

Table Three: Telephone Penetration Rate by State
(Annual Average Percentage of Households with Telephone Service)

State	1984	1999	Change
Alabama	88.4%	91.5%	3.0% *
Alaska	86.5	94.6	8.1 *
Arizona	86.9	93.2	6.3 *
Arkansas	86.6	88.9	2.3
California	92.5	95.7	3.3 *
Colorado	93.2	96.7	3.5 *
Connecticut	95.5	96.5	1.0
Delaware	94.3	95.7	1.5
District of Columbia	94.9	92.4	(2.5) **
Florida	88.7	92.6	3.9 *
Georgia	86.2	92.1	5.9 *
Hawaii	93.5	96.3	2.8 *
Idaho	90.7	93.8	3.1 *
Illinois	94.2	91.8	(2.4) **
Indiana	91.6	93.8	2.3
Iowa	96.2	95.8	(0.4)
Kansas	94.3	93.8	(0.5)
Kentucky	88.1	92.8	4.6 *
Louisiana	89.7	91.5	1.9
Maine	93.4	97.2	3.8 *
Maryland	95.7	95.3	(0.4)
Massachusetts	95.9	95.4	(0.5)
Michigan	92.8	94.2	1.3
Minnesota	95.8	96.9	1.1
Mississippi	82.4	88.0	5.6 *
Missouri	91.5	95.6	4.1 *

State	1984	1999	Change
Montana	91.0	95.3	4.3 *
Nebraska	95.7	95.9	0.2
Nevada	90.4	93.1	2.8
New Hampshire	94.3	97.0	2.7 *
New Jersey	94.8	93.9	(0.8)
New Mexico	82.0	89.8	7.8 *
New York	91.8	95.3	3.5 *
North Carolina	88.3	93.9	5.6 *
North Dakota	94.6	97.3	2.6 *
Ohio	92.4	94.7	2.3 *
Oklahoma	90.3	91.2	0.9
Oregon	90.6	95.2	4.6 *
Pennsylvania	94.9	97.1	2.3 *
Rhode Island	93.6	94.3	0.6
South Carolina	83.7	92.9	9.3 *
South Dakota	93.2	92.7	(0.5)
Tennessee	88.5	94.5	6.0 *
Texas	88.4	92.4	4.0 *
Utah	92.5	95.6	3.1 *
Vermont	92.3	95.3	3.1
Virginia	93.1	93.2	0.1
Washington	93.0	95.9	2.9 *
West Virginia	87.7	92.7	5.0 *
Wisconsin	95.2	95.7	0.5
Wyoming	89.9	95.0	5.2 *
Total United States	91.6	94.2	2.6 *

Changes may not be the same as calculated differences, due to rounding.

* Increase is statistically significant at the 95% confidence level.

** Decrease is statistically significant at the 95% confidence level.

Source: Federal Communications Commission, Common Carrier Bureau, Industry Analysis Division

Some consumer leaders point to increased telephone penetration rates among low-income households (income of less than \$10,000) as evidence of some level of success of the Lifeline and Link-Up programs. From 1984 (the first year of the program) to 1998, the number of poor households with telephones increased from 80 percent to 85 percent.⁴¹ Consumer advocate groups praise the program in that it allows many groups access to telephone services who could not otherwise afford it. They also point out, however, that despite the limited success of the Low Income program, large numbers of American households still lack basic telephone service. In 1997, for example, an FCC study found that just 71 percent of households with incomes of less than \$5,000 had phone service

⁴¹ Federal Communications Commission, "Telephone Penetration By Income By State," March 2000, Chart #1. Also see Alexander Belinfante, "Telephone Subscribership in the United States: Data Through November 2000," FCC, Common Carrier Bureau, March, 2001.

compared to 99 percent of households with incomes of \$35,000 or above.⁴² Studies have also found that race and ethnicity may be a significant factor. One study determined, for example, that at all levels of income below \$40,000, Whites have higher levels of telephone penetration than African Americans and Hispanics.⁴³ Consumer and public advocates argue that ensuring the universality of basic telephone service is a necessary foundation for any expansion of the USF to include advanced services, especially because most Internet access in the foreseeable future is expected to occur with dial-up modems.

2. Rates of Participation

One way of examining the reach of a program like Lifeline is to compare the number of households participating in the program at a state level to the number that receive means tested assistance (see Table Four). While the qualification factors for the Lifeline program vary by state and may not directly correspond with those of other public assistance programs, this comparison can provide a useful benchmark to assess participation in the program.

There are several possible explanations for less than optimal rates of participation in the low-income programs. One is that customer qualification in many jurisdictions is linked to a consumer's participation in social services programs, and for many there is a stigma associated with revealing this information (and even, alternatively, with participating in the programs). Other reasons include consumers not being aware of the program or while the consumer may have a low income, they do not meet the state's threshold for qualification for assistance, and as such may be both unable to afford telephone service and unable to qualify for assistance.

⁴² FCC Monitoring Report, CC Docket 87-339, May 1997 (cited in "Deepening the Digital Divide: The War on Universal Service," Center for Media Education, December 1998) (<http://www.cme.org/access/universal/ddpaper.html>).

⁴³ Schement, J., "Beyond Universal Service: Characteristics of Americans Without Telephones, 1980-1993," Communications Policy Working Paper #1, 1994, (<http://www.benton.org/Library/Universal/Working1/working1.html>).

Table Four: Lifeline Recipients Compared To Recipients Of Other Public Assistance Sorted By Rank

	Lifeline Recipients 2Q00 Filings (USAC) (in Thousands)	Households Receiving Public Assistance* (in Thousands)	Lifeline as a % of Households with other programs
Delaware	0.7	55	1.3%
Oklahoma	3.7	265	1.4%
Maryland	3.9	235	1.7%
West Virginia	5.4	192	2.8%
Arkansas	9.1	254	3.6%
Louisiana	14.7	403	3.7%
Kansas	7.3	182	4.0%
Wyoming	1.3	32	4.1%
New Jersey	20.2	453	4.5%
Missouri	17.0	368	4.6%
Mississippi	16.2	315	5.2%
Alabama	21.1	394	5.3%
Indiana	20.0	356	5.6%
Pennsylvania	47.3	782	6.0%
South Carolina	20.9	302	6.9%
Virginia	21.8	305	7.1%
Tennessee	37.0	508	7.3%
Iowa	9.8	133	7.3%
Arizona	23.8	322	7.4%
New Hampshire	6.2	78	8.0%
Illinois	56.1	680	8.3%
North Carolina	56.2	554	10.1%
Oregon	30.3	261	11.6%
Kentucky	38.7	325	11.9%
Florida	133.1	1076	12.4%
Georgia	73.7	595	12.4%
Alaska	5.6	44	12.7%

	Lifeline Recipients 2Q00 Filings (USAC) (in Thousands)	Households Receiving Public Assistance* (in Thousands)	Lifeline as a % of Households with other programs
Colorado	26.6	185	14.4%
Montana	10.0	65	15.3%
Nebraska	14.7	95	15.5%
Texas	258.5	1541	16.8%
Nevada	16.3	97	16.8%
Washington	65.9	380	17.4%
Hawaii	14.9	80	18.6%
Utah	19.5	102	19.1%
New Mexico	33.7	169	19.9%
Minnesota	55.3	273	20.3%
Ohio	159.1	769	20.7%
District of Columbia	11.2	52	21.5%
Wisconsin	63.0	285	22.1%
Idaho	19.4	85	22.8%
Michigan	142.2	623	22.8%
South Dakota	11.9	44	27.1%
North Dakota	11.7	43	27.3%
Massachusetts	169.9	495	34.3%
New York	607.7	1693	35.9%
Connecticut	65.5	170	38.6%
Vermont	28.9	62	46.6%
Rhode Island	47.7	88	54.2%
Maine	74.2	78	95.1%
California	3181.6	2595	122.6%
TOTAL U.S.	5702.8	19536	29.2%

Based on Data Prepared by USAC, the Census Bureau, and the Missouri Office of the Public Counsel

* Includes households that received means-tested cash or non-cash assistance including: Public Housing, Heating Assistance, Rent Assistance, Medicaid or Medicare, Supplemental Security Income, Hot Food Lunch, Food Stamps, Veterans Benefits, Public Assistance or Welfare.

While the promotion of Lifeline and Link-up programs is a matter of state discretion, there are several different mechanisms being undertaken by different carriers and state commissions to reach qualifying citizens and make enrollment in the programs easier. A report released in August 2000 by the Telecommunications Industries Analysis Project (TIAP report) examined the availability of universal service support for low-income

households.⁴⁴ The report offers a comparative analysis of different initiatives by states to extend lifeline benefits to consumers. Some of the initiatives include:

- **State supplements to federal support levels:** The report found that on average, the more additional support offered by a state, the more eligible consumers take advantage of the Lifeline program.
- **Self-certification:** In California, for example, customers can order Lifeline service with no verification check.
- **Expanding eligibility requirement to include a broader range of customers:** In Minnesota and Arizona, age and disability are also used in addition to income as qualifying factors; in Tennessee eligibility requirements are extended to recipients with income that is 125 percent of the annual federal poverty guidelines; Texas is considering a similar proposal and Pennsylvania is considering increasing eligibility levels to those at 150 percent of the federal poverty guidelines.
- **Community outreach programs:** In Vermont, local exchange companies are required to send all customers annual notices of how to apply for Lifeline; the Coalition for Affordable Local and Long Distance Service has developed a web site (www.lifelinesupport.org) to list benefits in different states; Tennessee will begin producing information in multiple languages and will establish a Manager of Consumer Outreach position to concentrate on programs like Lifeline; Puerto Rico plans to hold town hall meetings.
- **Direct customer contact:** In an Alaskan community a company undertook a door-to-door campaign; in Maine and South Dakota flyers and letters are sent to customers; the state of Wisconsin works with the Department of Revenue and the Department of Workforce Development to provide information; Illinois will be mailing information to all of its Medicaid recipients.
- **Coordination with other state agencies:** numerous states coordinate efforts with other agencies to reach citizens eligible for lifeline support.
- **Revised definitions of basic service:** California plans to review the definition of basic service as new services become more widely used to avoid some consumers having no access to information.

Not all of these approaches may be appropriate for adoption in every state (for instance, door-to-door visits may be prohibitively expensive in some areas and may be regarded as intrusive in some areas). The ideas offered above, however, illustrate some ways in which

⁴⁴ "Closing the Gap: Universal Service for Low-Income Households", TIAP, August 1, 2000. The report is available at <http://www.tiap.org>.

each individual state can target eligible consumers that are not currently subscribing to receive low-income benefits. There is strong support that states should evaluate and reexamine their programs along these lines to maximize their usefulness to the intended beneficiaries.

Some have noted general concern regarding self-certification programs, like that in the State of California, as a means of enrolling people in the low-income programs. California has 12 percent of the U.S. population, but in 1999 it received nearly 56 percent of the total federal Lifeline funds. The California program does have a household income cap to be used for determining eligibility for its Lifeline program, but allows residents to self-certify that they meet this requirement. Customers must re-certify annually and although the program does not include an audit mechanism, if a Lifeline subscriber is deemed ineligible they will be charged the regular tariffed rate retroactively from the time they became ineligible. Critics note that some sort of regular audit mechanism may be appropriate to ensure that Lifeline funds are not going to those who do not qualify.

3. Automatic Enrollment

Some states have chosen to enroll automatically all residents that fall under a certain income threshold. Vermont, for example, enrolls all residents that have incomes that are less than 175 percent of the poverty line. Auto-enrollment has gained broad support for determining those eligible for low-income support, especially since it does not rely on the consumers themselves filling out the forms or contacting the appropriate authorities. If done efficiently, low-income customers simply receive a bill that already has a portion of their amount due credited. Automatic enrollment avoids the problems associated with going through social services agencies, since many eligible customers many not receive social services benefits. It also enrolls many low-income consumers who may not know that they are eligible, or may be unwilling to go through the procedures to gain assistance.

While CECA believes that automatic enrollment is the best tool for states to use for enrolling eligible low-income consumers, it should be noted that it will only work for those consumers who already have telephone service since the credit is applied to all outgoing local phone bills. There may also be a significant number of consumers who do not have service because of costs who could benefit from the Low-Income program, yet are unaware of their eligibility. While automatic enrollment is an excellent policy option for assisting eligible consumers, it must be complemented with outreach and consumer education programs that explain the benefits of the Low-Income program for those without service.

B. Carrier Eligibility for Universal Service Funding

Only carriers designated as eligible telecommunications companies (ETCs), as defined in Section 214 of the Act, can receive universal service funds. Section 214(e)(2) gives states the primary responsibility for designating carriers as ETCs.⁴⁵ Section 214(e)(1) sets forth

⁴⁵ The FCC will designate ETC status only in those instances where a state has determined it lacks jurisdiction to designate ETC status to a carrier. For instance, in 1999 the Wyoming Public Service

the criteria for ETC designation; (i) to offer the services that are supported by the universal service support mechanisms; (ii) to offer these services throughout the designated service area; and (iii) to advertise the availability of those services using media of general distribution. To be deemed eligible as an ETC, the carrier is required to use at least some of their own transmission facilities to deliver telecommunications (as opposed to information) services.

In a non-rural telephone company area, the statute requires the grant of ETC status to a carrier that meets the criteria mentioned above, namely providing and advertising the universal service offering within the designated service area (as determined by the state) and using at least some of its own facilities. In a rural telephone company area, however, in addition to the requirements for non-rural areas, the carrier seeking ETC status as an additional carrier in a rural telephone company area is required to serve the entire rural telephone company study area at issue and the state is required to undertake an analysis as to whether the grant of ETC status is in the public interest. Critics have argued that these requirements, especially the public interest assessment factor present a barrier to competition and new technology in these areas.

Since the passage of the Telecommunications Act of 1996, few competitive carriers have undertaken the ETC process and been designated as ETCs. Of the competitive carriers designated as ETCs, very few have begun providing universal service and received universal service funding. Critics have charged that state regulatory regimes are often biased towards traditional wireline carriers creating a barrier for new entrants, especially those using non-traditional technologies such as wireless. These critics believe that certain state regulatory ETC hurdles that impose disparate procedural and substantive requirements on competitive carriers seeking ETC status discourage competition and should be addressed. They suggest that it would be good public policy to adopt ETC certification policies that are neutral with regard to technology.

Two recent cases, one before the Minnesota Public Utilities Commission and one before the FCC, illustrate some of the arguments raised in opposition to certification of a second ETC, especially a wireless carrier, and provide guidance toward a policy that is technology neutral and competition friendly.

1. Case Study No. 1: State Commission Designation of a Competitive Carrier as an ETC

In the Minnesota case,⁴⁶ Minnesota Cellular Corp. filed an application with the Minnesota Public Utilities Commission (Minnesota Commission) to obtain status as an additional ETC in 43 counties in northern Minnesota. They sought to become eligible for Universal Service program support for providing wireless local loop service in these counties.

Commission found that it lacked the authority to grant ETC status to Western Wireless because its state laws prevent it from regulating cellular providers except as related to quality of service.

⁴⁶ In the Matter of Minnesota Cellular Corporation's Petition for Designation as an Eligible Telecommunications Carrier, Minnesota Public Utilities Commission, October 27, 1999.

Several parties intervened, including a number of incumbent carriers. In its request for ETC status, Minnesota Cellular Corp. pledged to offer all services required by the statute (the core services) and price them within 10 percent of the rates charged by incumbents, and in addition would include advanced features such as an expanded local calling area and limited service mobility, Caller ID and voice mail. By designating Minnesota Cellular Corp. as an ETC in rural telephone company service areas, the Minnesota Commission became the first state commission in the nation to designate an additional carrier as an ETC in rural telephone company service areas.⁴⁷

The opponents of the application raised two principal arguments:

1. The concern that wireless technology is unable to provide high quality and affordable service to customers in the way wireline technology can, and as such Minnesota Cellular Corp. would not meet the threshold for certification as an ETC because of its use of wireless technology.
2. Designating a second ETC in rural telephone company service areas is contrary to the public interest. A competing ETC could diminish the revenues of the incumbent, or in the very least create the possibility of diminished future revenues, thereby creating economic incentives for incumbents to defer investment in infrastructure. The competition could also cause a rise in prices for remaining customers because, as the competitor takes away subscribers, the base over which costs can be spread will decrease. In the most extreme case, the competition could put the incumbent provider out of business.

In its decision to grant conditional approval of ETC status for Minnesota Cellular Corp., the Minnesota Commission offered useful guidance for considering policies to embrace the concepts of competition and technological neutrality.

With regard to the technical capability of a wireless provider to offer high quality service and affordable rates, the Minnesota Commission cited FCC and Federal-State Joint Board on Universal Service rulings that urge states to refrain from discriminating against applicants on the basis of technology and open telecommunications markets to cable and wireless providers.⁴⁸ The Minnesota Commission found that as long as there is evidence that high quality and affordable service can be provided and lack of compelling evidence contrary to this fact, certifying a carrier that provides its service using wireless technology should not be a concern.

With regard to the public interest argument by challengers that cited the potential harmful effects of competition on rural markets, the Minnesota Commission rejected each of the arguments of the challengers. In its decision, the Minnesota Commission recognized both

⁴⁷ Since then several other state commissions have designated additional carriers as ETCs in rural telephone company service areas.

⁴⁸ In its Report and Order on Universal Service, the FCC concluded that universal service support mechanisms and rules should be competitively and technologically neutral. *Universal Service Order*, 12 FCC Rcd 8776, 8801, paras. 46-49.

the state and federal commitments to opening local telecommunications markets to competition, but acknowledged that some areas served by rural telephone companies may not be able to support more than one carrier. It also noted that Section 214 of the Act puts the burden on the carrier seeking additional ETC status to make a showing to the relevant authority that granting such status would be in the public interest.

The argument that competition could encourage incumbents to stop investing in infrastructure because of the fear of not being able to recoup investment was countered with the argument that the competition could also spur beneficial investment in infrastructure to provide superior service to beat the competition. The Minnesota Commission further reasoned that competition could motivate incumbents to find and implement new operating efficiencies, leading to lower prices and better service. In the unlikely case that this competition would cause the incumbent to go out of business, the Minnesota Commission reminded the challengers of the obligations of the ETC to serve every customer within the service area and the Minnesota Commission could require Minnesota Cellular Corp. to purchase or construct facilities necessary to ensure adequate service, leaving the consumers no worse off than they were before.

This case is important in that it illustrates a state coping with new technology and competition in a proactive manner. This is especially important in the continuing effort to reach unserved consumers, especially those in remote areas.

2. Case Study No. 2: FCC Designation of a Competitive Carrier as an ETC

In a similar decision at the federal level, the FCC was asked to consider ETC status for Western Wireless in Wyoming.⁴⁹ The Commission used this case to reiterate and support its policies for competition and technological neutrality. The Commission rejected arguments of possible ‘cream skimming’ of the most profitable customers by Western Wireless by pointing to the requirement in Section 214 whereby the ETC must offer its services through the entire service area. Similar to the Minnesota case, the FCC found nothing inherent in wireless technologies that make a carrier ineligible for status as a second ETC in an area. Overall, the Commission recognized the potential benefits of competition in rural markets by saying, “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 service 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.”⁵⁰

⁴⁹ *In the Matter of Federal-State Joint Board on Universal Service Western Wireless Corporation Petition for Designation as an Eligible Telecommunications Carrier*, Memorandum Opinion and Order, DA 00-2896 (rel. Dec. 26, 2000), (*Western Wireless Order*).

⁵⁰ *Western Wireless Order* at 17.

With regard to the argument that rural areas in general are not capable of sustaining competition for universal service support, the FCC said that it did not believe that was necessarily the case.

Specifically, we find no merit to the contention that designation of an additional ETC in areas served by rural telephone companies will necessarily create incentives to reduce investment in infrastructure, raise rates, or reduce service quality to consumers in rural areas. To the contrary, we believe that competition may provide incentives to the incumbent to implement new operating efficiencies, lower prices, and offer better service to its customers.⁵¹

The Commission did note that some rural areas might not be able to support more than one ETC, but the claim in this case was not supported with credible evidence.

C. Portability and Disaggregation

There are two general issues that figure heavily in the debate about eligibility of carriers for universal service funding, portability and disaggregation, the latter of which includes two very different and important components – disaggregation of service areas and disaggregation of support. These two components are described below.

1. Portability

Prior to the passage of the 1996 Act, only incumbent local exchange carriers were eligible for universal service funding. Many carriers that did not receive funds claimed that universal service funding was discriminatory and kept competitors from going into high cost areas to compete. The reason, they insisted, was that since the incumbents received funding, they were able to keep rates artificially low. This of course was one of the prime objectives of universal service – to keep the rates in high-cost areas low enough that they could be somewhat comparable to those rates charged in urban areas, or low-cost, areas. However, without the subsidies that would allow them to offer the same low rates, competitors were at a distinct disadvantage. Thus, they argued that if competitive entry was desired, universal service funding would also have to be made available to all competitive carriers.

When Congress passed the 1996 Act, it reasoned that competition was being hampered by the limitations on who could receive universal service funding. It required that, consistent with the public interest, convenience and necessity, the state commission may (in the case of an area served by a rural carrier) and shall (in the case of an area served by a non-rural

⁵¹ *Western Wireless Order* at 22.

carrier) designate more than one common carrier as eligible for funding.⁵² In January 1998, the Commission implemented this directive and funding became "portable," so that funding would move among carriers that were serving high cost customers. In other words, if a competing Eligible Telecommunications Carrier (ETC) were to enter an area served by the incumbent and "win" a customer line from the incumbent ETC, then the competitor would receive the allocated funding associated with that customer line.

This portability requirement should have quelled the concerns of those who said that not having access to universal service funding was anti-competitive. However, many of those seeking funding are still concerned that the amount of funding transferred to them would not be sufficient, while incumbent carriers believe that the funding that their competitors receive (based on the incumbent's costs) could be a windfall for the competitors.

Portability is complicated by the fact that the support allocated to the ETC is based upon the average costs incurred over the entire exchange. Therefore, if the exchange includes densely populated areas that are less expensive to serve along with the sparsely populated areas that are more expensive, then the average cost will meet somewhere in the middle. However, some competing carriers claim that if they end up serving only the highest cost of the high cost customers – those that are the most expensive to serve, such as those living in the most remote or insular parts of the exchange – then they will not be able to compete because their subsidy will be based on the average cost of the entire exchange, not the individual lines. Many competitors claim that the support should reflect the actual cost of the individual lines, not the average of the area. This is the main premise behind the idea of "disaggregation," or "targeting," the practice of fitting the subsidies to more closely reflect the costs of service.

On the other hand, many of the incumbent LECs believe that competitors should not receive funding based on the costs ascribed to the incumbent. They suggest that the costs of providing service for the competitor would be much less than their costs for a number of reasons. One is that a competitor would not enter the market in the first place unless it knew that it could be profitable. One reason a competitor might have a cost advantage is that the competitor might be able to include input costs that were much lower than the those of the incumbent LECs', because, for example, they could use the latest, most efficient technology

The most apparent fact is that there is a debate over what should be portable, and how the assessment of that amount should be made. It is a problem that haunts decision-makers addressing carriers that use the model and those that still remain under cost. There is no non-wireline model, so any funding to a competitor, be that competitor a wireless, satellite or other type of carrier, will be based on a wireline model. The problem is intensified for those carriers who function under an actual cost scheme. The decision-makers are in an unenviable position in making the determination of what that "right amount" is.

⁵² 47 U.S.C. § 102.

2. Disaggregation

Disaggregation is a complex issue because there are a number of different parameters that could be subject to greater or lesser degrees of disaggregation. First, there is the service area or study area used to determine the size of the overall fund. Traditionally, the ILEC providing service in a state has treated the entire geographic area served as a single service area or “study area.” Currently, to determine the amount of high cost funding available to non-rural LECs, an ILEC’s state-wide average costs are compared to the nationwide average; that is, the service area or study area used is the ILEC’s aggregated statewide service area. By basing this comparison on a state-wide average cost, the low cost areas served by the ILECs “cancel out” some of the high cost areas served, so the total size of the universal service fund is smaller than it would be if the service area used were also disaggregated.

Within such a broad service area, however, there will be higher and lower cost areas to serve. To the extent that a universal service objective is (given the size of funding available, as determined by state-wide averages) to target funds to those areas that are most costly to serve, costing must be performed at a more disaggregated level than the state-wide serving area to identify those highest cost areas and to limit the funding to service providers serving customers in those highest cost areas. Thus, a second parameter subject to disaggregation involves the costing required to target funds to high cost areas.

Once costing has been disaggregated to identify the geographic areas for which universal service funds should be targeted, that costing must be applied to new entrants as well as the ILECs. An ETC should be able to define its service area any way it chooses, but would only receive funds for serving customers located in the highest cost geographic areas.

There is one additional disaggregation factor. The cost of essential inputs, particularly the local loop to the customer premises, is subject to substantial geographic variation. The FCC has required ILECs to disaggregate rates for unbundled loops into at least three zones. If these loop price zones do not correspond to the cost zones used for targeting universal service funds, then competitors will have an arbitrage opportunity and may enter some markets and avoid others simply because the universal service subsidy is not based on the same level of disaggregation as the loop price.

VI. Which Services Merit Support?

Judgments about which services merit support by the program are crucial because they may mark the dividing line between the “haves” and the “have-nots” in a society in which economic empowerment increasingly depends upon access to information and the technologies that deliver it. A significant portion of the population (some six percent of American households, representing more than six million households) for one reason or another does not have access to even “plain old telephone service” (POTS). This is evidenced by the data on telephone subscribership and the Lifeline and Link-up programs presented in the report.

More and more, Americans are taking part in the information age and the growth of the Internet shows that Americans are increasingly interested in more than just POTS. The 1996 Act provides some high-level and long-range guidance for the evolution of the Universal Service program, but leaves many of the details to the Federal-State Joint Board and the FCC to flesh out. As technology evolves and becomes vitally important to the social and economic well-being of all Americans, so too must universal service evolve. The services that are supported by the Universal Service program must be carefully examined to ensure that it is in touch with the needs of all Americans.

A. Core Services

The 1996 Act defines universal service as “an evolving level of telecommunications services”⁵³ and charges the FCC with determining which services are essential, and therefore supported by universal service funding, based on a variety of factors,⁵⁴ including the extent to which these services:

- Are essential to education, public health, or public safety;
- Have, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers;
- Are being deployed by telecommunications carriers; and
- Are consistent with the public interest, convenience, and necessity.

The basic package of services that is eligible for universal service funding is likely to continue to evolve as policymakers grapple with which services are essential to Americans, a naturally dynamic process that is contemplated by the 1996 Act. Currently, the

⁵³ 47 U.S.C. § 254(c).

⁵⁴ In its interpretation of the Act, the FCC has concluded that not all four criteria must be met for a service to be determined to be essential for universal service purposes.

following are designated as “core” services and carriers who offer them (and meet other requirements specified in the Act) are eligible to receive universal service funds⁵⁵:

- Voice grade access to a telephone network
- Access to touchtone capability
- Single party service
- Access to emergency services, that may including 911
- Access to operator services
- Access to interexchange services
- Access to directory assistance
- Limited long-distance calling for qualified customers

This group of core services is not meant to be static. Section 254(b) of the 1996 Act also sets out clear Congressional intent for the promulgation of universal service policies that encourage the deployment of services beyond basic services when it states that, “Access to advanced telecommunications and information services should be provided in all regions of the Nation.” The 1996 Act further sets up a forward-looking approach to the definition of universal service when, in Section 254 (c), it defines universal service as, “an evolving level of telecommunications services that the Commission shall establish periodically under this section, taking into account advances in telecommunications and information technologies and services.”

Section 254 is not the only part of the 1996 Act that addresses policymakers’ role in access to advanced services. In Section 706, Congress created a requirement for the Commission and the states to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans.”⁵⁶ The term “advanced telecommunications capability” is defined as “high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.”⁵⁷ This section requires the Commission and the states to achieve this goal through the use of “price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment,” and to report “regularly” on the success their efforts. This section of the 1996 Act encourages the Commission to develop policies that promote private sector deployment of advanced services, and when read in conjunction with Section 254, makes it clear that the Universal Service program was not intended to single-handedly address the issue of access to advanced services.⁵⁸

⁵⁵ *Federal-State Joint Board on Universal Service, Report and Order, FCC 97-157, CC Docket No. 96-45* (released May 8, 1997).

⁵⁶ 47 C.F.R. § 706(a).

⁵⁷ 47 C.F.R. § 706(c)(1).

⁵⁸ In practice, the FCC has not seized upon section 706 as a vehicle to promote advanced services. In its two reports on progress in deployment of advanced services, the FCC has concluded that deployment is

The 1996 Act clearly sets out the goals of promoting advanced services and creating an evolving definition of the services that are to be covered by some sort of universal service mechanism, and in doing so, grants significant discretion to the Joint Board and the Commission to promulgate these policies. With this discretion comes a challenging task – to determine the means by which public policy can accomplish the goal of bringing access to advanced services to all Americans.

Before undertaking a discussion of the role the Universal Service program plays with respect to advanced services, it is helpful to understand the current state of affairs regarding the availability of advanced services such as Internet access (both dial-up and high-speed) in areas that are historically less technologically advanced, namely low-income and rural areas. These areas are the focus of the “digital divide.”

B. Universal Service and the Internet

Recent data show that there are gaps in connectivity to the Internet and personal computer (“PC”) ownership for many Americans, especially those that are poor and those that live in rural areas. An October 2000 study released by the National Telecommunications and Information Administration (NTIA) shows a wide gap in computer ownership and Internet access between households with lower incomes and households with higher incomes⁵⁹ (see Table Five). The table shows that in households with incomes less than \$15,000, 19 percent have a computer and 13 percent have Internet access. This contrasts sharply with households with higher incomes, for example, in the \$25,000-\$34,999 bracket, 59 percent have computers and 46 percent have Internet access. The gap is also evident in different racial and ethnic groups. White households owned PCs at twice the level of African American households (56 percent vs. 33 percent) as of August 2000. In rural areas, however, the gap is not as severe, with 50 percent of rural households having a computer and 39 percent having Internet access as compared to 52 percent of urban households having computers and 42 percent having Internet access.

proceeding in a reasonable and timely manner and that no proactive or deregulatory steps are required to fulfill its statutory duties.

⁵⁹ National Telecommunications and Information Administration, *Falling Through the Net: Toward Digital Inclusion*, October 2000, (NTIA Study)

Table Five: Computer Ownership and Internet Access by Household

	Percent Households With A Computer			Percent Households With Internet Access		
	August 2000	Point Change over Dec. 1998	Expansion Rate (Percent)	August 2000	Point Change over Dec. 1998	Expansion Rate (Percent)
All	51.0	8.9	21.1	41.5	15.3	58.4
White Non-Hispanic	55.7	9.1	19.5	46.1	16.3	54.7
Black Non-Hispanic	32.6	9.4	40.5	23.5	12.3	109.8
Asian Amer. & Pac. Isl.	65.6	10.6	19.3	56.8	20.8	57.8
Hispanic	33.7	8.2	32.2	23.6	11	87.3
Under \$15,000	19.2	4.7	32.4	12.7	5.6	78.9
\$15,000 - \$24,999	30.1	6.4	27.0	21.3	10.3	96.3
\$25,000 - \$34,999	44.6	8.8	24.6	34	14.9	78.0
\$35,000 - \$49,999	58.6	8.4	16.7	46.1	16.6	56.3
\$50,000 - \$74,999	73.2	6.9	10.4	60.9	17	38.7
\$75,000 +	86.3	6.4	8.0	77.7	17.4	28.9
Less than High School	18.2	5.7	45.6	11.7	6.7	134.0
High School Graduate	39.6	8.4	26.9	29.9	13.6	83.4
Some College	60.3	11	22.3	49	18.8	62.3
College Graduate	74.0	7.1	10.6	64	17.2	36.8
Post Graduate	79.0	6.8	9.4	69.9	16.9	31.9
Rural	50.4	10.5	26.3	38.9	16.7	75.2
Urban	51.5	8.6	20.0	42.3	14.8	53.8
Central City	53.7	15.2	39.5	37.7	13.2	53.9

Source: NTIA Study, *Falling through the Net IV*, Tables I-1 and I-2

It is generally true that poor people and minorities in the U.S. are less likely to own computers and be connected to the Internet than are middle and upper income citizens and non-minorities. However, the data show that in just the past few years, PC ownership and access to the Internet have grown dramatically among segments of society that heretofore have not been significantly involved in the digital revolution. In particular, the August 2000 data show a 75 percent increase in rural households connected to the Internet over

December 1998 when only 22 percent had access. Households in the lowest income level (under \$15,000) saw an increase of 79 percent in Internet access in the period between December 1998 and August 2000 (from 7.1 percent to 12.7 percent). Impressively, the Internet access rate for African Americans more than doubled in this period.

As more Americans access the Internet, the demand for high-speed access has grown. By August 2000, of all households that were already online, 10.7 percent had access to the Internet through broadband facilities,⁶⁰ and this number is expected continue growing rapidly.⁶¹ Broadband access is not only faster than standard dial-up access, but it also allows for a broader range of high capacity content such as streaming video. Similar to general Internet access, broadband subscribership varies by income, education and location. In rural areas, 7.3 percent of those households with Internet access have broadband access, compared to 11.8 percent in urban areas and 12.2 percent in central cities. Among Internet-available households with incomes less than \$15,000, only 7.7 percent had broadband access as compared to 13.8 percent for households with incomes over \$75,000. Households with members holding college degrees outpaced the average for broadband access at 12.5 percent while in those with high school or less, only 9 percent have broadband access.

The data above demonstrate that clear gaps exist among different groups – racial, socio-economic, and geographic – in terms of the extent to which they are connected to advanced services. This data suggests that large segments of the population are not participating in the types of information sharing enjoyed by other groups. The fear is that these groups are missing out on access to knowledge and the power that comes with that access. This “digital divide” has led some groups to call for the expansion of the definition of universal service to address this apparent inequity.

It is also important to note that there is a distinction between advanced services being included in the definition of supported services and actual Internet or broadband access. Some suggest that even if advanced services were included in universal service, it would not necessarily mean that more Americans could obtain them. Unlike basic telephony, where a simple phone and cord are needed for service inside the household, access to advanced services also contingent upon computers, software, other various hardware equipment, and the skills and knowledge of how to use them. With this in mind, there are a variety of issues that need to be attended to in order to address the digital divide, only some of which may be covered by the Universal Service Program. Therefore many have asserted that it is near-sighted to think that the digital divide can be bridged by universal service alone, and that there is a definite need for a more comprehensive strategy that

⁶⁰ NTIA Study page 23. NTIA notes that the study based its definition of broadband subscribership on the use of the most common technologies, such as Digital Subscriber Line (DSL), cable modems and Integrated Services Digital Network (ISDN), despite the fact that some of these services may provide less than the 200 kilobits per second transmission standard used in the FCC determination of broadband access.

⁶¹ According to Jupiter Research, by 2005 there may be more than 28 million households connected to broadband. This will represent a jump of over five-fold from the year 2000. See “More than One in Three US Online Households Will Connect Via Broadband in 2005, Jupiter Research Says,” <http://jup.com/company/pressrelease.jsp>, accessed November 9, 2000.

includes federal, state, and local governments working in unison to develop the infrastructure, provide the skills, and assist with obtaining the right equipment.

C. An Evolving Definition of Universal Service

At the core of the debate over expanding the Universal Service program to include advanced services is a disagreement about which services should be deemed “essential” services, and a further disagreement about what the programs can afford to support. Determining which services are essential to a community or a nation is a formidable task given the competing views on the issue and the diverse geographical and socioeconomic backgrounds of the American people.

Most stakeholders agree that a minimum level of access to telecommunications services is essential for meaningful participation in the economic, social and political aspects of modern society. Disagreements arise in determining that level of service. Some advocates of expanding the definition of supported services envision a “broadband telecommunications platform” in which a variety of advanced services would be accessible and affordable for all Americans, including voice, data, image graphics, and full motion video.⁶² Others would keep the current definition of supported services and provide for advanced services through the E-rate, which provides discounts to schools and libraries for advanced services.⁶³

Proponents of expanding the universal service program argue that as more advanced services become available and are adopted by a significant number of Americans, the level of services needed for effective participation by all groups naturally increases. For example, several states are experimenting with voting over the Internet,⁶⁴ and if this trend continues, there may be more opportunities for civic involvement and participation using high-speed connections. These groups also argue that government intervention is necessary due to the unique nature of network economics. They stress that the existence of strong network externalities in telecommunications services implies that the interaction of market forces alone will not bring about widespread adoption of new technologies by a majority of Americans as rapidly as is desirable.⁶⁵

Other stakeholders oppose expanding the definition of universal service to include advanced services. These groups argue that expanding the basic core package to eligible consumers is undesirable at this time, given the breakneck speed of technological innovation and the constant introduction of new services. Such an environment, they argue, is not conducive to government intervention that seeks to define a particular

⁶² See, e.g., “Connecting Each to All: A Telecommunications Platform for the Information Age,” Alliance for Public Technology (APT), 1993 (<http://www.apr.org/publica/each2all.html>).

⁶³ As previously noted, the Schools and Libraries program is beyond the scope of the Forum.

⁶⁴ See, e.g., “Arizona Democrats Plan First Online Election,” *IDG News*, December 17, 1999 (<http://www.nwfusion.com/news/1999/1217webvote.html>).

⁶⁵ From general economic theory, the idea is that while the addition of a new member to an existing network gives all members an external benefit, the marginal benefit to the individual is less than the marginal benefit to society. This leads to a smaller network than is socially desirable.

package of technologies to be included in universal service. These stakeholders call for a focus on the *process* rather than the *products* in examining the universal service definition. Instead of offering universal support for services, for example, these groups argue that government should be redefining the program so that it favors networks and technologies that are, as one analyst defined it, “digital, scalable and extensible.”⁶⁶ Its supporters see this approach as preferable because it allows the market to make the decision about which services are essential while charging policymakers with constructing a viable platform that could support a broad array of advanced services.

Some have noted that the 1996 Act is very clear in its four-part standard for determining when a particular service should be considered for inclusion in the definition of universal service, including when a substantial majority of residential subscribers have adopted the service. If the trends are positive and adoption rates are high, new services should be included, provided there is evidence of high penetration rates and usage. The idea of universal service for bringing telephone service to all American households was embraced as a policy goal after a majority of U.S. households already had telephone services.⁶⁷ With slightly more than 55 percent of Americans accessing the Internet in late 2000,⁶⁸ and with a growing number using broadband to do so, some suggest that the time is rapidly approaching for additional services, including advanced services, to be considered in the definition of supported services.

Even some of the opponents of expanding the definition of universal service do admit, however, that evidence of market failures preventing widespread adoption of certain telecommunications services could also justify an expansion of the current definition. These groups maintain that, on the contrary, the latest data supports a diminishing “digital divide” in certain categories. At the highest income levels (\$75,000+), for example, the gap between White and African American household ownership of personal computers has declined by 6 percent between 1997 and 1998.⁶⁹ A separate study found that from 1994-1997, African American and Hispanic households with incomes less than \$35,000 purchased computers at a faster rate than Whites.⁷⁰ On the other hand, proponents argue that the gap has continued to widen for low-income, least educated, and certain minorities.

It should be noted that provisions of the Telecommunications Act of 1996 are already providing a foundation for the advancement of advanced services, and that there are many carriers that are receiving universal service funding for deploying technologies that are advanced services capable. The 1996 Act provides, for example, that a variety of competing technologies (wireless, satellite) are eligible to receive USF for providing telecommunications services to customers.⁷¹ This is an important distinction because even

⁶⁶ Gillett, S., “Technological Change, Market Structure, and Universal Service,” Massachusetts Institute of Technology, April 1994.

⁶⁷ Mueller, M., “Universal Service in Telephone History: A Reconstruction,” *Telecommunications Policy*, Vol. 17, Issue 5, page 355, cited in *Id.*, page 21.

⁶⁸ Nielsen Net Ratings, November 2000 (http://www.nua.ie/surveys/how_many_online/n_america.html).

⁶⁹ *Id.*, pages 8 and 21.

⁷⁰ National Telecommunications and Information Administration, “PC Rate by Race and Income,” 1998 (cited in “The Internet and Society: Universal Access, Not Universal Service,” Progressive Policy Institute, September 1998, pages 8-9).

⁷¹ See Universal Service Order, 12 FCC Rcd at 8850-8851, para. 134.

though the definition of supported services does not include advanced services at this time, it does not prevent broadband capable plant from being supported. Some suggest that this new competitive environment is a very effective means for bringing affordable access to advanced telecommunications services for rural and low-income customers, and will help pave the way for the inclusion of advanced services in the definition of supported services at a later time. Making sure that there are no obstacles to USF support for advanced services may be just as significant as actually adding them into the definition.

In this sense, the universal service provisions in the 1996 Act are already opening the doors for advanced services on a larger scale later. However many supporters of universal service also caution that like the provision of voice grade service to rural, high cost, and low-income consumers, the advanced services market by itself may not be enough to reach all sectors of the United States without the support of the Universal Service Program. With this in mind, CECA believes it is important to monitor the deployment of plant that is capable of advanced services, and is important to watch closely for segments of the population that may be left out.

To this end, CECA offers a framework for determining the appropriate circumstances under which certain services, including but not limited to advanced services, can and should be included in the definition of services supported by the Universal Service program (see Appendix 3).

D. Looking Ahead

It is nearly impossible for any one person or organization to stay on top of all of the advances in telecommunications and technology. Even so, the Commission, the Joint Board and the states are tasked with promoting advanced telecommunications services for all Americans. In order to assist regulators in meeting these lofty goals, the CECA calls for the creation of a Technology Task Force (TTF) to aid regulators in a comprehensive examination of the social, political, economic, and technological landscape within which advanced services can be observed.

The TTF would be comprised of a wide balance of stakeholders – representatives from rural and urban areas, academics, business groups, representatives from various sectors of the telecommunications industry, and members of state and local governments. The TTF would monitor, on a regular and ongoing basis, the status of the deployment of technology in all areas of the nation, and indicators of the demand for those services. The TTF would have the flexibility to examine issues outside the boundaries of jurisdiction of the FCC, and if appropriate, could present observations and recommendations to other governmental and non-governmental agencies.

In formulating their recommendations regarding advanced services that should be considered by the FCC and the Joint Board for universal service support or for support by any other governmental program, the CECA Universal Service Forum has created a decision tree of questions to help guide decision-makers in their analysis. Part Four

includes a series of questions that CECA feels are appropriate for answering the question of when to include advanced services in the definition of core supported services.

E. A Note of Caution

While the mandates of the 1996 Act regarding advanced services are clear, one must not ignore the impact that the expansion of core services would have on the size and sustainability of the program. As new services are supported the financial strain on the program will increase. It will be critically important to weigh the potential impact on the program against the social benefits before new services are added to the definition. This underscores the importance of a careful review and examination of the alternative funding mechanisms presented earlier in this paper. It also underscores the need for the fund to be flexible so that it can evolve to meet the needs of the future.

There are also concerns that the current definition of supportable services may lead to two unfortunate consequences relating to the deployment of telecommunications infrastructure: (1) The low threshold for core services currently supported by the program may lead to a "race to the bottom," in which carriers have little incentive to deploy anything but the cheapest plant possible to minimize costs and maximize the amount of support received. The concern is that without minimum thresholds on the quality and capacity of plant that will ensure that the plant can accommodate advanced services, the Universal Service program could in fact be supporting plant that meets the minimum requirements of today, but will not be upgradeable in the future without considerable expense.⁷² (2) At the other end of the spectrum, there are concerns that the program may encourage deployment of plant that is more expensive than necessary, knowing that the program will support them. If true, this may not be the most efficient allocation of the Funds, and could lead to competitive disadvantages to non-ETC carriers, which could in the end, hurt consumers.

CECA concludes that the bar indeed should be raised on the minimum standards for plant deployment to ensure that all Americans will have access to advanced services in the future, but also acknowledges that there are no clear answers to what the new minimum standards should be nor how to create new standards while maintaining the principle of technology neutrality.

⁷² This concern has been raised particularly for small rural telephone companies and cooperatives. It is important to note that some government agencies, the Rural Utilities Service (RUS) in particular, provides significant funding support for these entities but also insists on firm requirements that the facilities be upgradeable in the future.

PART THREE: RECOMMENDATIONS AND OBSERVATIONS

VII. Recommendations

The following recommendations have been developed by CECA based on the ideas generated during discussions and the exchange of views from the Forum participants.

A. Supported Services

CECA believes that the services supported by the Universal Service Program are vital to the social well-being of all Americans. CECA also asserts that advanced and enhanced services, as links for maintaining connectedness among Americans and as tools for economic viability, will continue to increase in importance. Therefore, **CECA recommends that all supported services be maintained and that steps be taken consistent with legislative mandate to determine when additional services, including advanced services, should be included in the definition of supported services.** CECA recommends taking the following steps:

1. Create a Technological Task Force to Advise on Supported Services

CECA recommends that a Technological Task Force (TTF), in an advisory capacity to the FCC and the Federal-State Joint Board, be created to determine the optimal time for inclusion of additional services, including advanced services. The TTF would be a stakeholder group that would take a comprehensive examination of the social, political, economic, and technological landscape within which advanced services are considered. The TTF will have several advantages as a supplement to the FCC review process:

- The TTF would be comprised of a broad balance of stakeholders, much like the Rural Task Force, so that a variety of viewpoints on advanced services could be considered. Ensuring that the key stakeholders are represented is essential to the success and credibility of the TTF;
- The TTF could monitor progress on a more continuous basis than the regular review mandated by the Act;
- The TTF would have the flexibility to examine issues outside the boundaries of jurisdiction of the FCC, and if appropriate, could present observations and recommendations to other governmental and non-governmental agencies.

CECA recommends that a TTF consisting of approximately 20 members be established to advise the Commission. The TTF should include a balance of key representatives of stakeholder interests, including:

- Industry and business representatives;

- Consumer leaders;
- Payer states and payee states;
- Academics and technical experts;
- Low income advocates and ratepayer advocates.

2. Utilize a Deliberative Approach for Determining Essential Services

The 1996 Act mandates that universal service be “an evolving level of telecommunications.” As such, the Federal-State Joint Board and the FCC must determine precisely *how* universal service should evolve and *what* it should evolve into. **CECA recommends that decision-makers take a deliberative approach to determining such issues as whether to include advanced services in the definition of supported services.** To guide the process of reaching a decision, CECA has developed a series of questions for the FCC and the Joint Board to explore. Those are included in Appendix 5 of the report.

3. Coordinate the National Development of Advanced Services through the USF

CECA recommends that federal, state, and local governments should engage in an effort, nationally coordinated through the Universal Service Program, to encourage deployment of advanced services in all possible venues, specifically including economic development agencies. The Universal Service Program is a valuable asset in the provision of telecommunications services to Americans, and is also excellently positioned to oversee, plan, and synchronize governmental efforts to create the conditions under which advanced services are deployed.

B. The Low-Income Program

CECA believes that efforts should be made to ensure that the maximum number of low-income individuals are served by the Low-Income program. The recommendations below are intended to enhance the operational effectiveness of the program and encourage broader outreach efforts.

4. Use “Star” States as Benchmarks for Low Income Policies

The less than optimal penetrations rates suggest that most states could work more efficiently to ensure that Low Income support goes to all those who are in need. While state officials acknowledge that the Lifeline and Link-up programs are not benefiting a great number of eligible low income households, some states have policies that result in better targeting and support for households that are in need of assistance. **CECA recommends that the FCC examine the various state programs and determine which state policies can be held up as models for other states to adopt or replicate.**

A nationwide benchmark, such as the standard used in Vermont—where a flat threshold of 175 percent of the poverty line is used to determine who is eligible and then all eligible households are automatically enrolled into the system—can reduce the guesswork and produce clear numbers for state regulators.

5. Create a Compendium of Successful Outreach Tools

Even when states can determine more precise numbers of eligible households for Low Income support, a problem remains that many of those households may not realize that support is available. Publicizing this support is a requirement for Eligible Telecommunications Carrier (ETC) status, but it is not clear what the best means of publicizing might be. Currently, efforts to inform eligible individuals takes the form of:

- Bill stuffers from carriers;
- Television, radio, and print commercials;
- Information detailed on tax returns;
- Door to door, literally extending the message by word of mouth;
- Through web pages, such as the CALLS website;
- Information distributed through educational and social service agencies;
- Direct mailing to qualified customers.

This list gives examples of the variety of techniques available for making the program known to those hardest to reach. **CECA recommends that the FCC create a compendium of public education and outreach methods currently being used, along with an objective summary of the merits and limitations of each method.** This compendium can then be available to state regulators who wish to compare the methods used in their states with other demographically similar states.

C. Streamline ETC Certification Procedures

CECA believes that the goal of the Act—to introduce competition—will be enhanced if the ETC certification process is made most efficient, if undue delays are avoided, and if ease of certification is improved, thereby better enabling new entrants to compete. CECA acknowledges that many states have gained sufficient experience with the process over the past four years so as to have substantially accomplished streamlining. **CECA recommends that federal and state regulators, with the input of interested small carriers, continue to oversee progress in this area to ensure a technology-neutral and carrier-neutral approach to competition.**

VIII. Further Observations

The Forum identified several additional issues that are still in need of attention. The following observations are provided to help guide the debate.

A. Potential Tension Between Net Payor and Net Payee States

CECA believes that a vibrant, ubiquitous national network is in the best interest of the United States, both from an economic and a social perspective. The focus on a national network means that there will be states that contribute more financially than they receive, but ideally are rewarded by being connected to a dynamic network that would not otherwise exist.

However, CECA notes that there may be a growing tension between net payor and net payee states. Densely populated states pay more into the High-Cost program than they receive. Some from these states complain that carriers in some states receive universal services support for their overall loop costs, but are not required to offset those costs by including revenue generated by vertical or “premium” services, such as voice mail, call waiting, and call forwarding. At the same time, others have also pointed out that in programs like the Low-Income and the Schools and Libraries programs, the flow of funds goes the opposite direction, from low to high population density states. As long as the funds continue to go where they are needed, there may always be some states that are gaining slightly more than they are paying. CECA urges policymakers to emphasize the National benefits of the Universal Service Program and to take measures to reduce the tensions that may arise from payor states.

B. The Importance of Avoiding Perverse Incentives in Universal Service Support

There are concerns that the current definition of supportable services may lead to two unfortunate consequences in the deployment of telecommunications equipment:

- (1) The low threshold for core services supported by the program may lead to a “race to the bottom,” in which carriers deploy the cheapest plant possible to maximize the amount of support received. The concern is that without bottom limits as to load capacity (bandwidth, signal-to-noise ratio, and bit/second data capacity), the Universal Service program could in fact be supporting plant that meets the minimum requirements today, but will not be upgradeable in the future.
- (2) At the other end of the spectrum, there are concerns that the program may encourage “gold plating,” whereby carriers deploy the most expensive and

sophisticated plant available knowing that the program will support them. If true, this may not be the most efficient allocation of the funds, and could lead to competitive disadvantages to non-ETC carriers.

CECA believes that the bar should be raised on the minimum standards for plant deployment. CECA recommends that policymakers examine what the new minimum standards should be and how to create new standards while maintaining the principle of technology neutrality.

C. Disaggregation of Service Areas

The CECA Universal Service Forum discussed at length the idea of disaggregating service areas to allow new entrants to serve areas that best match their resources and business plans. While disaggregating (reducing the size of) the service area that a competitive ETC would have to serve would likely accelerate the introduction of competition in the most densely populated parts of rural areas, unless the support for an area is also disaggregated with the service, there runs the risk of encouraging the “cherry picking” of the lower-cost, more profitable customers by a competitor to the detriment of the incumbent. A potential solution might include disaggregating the amount of support along with the service area so that the subsidy received for a person in an area that costs less to serve would be less than the subsidy for someone in a less densely populated area.

Congress recognized that it is appropriate for States, with assistance from the FCC, to assess whether it is in the best interest of consumers to disaggregate the study area to create smaller service areas. The Act clearly intends to ensure that specific rural areas' needs and circumstances are carefully considered before any disaggregation occurs. CECA believes that this topic merits further analysis.

PART FOUR: BACKGROUND AND TECHNICAL INFORMATION

IX. Flow of Funds In and Out of the Universal Service Program

The Universal Service Fund is essentially comprised of several different programs. The Universal Service Administrative Company (USAC), a private, non-profit company, administers the USF and oversees the four divisions of the Universal Service Fund: The High Cost Division (HCD), the Low Income Division (LID), the Rural Health Care Division (RHCD) and the Schools and Libraries Division (SLD). In 1998, all four programs distributed more than \$5 billion in funds to eligible recipients.⁷³ The National Exchange Carrier Association, Inc. (NECA) provides program support for all divisions of the program.

A. Key Institutions Involved in the Universal Service Program

1. National Exchange Carrier Association (NECA)

Formed in 1983 by the Federal Communications Commission (FCC) as a not-for-profit membership corporation, NECA⁷⁴ is governed by a board of directors elected annually by its local telephone company members. The 15-member board includes telephone company representatives as well as individuals from other areas.

One of the key responsibilities of NECA is to administer the FCC's access charge plan. Access charges are the fees that long distance companies pay to access the local phone network to complete calls and are delineated in tariffs filed with the FCC by or on behalf of local telephone companies. Above cost access charges have provided an implicit subsidy used to meet universal service goals.

2. Universal Service Administrative Company (USAC)

The Universal Service Administrative Company (USAC) is a private, not for profit corporation that is responsible for administering the federal funds intended to provide every state and territory in the United States with access to affordable telecommunications services through the federal Universal Service program. Carriers serving high cost areas, low-income neighborhoods, as well as rural health care providers, public and private schools and public libraries, are eligible to seek support from the Universal Service program.

B. Description of How the Revenues Are Collected

USAC is responsible for collecting mandatory contributions to the universal service support mechanisms, and for disbursing universal service support funds to all eligible entities.⁷⁵ For the year 2000, USAC will have billed and collected approximately \$4.5

⁷³ <http://www.universalservice.org>.

⁷⁴ <http://www.neca.org>.

⁷⁵ This section replicates and otherwise relies on materials provided by USAC with its consent.