, satellite and cable. The regulation of intrastate services falls under the jurisdiction of state public utility commissions.

Federal-State Joint Board – A body formed when regulatory issues have implications for both the inter- and intrastate jurisdictions. A joint board usually consists of three **Federal Communications Commission (FCC)** commissioners and four state public utility commissioners. The Telecommunications Act of 1996 calls for a Federal-State Joint Board on Universal Service to assist the FCC in resolving **universal service** issues.

H

High cost assistance fund – Prior to the enactment of the Telecommunications Act of 1996, the High Cost Assistance Fund (also, at the time, referred to as the **Universal Service Fund**) provided support to **incumbent local exchange carriers (ILECs)** with high **loop** costs by allocating a higher than normal percentage of those costs to the interstate jurisdiction that were in excess of the national average cost per loop. This mechanism is now referred to as **High-Cost Loop Support (HCLS)** for **rural telephone companies**.

High-Cost Loop Support (HCLS) – A high-cost **universal service** mechanism (previously known as the **high cost assistance fund** or **Universal Service Fund**) that provides support to **rural telephone companies** with high **loop** costs. HCLS allocates a higher than normal percentage of a rural telephone company's actual loop costs to the interstate jurisdiction that are in excess of 115 percent of the national average cost per loop. Allowing high-cost rural telephone companies to recover additional loop costs from the interstate jurisdiction reduces the portion of their costs allocated to the intrastate jurisdiction, thereby helping to keep end-user rates at reasonable and affordable levels.

High-Cost Model Support (HCMS) – A high-cost **universal service** mechanism that provides support to non-rural **incumbent local exchange carriers (ILECs)** with high **loop** costs. HCMS is calculated using a non-rural ILEC's forward-looking costs, as estimated by a **Federal Communications Commission (FCC)** cost model. It compares the statewide average cost per line for non-rural ILECs, as estimated by the FCC's cost model, to a nationwide cost benchmark to determine eligibility for support.

High-Cost program – One of the four components of the federal **Universal Service Fund (USF)**. The purpose of the High-Cost program is to maximize subscribership to a defined set of telecommunications services by spreading the high costs of rural network infrastructure nationwide. There are six support mechanisms contained within the High-Cost program. Four of the mechanisms, **High-Cost Loop Support (HCLS), Local Switching Support (LSS)**, **Long Term Support (LTS)** and **Interstate Common Line Support (ICLS)**, provide support primarily to areas served by **rural telephone companies**. The remaining two mechanisms, **High-Cost Model Support (HCMS)** and **Interstate Access Support (IAS)**, provide support primarily to the high-cost areas served by non-rural **incumbent local exchange carriers (ILECs)**.

Holding company – A parent company that owns one or more **local exchange carriers (LECs)**.

I

Incumbent local exchange carrier (ILEC) – The **common carrier** that provided local telephone service to a particular service area at the date of the enactment of the Telecommunications Act of 1996 (February 8, 1996).

Independent local exchange carrier – A **local exchange carrier (LEC)** that was never affiliated with the former Bell System.

Interexchange carrier (IXC) – A carrier providing inter- and/or intrastate toll service.

Interstate Access Support (IAS) – A high-cost **universal service** mechanism for **incumbent local exchange carriers (ILECs)** governed by **price cap regulation**. IAS recovers certain revenues previously collected through interstate **access charges**. IAS is

intended to facilitate comparable long distance rates nationwide and promote long distance competition in the high-cost rural areas served by price cap-regulated carriers.

Interstate Common Line Support (ICLS) – A high-cost **universal service** mechanism for **incumbent local exchange carriers (ILECs)** governed by **rate-of-return regulation**. ICLS recovers a portion of a rate-of-return regulated ILEC's **loop** costs assigned to the interstate jurisdiction that were previously recovered through the **Carrier Common Line (CCL) charge**. ICLS is intended to facilitate comparable long distance rates nationwide and promote long distance competition in the high-cost rural areas served by rate-of-return regulated carriers.

J

Jurisdictional separations – **Incumbent local exchange carriers (ILECs)** use the same telecommunications plant and equipment for providing both interstate access to **interexchange carriers (IXCs)** and local telecommunications services to end-user subscribers. ILECs use jurisdictional separations procedures contained in the **Federal Communications Commission's (FCC)** rules to determine what portion of their costs for jointly used plant and equipment must be recovered from the interstate jurisdiction via interstate **access charges**, and what portion must be recovered from the revenues they receive from providing local telecommunications services to end-user subscribers. Separations procedures have been performed by ILECs since the Supreme Court found in 1930 that the "separation of intrastate and interstate property, revenues, and expenses" was "essential to the appropriate recognition of the governmental authority in each field of regulation."

L

Local exchange carrier (LEC) – A local telephone company. LECs include both **Bell Operating Companies (BOCs)** and **independent local exchange carriers**.

Local exchange service – Those telecommunications services which allow customers living within the service territory of a **local exchange carrier (LEC)** to communicate with each other.

Local Switching Support (LSS) – A high-cost **universal service** mechanism that provides support to **incumbent local exchange carriers (ILECs)** with fewer than 50,000 **access lines** to help defray their higher **switching** costs. The LSS mechanism has helped to encourage the deployment of digital switching and digital networks in rural service areas. LSS was previously known as **Dial Equipment Minute (DEM) weighting**.

Long Term Support (LTS) – A high-cost **universal service** mechanism that provides support to the **National Exchange Carrier Association (NECA)** Common Line revenue **pool**. LTS allows the **incumbent local exchange carrier (ILEC)** members of the pool to charge a below-cost **Common Carrier Line (CCL)** access rate to **interexchange carriers (IXCs)** that is uniform for all carriers in the pool. Reducing the amount of **loop** costs that high-cost ILECs have to recover from IXCs through the CCL charge was in-

tended to facilitate the availability of long distance service in rural areas that is reasonably comparable to the service options and rates available in urban areas.

Loop – The cable, telephone wires, poles and other facilities that link each customer's premises to the public switched network and provide subscribers with access to both intra- and interstate telecommunications services. Loops may also be referred to as **"access lines."**

Low Income program – One of the four components of the federal **Universal Service Fund (USF)**. This program consists of two mechanisms: 1) Lifeline, which reduces qualifying low-income consumers' monthly telephone charges, and 2) Link-Up America, which reduces the one-time installation charges associated with initiating telephone service.

N

National Exchange Carrier Association (NECA) – An organization created by the **Federal Communications Commission (FCC)** in 1984 to file interstate access tariffs on behalf of **incumbent local exchange carriers (ILECs)** and to manage the various access revenue **pools**.

P

Pool(s)/pooling – A payment system under which revenues collected by **incumbent local exchange carriers (ILECs)** are not kept, but instead are combined and redistributed based on factors such as an ILEC's cost of providing service. Interstate pools are administered by the **National Exchange Carrier Association (NECA)**. At the end of the monthly pooling process, each participating ILEC either owes monies to the pool or is due monies from the pool. NECA collects the monies due and distributes it to members who are recipients. Pooling allows participants to reduce the volatility of their individual company revenues by dissipating those risks among numerous carriers.

Portability – The term used for the **Federal Communications Commission's (FCC)** rule that allows a **competitive eligible telecommunications carrier (CETC)** to receive the same per-line amount of **universal service** support that the **incumbent local exchange carrier (ILEC)** would receive for serving a particular end-user subscriber.

Price cap regulation – A form of federal regulation of **incumbent local exchange carrier (ILEC)** earnings that basically sets a ceiling or cap on the prices ILECs can charge for their interstate access services and provides incentives for ILECs to be more efficient. Price cap regulation is mandatory for the **Bell Operating Companies (BOCs)**, but is optional for other ILECs.

R

Rate-of-return regulation – A form of federal regulation of **incumbent local exchange carrier (ILEC)** earnings that establishes the percentage of net profit that an ILEC is allowed to earn on its rate base (its total invested capital). Currently, ILECs are permitted to earn an 11.25 percent interstate rate-of-return. Most rural ILECs operate under rate-of-return regulation.

Rural Health Care program – One of the four components of the federal **Universal Service Fund (USF)**. The Rural Health Care program provides reduced rates to rural health care providers for telecommunications services related to the use of telemedicine and telehealth.

Rural telephone company – The Telecommunications Act of 1996 defines a rural telephone company as a **local exchange carrier (LEC)** operating entity to the extent that such entity:

A) provides **common carrier** service to any LEC **study area** that does not include either-
   1) any incorporated place of 10,000 inhabitants or more, or any part thereof, based on the most recently available population statistics of the Bureau of the Census; or
   2) any territory, incorporated or unincorporated, included in an urbanized area, as defined by the Bureau of the Census as of August 10, 1993;

B) provides telephone **exchange** service, including **exchange access,** to fewer than 50,000 **access lines**;

C) provides telephone exchange service to any LEC study area with fewer than 100,000 access lines; or

D) has less than 15 percent of its access lines in communities of more than 50,000 on the date of enactment of the Telecommunications Act of 1996.

S

Schools and Libraries program – One of the four components of the federal **Universal Service Fund (USF)**. The Schools and Libraries program provides discounts to schools and libraries in the United States for telecommunications services, Internet access and internal connections.

Settlements – Prior to AT&T's **divestiture,** settlements were payments made by the local telephone companies owned by AT&T to the **independent local exchange carriers (LECs)** who interconnected with AT&T's local operations. Settlements enabled the independent LECs to recover the costs incurred in the transmission of toll calls and also keep local rates affordable.

Study area – Generally, an **incumbent local exchange carrier's (ILECs)** entire service territory within a state. Thus, an ILEC that operates in a single state has one study area, while an ILEC operating in more than one state typically has a study area for each state.

However, a holding company may own multiple ILECs, and thus have multiple study areas within a state.

Subscriber Line Charge (SLC) – A federally mandated flat-rated interstate **access charge** imposed on the end-user customers of **incumbent local exchange carriers (ILECs)**. The SLC recovers a portion of an ILEC's **loop** costs that are allocated to the interstate jurisdiction.

Switch – A network device that selects a path or circuit for sending a unit of voice or data to its next destination.

U

Unbundled Network Elements (UNEs) – The discrete portions of an **incumbent local exchange carrier's (ILECs)** network, which the Telecommunications Act of 1996 requires ILECs to lease to competitive carriers for their provision of service. Examples of the UNEs that ILECs presently are required to make available to competitive carriers include: **loops**, network interface devices, local circuit **switching**, interoffice transmission facilities, signaling networks and call-related databases, and operation support systems. The **Federal Communications Commission's (FCC)** rules require that the rates an ILEC may charge for a UNE be based on its incremental cost. The 1996 Act exempts **rural telephone companies** from the requirement to lease UNEs to competitors which is otherwise imposed on ILECs.

Universal service – The basic concept, first stated in the Communications Act of 1934, that all Americans – both urban and rural – should have access to quality telecommunications services at affordable rates. Specifically, the Act says "...to make available, so far as possible, to all the people of the United States…a rapid, efficient, Nation-wide and world-wide wire and radio communication service with adequate facilities at reasonable charges..." The concept of universal service was further refined and expanded in the Telecommunications Act of 1996.

Universal Service Administrative Company (USAC) – The entity designated by the **Federal Communications Commission (FCC)** to administer the **universal service** support mechanisms. USAC's duties include billing contributors, collecting contributions and disbursing universal service support funds.

Universal Service Fund (USF) – A group of federal support programs that promote the **universal service** principles set forth in the Telecommunications Act of 1996. The four components of the USF are: the **High-Cost program**, the **Low Income program**, the **Schools and Libraries program** and the **Rural Health Care program.** The 1996 Act requires every telecommunications carrier that provides interstate telecommunications services to contribute to the USF on an equitable and nondiscriminatory basis. Prior to the Telecommunications Act of 1996, the USF was another name for the **high cost assistance fund.**