



United States
General Accounting Office
Washington, D.C. 20548

160411

Resources, Community, and
Economic Development Division

B-279833

May 7, 1998

The Honorable Ted Stevens
United States Senate

Subject: Telecommunications: Court Challenges to FCC's Universal Service Order and Federal Support for Telecommunications for Schools and Libraries

Dear Senator Stevens:

This report provides the information you requested on (1) the arguments raised in pending litigation challenging the Federal Communications Commission's (FCC) Universal Service Order and (2) the federal programs that provide assistance to schools (grades kindergarten through 12th) and libraries for telecommunications technologies and related services, including the amount and types of funding provided.¹

BACKGROUND ON UNIVERSAL SERVICE

Historically, universal service has meant providing nationwide access to basic telephone service. Before the passage of the Telecommunications Act of 1996, Public Law 104-104, universal service was achieved through a system of implicit and explicit subsidies at both the state and federal levels. The 1996 act codified the long-standing commitment to universal service and directed FCC to establish specific and predictable support mechanisms. Under the act, the beneficiaries of universal service include low-income consumers; consumers in rural, insular, and high-cost areas; eligible schools and libraries; and rural health care providers. To guide FCC's implementation, the act specified several principles to preserve and advance universal service. One of these principles was that consumers in all regions of the nation should have access to telecommunications and information services at rates that are reasonably comparable to those services and rates in urban areas. The act also specified

¹Federal-State Joint Board on Universal Service, First Report and Order, CC Docket No. 96-45, FCC 97-157 (rel. May 8, 1997) (Universal Service Order).

160411

that every telecommunications carrier that provides interstate telecommunications services must contribute to a universal service fund, unless exempted by FCC. FCC was also given the authority to require others to contribute under certain conditions.

To implement this direction, FCC released its Universal Service Order on May 8, 1997. Among other things, the order specified 25 percent as the share of support for the high-cost areas and provided for eligible schools and libraries to receive discounts ranging from 20 to 90 percent on the purchase of all commercially available telecommunications services, Internet access, and internal connections.² Expenditures for schools and libraries were capped at \$2.25 billion annually. FCC also provided for all public and not-for-profit health care providers located in rural areas to receive universal service support, not to exceed an annual cap of \$400 million.³

ARGUMENTS RAISED IN CHALLENGES TO FCC'S UNIVERSAL SERVICE ORDER

Several parties, including several states and telephone companies, have challenged FCC's Universal Service Order. Among the arguments raised are whether (1) the universal service regime implemented by FCC is an unlawful tax; (2) FCC's decision to support only 25 percent of the universal service costs in high-cost areas is contrary to the plain terms and express intent of the legislation and is arbitrary and capricious; (3) FCC has jurisdiction over intrastate rates; and (4) FCC erred by "radically expanding" the program for discounted telecommunications services for schools and libraries and rural

²In Federal-State Joint Board on Universal Service, Report to Congress (CC Docket No. 96-45, FCC 98-67, rel. Apr. 10, 1998), FCC stated that prior to implementing its methodology for determining support for nonrural carriers, FCC will complete a reconsideration of its decision to support 25 percent of universal service costs in high-cost areas and of the method of distributing that support. FCC released a public notice on April 15, 1998, seeking comments on proposals that have been submitted and requesting additional proposals to revise the methodology for determining universal service support.

³For further details about FCC's implementation of universal service, see Telecommunications: FCC Lacked Authority to Create Corporations to Administer Universal Service Programs (GAO/T-RCED/OGC-98-84, Mar. 31, 1998).

health care providers. The judicial panel of multidistrict litigation⁴ determined through means of a lottery that the U.S. Court of Appeals for the Fifth Circuit would hear the consolidated appeal to the Universal Service Order.⁵ The court set February 20, 1998, as the date for submission of original petitioners' briefs and March 9, 1998, for the submission of briefs by intervenors in support of petitioners.⁶ Six briefs by original petitioners and six by intervenors were submitted. In addition, one brief was submitted jointly by a petitioner and intervenor. Thus, as of April 15, 1998, 13 briefs had been filed. Enclosure I identifies those who have submitted briefs and the arguments presented in those briefs.

FEDERAL PROGRAMS THAT PROVIDE ASSISTANCE TO SCHOOLS AND LIBRARIES FOR TELECOMMUNICATIONS TECHNOLOGIES

We identified 40 programs in nine federal departments and agencies that provide funding assistance for uses that could include telecommunications technologies and related services for schools (for kindergarten through 12th grade) and libraries. Together, these programs provided an estimated \$10 billion in funding assistance in fiscal year 1997. However, the extent to which the funds were used for telecommunications purposes is unknown. While half of the programs are targeted for telecommunications technologies, computers, and related purposes, the other half are primarily intended for other purposes but include telecommunications uses. The types of telecommunications technologies and related services for which these funds may be used include, among other things, the purchase of computer equipment and software, technical support, and distance learning. Enclosure II provides an overview of each program, including the program's name and administering agency, the type and the amount of assistance, who may apply, and the types of telecommunications activities that may be funded.

⁴Under 28 U.S.C. section 2112(a)(3), when petitions for review of a federal agency's orders are filed in at least two courts of appeals, the judicial panel of multidistrict litigation will consolidate the cases and randomly select, from among the courts where petitions were filed, one court to hear the consolidated appeal.

⁵Appeal pending in Texas Office of Public Utility Counsel v. FCC, No. 97-60421 (5th Cir. filed June 25, 1997).

⁶FCC's brief in response is to be filed by May 18, 1998, according to FCC's Deputy Associate General Counsel.

SCOPE AND METHODOLOGY

The information in this report on court challenges to FCC's order implementing universal service is based on original petitions filed by February 20, 1998, and intervenors' briefs filed by March 9, 1998, provided to us by FCC. FCC's Deputy Associate General Counsel reviewed a draft of enclosure I and found the information presented therein to be accurate.

The list of programs that support telecommunications technologies and related services for schools and libraries is based on information in the December 1997 Catalog of Federal Domestic Assistance (CFDA) and web sites maintained by the federal departments and agencies that administer such programs. The CFDA is a "government-wide compendium of federal programs, projects, services and activities which provide assistance and benefits." Coordinated by the Office of Management and Budget and compiled by the General Services Administration, the CFDA contains information, both financial and nonfinancial, about programs administered by federal departments and agencies.

To determine which programs provide funding assistance to schools and libraries for telecommunications technologies and related services, we searched the CFDA's electronic database for terms that we believed could reasonably identify such programs, including, among others, information technology and schools, local education agency and computer, teaching and telecommunications, and library and technology.

We assessed our selection of programs by also examining web sites maintained by the departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, the Interior, and Transportation; the Environmental Protection Agency; the National Foundation on the Arts and the Humanities; the National Science Foundation; the National Education Association; the American Federation of Teachers; and the American Library Association. We did not independently verify these data.

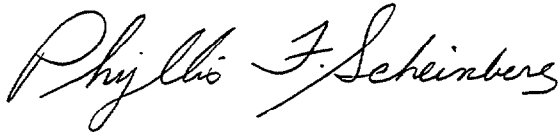
We did not include federal programs such as the Department of Housing and Urban Development's \$4.8 billion Community Development Block Grant program, which allows grant recipients—primarily communities and states—considerable discretion and flexibility to determine how funds will be spent as long as they meet broad program objectives. Some communities may be using some of those moneys for telecommunications technologies and related services for schools and libraries. We also did not include FCC's universal service program for schools and libraries, which may provide up to \$2.25 billion annually to schools and libraries for telecommunications technologies and

B-279833

related services. Although federally mandated, the program is funded by the telecommunications industry; it receives no federal funding.

If you have any questions about this report, please contact me on (202) 512-3650. Major contributors to this report were Curtis Groves, Heather Halliwell, Mindi Weisenbloom, and Erin Lansburgh.

Sincerely yours,

A handwritten signature in cursive script that reads "Phyllis F. Scheinberg".

Phyllis F. Scheinberg
Associate Director,
Transportation Issues

Enclosures - 2

COURT CHALLENGES TO THE FEDERAL COMMUNICATIONS
COMMISSION'S UNIVERSAL SERVICE ORDER

Several parties, including several states and telephone companies, challenged the Federal Communication Commission's (FCC) Universal Service Order. The judicial panel of multidistrict litigation, which is involved when petitions for review of a federal agency's orders are filed in at least two courts of appeals, determined through means of a lottery that the U.S. Court of Appeals for the Fifth District would hear the consolidated appeal to FCC's Universal Service Order.¹

Among the arguments raised in the consolidated appeal are whether (1) the universal service regime implemented by FCC is an unlawful tax; (2) FCC's decision to support only 25 percent of the universal service costs in high cost areas was contrary to the plain terms and express intent of the legislation and whether it is arbitrary and capricious; (3) FCC has jurisdiction over intrastate rates; and (4) FCC erred by "radically expanding" the program for discounted telecommunications services for schools and libraries and rural health care providers. The court set February 20, 1998, as the date for the submission of original petitioners' briefs and March 9, 1998, for the submission of intervenor briefs in support of petitioners.² Six original petitioner briefs were submitted and six intervenor briefs. In addition, one brief was submitted jointly by a petitioner and an intervenor. Thus, as of April 15, 1998, 13 briefs have been filed.

Listed below are the parties and the arguments presented in the 13 briefs. We have numbered the briefs as follows: briefs 1 through 6 were submitted by original petitioners; brief 7 was submitted jointly by an original petitioner and an intervenor; and briefs 8 through 13 were submitted by intervenors on behalf of petitioners.

¹Appeal pending in Texas Office of Public Utility Counsel v. FCC, No. 97-60421 (5th Cir. filed June 25, 1997).

²FCC's brief is to be filed by May 18, 1998, according to FCC's Deputy Associate General Counsel.

BRIEFS SUBMITTED BY ORIGINAL PETITIONERS**1. Parties Submitting the Brief³**

Texas Office of Public Utility Counsel
Public Utilities Commission of the State of California
Florida Public Service Commission
Iowa Utilities Board
Louisiana Public Service Commission
New York State Public Service Commission
Public Service Commission of Nevada
Pennsylvania Public Utility Commission
South Dakota Public Service Commission

Arguments Raised

- I. In FCC's Universal Service Order, the directive that incumbent local exchange carriers (LEC) use federal universal service support only to reduce interstate access charges is contrary to law as well as arbitrary and capricious.
 - A. Eliminating federal support through jurisdictional cost shifting for high-cost areas without providing alternative interstate funding is arbitrary and capricious as well as contrary to the plain language of section 254(b)(5) that universal service support be "sufficient."
 - B. The Universal Service Order is contrary to the plain language of section 254(e) because it permits universal service support to be directed to the "provision, maintenance, and upgrading" of interstate facilities rather than the facilities for which the support was intended.

³Not all parties joined in all parts of the brief. The Texas Office of Public Utility Counsel expressed no opinion regarding section IV of the argument; the New York State Public Service Commission participated in the brief only with respect to sections II and III of the argument and the portions of the brief related to those arguments; and the Public Utilities Commission of Nevada participated in the brief with respect to sections II, III, and IV of the argument and portions of the brief related to those arguments and expressed no opinion with respect to section I.

- C. The Universal Service Order is arbitrary and capricious, because it is inconsistent with longstanding FCC policies that federal support mechanisms be utilized to reduce intrastate, not interstate, rates.
- II. FCC has no jurisdiction over intrastate rates.
 - A. Section 152(b) reserves intrastate regulations to the states.
 - B. FCC has not provided a lawful basis for preempting state regulation of intrastate rates.
- III. FCC has unlawfully exceeded its authority under section 214(e) of the act by limiting the states' discretion to designate carriers eligible for federal universal service support and to determine the service areas in which eligible carriers must serve.
 - A. FCC has unlawfully prohibited the states from imposing obligations on eligible carriers that are consistent with the preservation and advancement of universal service.
 - B. FCC has unlawfully circumscribed the states' authority to define service areas in which eligible carriers must serve.
- IV. FCC has unlawfully exceeded its authority by prescribing terms and conditions governing the provision of local service by carriers deemed eligible to receive federal universal service support.

2. Parties Submitting the Brief

Kansas Corporation Commission
Vermont Department of Public Service

Arguments Raised

- I. The Notice of Proposed Rulemaking did not provide notice and opportunity to comment on the possibility that the federal high-cost assistance program would support less than the full need for support in the high-cost areas.

- II. FCC's high-cost support mechanism does not comply with section 254's sufficiency and reasonable comparability requirements.
 - A. FCC's decision to provide only partial support of high-cost needs violates section 254(e)'s requirement that federal support must be "sufficient to achieve the purposes of" section 254.
 - B. FCC's universal service funding mechanism fails to achieve rates in high-cost areas that are reasonably comparable to rates prevailing in urban areas.
 - C. The 25-percent support factor is not consistent with—and in fact reduces—prior levels of federal support, despite the dictate from the Congress that support be sufficient.
- III. FCC's assignment of federal high-cost assistance to the interstate jurisdiction diverts funds that should support the local services FCC had designated for federal universal service support.
- IV. FCC's transition mechanism favoring small telephone companies over large telephone companies serving high-cost areas is arbitrary and not supported by the substantial record of evidence.
 - A. FCC erred by applying its transition mechanism only to areas of the nation served by small incumbent LECs rather than on characteristics that are better determinants of cost.
 - B. FCC's existing high-cost rules, which are continued over the transition, contain a similar size-based flaw.

3. Parties Submitting the Brief

GTE Entities
Southwestern Bell Telephone Company
BellSouth Corporation

Arguments Raised

- I. FCC violated the plain commands of the act by failing to create an "explicit and sufficient" subsidy system in accordance with the timetable the Congress set.
- II. FCC erred by measuring the cost of universal service based solely on hypothetical forward-looking costs.
- III. FCC erred by including in its revenue benchmark not only the revenues earned through the charges for supported services but all revenues earned per line and by requiring the use of a national average revenue benchmark.
 - A. Basing the revenue benchmark on all revenues earned per line violates section 254(e)'s command that support be "explicit" by building implicit subsidies into the new support mechanism.
 - B. FCC's decision to use a national average revenue benchmark violates the act by systematically under compensating carriers that have below-average per line revenues.
- IV. FCC erred by failing to enforce the requirement that, to be eligible to receive support, carriers must offer supported services throughout their service territories.
- V. FCC's decision to cover only 25 percent of the universal service costs it identified is arbitrary and capricious.
- VI. FCC violated the Communications Act by purporting to alter the jurisdictional allocation of loop costs without consulting a federal-state joint board.
- VII. FCC erred by radically expanding the program for discounted telecommunications services for schools and libraries and rural health care providers.
 - A. FCC violated section 254(h)(1)(B) by declaring that services other than telecommunications services would be supported by the federal fund.
 - B. FCC violated the terms of section 254(h)(1)(B) by providing for support payments to non-telecommunications carriers.
 - C. FCC has impermissibly encroached upon the right of each state to set the discount for intrastate telecommunications services.

- D. FCC failed to exercise the authority that was granted by section 254(c)(3) in the manner required by the act.
 - E. FCC violated the act by extending universal service support payments to nonrural health care providers.
- VIII. FCC's restrictions on incumbent LECs' recovery of universal service contributions violate the act's requirement that all carriers contribute equitably to universal service because they unfairly handicap incumbent LECs.

4. Party Submitting the Brief

Cincinnati Bell Telephone Company

Arguments Raised

- I. FCC has unlawfully asserted jurisdiction over intrastate revenues.
 - A. FCC does not have jurisdiction to assess universal service charges against intrastate revenues.
 - B. The states are solely empowered to assess intrastate revenues to support state universal funding mechanisms.
- II. Even if FCC could have jurisdiction to assess intrastate revenues, FCC acted arbitrarily in doing so and requiring cost recovery to occur solely from interstate rates.
 - A. The universal service funding mechanism must be equitable, nondiscriminatory and comply with the principle of competitive neutrality.
 - B. FCC cannot require carriers to seek state cost recovery, which forces it to order an inequitable, discriminatory and anticompetitive federal cost-recovery mechanism.
 - C. FCC rules discriminate against interstate carriers that provide predominantly intrastate services.

5. Party Submitting the Brief

COMSAT Corporation

Arguments Raised

- I. FCC's decision that COMSAT must contribute to the universal service support mechanism is neither "equitable" nor "nondiscriminatory" under section 254(d).
- II. FCC's decision that COMSAT must contribute to the universal service support mechanisms violates the universal service guiding principle of competitive neutrality and hence is arbitrary and capricious.
 - A. The order unfairly disadvantages COMSAT.
 - B. The anticompetitive effects the order will have are inconsistent with competitive neutrality.
- III. FCC's failure to examine fully the issues COMSAT previously raised and to explain its decision adequately is arbitrary and capricious.

6. Party Submitting the Brief

Celpage, Inc.

Arguments Raised

- I. The universal service regime implemented by FCC is an unlawful tax.
- II. The contribution requirements violate paging companies' constitutional rights.
- III. The contribution requirements imposed upon paging carriers are arbitrary, capricious, and contrary to the statute.
 - A. FCC's rules violate statutory language and intent.

- B. The universal service rules violate FCC's precedents.
 - C. FCC's rules are inherently contradictory and unreasonable.
 - D. Substantive rule changes were made in violation of the Administrative Procedures Act.
- IV. FCC's determination that states may impose universal service obligations on Commercial Mobile Radio Service (CMRS) providers was clearly erroneous.

**BRIEF SUBMITTED JOINTLY BY AN ORIGINAL PETITIONER
AND AN INTERVENOR**

7. Parties Submitting the Brief

Bell Atlantic Telephone Companies
Intervenor Ameritech

Arguments Raised

- I. FCC lacks the power to displace state authority and directly prohibit disconnection of local service for nonpayment of toll-call bills.
- A. Section 2(b) of the Communications Act broadly prohibits the Commission from displacing state authority over intrastate matters.
 - B. Section 2(b) applies to disconnection of intrastate service.
 - C. The impossibility exception to section 2(b) does not save the Commission's rule dictating the terms of intrastate service.

BRIEFS SUBMITTED BY INTERVENORS**8. Party Submitting the Brief**

National Association of State Utility Consumer Advocates (NASUCA)

Arguments Raised

- I. FCC has failed to apply universal service assistance to local exchange carriers in high-cost areas as the Telecommunications Act of 1996 requires.
 - A. FCC proposes to terminate programs that have been used to move costs from the intrastate to the interstate jurisdiction in order to reduce intrastate rates.
 - B. This misapplication of universal service funds to interstate access charges is inconsistent with how FCC has directed that other funds must be applied.
 - C. FCC's application of all high-cost universal service funds to interstate access charges is inconsistent with the requirement to support itemized universal services.

9. Party Submitting the Brief

U. S. West, Inc.

Arguments Raised

- I. FCC's decision to support only 25 percent of universal service cost is contrary to the plain terms and express intent of section 254 and is arbitrary and capricious.
 - A. FCC's decision to fund only 25 percent of universal service cost violates the plain language and structure of the act and should be reversed to avoid serious constitutional issues.
 - B. FCC's decision to support only 25 percent of the universal service cost was arbitrary and capricious.

10. Party Submitting the Brief

Southwestern Bell Telephone Company

Arguments Raised

- I. FCC impermissibly has denied the states the right to establish eligible carrier criteria for universal service support funding.
- II. FCC's imposition of "no disconnect/no deposit" lifeline rules for intrastate services exceeds its jurisdiction.

11. Party Submitting the Brief

America's Carriers Telecommunication Association

Arguments Raised

- I. FCC's universal service contribution regime is an unconstitutional tax.
 - A. The universal service contribution is a tax.
 - B. In delegating its taxing power to FCC, the Congress exceeded its constitutional authority.
- II. FCC's analysis of the effect of the new universal service tax on small business is arbitrary, capricious, and does not satisfy the Regulatory Flexibility Act.

12. Parties Submitting the Brief

Vanguard Cellular Systems, Inc.
Comcast Cellular Communications, Inc.

Airtouch Communications, Inc.
Sprint Spectrum L.P.

Arguments Raised

- I. FCC's construction of 47 U.S.C. section 332(c)(3)(A) to permit states to impose universal service requirements without the statutorily required finding that CMRS is a substitute for landline service is erroneous as a matter of law.
 - A. Well-settled principles of statutory construction establish that FCC erred as a matter of law in construing 47 U.S.C. section 332(c)(3)(A) to permit the states to impose universal service requirements without the statutorily required finding that CMRS is a substitute for landline service.
 - B. The 1996 act did not expand the strict limitations imposed by section 332 on the authority of states to enact universal service obligations on CMRS providers.
 - C. FCC erred as a matter of law in construing section 332(c)(3)(A) to permit states to impose universal service requirements, because such requirements can be imposed only on jurisdictionally intrastate services, while CMRS is a jurisdictionally interstate service.
- II. FCC's universal service assessment requirements violate the due process rights of CMRS carriers, section 254(b), and FCC's own Universal Service Order.
 - A. FCC violated due process by issuing unconstitutionally vague rules.
 - B. FCC's universal service assessment requirements violate the equitable contribution requirements of section 254(b)(4) and the FCC's own Universal Service Order.

13. Party Submitting the Brief

MCI Telecommunications Corp.⁴

Arguments Raised

- I. The Universal Service Order fails to eliminate implicit subsidies as required by section 254.
 - A. Interstate access charges remain far above costs, resulting in impermissible implicit subsidies.
 - B. Impermissible implicit subsidies result when local carriers pass their universal service contributions through to long-distance carriers in access charges without designating them as such.

⁴MCI supports the petitioners' requests for relief in connection with some issues and will support FCC in defending the order in connection with other issues.

FEDERAL PROGRAMS THAT PROVIDE FUNDING ASSISTANCE
TO SCHOOLS AND LIBRARIES FOR TELECOMMUNICATIONS
TECHNOLOGIES AND RELATED SERVICES

Our review of the December 1997 Catalog of Federal Domestic Assistance (CFDA) and web sites maintained by federal departments and agencies identified 40 federal programs that provide funding assistance to schools—kindergarten through 12th grade—and libraries for telecommunications technologies and related services. The extent that the funds available for these programs may have been used for telecommunications purposes is unknown. While half of the programs are targeted for telecommunications technologies and related uses, the other half are targeted for other purposes, but include telecommunications uses. The programs are administered by the Christopher Columbus Fellowship Foundation; the Departments of Agriculture, Commerce, Defense, Education, Health and Human Services, and the Interior; the National Foundation on the Arts and the Humanities; and the National Science Foundation.

To determine which programs in the CFDA provided funding assistance to schools and libraries for telecommunications technologies and related services, we searched the CFDA's electronic data base for terms that we believed could reasonably identify such programs, including among others, library and technology, information technology and schools, local education agency and computer, and teaching and telecommunications. We assessed our selections by also examining web sites maintained by the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, the Interior, and Transportation; the Environmental Protection Agency; the National Foundation on the Arts and the Humanities; the National Science Foundation; the National Education Association; the American Federation of Teachers; and the American Library Association. We did not independently verify these data.

We did not include federal programs, such as the Department of Housing and Urban Development's \$4.8 billion Community Development Block Grant program, which allow grant recipients—primarily communities and states—considerable discretion and flexibility to determine how funds will be spent as long as they meet broad economic development goals. Some communities may be using some of those moneys for telecommunications technologies and related services for schools and libraries. We also did not include FCC's Universal Service Schools and Libraries Program, which may provide up to \$2.25 billion annually to schools and libraries for telecommunications technologies and related services. Although federally mandated, the program is funded by the telecommunications industry; it receives no federal funding.

Following is an overview of each program, including the program name and administering department/agency, type and amount of assistance, eligible applicants, the types of telecommunications activity that may be funded, and, in parentheses, the CFDA number.

CHRISTOPHER COLUMBUS FELLOWSHIP FOUNDATION

Christopher Columbus Fellowship Program

Project grants and direct payments are used to support study designed to produce new discoveries in all fields of endeavor for the benefit of mankind. The Christopher Columbus Discovery Institute is a training session in creative behavior for teams from schools across the country. Projects eligible to receive funding include those dealing with emerging technology and computer software and hardware. U.S. citizens may apply. Fiscal year 1997 estimated funding is \$400,000.¹ (85.100)

DEPARTMENT OF AGRICULTURE

Agricultural Telecommunications Program

Cooperative State Research Education and Extension Service

Project grants are used to develop and use an agricultural communications network, which employs satellite and other telecommunications technology to share instructional materials, agriculture research and marketing information. Objectives of the program include training students for careers in agriculture and food industries and facilitating interaction among leading agricultural scientists. Applicants must demonstrate they participate in a network that distributes information consistent with the program's objectives. Fiscal year 1997 obligations were \$1.1 million. (10.501)

Distance Learning and Telemedicine Loans and Grants

Rural Utilities Service

Loans and project grants are used to improve the use of telemedicine, telecommunications, computer networks, and related advanced technologies that provide educational and/or medical benefits to students, teachers, medical professionals, and rural residents. Schools, libraries, medical centers, and other

¹The Christopher Columbus Fellowship Foundation is an independent establishment of the executive branch.

organizations using advanced technology to assist rural residents are eligible to apply. Fiscal year 1997 estimated funding is \$157.5 million. (10.855).

Team Nutrition Grants

Food and Consumer Service

Project grants are used to establish or enhance training and technical assistance programs for school food service professionals. Funded programs include a CD-ROM training package on menu management. Some state agencies plan to establish network connections for their schools via the Internet and create training or informational videos for their students and school food service personnel. State agencies that administer the National School Lunch Program or the Nutrition and Education Training Program are eligible to apply. Fiscal year 1997 estimated funding is \$4 million. (10.574)

DEPARTMENT OF COMMERCE**Meteorologic and Hydrologic Modernization Development**

National Weather Service, National Oceanic and Atmospheric Administration

This program includes formula and project grants, direct payments, dissemination of technical information, and training. Funds may be used to conduct meteorological training, education and professional development, and for research on hydrometeorological issues. Funded projects include the Distance Learning Program, which produces computer-based learning modules, and the International and New Products Program, which promotes the development of computer-based learning modules. Colleges, universities, and schools may apply. Fiscal year 1997 estimated funding is \$3 million. (11.467)

Public Telecommunications Facilities Planning and Construction

National Telecommunications and Information Administration

Project grants are used to assist in the planning, construction, and modernization of public telecommunications facilities. This program seeks to extend delivery of telecommunications services to as many citizens of the United States as possible by the most efficient and economical means. Schools and libraries are among the eligible applicants. Fiscal year 1997 estimated funding is \$14.2 million. (11.550)

Telecommunications and Information Infrastructure Assistance Program

National Telecommunications and Information Administration

Project grants are used to promote the widespread use of advanced telecommunications and information technologies among public and nonprofit organizations and to develop a national interactive, multimedia information infrastructure that is accessible to urban and rural residents. School districts, libraries, universities, and other nonprofit entities are eligible to apply. Fiscal year 1997 estimated funding is \$20.9 million. (11.552)

DEPARTMENT OF DEFENSE

Basic and Applied Scientific Research

Office of Naval Research, Department of the Navy

Project grants are used to support basic and applied research with potential to improve naval operations and encourage careers in science and engineering by supporting graduate, undergraduate, and high school students in areas of naval concern. Program has funded efforts to increase minorities trained at the graduate level in mathematics and computer science. Fiscal year 1997 estimated funding is \$470.4 million. (12.300)

DEPARTMENT OF EDUCATION

Adult Education Evaluation and Technical Assistance

Office of Vocational and Adult Education

Project grants are used to support activities that contribute to adult basic education. Projects funded include an evaluation of a distance learning initiative. Schools and libraries are eligible to apply. Fiscal year 1997 estimated funding is \$5 million. (84.191)

After School Learning Centers

Assistant Secretary for Education Research, Statistics and Improvement

Project grants are used to create or expand rural and inner city community learning centers, which seek to meet the educational, health, social service, cultural, and recreational needs of residents. One center receiving funds through this program provides technology services for its patrons. Rural and inner city public schools are eligible to apply. Fiscal year 1997 estimated funding is \$1 million. (84.287)

Alaska Native Student Enrichment Program

Office of Elementary and Secondary Education

Through direct payments for specified uses, this program helps Alaska Native organizations develop enrichment programs to prepare students from rural areas to excel in science and mathematics. Schools with experience in developing or operating Alaska Native programs are eligible to apply. Fiscal year 1997 estimated funding is \$1 million. (84.322)

Bilingual Education Program Development and Implementation Grants

Office of the Director for Bilingual Education and Minority Languages Affairs

Among the uses for these project grants are the development and implementation of preschool through 12th grade bilingual education programs for students whose proficiency in English is limited, including gifted and talented programs and vocational and applied technology education. Schools are eligible to apply. Fiscal year 1997 estimated funding is \$11.9 million. (84.288)

Comprehensive Regional Assistance Centers

Assistant Secretary for Elementary and Secondary Education

This program does not provide direct funding; it does provide technical information to help coordinate and integrate the implementation of the Elementary and Secondary Education Act with state and local activities. Among the types of training and technical assistance available is help in implementing education applications of technology. Schools and libraries are among the eligible applicants. Fiscal year 1997 estimated funding is \$25.6 million. (84.283)

Eisenhower Professional Development Federal Activities

Office of Assistant Secretary for Educational Research and Improvement

Project grants are used for the professional development of kindergarten through 12th grade teachers, including the dissemination of information about emerging academic trends. Funded projects include the use of technology. Schools, colleges, and universities are eligible to apply. Fiscal year 1997 estimated funding is \$13.3 million. (84.168)

Fund for the Improvement of Education

Office of Assistant Secretary for Educational Research and Improvement

Project grants are used to improve the quality of education and to assist students in meeting state educational content standards. Funds may be used to support a wide range of projects. Funded projects include a partnership among four South Carolina school districts in which technology plays a major role in facilitating the exchange of information among them. State and local education agencies, colleges and

universities, and libraries are among the eligible applicants. Fiscal year 1997 estimated funding is \$40 million. (84.215)

Goals 2000: State and Local Education Systemic Improvement Grants
Office of Elementary and Secondary Education

Formula grants are used to support comprehensive reform plans to improve the teaching and learning of all children and to integrate technology into overall state education improvement plans. State education agencies may apply. Fiscal year 1997 estimated funding is \$476 million. (84.276)

Innovative Education Program Strategies
Office of Elementary and Secondary Education

Formula grants are used to assist state and local educational agencies in the reform of elementary and secondary education. Funds may be used for technology and training in technology related to the implementation of school-based reform and for the acquisition and use of instructional materials. States are eligible to apply. Fiscal year 1997 estimated funding is \$310million. (84.298)

Javits Gifted and Talented Students Education Grant
Office of Assistant Secretary for Educational Research and Improvement

Project grants are used to stimulate research and training to meet the special educational needs of gifted and talented students. Schools, universities, and colleges may apply. Fiscal year 1997 estimated funding is \$5 million. (84.206)

Migrant Education Coordination Program
Office of Elementary and Secondary Education

Project grants are used to encourage the interstate and intrastate coordination of migrant education. In fiscal year 1997, several of the grants were used to increase the use of technology for teaching and learning in the migrant community. Those eligible to apply for grants include schools, colleges and universities, and libraries. Fiscal year 1997 estimated funding is \$6 million. (84.144)

National Institute on Student Achievement, Curriculum, and Assessment
Office of Educational Research and Improvement

Project grants are used to support research based on information to teachers, schools, policymakers, and parents engaged in education reform. Funded projects have addressed how to use technology to improve teaching and learning. Colleges and

universities, libraries, and schools may apply. Fiscal year 1997 estimated funding is \$13.3 million. (84.305)

Native Hawaiian Vocational Education

Office of Vocational and Adult Education

Project grants are used to provide vocational education opportunities for native Hawaiians as authorized by the Carl D. Perkins Vocational and Applied Technology Education Act. The program has funded computer training centers and technology preparation projects. Any organization primarily serving and representing native Hawaiians may apply. Fiscal year 1997 estimated funding is \$2.6 million. (84.259)

Regional Technical Support and Professional Development Consortia

Office of Assistant Secretary for Educational Research and Improvement

Project grants are used to help schools integrate advanced technology into kindergarten through 12th grade classrooms, library media centers, and other educational settings. Funded projects include community telecomputing access networks. Schools are eligible to apply. Fiscal year 1997 estimated funding is \$10 million. (84.302)

Star Schools

Office of Assistant Secretary for Educational Research and Improvement

This program has provided computers, telecommunications, and satellite access to schools and universities in urban and rural settings for programs stressing mathematics and literacy. One of the program's goals is to serve disadvantaged elementary and secondary schools. Grants are made to telecommunications partnerships on a statewide or multistate basis. Fiscal year 1997 estimated funding is \$30 million. (84.203)

State School Improvement Grants

Office of Elementary and Secondary Education

Formula grants are used to support the technical assistance efforts of state education agencies and to help schools raise student achievement and meet Title I requirements. State education agencies may apply. Fiscal year 1997 estimated funding is \$0. Fiscal year 1998 estimated funding is \$8 million. (84.218)

Technology Applications for Individuals With Disabilities

Office of Special Education and Rehabilitative Services

Project grants are used to fund technology and educational media for the education of children with disabilities. State and local education agencies, colleges and universities, and public agencies may apply. Fiscal year 1997 estimated funding is \$10 million. (84.180)

Technology Innovation Challenge Grants

Assistant Secretary for Educational Research, Statistics, and Improvement

Project grants are used to provide educational technology equipment, teacher training, school library and media personnel, and technical support. The program seeks to improve student learning and integrate technology into the school curriculum. Funded projects include the use of interactive video-conferencing and multimedia computers. Schools with a high percentage of students living below the poverty level and libraries are among the eligible applicants. Fiscal year 1997 estimated funding is \$57 million. (84.303)

Telecommunications Demonstration Project for Mathematics

Assistant Secretary for Educational Research and Improvement

Project grants are used to carry out a national telecommunications-based demonstration project to improve mathematics teaching. The program involves the use of existing telecommunications infrastructure and has funded online teachers' learning communities. Public schools may apply. Fiscal year 1997 estimated funding is \$1 million. (84.286)

Title I Grants to Local Educational Agencies

Department of Education, Office of Elementary and Secondary Education

Formula grants are used to help public elementary and secondary schools improve the teaching and learning of at-risk and failing children. Among other things, this program funds almost one-third of all software and hardware used primarily for basic skills instruction by schools. Fiscal year 1997 estimated funding is \$7.2 billion. (84.010)

Vocational Education Indians Set-aside

Office of Vocational and Adult Education

Project grants are used to provide vocational and technical education opportunities for Indians and Alaskan natives that are consistent with the Carl D. Perkins Vocational and Applied Technology Education Act. The program has supported college-level computer science courses. Indian tribes or tribal organizations and schools funded by the Bureau of Indian Affairs may apply. Fiscal year 1997 estimated funding is \$12.9 million. (84.101)

Women's Educational Equity Act Program
Office of Elementary and Secondary Education

Project grants are used to promote gender equity in education and funding to educational agencies and institutions in order to meet the requirements of Title IX of the Educational Amendments of 1972. The program has funded projects designed to increase participation of women and girls in mathematics, science, and computer science. Fiscal year 1997 estimated funding is \$2 million. (84.083)

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Allied Health Project Grants
Health Resources and Services Administration

Project grants are used to improve and strengthen allied health training and to link academic centers to rural clinical settings. Funds may be used for personnel, equipment, supplies, and other costs directly related to the project. Funded projects include the development of video disc and computer-based instructional technologies and distance learning using satellite technologies. Schools, colleges, and universities that train students in allied health professions may apply. Fiscal year 1997 estimated funding is \$3.4 million. (93.191)

Interdisciplinary Training for Health Care for Rural Areas
Health Resources and Services Administration

Project grants are used to encourage the recruitment and retention of health professionals in rural areas. Funding is available for rental or purchase of telecommunications equipment where appropriate. Assistance is available to public or private nonprofit colleges, universities, or schools; programs specializing in medicine, nursing, mental and public health; and other health sciences. Fiscal year 1997 estimated funding is \$3.8 million. (93.192)

Medical Library Assistance
National Institutes of Health

Project grants are used to improve health information services, including computer and telecommunications technology. Internet Connections Grants are available to provide health professionals access to remote data bases, libraries, and other medical information resources. Any nonprofit institution that maintains or plans to establish library and information services in the health professions is eligible to apply. Fiscal year 1997 estimated funding is \$27.9 million. (93.879)

Research and Demonstration Projects for Indian Health
Indian Health Service

Project grants are used to promote improved health care among American Indians and Alaska natives. Funded projects include the development of computer-based instructional modules for dental assistants. Public or private nonprofit health and education entities are among the eligible applicants. Fiscal year 1997 estimated funding is \$3.4 million. (93.933)

DEPARTMENT OF THE INTERIOR**National Spatial Data Infrastructure Competitive Cooperative Agreements Program**
U.S. Geological Survey

Project grants are used to help the Federal Geographic Data Committee form partnerships with the nonfederal sector to further the development and implementation of the National Spatial Data Infrastructure, which deals with geospatial data. Funded projects include the creation of a National Geospatial Data Clearinghouse node on the Internet to access and deliver geological data to public and private sectors. State and local government agencies and educational institutions are among the eligible applicants. Fiscal year 1997 estimated funding is \$1.1 million. (15.809)

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES**Library Services and Technology Act Grants**
Institute of Museums and Library Services

Grants are used to allow libraries to adapt new technologies to identify, preserve, and share library and information resources and to extend outreach to those for whom library service requires extra effort or special materials. All libraries may apply. Fiscal year 1998 appropriation is \$146.3 million.²

²The Institute of Museum and Library Services is an independent, grant-making agency that assists museums and libraries in maintaining, increasing, and improving their services to the public, established in 1996. This program was identified through our review of the web site of the Office of Educational Research and Improvement, a division of the Department of Education. Because the program is new, it is not included in the latest CFDA. Funding shown is the fiscal year 1998 appropriation.

Promotion of the Arts, Grants to Organizations and Individuals**National Endowment for the Arts**

Project grants are used to foster the arts. Funds must be used in at least one of four ways: heritage and preservation, education and access, creation and presentation, and planning and stabilization. Funded projects include development of a computer network to accompany a Southern arts touring program. Schools may apply. Fiscal year 1997 estimated funding is \$55 million. (45.024)

Promotion of the Humanities Challenge Grants**National Endowment for the Humanities**

Project grants are used to support educational and cultural institutions. Funds may be used for technological enhancement when designed to improve humanities programs and activities. One library is using its Challenge Grant to support information technologies. Schools, colleges, universities, and libraries are eligible to apply. Fiscal year 1997 estimated funding is \$9.9 million. (45.130)

Promotion of the Humanities, Division of Preservation and Access**National Endowment for the Humanities**

Project grants are used to promote the preservation of resources held in libraries, museums, archives, and other institutions that are important to the humanities. Activities funded may include the bibliographic control of printed works and the documentation of collections of art and material culture. One museum used the grant to create computerized records for a collection of 35,000 North American Indian objects. Schools and libraries are among the eligible applicants. Fiscal year 1997 estimated funding is \$18 million. (45.149)

NATIONAL SCIENCE FOUNDATION**Education and Human Resources**

Project grants may be used for research, educational activities and studies, purchasing permanent equipment, and other direct and indirect costs. This program seeks to provide leadership and ensure the vitality of the nation's science, mathematics, engineering, and technology education from kindergarten through graduate school. It has funded the Northwest Center for Emerging Technologies: New Designs for Advanced Information Technology Education, a project that fosters faculty-industry

fellowships in information technology. Schools, colleges, and universities may apply. Fiscal year 1997 estimated funding is \$619 million. (47.076)

Engineering Grants

Project grants are used for engineering education and research. Among the activities included are programs to promote the transfer of knowledge among diverse constituencies and communities and communications and computational systems. Libraries, colleges, universities, and schools are eligible to apply. Fiscal year 1997 estimated funding is \$347.9 million. (47.041)

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