urged the importance of advanced services in developing universal service support mechanisms.

Unless FCC acts clearly and affirmatively to define universal service support mechanisms in terms of an evolutionary concept of network capabilities moving towards broadband networks, entire communities, regions and individuals will be left out of this rapidly developing evolution of the nation's communications to include synchronous video, audio and high speed data networks for the delivery of essential services to the citizenry of this country.

II. Comments Support the Importance of Section 706 to Universal Service Issues

Our examination of the comments in this proceeding convinces APT of the need to emphasize again a crucial policy consideration -- the great pertinence and importance of Section 706 to the sound resolution of the universal service question -- and to call for immediate focus on that facet. The grounds for this position are simply stated in the following discussion.

- The main thrust of the universal service section (sec. 254 (b)(2)) is that "[a]ccess to advanced telecommunications and information services should be provided to all regions of the nation." That is also APT's vision, as stated in its comments and its lead documents (e.g., "Connecting Each to All"). As for what is encompassed by the term, "advanced telecommunications," the Act

competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment." As to removing barriers, the Commission is called upon now to preempt any state barriers to open entry into local telecommunications, after appropriate process (sec. 253). The Commission and the states should forbear now from economic regulation where effective competition is found in some facet or sector. The Commission must act within the next six months to adopt its rules appropriately fleshing out the statutory standards in section 251. Thus, where the Commission sees clearly an amplification of the statutory standard that, consistent with that standard, will promote competition in the local market, it should act to make that amplification applicable on a nationwide basis. While there is no such opportunity, the Commission should follow the statutory process in section 252 (negotiation and state resolution) , allowing the states, with their "grass roots" expertise, to be laboratories, and returning to the question of national amplification at some later time after gaining needed experience from the state activities.

- Finally, there is the first statutory prescription, the use of price cap regulation by the Commission and the states. The Commission does already employ such regulation but it does so as a better or more efficient form of economic regulation to protect the monopoly ratepayer and to prevent improper cross-subsidization. It has never indicated any interest in using price cap regulation to accelerate broadband infrastructure development. On the contrary, it has

negative -- that price cap and other economic regulation by the FCC have been geared solely to deal with the lowest possible subscriber rates and to prevent improper cross-subsidization. We do not denigrate the importance of these considerations. But clearly in light of section 706, they are not the only factors to be taken into account. The public interest is greatly promoted by the early achievement of advanced telecom capability. On this score, we rely upon our comments (pp.5-8), showing that without such capability, we will not have the full or even adequate contribution by telecommunications to the quality of life in such crucial areas as education and health care in light of the need there for a broadband reach into the home.

- Finally, if we are correct in the above analysis, there is a need for FCC (and in many instances, state) action in the price cap area. The Act (sec. 706(b)) calls for the Commission to initiate a proceeding within 30 months after enactment, to consider the availability of advanced telecom capability to all Americans, and to conclude such a proceeding in six months. If the answer is negative, the Commission is to take immediate action to accelerate deployment by removing barriers to investment and promoting competition. Clearly, the Commission cannot soundly wait for three years, and then say that some action is called for. It must act now along the lines indicated in the Act, including the use of price cap regulation to accelerate deployment. It can then be in position just before the turn of the century to examine whether further actions are needed -- not to regret the waste of three precious years. We leave it to the Commission to

CERTIFICATE OF SERVICE

I, Lu Ann Steffey, hereby certify that the foregoing **Reply Comments of the Alliance for Public Technology** were mailed or hand delivered to the following on the 7th of May, 1996.

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FEDERAL COMMUNICATIONS COMMISSION Before the

Washington, DC 20554

In the Matter of	)	
	)	
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	
	)	

COMMENTS OF ALLIANCE FOR PUBLIC TECHNOLOGY

SUMMARY

The Alliance for Public Technology, a coaliton of 105 public interest organizations ands more then 200 individuals, comments to the Commission and the Joint Board on the questions raised in its Notice of Proposed Rulemaking to implement the universal service provision of the Telecommunications Act of 1996.

APT's vision of universal access to advanced telecommunication servcies at the earliest possible time is the focus of these comments. Section 706 of the Act endorses the APT vision of advanced universal service, borrowing language directly from APT policy papers, describing it "without regard to any transmission media or technology, as high-speed, switched, broadband telecmmunications capability that enables users to originate and receive high-quality, voice, data, graphics, and video telecommunications using any technology."

APT urges the Commission and the Joint Board to measure all proposals for universal service against whether they will speed the day when there is widespread deployment and use of advanced telecommuications services. We urge them to establish a path for migration from the more limited definition of a telephone based universal service to advanced universal service.

Our comments also endorse a funding mechanism that is fair and equitable, but we point out the Act's mandate that funding for universal service be from carriers. Thus, we encourage the Commission to focus on collection and administration methods that result in contributions by all carriers to universal service obligations. It should be left up to carriers, once there is effective local competition, on how to recoup their costs from their customers.

Finally, APT believes that Section 706 of the Act, which authorizes the Commission and the States to utilize regulatory and deregulatory mechanisms to incent the deployment of advanced infrastrcuture and services applies to the instant proceeding. Specifically, the Commission would be authorized under Section 706 to develop regualtory incentives in this proceeding to encourage more rapid deployment of advanced telecommunication services.

I. Introduction

The Alliance for Public Technology (APT)[1], is a Washington, DC based nonprofit, tax-exempt coalition of public interest groups with diverse grassroots membership and of individuals that is concerned with promoting policies that foster a maximum contribution by the telecommunications and information services to the quality of life of all Americans, especially in fields like education, health care, and democratic processes. The Alliance therefore fully agrees with the Commission on the great importance of this proceeding and others to follow in this area. In that respect, we call the Commission's attention to the APT's declaration of principles, *Connecting Each to All*, and to its implementing proposals contained in *Principles to Implement the Goal of Advanced Universal Service*. Both documents have previously been supplied to the Commission in other proceedings.[2] We believe strongly that APT's principles, particularly those related to the universal deployment of an advanced telecommunications

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[1] The Alliance was founded in 1988 and now has over 325 members, including 105 organizational members.

[2] A courtesy copy is being supplied under separate cover to the Commission and members of the Joint Board. Copies of the reports are available to the public from the Alliance for Public Technology, PO Box 28578, Washington, DC 20038-8578.

infrastructure and network, are most pertinent to the Commission's task in this proceeding.

We shall focus here on four facets -- the concept of universal service; the appropriate recipients of universal service subsidies; the administration of the concept in the new "pro-competitive, deregulatory environment,"[3] and the Snowe-Rockefeller provisions dealing with schools, libraries, and rural health providers.

II. The Concept of Universal Service

The Alliance has articulated a vision for this country of universal access by every American to an advanced telecommunications system and its services at reasonable rates. Our vision closely parallels the definition of advanced telecommunication services contained in Section 706 of the Act, to be "without regard to any transmission media or technology, 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."[4] We urge the Commission

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[3] Notice of Proposed Rulemaking and Order Establishing Joint Board, FCC 96-93, released March 8, 1996, at par. 30 (herein Notice).

[4] APT particularly applauds the critical element in this definition that users must be able to originate as well as receive so that the future does not entail large commercial companies simply dumping on a one-way basis vast quantities of entertainment,

and the Joint Board to embrace this vision and evaluate each proposal and rule against the standard of whether and to what degree it will promote the rapid deployment of such a nationwide and worldwide advanced telecommunication system.

We recognize that the goal of universal advanced telecommunications to every home at affordable rates cannot be fully and instantly implemented today. The concept of universal service -- as Congress has recognized -- is an evolving one, and necessarily so in light of the dynamic technology, market and societal needs as Section 254(c) has laid down.

We believe that the structure of the new Act, including the requirement in Section 254(b)(3), the policy contained in Section 706, and the mandate to deploy advanced services to schools, libraries and health care facilities, dictates that the Commission and Joint Board map out a strategy and migration path from the immediate, limited telephone based universal services suggested in the Notice, to the time when the advanced network and services envisioned by Section 254(b)(3) and Section 706 are universally deployed.

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shopping channels, etc. on consumers with no capability for two-way symmetrical transmission of high speed data-- so essential for the delivery of educational, health care, public information transactional and telecommuting services.

We urge the Commission and the Joint Board to address how universal service mechanisms can be directed to foster these goals and to implement a strategy for accelerating deployment of advanced telecommunications services. We believe such an approach is consistent with 254(b)(3) and also can be justified as a "regulatory mechanism designed to remove barriers to infrastructure development." (Section 706).[5]

The dilemma is patent -- how can a service or functionality meet principles ii and iii -- widespread availability and adoption -- unless the network itself is capable of supporting the service. We fear that a minimalist definition of universal service will not provide sufficient incentives for infrastructure investment necessary

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[5] Section 706 does not leave the matter to the general public interest standard. It is explicit: The Commission and each State "...shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms) by utilizing, in a manner consistent with the public interest... price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment." The Commission is directed to institute an inquiry within 30 months to determine whether such advanced capability is being deployed in a reasonable and timely fashion, and if it finds that it is not, to take immediate action to accelerate such deployment by removing barriers to infrastructure investment and promoting competition. But our point here is that the Section 706 process includes the instant universal service proceeding.

to foster the rapid development and deployment of advanced networks and services.[6]

If the Commission and the states do not act now to reasonably promote investment in advanced telecommunication infrastructure, such advanced services will not be timely available to be chosen by a majority of consumers, and thus will not become timely available to all Americans under the universal service concept. We recognize that the Commission and states have great discretion in how they proceed to meet this vital responsibility under the Act. But the Act does settle some issues that have long been in dispute. Some consumer groups have stressed that with declining costs because of dynamic technology, the sole emphasis should be on corresponding declining rates for consumers. While we are concerned that consumers not pay unfair or unreasonable rates, rates emphatically are not the sole consideration: If, for example, price cap regulation can be utilized to accelerate advanced telecommunication investment, that also is a

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[6] See Sec. 254(c). We, therefore, are concerned that the definition in that section may not be adequate: In deciding the telecommunication services to be supported by federal support mechanisms, consideration is to be given to the extent to which such services are (i) essential to education, public health, or public safety; (ii) have, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers; (iii) are being deployed in public telecommunications networks; and (iv) are consistent with the public interest. We believe that an additional consideration should include **whether the service or functionality is or will be necessary for access to advanced services.**

most important contribution to the public interest, and must be taken into account by the policy makers.[7] We believe the 1996 Act settled the dispute, and in a manner markedly favorable to the APT position. And we specifically urge that the Commission and the states move to implement this facet of the Act now, beginning with this proceeding. It would be most unsound not to take immediate action and to postpone action until some time three or more years from now. It is a truism, but worhty of noting, that for every year wasted, the opportunities lost are irretrievable.

This need can be pointed up by consideration of the role of advanced telecommunications in the education, health care, civic information and telecommuting fields if our nation is not to be irrevocably divided into information haves and have nots, and significant segments of our population deprived of the ability to participate in critical elements of our society.

There is a national consensus about the importance of educating for the high tech future, so that the current income disparities in our society are not exacerbated. Access to health care is an equally critical concern for citizens particularly those without insurance or in the lower income brackets. Participation in the democratic process

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[7] So also the Commission must be alert to promote advanced infrastructure investment by the cable television industry during the three year period when a substantial portion of that industry remains subject to rate regulation.

must obviously be as accessible for disadvantaged and lower income citizens as it is today for the upper income technically sophisticated citizens. It must also be available to all citizens regardless of income and not simply to citizens lucky enough to live in communities with an advanced telecommunication network infrastructure. As telecommuting involving video connections between home based workers and their supervisors, peers and subordinates in the office and home setting grows, access to jobs will increasingly require access to advanced telecommunications services in the home. If all citizens do not have access to these services because their communities are not wired up, we will have created one more insuperable barrier for citizens to participate in main stream society. That is one of the main reasons why the 1996 Act places such emphasis on the availability of advanced telecommunication and information services for schools and libraries (e.g., Internet access). See Sections 254(h), 706. Thus, the Commission can designate "a separate definition of universal service applicable only to public institutional telecommunications users" (Notice, par. 11); section 254(h)(1) contemplates federal support mechanisms to make available services additional to the "core" ones already described, and section 254(h)(2) directs the Commission to adopt competitively neutral rules to enhance school and library access to advanced

telecommunication and information services to the extent technically feasible and economically reasonable.

This means that it is much in the national interest to have the universal service support mechanism kick in for advanced services as soon as feasible. For this to happen under the Act, advanced telecommunication services must be widely promoted by the Commission and the states, so that they will be widely available and taken by consumers. So once again regulatory policies that promote infrastructure investment are crucial to the universal service concept and the national interest.

It is clear, therefore, that universal service mechanism must be developed to respond to the evolving telecommunication network infrastructure as it is gradually deployed. Today, telecommunications services have already significantly embraced high speed data and graphics and have started to embrace video. Demand for higher speed communications is beginning to mount. Since deployment of this evolving infrastructure will be uneven from community to community and region to region, it is essential that the Commission and Joint Board not create static mechanisms on a one size fits all basis.

It is also likely that in the advanced telecommunication world there will not be a widespread demand for one set of "basic

services."[3] Rather different demands for services of critical public interest and significance will be generated by different segments of the population at different times in their lives. A crude example of this changing demand might involve demands by families with children for educational services, by working families for telecommuting and by retirees and families with aging realities for electronic delivery of health care services to the home. Thus, basic services in the advanced telecommunication world will probably embrace a series of basic public service packages from which families can choose the basic package they want. This package will probably be a mixture of bandwidths geared to different usage's which these various applications may require.

The Commission and the Joint Board must be careful to design its universal service mechanisms to create incentives for advanced telecommunication network deployment and develop flexible mechanisms which can be adapted as advanced networks and technologies are deployed.

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[3] Indeed, these "services" may simply be a bundle of bits and bytes with various kinds of instructions or capabilities built in. (See, e.g., Nicholas Negroponte, *being digital* (Vintage Books, 1995)) The line between communications and content are also going to blur.

III. The Appropriate Targets for Universal Service

APT thus stresses that all Americans should be the beneficiaries of government policies that promote the infrastructure investment to bring them advanced telecommunication services as soon as feasible. See Section 706; above discussion. The issue here is that whatever the level of basic universal service may be at a particular time (in light of the four criteria), how the universal service subsidies will be made explicit and disbursed in a way consistent with the Act and a competitive telecommunication industry.

The Act (Section 254(b)(3),(h)) explicitly identifies three groups -- (1) low income consumers; (2) consumers in rural, insular, and high cost areas; and (3) rural public or nonprofit health providers, elementary and secondary schools, and public libraries. We discuss (3) in Point V, infra.[9]

As to (1), there is full agreement as to the need to extend basic universal service support to low income consumers and, indeed, to do a much better job in this respect. The Commission has determined that subscribership levels for low income persons fall

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[9] We also do not treat here the implementation of Section 255 concerning access by persons with disabilities. Implementation of those provisions will be dealt with in other proceedings. Many of APT member organizations are groups advocating for people with disablities. Section 254 and universal service mandates should be viewed with respect to all consumers, including those people with disabilities.

substantially below the national average;[10] thus, 31% of all families on food stamps have no telephone, and telephone penetration for women with children living at or below the poverty line is about 50%. The Commission has noted some of the problems leading to these depressing figures and we fully support the suggested efforts to deal with these problems.

This brings us to the second group, support for consumers in rural, insular and high cost areas. We certainly join in recognizing the obvious desirability of extending universal service support to those in rural or high cost areas that are in need of such support. When universal service support is viewed strictly from the perspective of how much any one individual is "subsidized" to receive a particular set of services, there is a perception of unfairness when support goes to the very affluent in ski resorts like Aspen and Vail, to rich ranchers or casino owners, and to many others in not the slightest need of a subsidy, as well as to low and middle income residents. That is why an infrastructure investment perspective on universal service may be a more appropriate view, providing financial incentives to encourage the deployment of technology in a way to assure these communities have access to advanced services. Initially, the Commission and Joint Board should examine the extent

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[10] See Subscribership Notice, at 13003-04.

to which elimination of artificial barriers to new entrants, particularly the interlata restrictions, may enable more efficient and affordable deployment of technology to these areas. The Commission and Joint Board should also examine opportunities to foster the development of multi-state regulatory experiments and compacts as a means of fostering innovative solutions to delivery of advanced services through more efficient mechanisms than have existed prior to the Act.

The Commission is aware of the problems and, as shown in the discussion in the Notice, pars. 27-40, is seeking new ways that might better comport with Congress' intent "to provide for a pro-competitive, de-regulatory national policy framework ... opening all telecommunications markets to competition" (par. 30). We encourage the Commission to explore carefully avenues like the proxy models and distributing high-cost assistance on the basis of competitive bids. We also support the notion that any plan here should be technology neutral (par.32), in light of the great promise of wireless to eventually alleviate problems in the high cost areas.

APT's position is simply stated: It favors most utilizing Section 706 incentives for carriers to provide the most advanced network and services to all areas of the country. We believe that universal service subsidies and recovery mechanisms can qualify as a

Section 706 incentive. To do so will lower the cost of providing services, ultimately minimizing the cost of traditional universal service mechanisms, such as life line and link-up.

APT recognizes the requirement of the Act to make subsidies explicit. We believe, however, that the Act envisions that these subsidies be contributed by **"carriers"**. The Commission should consider the use of systems (such a the "NeTrans" fee proposed by Eli Noam) that assure that all carriers contribute to the cost of universal services. Once there is local competition, then the Commission should permit carriers to decide how best to recover local loop and other costs from their customers. Some may elect to utilize a flat, subscriber line like fee, while others may average the cost in the price of their services and others still might develop volume discount systems or other innovative pricing schemes.

It seems clear that it will be decades before facilities based local competition reaches and benefits residential consumers. Competitors will of necessity resell local loops under discounted prices. These prices should be the source of recovery of explicit subsidy amounts. A number of different means of recovery have been proposed. One plan, proposed by NYNEX, does not rely on a usage sensitive element, but instead is a flat fee per line ordered by IXCs. APT strongly believes that all of those competitors who use

the public network must contribute to the cost of providing universal service. Similarly, to the extent these competitors themselves become eligible carriers, they should be entitled to receive the subsidies.[11]

IV. Administration in the New Competitive Era

As indicated above and in APT's policy papers, we support a system that ensures that carriers' contributions to fund universal service support are collected "on an equitable and nondiscriminatory basis" using "specific, predictable, and sufficient mechanisms" (par. 118) (e.g., TRS (par. 122) or contributions based on revenues net of payments to other carriers (par. 123).

We touch only briefly on this topic to raise a matter germane to the states rather than the basic federal universal service support system. The 1996 Act (Section 254(f)) permits the states to preserve and advance universal service so long as the state pays its own way and does not conflict with the federal system or rules. We believe that the states can play a most important role in this field.

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[11] APT is concerned that universal service policies not promote the continuation of uneconomic business enterprises such as very small telephone companies. Small phone companies serving very small populations do not enjoy the economies of scope and scale inherent in larger telecommunications networks. Federal policies that encourage the maintenance of these uneconomic entities do not serve to incent widespread deployment of advanced network infrastructure.

Experience shows that many States have been leaders in advancing universal systems, and have admirably fulfilled their role as laboratories by blazing new trails for others to follow (e.g., inclusion of touch-tone in universal service support). We strongly hope that they play a leading role in promoting the earliest possible use of advanced telecommunication and information services by, for example, formulating a process for aggregating demand through use of community based centers in libraries, schools and other suitable places (see discussion, infra, at page 17)

Some states have also been most innovative in the administration of their universal service undertakings. Thus, Maryland, like most states, imposes a gross receipts tax on all telecommunication carriers, and it simply permits a carrier that affords a designated universal service package to a qualified low income consumer (i.e., on welfare) to deduct that amount from the sum remitted to the state treasury. This not only fits the competitively neutral requirement, is available to all carriers, but most important, comes from the general treasury and thus promotes the fullest and most efficient use of telecommunications services. We believe that the Commission and Joint Board, in addition to their very important assigned tasks, can also act as a clearinghouse for innovative techniques that might be employed on the state level.

V. The Snowe-Rockefeller provisions.

As we have already stated, these provisions are of great importance because of the critical relationship of education to the future of our nation. In acting here, the Commission must take into account not only the issues raised in Part IV of the Notice but the desirability of surveying this requirement in the context of national and statewide educational reform efforts.

A. Education

While we would expect the Commission to rely most heavily on the comments of schools, libraries and health care provdiers in crafting its rules, APT would like to comment on at several points in the context of Snowe-Rockefeller. First, Federal policies designed to accelerate educational access to and uses of the NII through electronic linkages or "on/off ramps" to schools and libraries should reflect the diverse needs of states and local communities. No one technology or type of electronic service can address adequately the complex and emerging needs of schools and libraries. Incentives in the form of regulatory incentives and waivers could stimulate states and local municipalities to demand and negotiate services with the competitive providers they know and trust. Federal telecommunications policies should be changed and implemented in tandem with other federal regulatory and spending policies. Schools and libraries should be given the discretion to use and co-mingle multiple categorical grant allocations to extend educational and informational services electronically. Enabling schools and libraries to communicate and share services directly with families