Before the
Federal Communications Commission
Washington, D.C. 20554

FCC 96-93

In the Matter of

Federal-State Joint Board on
Universal Service

CC Docket No. 96-45

NOTICE OF PROPOSED RULEMAKING AND
ORDER ESTABLISHING JOINT BOARD

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By the Commission: Commissioner Barrett issuing a separate statement.

Comment Date: April 8, 1996

Reply Comment Date: May 3, 1996

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I. Introduction

1. This Notice of Proposed Rulemaking and Order Establishing Joint Board (Notice) implements, in part, the Congressional directives set out in Section 254 of the Communications Act of 1934, as added by the Telecommunications Act of 1996 (1996 Act)."
As required by Section 254(a)(1), we initiate this rulemaking to do the following: (1) define the services that will be supported by Federal universal service support mechanisms; (2) define those support mechanisms; and (3) otherwise recommend changes to our regulations to implement the universal service directives of the 1996 Act. We seek comment on all the matters discussed in this Notice. Also, pursuant to Section 254(a)(1), we order that a Federal-State Joint Board be convened in this docket, we appoint the individual members of the Federal-State Joint Board, and we refer the issues raised in this Notice to that Joint Board for the preparation of a Recommended Decision on these matters by November 8, 1996.

2. We intend that our undertaking in this Notice be consistent with the language of the 1996 Act and the underlying Congressional intent. We are further guided by our past experience in addressing universal service issues, but only to the extent that experience can assist us in interpreting and effectuating our new statutory mandate. This Notice reflects our newly articulated statutory obligation to ensure that the definition of services supported by universal service support mechanisms and those mechanisms themselves evolve as advances in telecommunications and information technologies continue to present consumers with an ever increasing array of telecommunications and information services. In accordance with Section 254(c)(2) of the 1996 Act, and as described below, we will periodically review, after obtaining further Joint Board recommendations, the definition of services supported by universal service mechanisms that we adopt in this proceeding, as well as the regulations adopted to implement the universal service mandates of the 1996 Act.

II. Goals and Principles of Universal Service Support Mechanisms

3. Section 254(a)(1) of the Communications Act, as amended, requires the Commission to "institute and refer to a Federal-State Joint Board under section 410(c) a proceeding to recommend changes to any of its regulations in order to implement sections 214(e) and [Section 254], including the definition of the services that are supported by Federal universal service support mechanisms and a specific timetable for completion of such recommendations." Section 254(b) requires that:

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4 1996 Act sec. 101(a), § 254(c)(1).

5 Id., § 254(c)(2).

6 Id., § 254(a)(1).
The Joint Board and the Commission shall base policies for the preservation and advancement of universal service on the following principles:

(1) QUALITY AND RATES. -- Quality services should be available at just, reasonable, and affordable rates.

(2) ACCESS TO ADVANCED SERVICES. -- Access to advanced telecommunications and information services should be provided in all regions of the Nation.

(3) ACCESS IN RURAL AND HIGH COST AREAS. -- Consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas.

(4) EQUITABLE AND NONDISCRIMINATORY CONTRIBUTIONS. -- All providers of telecommunications services should make an equitable and nondiscriminatory contribution to the preservation and advancement of universal service.

(5) SPECIFIC AND PREDICTABLE SUPPORT MECHANISMS. -- There should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service.

(6) ACCESS TO ADVANCED TELECOMMUNICATIONS SERVICES FOR SCHOOLS, HEALTH CARE, AND LIBRARIES -- Elementary and secondary schools and classrooms, health care providers, and libraries should have access to advanced telecommunications services as described in subsection (1).

(7) ADDITIONAL PRINCIPLES. -- Such other principles as the Joint Board and the Commission determine are necessary and
appropriate for the protection of the public interest, convenience, and necessity and are consistent with this Act.\(^7\)

Prior to the 1996 Act, the Commission relied on Section 1 of the Communications Act of 1934\(^8\) as the touchstone for virtually all major universal service policy discussions. The principles in Section 254(b) particularize and supplement our responsibility under that section of the Communications Act, as amended by the 1996 Act, "to make available, so far as possible, to all the people of the United States without discrimination on the basis of race, color, religion, national origin, or sex a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges.\(^9\)

4. We solicit comment on how each of the seven principles enunciated in Section 254(b) should influence our policies on universal service. For example, the first principle introduces the concept of "quality services."\(^10\) We seek comment on how we can assess whether quality services are being made available. In particular, we seek comment on the utility of performance-based measurements to evaluate our success in reaching that Congressional objective. The first principle also directs us to ensure that quality service be available at "just, reasonable, and affordable rates."\(^11\) While the Commission has often determined "just and reasonable" rates, we have not generally grappled with the notion of "affordable"\(^12\) in the context of universal service. We seek comment on whether there are appropriate measures that could help us assess whether "affordable" service is being provided to all Americans.\(^13\)

5. As to the second principle, we seek comment on how to design our policies to foster access to advanced telecommunications and information services for "all regions of the

\(^7\) Id. § 254(b).

\(^8\) 47 U.S.C. § 151.


\(^10\) 1996 Act sec. 101(a) § 254(b)(1).

\(^11\) Id.

\(^12\) Webster's New World Dictionary defines the term "afford" as follows: "to have enough or the means for; bear the cost of without serious inconvenience." Webster's New World Dictionary at 23 (William Collins, Second College ed. 1980).

\(^13\) For example, one such measure might be the level of telecommunications service subscribership among targeted populations.
While in the past, the Commission has focused on bringing basic telecommunications services to as many American homes as possible, this principle instructs us to focus specifically on advanced telecommunications and information services. We seek comment on which advanced telecommunications and information services should be provided, and how to provide access effectively to Americans in various geographic regions. We also seek comment on the cost of providing such access.

6. The third principle stresses that consumers in "rural, insular, and high-cost areas" and "low-income consumers" should have access to "telecommunications and information services" that are "reasonably comparable to those services provided in urban areas." In light of the further legislative intent to "accelerate rapidly private sector deployment of advanced services to all Americans," we believe that our goal should be to ensure that consumers "in all regions of the Nation" and at all income levels, including low-income consumers, enjoy affordable access to the range of services available to urban consumers generally. We recognize, however, that the range of services is not likely to be identical for all urban areas, and may, as a practical matter, vary according to the demographic characteristics of consumers located in a given urban area. We seek comment on how best to incorporate that variation in our use of urban area service as a benchmark for comparative purposes.

7. The fourth and fifth principles refer to support mechanisms for universal service and will guide our efforts to establish those mechanisms through which funding essential to realizing our universal service goals will be collected and distributed. The fourth principle calls for "equitable and non-discriminatory contributions: from "all providers of telecommunications services," while the fifth principle directs that the "Federal and State mechanisms" be "specific, predictable and sufficient." The sixth principle that will shape our deliberations states that "elementary and secondary schools and classrooms, health care providers, and libraries should have access to advanced telecommunications services. . . ." We discuss these principles in Sections V and VI. below.

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14 1996 Act Sec. 101(a) § 254(b)(2).
15 Id. § 254(b)(3). "Insular" areas refer to areas such as the Pacific Island territories. S. Conf. Rep. No. 104-230. 104th Cong., 2d Sess. at 131.
17 Id. § 254(b)(2).
18 Id. § 254(b)(4).
19 Id. § 254(b)(5).
20 Id. § 254(b)(6).
8. The final principle listed in Section 254 of the new legislation authorizes the Commission and the Federal-State Joint Board to base universal service policies on "[s]uch other principles as [they] determine are necessary and appropriate for the protection of the public interest, convenience, and necessity and are consistent with this Act." We invite interested parties to propose additional principles relevant to the choice of services that should receive universal service support. We note, for example, a fundamental underlying principle of the 1996 Act is the Congressional desire "to provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies to all Americans." In that context, we seek comment on whether we should ensure that the means of distributing universal service support should be competitively-neutral, and the least regulatory possible, consistent with our statutory obligations. In addition, we specifically ask that commenters address whether and to what extent concerns for low income consumers or those in rural, insular, or high cost areas can or should be articulated as additional universal service principles pursuant to Section 254(b)(7) or should be considered in determining whether a particular service is "consistent with the public interest, convenience, and necessity under Section 254(c)(1)(D)." We request the Joint Board's recommendations regarding all of these general policy issues raised by Section 254(b).

9. Section 254(c)(1) of the Act directs that:

[t]he Joint Board in recommending, and the Commission in establishing, the definition of the services that are supported by Federal universal service support mechanisms shall consider the extent to which such telecommunications services--

(A) are essential to education, public health, or public safety;

(B) have, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers;

(C) are being deployed in public telecommunications networks by telecommunications carriers; and

21 Id. § 254(b)(7).


23 The contribution mechanism is expressly required to be "equitable and non-discriminatory." 1996 Act sec. 101(a), § 254(d).

24 Id. § 254(b)(7).
(D) are consistent with the public interest, convenience, and necessity.\textsuperscript{25}

We interpret the statutory language of Section 254(c)(1) as manifesting Congressional intent that the Joint Board and the Commission consider all four criteria when deciding what services to support through Federal universal service. We interpret this language, however, - particularly the use of the word "consider" -- to allow the Joint Board and the Commission to include services that do not necessarily meet all of the four criteria. We seek comment and the Joint Board's recommendation on this interpretation. We also ask how we should evaluate whether a service or feature is "essential to education, public health, or public safety."\textsuperscript{26}

10. The fourth principle dictates that we must collect the revenues required to fund the universal service support mechanisms discussed here in an equitable and non-discriminatory manner. We seek detailed comments on the implications of this directive with respect to the mechanisms that will be employed to collect universal service contributions, below. Here, however, we seek comment on what standards we might use to help determine which, if any, "providers of telecommunications services" might be treated differently than others for "equitable" reasons.

11. The 1996 Act provides universal service support for two primary categories of services, each of which has two separate subcategories of intended beneficiaries: (1) a "core" group of services, the provision of which is to be supported for consumers with low incomes or in rural, insular, and high cost areas; and (2) additional services, including advanced telecommunications and information services, for providers of health care or educational services, as described in Sections 254(b)(6) and 254(h). As we interpret the 1996 Act, our first responsibility is to identify what core group of services should be supported by Federal universal support mechanisms, to enable the first group of beneficiaries to purchase those services at just, reasonable, and affordable rates. As to the second category of services, advanced telecommunications services for schools, libraries, and health care providers, Section 254(c)(3) authorizes the Commission "to designate a separate definition of universal service applicable only to public institutional telecommunications users."\textsuperscript{27} We note that, in regard to this provision, "the conferees expect the Commission and the Joint Board to take into account the particular needs of hospitals, K-12 schools and libraries."\textsuperscript{28} In Section 254(h), the Act created two distinct mechanisms for assuring the availability of these additional services to schools, libraries and health care providers.

\textsuperscript{25} Id. § 254(c)(1).

\textsuperscript{26} See id. § 254(c)(1)(A)


\textsuperscript{28} Id.
Section 254(h)(1) contemplates that there will be Federal support mechanisms to enable eligible health care providers in rural areas, schools and libraries to obtain access to these additional services, as well as the core services discussed above. In addition, the second mechanism, found in Section 254(h)(2), directs the Commission to adopt competitively neutral rules to enhance for all eligible health care providers, libraries and schools access to advanced telecommunications and information services to the extent technically feasible and economically reasonable. In this Notice, we will address both of these definitions and their respective potential support mechanisms separately.

12. We do not address Sections 254(f), 254(g), or the last sentence in Section 254(k) in this Notice, nor do we refer issues relating to them to the Federal-State Joint Board convened by this Order. Section 254(f) is directed to the states and to what they may or may not do to advance universal service goals. Section 254(g) has an explicit timetable separate and distinct from that in Section 254(a), and we believe these separate timetables, which are not reconcilable, indicate that Section 254(g) does not need Joint Board consideration. The last sentence in Section 254(k) states that "[t]he Commission, with respect to interstate services, and the States, with respect to intrastate services, shall establish any necessary cost allocation rules, accounting safeguards, and guidelines to ensure that the services included in the definition of universal service bear no more than a reasonable share of the joint and

Section 254(h)(5)(B) defines "health care provider" to mean:

(i) post-secondary educational institutions offering health care instruction, teaching hospitals, and medical schools;
(ii) community health centers or health centers providing health care to migrants;
(iii) local health departments or agencies;
(iv) community mental health centers;
(v) not-for-profit hospitals;
(vi) rural health clinics; and
(vii) consortia of health care providers consisting of one or more entities described in clauses (i) through (vi).


Section 254(a) requires the Joint Board to make its recommendation to the Commission nine months after the date of enactment of the 1996 Act and requires the Commission to complete its proceedings within 15 months of the date of enactment. Id. § 254(a). Section 254(g), however, requires the Commission to adopt rules "within 6 months after the date of enactment" of the 1996 Act "to require that the rates charged by providers of interexchange telecommunications services to subscribers in rural and high cost areas shall be no higher than the rates charged by each such provider to its subscribers in urban areas." Id. § 254(g).
common costs of facilities used to provide those services. The explicit use of the language "the Commission, with respect to interstate services, and the States, with respect to intrastate services," indicates that Congress intended to give the separate jurisdictions the flexibility to review these issues separately.

III. Support for Rural, Insular, and High-Cost Areas and Low-Income Consumers

A. Goals and Principles

13. In this section, we seek to answer several basic questions concerning the design and operation of the support mechanisms for rural, insular, and high-cost areas as well as for low-income consumers. In our search, we are guided by the principles in Section 254 relating to our obligations toward rural, insular, and high-cost areas and low-income consumers.

14. The first universal service principle relevant to consumers in rural, insular, and high-cost areas set forth in the 1996 Act is that "[q]uality services should be available at just, reasonable, and affordable rates." Prior to the 1996 Act, the Communications Act of 1934 required that rates for telephone services subject to our jurisdiction be just and reasonable, without unjust or unreasonable discrimination, but did not expressly require that the rates be affordable to the average telephone subscriber or to any designated group of subscribers. The 1996 Act makes explicit that our universal service policies should promote affordability of quality telecommunications services. We seek comment proposing standards for evaluating the affordability of telecommunications services. We note that the Act specifically provides that telecommunications services -- not just the narrow category of telephone

31 Id. § 254(k).

32 We are planning to commence a rulemaking shortly to implement the provision in Section 254(k) calling for the Commission "with respect to interstate services. . .[to] establish any necessary cost allocation rules, accounting safeguards, and guidelines to ensure that services included in the definition of universal service bear no more than a reasonable share of the joint and common costs of facilities used to provide those services." Id. § 254(k). This proceeding will be a vehicle for all interested parties, including State regulators and consumer advocates, to address issues of common concern and interest relating to development of accounting safeguards for universal service support mechanisms.

33 Id. § 254(b)(1).

exchange service -- be affordable. The second relevant principle is that "[a]ccess to advanced telecommunications and information services should be provided in all regions of the Nation." We seek comment on whether the Act requires that all regions of the country must have access to all telecommunications and information services, and if so, how this can best be effectuated in a "pro-competitive, de-regulatory environment."

The third principle we address here is that "[c]onsumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high-cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services" reasonably comparable to those provided in urban areas and at reasonably comparable rates. This principle directs us to go beyond the purpose and approach of the current Universal Service Fund (USF) program by focusing on the comparability of access to services available throughout the country, as well as on the comparability of rates.

35 See 1996 Act sec. 101(a), § 254(c), (i). The 1996 Act defines "telecommunications service" as "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used." Id. § 153(51).

36 1996 Act sec. 101(a) § 254(b)(2).


38 1996 Act sec. 101(a) § 254(b)(3).

39 The current USF program is designed to "preserve universal service by enabling high cost companies to establish local exchange rates that do not substantially exceed rates charged by other companies." MTS and WATS Market Structure, Third Report and Order, 93 FCC 2d 241 (1983).

40 By means other than through the USF, the Commission has also sought to ensure service to rural areas. For example, in Basic Exchange Telecommunications Radio Service, Report and Order, 3 FCC Rcd 214 (1988), we acknowledged that many rural households do not have standard telephone service because the cost of wiring remote locations is prohibitive. In response, the Commission established the Basic Exchange Telephone Radio Systems (BETRS) to allow access by LECs to shared frequencies to provide wireless local loops. More recently, in amending our rules for competitive bidding for Personal Communications Systems (PCS) licenses, we permitted rural telephone companies to obtain broadband PCS licenses that are geographically partitioned from larger PCS service areas (through a partial license transfer) in an effort to ensure that rural areas receive broadband PCS. Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, Fifth Report and Order, 9 FCC Rcd 5532 (1994)
B. Support for Rural, Insular, and High Cost Areas

1. What Services to Support

15. In this section, we discuss specific telecommunications services we propose to include among the services that, with respect to rural, insular, and high cost areas, should receive universal service support. As to each of these "core" services, we seek comment on our proposal to designate the service for universal service support. We also ask commenters to discuss the extent to which each of the proposed services is in accordance with the principles and criteria in Sections 254(b) and 254(c)(1), discussed above. In accordance with the principle of the 1996 Act that support mechanisms should be "specific, predictable, and sufficient," we also ask the commenters to identify the total amount currently required for each included service.

16. We seek comment regarding whether the following services should be included among those core services receiving universal service support: (1) voice grade access to the public switched network, with the ability to place and receive calls; (2) touch-tone; (3) single party service; (4) access to emergency services (911); and (5) access to operator services.

17. We invite commenters to identify additional services that meet the statutory criteria of Section 254(c)(1) and therefore should be among the services that should receive universal service support. Commenters should discuss the extent to which each of the proposed services specifically meet those statutory criteria and further the principles established in Section 254(b). In addition, given that the 1996 Act specifies that common carriers "shall . . . offer the services that are supported by Federal universal service support mechanisms" in order to be designated as eligible telecommunications carriers and thus eligible for universal service support, and that the Joint Statement stresses the importance of "opening all telecommunications markets to competition," we seek comment regarding the competitive effect of our proposed definition. Specifically, we ask whether providing universal service support for each proposed service could serve as a barrier to entry by new competitors or favor one technology over another, perhaps more efficient, technology. Our goal is to adopt universal service rules that are competitively and technologically neutral so

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41 1996 Act sec. 101(a) § 254(b)(5).

42 We have expressly not included Telecommunications Relay Services (TRS) within the list of services proposed for universal service support, because those services are already served by the existing TRS support mechanism, established pursuant to Section 401 of the Americans with Disabilities Act, 47 U.S.C. § 225.

43 1996 Act sec. 102(a) § 214(e)(1).

that our rules do not unreasonably advantage one particular technology or class of service provider over another technology or service provider.45

18. **Voice Grade Access to the Public Switched Telecommunications Network.** We believe that voice grade service, whether provided by wireline or wireless technologies,46 should be considered indispensable because it enables direct calling into the network, is provided throughout public telecommunications networks,47 and is subscribed to by a substantial majority of residential customers.48 Because it enables consumers to reach schools, emergency medical assistance, doctors, law enforcement authorities, and fire departments, it appears to be essential to education, public health, and public safety.49 Including voice grade service among the services that should receive universal service support would also appear to be consistent with the public interest, convenience, and necessity. We seek comment as to whether, and at what performance level, voice grade service should be included among the services that should receive universal service support.

19. **Touch-tone.** Touch-tone is a generic term for technology that involves the use of a push-button telephone set that transmits, and a local switch that receives, a dual-tone multifrequency signal (DTMF). Touch-tone is widely deployed throughout public telecommunications networks, and consumers widely subscribe to it.50 We note that touch-tone is becoming increasingly indispensable for subscribers in order for them to interact with automated information systems, and thus may be essential for effective use of educational services. It also increases the speed at which subscribers are able to reach emergency service providers, and thus appears essential for public health and safety.51 Including touch-tone service among the services that should receive universal service support would also

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45 See, e.g., 1996 Act sec. 101(a), § 254(h)(2) (directing Commission to "establish competitively neutral rules - to enhance . . . access to advanced . . . services for . . . school classrooms, health care providers, and libraries") (emphasis added).

46 We recognize that all voice grade services may not have identical transmission characteristics and, in particular, that there may in some cases be differences in the capacity of wireline and wireless services.

47 1996 Act sec. 101(a) § 254(c)(1)(C).

48 Id. § 254(c)(1)(B).

49 Id. § 254(c)(1)(A).

50 Id. § 254(c)(1)(B)-(C).

51 Id. § 254(c)(1)(A).
appear to be consistent with the public interest, convenience and necessity. We seek comment as to whether touch-tone service should be included among those supported services. We also request that interested parties provide information regarding any service other than touch-tone that would serve the same general function as touch-tone service. In addition, we ask whether the provision of such services should be treated the same as the provision of touch-tone service for purposes of determining a carrier's designation as an eligible carrier.

20. **Single Party Service.** Single party service is also generally available throughout the public telecommunications network and is subscribed to by a majority of residential customers. Single party service helps ensure that subscribers will be able to reach emergency service and health care providers without delay and may therefore be essential to public health and public safety. In addition to affording subscribers privacy, single party service facilitates access to many information technologies. Many residential subscribers use modems to access advanced services like home banking, the Internet and commercial computing services. Because modems currently are required for computer users to have access to those services, single party service may be becoming even more important to residential computer users in the future, and requiring it may therefore be consistent with the public interest, convenience, and necessity. We seek comment as to whether single party service should be included among the services that should receive universal service support.

21. **Access to Emergency Services.** Access to emergency services, including 911 service, is essential to public health or public safety and, as such, consistent with the public interest, convenience, and necessity. Additionally, such services are widely deployed throughout public telecommunications networks and, though generally provided as part of residential service without any customer intervention, are available to a substantial majority of customers.

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52 Id. § 254(c)(1)(D).

53 Push button telephone sets are used with ISDN lines but signalling typically is accomplished through the transmission of digital signals instead of DTMF signals. Bellcore's BOC Notes on the LEC Networks, 1994, Section 14. These digital signals provide all of the functionalities available with DTMF signals.


55 Id. § 254(c)(1)(B)-(C). Single party service occurs when exactly one subscriber may use a local loop to originate or terminate calls.

56 Id. § 254(c)(1)(A). (D).

57 Id.
of residential customers. In much of the nation, 911 service merely connects subscribers with an emergency service that includes local police and fire departments. Enhanced 911 service adds capabilities, such as automatic number identification and automatic location information, to the basic 911 service. These additional capabilities "are being deployed in public telecommunications networks by telecommunications carriers" and appear "consistent with the public interest, convenience, and necessity." They also may be "essential to public health or public safety," and, in the future, provided to a substantial majority of residential subscribers. To ensure a complete record on this issue, we invite comment on whether we should include access to enhanced 911 service among the services that should receive universal service support in the event we include basic 911 service in that group.

22. Access to Operator Services. Similarly, access to operator services would appear indispensable for both at-home and away-from-home users in public health or public safety emergencies and, as such, would appear to be consistent with the public interest, convenience, and necessity. Operator services are available throughout the public switched network and are used by at least a substantial majority of residential customers, even though customers are often charged for using those services. We seek comment as to whether access to operator services should be included among the services that should receive universal service support.

23. We also invite commenters to identify services other than those listed above that should be included among the services that should receive universal service support, based on the four criteria specified in Section 254(c)(1). For instance, interested parties may wish to address the inclusion of relay services, directory listings, and equal access, to the extent that

58 Id. § 254(c)(1)(B)-(C).

59 Automatic number identification provides the called party with the telephone number from which the call was placed. Automatic location information allows the called party to use that telephone number to determine the address or other location from which the call was placed.

60 1996 Act sec. 101(a) § 254(c)(1)(C).

61 Id. § 254(c)(1)(D).

62 Id. § 254(c)(1)(A).

63 See id. § 254(c)(1)(F).

64 Id. § 254(c)(1)(A), (D).

65 Id. § 254(c)(1)(D).
such a requirement would be consistent with the Act. In particular, because of the directive in Section 254(b)(3) relating to "access to . . . interexchange services," we seek comment on whether access to interexchange services should also be included among those services receiving universal service support. Finally, we invite parties to discuss advanced services that may warrant inclusion, now or in the future, in the list of services that are supported by universal service support mechanisms. For example, within the context of the criteria discussed in Section 254(c)(1), commenters may wish to discuss Internet access availability, data transmission capability, optional Signalling System Seven features or blocking of such features, enhanced services, and broadband services.

2. How to Implement

24. With respect to each support mechanism, we must determine the beneficiaries of the support. For example, we ask parties to address whether support for rural, insular, and high-cost areas should be limited to residential users or residential and single-line business users, or should be provided to all users in such areas. We also seek comment on the method for calculating support amounts. We ask parties to address whether support should be calculated based on inputs (for example, facility costs would determine subsidy amounts) or based on outputs (the price of services would determine support levels). In answering these questions, commenters should consider all applicable provisions of the 1996 Act, especially the three general principles enumerated in the Act applicable to support for rural, insular and high-cost areas and for low-income consumers. We seek comment on how assistance for rural, insular, and high cost areas should be calculated and distributed, and request that the Federal-State Joint Board prepare recommendations in this regard.

a. How to Determine "Affordable" and "Reasonably Comparable"

25. Section 254(b)(3) states that rates for services in rural, insular, and high cost areas should be reasonably comparable to rates charged for similar services in urban areas of
the country.\textsuperscript{70} Section 254(i) charges this Commission and the States with responsibility for assuring that the service rates throughout this country should be "just, reasonable and affordable."\textsuperscript{71} We seek comment on how we should determine rate levels that would be "affordable" and "reasonably comparable" for services identified as requiring universal service support. We ask commenters to identify the criteria or principles that should guide this determination, the methods we should use to evaluate the required rate levels, and whether there should be procedures to recalibrate these rate levels to reflect changes in inflation or other factors that may make such recalibration periodically necessary.

26. We seek comment on, for example, whether support should be based on achieving specific end-user prices. We also seek comment on how we should determine the level of prices for designated telecommunications services that are "comparable to rates charged for similar services in urban areas."\textsuperscript{72} In addition, we ask whether prices should vary depending on whether the customer is a non-business subscriber, a single-line business subscriber, or a multi-line business subscriber. Finally, we seek comment on the extent to which a subsidy should be provided to assure affordable and reasonably comparable rates for services using other than a primary line to a principal residence. We refer these issues to the Joint Board for its recommendation.

\textbf{b. How to Calculate the Subsidy}

27. We also seek comment to identify methods for determining the level of support required to assure that carriers are financially able to provide the services identified for inclusion among those to be supported by universal service funds in rural, insular, and high-cost areas. The method we ultimately adopt should be as simple to administer as possible, technology-neutral, and designed to identify the minimum subsidy required to achieve the statutory goal of affordable and reasonably comparable rates throughout the country. It should be equitable and non-discriminatory in the burden that it imposes upon contributors, and its distribution procedures should be direct, explicit, and specific.

28. The existing universal fund mechanism operates through our Part 36 rules. The subpart that concerns the universal service fund allows LECs with above-average costs to recover a designated portion of those above-average costs from the interstate jurisdiction and, in particular, from the universal service fund, to which only some interexchange carriers must contribute. This frees the LEC recipients from the need to recover all of their costs from their own customers and in so doing is intended to moderate local rate levels. The existing mechanism may, however, give recipients of assistance, currently limited to incumbent LECs, a substantial advantage over competitors who must recover all of their

\textsuperscript{70} 1996 Act sec. 101(a) \textsection{} 254(b)(3).

\textsuperscript{71} Id. \textsection{} 254(i).

\textsuperscript{72} Id. \textsection{} 254(b)(3).
costs from their customers. It may also not be the sort of "explicit" support mechanism contemplated in Section 254(e).73

29. The dial equipment minute (DEM) weighting assistance program is based on the theory that smaller telephone companies have higher local switching costs than larger LECs have, because the smaller companies cannot take advantage of certain economies of scale.74 Our jurisdictional separations rules allow LECs with fewer than 50,000 access lines to allocate to the interstate jurisdiction a greater proportion of these local switching costs than larger LECs may allocate. For these small LECs, the actual DEM is weighted (i.e., multiplied by a factor) to shift some intrastate costs to the interstate jurisdiction. DEM weighting is specifically provided outside of, and unrelated to, the USF program. Unlike the USF, DEM weighting applies only to small LECs, and to all small LECs, regardless of their actual costs.

30. We seek comment on whether continuing to use the Commission's jurisdictional separations rules to subsidize LECs with above-average loop costs, or the local switching costs of small LECs, is consistent with Congress's intent "to provide for a pro-competitive, de-regulatory national policy framework . . . opening all telecommunications markets to competition,"75 or with its intent relating to the characteristics of universal service support mechanisms to be adopted pursuant to Section 254. Many entities, among them non-wireline and non-dominant carriers, that might be designated "eligible telecommunications carrier[s]" by the appropriate State commission, are not now subject to our separations rules, which apply only to LECs.76 We also seek comment in this connection regarding the statutory requirement "that any support mechanisms continued or created under new section 254 should be explicit,"77 and we request the Joint Board to address this principle in its recommendation.

31. We also request comment regarding a specific proxy model submitted to this Commission by several telecommunications carriers (Joint Sponsors), which we specifically

73 Id. § 254(e).

74 Dial equipment minutes are the minutes of holding time of originating and terminating local dial switching equipment. The jurisdictional separations rules allocate local switching equipment costs between the interstate and intrastate jurisdictions on the basis of each jurisdiction's relative number of dial equipment minutes of use.


76 1996 Act sec. 102(a) § 214(e).

77 Id. § 254(e).
incorporate by reference into this proceeding. Once we determine what constitutes affordable rates for services designated for universal service support, this model might be used to determine the level of subsidy required to bring services priced at affordable levels to consumers in high-cost, rural, and insular areas. We seek comment on how this objective could be achieved. The Joint Sponsors collaborated during the past year to develop a Benchmark Costing Model (Model) for calculating a "benchmark" cost, or standard assumed level of expense, for the provision of local telecommunications access in every census block group in the United States, excluding Alaska and the territories, if service is provided by a wireline carrier.

32. The purpose of the Model is to identify areas where the cost of service can reasonably be expected to be so high as to require explicit high-cost support for the preservation of universal service. The Model produces a benchmark cost range for a defined set of residential telecommunications services assuming efficient wireline engineering and design, and using current technology. It is not based upon the costs reported by any company, nor the embedded cost to a company of providing service today. The Model bases projected costs on the least-cost wireline technology to serve a particular area, given that area's geographic and population characteristics. As a threshold inquiry, we ask whether the model should be made technology neutral, in order to provide for non-wireline service where such service would be economical. In addition, we ask whether, in addressing the Model specifically or these issues generally, we should base our determinations on embedded costs or forward-looking costs, to the extent that costs are relevant to the support mechanisms for rural, insular, and high-cost areas.

33. We also solicit comment regarding a proxy model that incorporates data showing the location of actual residential and business customers. The party offering this model claims it can be adapted for use by wire center, or even by specific consumer, as well as by census block group, but also acknowledges that, as currently designed, it relies on proprietary information that cannot be reviewed by other interested parties. We seek comment regarding the merits of this proxy model. Specifically, we ask whether using an

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79 A census block group is a geographic unit defined by the Bureau of the Census. Each census block group contains approximately 400 households.

80 See Joint Submission

81 See ex parte submission in CC Docket No. 80-286 by Gina Harrison, Director, Federal Regulatory Relations, Pacific Telesis Group (February 29, 1996).
incumbent LEC's wire centers as the geographic unit for calculating universal service support accords with our policy of competitive and technological neutrality.

34. In addition, we ask whether census block groups are the best geographic units for developing a proxy model, or whether alternative units would be more accurate or easier to administer. We invite comment regarding the Model's assumptions about the likely distribution of subscribers within a census block group. For example, we seek comment whether the assumption of uniform population distribution adequately reflects the possibility that in some rural areas, despite the theoretical sparsity, all lines are clustered near a single location. The Model also excludes business lines from its analysis.\textsuperscript{82} We invite comment as to whether the Model might therefore show unduly high residential costs in some census block groups, in that the exclusion of business lines could produce an overstated calculation of the projected cost per line. We also ask whether a model that included business lines might be more accurate. We also seek comment regarding the engineering assumptions on which the Joint Sponsors rely, and whether the Model could be improved by the addition of other variables, such as climate or slope. Conversely, we seek comment on whether the Model contains any redundant or superfluous variables.

35. We also solicit comment on whether relying on a competitive bidding process to set the level of subsidies required in rural, insular, and high-cost areas would be consistent with Section 214(e), which addresses the circumstances under which telecommunications carriers are eligible to receive universal service support.\textsuperscript{83} Carriers offering all of the services supported by universal service mechanisms would bid on the level of assistance per line that they would need to provide all supported services. Such an approach would attempt to harness competitive forces to minimize the level of high-cost assistance needed to implement our statutory mandate in areas where competition has developed.\textsuperscript{84}

36. In such areas, competing carriers would bid to set the level of assistance per line that any carrier serving a specified area would receive, with the lowest bid winning. Although the low bidder would determine the amount of support per line served that eligible carriers would receive, any authorized carrier would be able to receive assistance at that level. The low bidder, however, would receive an additional "incentive bonus." The bonus would be necessary to induce competitors to underbid one another, rather than merely accepting the established level of assistance.

\textsuperscript{82} Joint Submission at 1-2.


\textsuperscript{84} We acknowledge that, at present, there may be only one eligible carrier in some rural, insular, or high cost areas. Bidding to set the level of support payments cannot take place until competitors enter the market.
37. We acknowledge that market conditions may not warrant the introduction of this plan at present. Nevertheless, we believe competitive local exchange markets may develop even in high-cost areas, and therefore request comment regarding distributing high-cost assistance on the basis of competitive bids.

38. We request that the Federal-State Joint Board prepare recommendations regarding the best means of establishing a new universal service support mechanism for rural, insular, and high-cost areas. In preparing its recommendation, we ask the Joint Board to give the greatest weight to effective implementation of the Telecommunications Act of 1996, enabling us to carry out the requirements of the Act in the manner most consistent with the principles and intentions expressed in the Act itself.

39. The legislative history of the 1996 Act makes clear that we are to take a new approach in designing support mechanisms for universal service, and that the proceeding in CC Docket No. 80-286 is not an appropriate foundation on which to base this proceeding.\(^{85}\) We wish, however, to preserve the relevant portion of the record that would be consistent with the principles of the 1996 Act. To avoid unnecessary duplication of efforts by interested parties and regulators, we are incorporating by reference that portion of the CC Docket No. 80-286 record that relates to changing the support mechanisms in our jurisdictional separations rules into this proceeding.\(^{86}\) With respect to the proposals raised in that proceeding, we request that interested parties specifically comment on which, if any, of those proposals are consistent with the requirements and intent of the 1996 Act.

c. Transition Issues

40. At present, LECs with loop costs more than 115 percent above the national average receive support from the Universal Service Fund described in part II.B.2.b., above. At present, there is a cap on the rate at which the fund may grow. That cap is scheduled to expire on July 1, 1996. We seek comment on whether we should extend the cap until the completion of the Joint Board's and our deliberations in this proceeding. We also seek comment on whether the principles governing our deliberation would permit, or even require, a transition period for carriers, particularly recipients of subsidies achieved through


\(^{86}\) Amendment of Part 36 of the Commission's Rules and Establishment of a Joint Board, Notice of Inquiry, 9 FCC Rcd 7404 (1994), and comments, reply comments, and ex parte submissions responsive thereto; Amendment of Part 36 of the Commission's Rules and Establishment of a Joint Board, Order, 9 FCC Rcd 7962 (1994) (Data Request) and responses thereto; and Amendment of Part 36 of the Commission's Rules and Establishment of a Joint Board, Notice of Proposed Rulemaking and Notice of Inquiry, 10 FCC Rcd 12309 (1995), and comments, reply comments, and ex parte submissions responsive thereto.
our separations rules (e.g., the USF and DEM weighting rules), to adjust to operating the statutory framework erected by the Telecommunications Act of 1996.

3. Who Is Eligible for Support

41. In addition to instructing us to define which telecommunications services carriers receiving support must provide, the 1996 Act also specifies the eligibility requirements carriers must satisfy in order to receive universal service support. Under Section 214(e), support is available only to "common carrier[s]" designated as "eligible telecommunications carrier[s]" by the appropriate State commissions.\(^{87}\) Section 254(e) also requires that "[a]ny carrier that receives support shall use that support only for the provision, maintenance, and upgrading of facilities and services for which the support is intended." We request comment, and a corresponding recommendation from the Joint Board, regarding the need for any measures to ensure that support is used for its intended purpose. Similarly, we ask for comment regarding the need for additional measures to ensure that "telecommunications carrier[s]" do not "use services that are not competitive to subsidize services that are subject to competition."\(^{88}\) We also invite commenters to propose means to ensure that all eligible carriers -- and no ineligible carriers -- receive the appropriate amount of universal service support.

42. In areas served by a "rural telephone company," as defined by Section 3 of the 1996 Act,\(^{89}\) the State commission may choose to designate "more than one common carrier as an eligible telecommunications carrier for a service area designated by the State commission" if that commission finds "that the designation is in the public interest."\(^{90}\) In other areas, the State commission must upon request designate as an "eligible carrier" any common carrier meeting the universal service requirements specified in Section 214(e)(1).

43. Section 214(e)(1) requires an eligible carrier to offer "the services that are supported by Federal universal service support mechanisms under Section 254(c), either using its own facilities or a combination of its own facilities and resale of another carrier’s services."\(^{91}\) Each eligible carrier must also "advertise the availability of such services" and the charges for those services "using media of general distribution."\(^{92}\) We seek comment

\(^{87}\) 1996 Act sec. 102(a) § 214(e).

\(^{88}\) Id. § 254(k).

\(^{89}\) Id. § 153(47).

\(^{90}\) Id. § 214(e)(2).

\(^{91}\) Id.

\(^{92}\) Id. § 214(e)(1)(B).
regarding, and ask the Joint Board to recommend, standards for compliance with these requirements.

44. Each State commission may specify the "service area" within which a common carrier is classified as an "eligible carrier." The 1996 Act defines "the term 'service area' [to mean] a geographic area established by a State commission for the purpose of determining universal service obligations and support mechanisms." With respect to rural telephone companies, "service area" means a company's study area, "unless and until the Commission and the States, taking into account the recommendations of a Federal-State Joint Board instituted under Section 410(c), establish a different definition of service area for such a company." The 1996 Act defines "rural telephone company" as a "local exchange carrier operating entity to the extent that such entity -- (A) provides common carrier service to any local exchange carrier study area that does not include either -- (i) any incorporated place of 10,000 inhabitants or more, or any part thereof, based on the most recently available population statistics of the Bureau of the Census; or (ii) any territory, incorporated or unincorporated, included in an urbanized area, as defined by the Bureau of the Census as of August 10, 1993; (B) provides telephone exchange service, including exchange access, to fewer than 50,000 access lines; (C) provides telephone exchange service to any local exchange carrier study area with fewer than 100,000 access lines; or (D) has less than 15 percent of its access lines in communities of more than 50,000 on the date of enactment of the Telecommunications Act of 1996."  

45. We solicit comment on how to define "study area" in the way that best comports with the Congress's expressed objective "to provide for a pro-competitive, de-regulatory national policy framework" for the "rapid[] private sector deployment of advanced telecommunications and information technologies." Currently, a wireline LEC's study area generally includes all the territory of a single state within which that carrier operates. We ask that interested parties propose an appropriate basis for defining the "service area" of a

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93 Id. § 214(e)(5).


95 1996 Act sec. 102(a1), § 214(e)(5).

96 Id. § 153(47).

"rural telephone company," taking into account the likely possible effect on competition of a "service area" definition for rural telephone companies. In conjunction with this issue, we request comment on whether we should amend our rules to revise existing study area boundaries. In the context of implementing a "pro-competitive, de-regulatory national policy framework," as required by the 1996 Act, we ask that the Joint Board prepare recommendations regarding the appropriate "service area" boundaries of areas served by a "rural telephone company."

46. The Act also requires "eligible telecommunications carrier[s]" to "advertise the availability of such services and the charges therefor using media of general distribution." The Joint Explanatory Statement adds that "such services must be advertised generally throughout" the service area. To avoid future disputes, we believe it may be useful for us to adopt guidelines defining the steps that would be sufficient to advertise the availability of, and charges for, services. We ask interested persons to comment on this approach and suggest appropriate guidelines.

47. Section 214(e)(1) permits any unserved community -- an area or a portion of a defined service area in which "no common carrier will provide the services that are supported by Federal universal service support mechanisms" -- to request the Commission (for interstate services) and State commission (for intrastate services) to designate an eligible telecommunications carrier. Upon such request, the Commission or State commission shall order a common carrier or carriers to provide service to the requesting community. Pursuant to Section 214(e)(3) of the 1996 Act, such carriers shall be designated as an eligible telecommunications carrier. We ask commenters to address how we should implement our responsibilities under Section 214(e)(3), and whether we and the State commissioners should develop a cooperative program to ensure that all areas receive each of the services supported by Federal universal service support mechanisms.

48. Section 214(e)(4) provides procedures for a carrier to relinquish its designation as an eligible telecommunications carrier. States must permit this to occur if the requesting carrier gives advance notice to the State and if there is more than one eligible telecommunications carrier serving the area. The State commission must require the remaining telecommunications carrier or carriers in the area to ensure that all of the relinquishing carrier’s customers will continue to be served. The State commission must also

98 Id.

99 1996 Act sec. 102(a), § 214(e)(1)(B).


101 1996 Act sec. 102(a), § 214(e)(3).

102 Id.
require sufficient notice to permit the purchase or construction of adequate facilities by any remaining telecommunications carrier. Section 214(e)(4) requires that the State commission must establish a time, not to exceed one year from the date of approval of relinquishment, for the purchase or construction of adequate facilities.\textsuperscript{103}

49. Section 214(e)(2) and (e)(4) reserve consideration of requests for relinquishment of the designation of eligible telecommunications carriers to the States.\textsuperscript{104} We must amend any of our regulations that would be inconsistent with that reservation, and we invite commenters to identify any such regulations.\textsuperscript{105} We refer these issues, and all of the issues raised above with respect to support for rural and high-cost areas, to the Joint Board for its recommendation.

C. Support for Low-Income Consumers

1. What Services to Support

50. In Part III.B.1 of this Notice, supra, we discuss the services that may be included among the services to consumers in rural, insular, and high-cost areas that should receive support.\textsuperscript{106} We propose that these services should also be services supported by Federal universal service support mechanisms with respect to low-income consumers. In this part of our Notice, we seek comment on whether designation of additional services that would be specifically appropriate for low-income users. We note that the Joint Explanatory Statement added persons with low-income "to the list of consumers to whom access to telecommunications and information services should be provided."\textsuperscript{107} Through the Commission's monitoring of subscribership levels and census data, we know that subscribership levels for low-income individuals fall substantially below the national average.\textsuperscript{108} We request comment regarding the Commission's overall responsibilities under Sections 1 and 254 with regard to low-income consumers. We invite the commenters to address whether there are any particular services, technical capabilities, or features that would be of benefit to low-income consumers and that meet one or more of the criteria for inclusion among the services that should receive universal service support. Consistent with

\textsuperscript{103} Id. § 214(e)(4).

\textsuperscript{104} Id. § 214(e)(2), (4).

\textsuperscript{105} Id. § 254(a).

\textsuperscript{106} Id. § 254(b)(3).


\textsuperscript{108} See Subscribership Notice at 13003-4.