

107TH CONGRESS
2^D SESSION

S. 2448

To improve nationwide access to broadband services.

IN THE SENATE OF THE UNITED STATES

MAY 2, 2002

Mr. HOLLINGS (for himself, Mrs. CLINTON, Mr. STEVENS, Mr. INOUE, Mr. ROCKEFELLER, and Mr. DORGAN) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To improve nationwide access to broadband services.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 “Broadband Telecommunications Deployment Act of
6 2002”.

7 (b) TABLE OF CONTENTS.—

8 The table of contents for this Act is as follows:

Sec. 1. Short title; table of contents.

Sec. 2. Findings.

TITLE I—TRUST FUND FOR BROADBAND LOANS AND GRANTS

Sec. 101. Broadband deployment trust fund.

TITLE II—ACCESS TO BROADBAND TELECOMMUNICATIONS
SERVICES IN RURAL AREAS

- Sec. 201. Loan program.
 Sec. 202. Grants for planning and feasibility studies on broadband deployment.
 Sec. 203. Pilot program for wireless or satellite broadband trials in rural areas.
 Sec. 204. Rural and underserved community broadband technology initiative.
 Sec. 205. Report on universal service and competition.
 Sec. 206. Block grants to States for broadband deployment.
 Sec. 207. GAO to study broadband deployment in other countries.
 Sec. 208. Assessment of homeland security and public safety needs in rural and underserved areas.

TITLE III—RESEARCH ON TECHNICAL AND FINANCIAL
REQUIREMENTS FOR FASTER BROADBAND SERVICES

- Sec. 301. Research enhancement of broadband telecommunications services.
 Sec. 302. Grants to colleges and universities to research faster broadband technology.

TITLE IV—STIMULATING DEMAND FOR BROADBAND SERVICES

- Sec. 401. Grants to colleges and universities for research.
 Sec. 402. Grants to libraries to digitize collections.
 Sec. 403. Grants to museums to digitize collections.
 Sec. 404. Grants for DTV conversion and programming.

TITLE V—DIGITAL NETWORK TECHNOLOGY PROGRAM

- Sec. 501. Amendment of National Telecommunications and Information Administration Organization Act.
 Sec. 502. Definitions.
 Sec. 503. Funding.

1 SEC. 2. FINDINGS.

2 The Congress finds the following:

3 (1) Broadband service could revolutionize the
 4 way Americans live. Therefore, it is important that
 5 Congress examine the issues surrounding the avail-
 6 ability and subscription to broadband service.

7 (2) The Federal Communications Commission
 8 recently concluded that advanced telecommuni-
 9 cations capability is being deployed in a reasonable
 10 and timely manner and that although investment
 11 trends in general have slowed recently, investment in

1 infrastructure for advanced telecommunications re-
2 mains strong.

3 (3) Approximately 85 percent of Americans
4 have access to broadband service provided by either
5 the cable or telephone companies.

6 (4) Some communities, such as those in rural
7 and urban areas do not have access to broadband
8 service.

9 (5) According to numerous reports only 10 to
10 12 percent of consumers actually subscribe to
11 broadband service, leading many to believe that the
12 low adoption of broadband by consumers is not due
13 to low availability, but instead to a lack of demand
14 by consumers. In the top one-tenth of zip codes
15 ranked by median family income, high-speed sub-
16 scribers were reported in 96 percent of the zip codes.
17 By contrast, high speed subscribers were reported in
18 59 percent of zip codes with the lowest median fam-
19 ily income.

20 (6) Cable and telephone companies provide
21 broadband service with speeds of up to 1.5 megabits
22 per second to residential consumers. However, many
23 in the technology industry state that higher speeds
24 are needed to provide telemedicine, video confer-

1 encing, movie and music over the internet and other
2 internet applications.

3 (7) The Federal Communications Commission’s
4 policies for promoting broadband deployment must
5 not undermine competition or universal service.

6 (8) Congress must explore ways to ensure that
7 broadband service is available to all Americans and
8 that no one is left behind. This includes exploring
9 ways to increase deployment in unserved and under-
10 served areas, address consumer demand factors, fa-
11 cilitate innovation that results in higher service
12 speeds, and promote consumer confidence when
13 using the Internet.

14 **TITLE I—TRUST FUND FOR**
15 **BROADBAND LOANS AND**
16 **GRANTS**

17 **SEC. 101. BROADBAND DEPLOYMENT TRUST FUND.**

18 (a) IN GENERAL.—The National Telecommuni-
19 cations and Information Administration Organization Act
20 is amended—

21 (1) by redesignating part C as part D; and

22 (2) by inserting after part B (47 U.S.C. 921 et
23 seq.) the following new part:

1 **“PART C—ASSISTANCE TO PROMOTE BROADBAND DEPLOY-**
2 **MENT AND DEMAND.**

3 **“SEC. 131. BROADBAND DEPLOYMENT AND DEMAND TRUST**
4 **FUND.**

5 “(a) CREATION OF TRUST FUND.—There is estab-
6 lished in the Treasury of the United States a trust fund
7 to be known as the Broadband Deployment and Demand
8 Trust Fund.

9 “(b) EXPENDITURES FROM TRUST FUND.—
10 Amounts in the Trust Fund shall be available for making
11 expenditures to carry out the provisions of the Broadband
12 Telecommunications Deployment Act of 2002, and for
13 such expenditures as may be necessary to administer the
14 programs established therein.

15 “(c) TREATMENT AS TRUST FUND.—Subchapter B
16 of chapter 98 of the Internal Revenue Code of 1986 shall
17 apply to the administration of the Trust Fund.

18 **“SEC. 132. REGULATIONS.**

19 “The Secretary of Commerce may prescribe such reg-
20 ulations as may be necessary to carry out this part.

21 **“SEC. 133. AUTHORIZATION OF APPROPRIATIONS.**

22 “(a) AUTHORIZATION.—For each of fiscal years 2003
23 through 2007 there are authorized to be appropriated to
24 the Broadband Deployment and Demand Trust Fund an
25 amount equivalent to 50 percent of the taxes received in
26 the Treasury after September 30, 2002, and before Octo-

ber 1, 2007, under section 4251 (relating to tax on communications) of the Internal Revenue Code of 1986.

“(b) SUNSET OF APPROPRIATIONS STREAM.—The authorization of appropriations by subsection (a) Trust Fund shall terminate at the end of fiscal year 2007, but any balances remaining in the Trust Fund at the close of that fiscal year, and any repayments of loans made from the Trust Fund received after fiscal year 2007, shall remain available for obligation and expenditure from the Trust Fund.”.

TITLE II—ACCESS TO BROADBAND TELECOMMUNICATIONS SERVICES IN RURAL AREAS

SEC. 201. LOAN PROGRAM.

(a) PURPOSE.—The purpose of this section is to provide loans to fund the costs of the construction, improvement, and acquisition of facilities and equipment for broadband service in eligible rural and underserved communities.

(b) DEFINITIONS.—In this section:

(1) BROADBAND SERVICE.—The term “broadband service” means any technology identified by the National Telecommunications and Information Administration, in consultation with the Rural

1 Utilities Service of the Department of Agriculture,
2 as having the capacity to transmit data to enable a
3 subscriber to the service to originate and receive
4 high-quality voice, high-speed data, graphics, or
5 video.

6 (2) ELIGIBLE RURAL COMMUNITY.—The term
7 “eligible rural community” means any incorporated
8 or unincorporated place that—

9 (A) has not more than 50,000 inhabitants,
10 based on the most recent available population
11 statistics of the Bureau of the Census; and

12 (B) is not located in an area designated as
13 a standard metropolitan statistical area.

14 (3) ELIGIBLE UNDERSERVED COMMUNITY.—
15 The term “eligible underserved community” means
16 any census tract located in—

17 (A) an empowerment zone or enterprise
18 community designated under section 1391 of
19 the Internal Revenue Code of 1986;

20 (B) the District of Columbia Enterprise
21 Zone established under section 1400 of such
22 Code;

23 (C) a renewal community designated under
24 section 1400E of such Code; or

1 (D) a low-income community designated
2 under section 45D of such Code.

3 (c) LOANS.—

4 (1) IN GENERAL.—The Rural Utilities Service,
5 in consultation with National Telecommunications
6 and Information Administration, shall make loans to
7 eligible entities to provide funds for the construction,
8 improvement, or acquisition of facilities and equip-
9 ment for the provision of broadband service in eligi-
10 ble rural and underserved communities.

11 (2) LOANS TO LECS.—The Rural Utilities Serv-
12 ice, in consultation with National Telecommuni-
13 cations and Information Administration, shall make
14 loans to local exchange carriers (as defined in sec-
15 tion 3(26) of the Communications Act of 1934 (47
16 U.S.C. 151(26)) that are eligible entities to provide
17 funds to upgrade or install remote terminals located
18 more than 25,000 feet from the closest central office
19 of the local exchange carrier, and for the installation
20 of fiber optic cable or broadband wireless facilities
21 between such remote terminals and the closest cen-
22 tral office of a local exchange carrier, in order to
23 provide broadband service to eligible rural and un-
24 derserved communities.

1 (3) EFFECT OF COMMUNICATIONS POLICY.—

2 Notwithstanding any other provision of this section,
3 the Rural Utilities Service may not make a loan
4 under this subsection if the National Telecommuni-
5 cations and Information Administration determines
6 that the loan would have an adverse effect on com-
7 munications policy, including competition in the
8 communications marketplace.

9 (d) ELIGIBLE ENTITIES.—To be eligible to obtain a
10 loan under this section, an entity shall—

11 (1) be able to furnish, improve, or extend a
12 broadband service to an eligible rural or underserved
13 community; and

14 (2) submit to the Rural Utilities Service a pro-
15 posal for a project that meets the requirements of
16 this section.

17 (e) BROADBAND SERVICE.—The National Tele-
18 communications and Information Administration shall,
19 from time to time as advances in technology warrant, re-
20 view and recommend modifications to the rate-of-data
21 transmission criteria for purposes of the identification of
22 broadband service technologies under subsection (b)(1).

23 (f) TECHNOLOGICAL NEUTRALITY.—For purposes of
24 determining whether to make a loan for a project under
25 this section, the Rural Utilities Service shall apply techno-

1 logically neutral criteria and encourage the use of a variety
2 of landline and wireless technologies among applications.

3 (g) TERMS AND CONDITIONS FOR LOANS.—A loan
4 under subsection (d) shall—

5 (1) be made available in accordance with the re-
6 quirements of the Federal Credit Reform Act of
7 1990 (2 U.S.C. 661 et seq.);

8 (2) bear interest at an annual rate, as deter-
9 mined by the National Telecommunications and In-
10 formation Administration, in consultation with the
11 Rural Utilities Service, of—

12 (A) 4 percent per annum; or

13 (B) the current applicable market rate;

14 and

15 (3) have a term not to exceed the useful life of
16 the assets constructed, improved, or acquired with
17 the proceeds of the loan or extension of credit.

18 (h) USE OF LOAN PROCEEDS TO REFINANCE LOANS
19 FOR DEPLOYMENT OF BROADBAND SERVICE.—Notwith-
20 standing any other provision of this Act, the proceeds of
21 any loan made by the Rural Utilities Service under this
22 Act may be used by the recipient of the loan for the pur-
23 pose of refinancing an outstanding obligation of the recipi-
24 ent on another telecommunications loan made under this
25 Act if the use of the proceeds for that purpose will further

1 the construction, improvement, or acquisition of facilities
2 and equipment for the provision of broadband service in
3 eligible rural and underserved communities.

4 (i) INCUMBENT LOCAL EXCHANGE CARRIER MUST
5 MAKE UPGRADED FACILITIES AVAILABLE.—In addition
6 to any other requirement to provide unbundled network
7 elements, any incumbent local exchange carrier (as defined
8 in section 251(h) of the Communications Act of 1934 (47
9 U.S.C. 251(h))) that uses funds made available under sub-
10 section (c)(2) shall make remote terminals and fiber optic
11 cable so funded, and any loop that includes such compo-
12 nents, available to a requesting telecommunications carrier
13 on an unbundled basis in accordance with the require-
14 ments of sections 251 and 252 of the Communications Act
15 of 1934 (47 U.S.C. 251, 252).

16 (j) FUNDING.—

17 (1) IN GENERAL.—The Secretary of Commerce
18 shall make available from amounts in the Broadband
19 Deployment and Demand Trust Fund not more than
20 \$125,000,000 for each of fiscal years 2003 through
21 2007 for loans under this section, of which
22 \$25,000,000 shall be for loans under subsection
23 (c)(2).

24 (2) VALUE OF LOANS OUTSTANDING.—The ag-
25 gregate value of all loans made under this section

1 shall be at least \$2,500,000,000 for each such fiscal
 2 year, including not more than \$500,000,000 for out-
 3 standing loans under subsection (c)(2).

4 (3) ALLOCATION OF FUNDS.—

5 (A) IN GENERAL.—From amounts made
 6 available for each fiscal year under paragraph
 7 (1), the Rural Utilities Service shall establish a
 8 national reserve for loans to eligible entities in
 9 States under this section.

10 (B) UNOBLIGATED AMOUNTS.—Any
 11 amounts in the reserve established for a State
 12 for a fiscal year under subparagraph (A) that
 13 are not obligated by April 1 of the fiscal year
 14 shall be available to the Rural Utilities Service
 15 to make loans under this section to eligible enti-
 16 ties in any State, as determined by the Rural
 17 Utilities Service.

18 **SEC. 202. GRANTS FOR PLANNING AND FEASIBILITY STUD-**
 19 **IES ON BROADBAND DEPLOYMENT.**

20 (a) IN GENERAL.—The National Telecommuni-
 21 cations and Information Administration shall make grants
 22 to non-profit organizations for planning and feasibility
 23 studies on the deployment of broadband services in dif-
 24 ferent geographic areas, including towns, cities, counties,
 25 and States.

1 (b) ELIGIBILITY CRITERIA.—

2 (1) IN GENERAL.—The National Telecommuni-
3 cations and Information Administration may estab-
4 lish additional criteria for eligibility for grants under
5 this section, including criteria for the scope of the
6 planning and feasibility studies to be carried out
7 with grants under this section.

8 (2) CONTRIBUTION BY GRANTEE.—An organi-
9 zation may not be awarded a grant under this sec-
10 tion unless the entity agrees to contribute (out of
11 funds other than the grant amount) to the planning
12 and feasibility study to be funded by the grant an
13 amount equal to the amount of the grant.

14 (c) APPLICATION.—An organization seeking a grant
15 under this section shall submit an application for the
16 grant to National Telecommunications and Information
17 Administration that is in such form, and that contains
18 such information, as the National Telecommunications
19 and Information Administration shall require.

20 (d) LIMITATION ON USE OF GRANT AMOUNTS.—
21 Grant amounts under this section may not be used for
22 the acquisition of office equipment, the construction of
23 buildings or other facilities, the acquisition or improve-
24 ment of existing buildings or facilities, or the leasing of
25 office space.

1 (e) RESERVATION OF FUNDS FOR GRANTS.—

2 (1) IN GENERAL.—The Secretary of Commerce
3 shall make available from amounts in the Broadband
4 Deployment and Demand Trust Fund not more than
5 \$60,000,000 for each of fiscal years 2003 through
6 2007 as a reserve for grants under this section.

7 (2) RELEASE.—Funds reserved under para-
8 graph (1) for a fiscal year shall be reserved only
9 until April 1 of the fiscal year.

10 (f) SUPPLEMENT NOT SUPPLANT.—

11 (1) IN GENERAL.—Eligibility for a grant under
12 this section shall not affect eligibility for a grant or
13 loan under another section of this Act.

14 (2) CONSIDERATIONS.—The National Tele-
15 communications and Information Administration
16 may not take into account the award of a grant
17 under this section, or the award of a grant or loan
18 under another section of this Act, in awarding a
19 grant or loan under this section or another section
20 of this Act, as the case may be.

21 (g) TERMINATION OF AUTHORITY.—

22 (1) IN GENERAL.—No grant may be made
23 under this section after September 30, 2007.

24 (2) EFFECT ON VALIDITY OF GRANT.—Notwith-
25 standing paragraph (1), any grant made under this

1 section before the date specified in paragraph (1)
2 shall be valid.

3 **SEC. 203. PILOT PROGRAM FOR WIRELESS OR SATELLITE**
4 **BROADBAND TRIALS IN RURAL AREAS.**

5 (a) IN GENERAL.—The National Telecommuni-
6 cations and Information Administration shall support up
7 to 7 pilot programs in each of fiscal years 2003 through
8 2007 for conducting innovative applications of wireless,
9 satellite, and other non-wireline technologies capable of de-
10 livering broadband service (as defined in section
11 201(b)(1)) to an eligible rural community (as defined in
12 section 201(b)(2)) or an eligible underserved community
13 (as defined in section 201(b)(3)). The National Tele-
14 communications and Information Administration shall
15 support 1 pilot program per year for fiber-to-the-home
16 technology under this subsection except for any year for
17 which no application is received for such a program.

18 (b) APPLICATION PROCEDURES AND CONDITIONS.—
19 The National Telecommunications and Information Ad-
20 ministration shall establish such application procedures
21 and conditions for grants under this section as it deems
22 appropriate.

23 (c) FUNDING.—The Secretary of Commerce shall
24 make available from the Broadband Deployment and De-

1 mand Trust Fund up to \$2,000,000 per year for each pilot
2 program under subsection (a).

3 **SEC. 204. RURAL AND UNDERSERVED COMMUNITY**
4 **BROADBAND TECHNOLOGY INITIATIVE.**

5 The Director of the National Institute of Standards
6 and Technology, through the Advanced Technology Pro-
7 gram, may hold a portion of the Institute's competitions
8 in thematic areas, selected after consultation with indus-
9 try, academics, and other Federal Agencies, designed to
10 develop and improve technical capabilities with respect to
11 the speed, quality, and availability of technologies that will
12 extend the reach of broadband Internet services to individ-
13 uals living in eligible rural communities (as defined in sec-
14 tion 201(b)(2)) and eligible underserved communities (as
15 defined in section 201(b)(3)).

16 **SEC. 205. REPORT ON UNIVERSAL SERVICE AND COMPETI-**
17 **TION.**

18 No later than May 1, 2003, a Federal-State Joint
19 Board established pursuant to section 410(c) of the Com-
20 munications Act of 1934 (47 U.S.C. 410(c)) and the Na-
21 tional Exchange Carriers Association shall report to the
22 Federal Communications Commission and to the Senate
23 Committee on Commerce, Science, and Transportation
24 and the House of Representatives Committee on Energy
25 and Commerce on—

1 (1) the effect of reclassifying telecommuni-
2 cations services provided by incumbent local ex-
3 change carriers on—

4 (A) the level of support available for uni-
5 versal service;

6 (B) the universal service contribution obli-
7 gations of telecommunications carriers and
8 other providers of telecommunications; and

9 (C) the ability of the Commission and
10 State commissions to fulfill the requirements of
11 subsections (b), (h), and (i) of section 254 of
12 the Communications Act of 1934 (47 U.S.C.
13 254);

14 (2) the effect on universal service of—

15 (A) reducing the availability of network
16 elements provided by incumbent local exchange
17 carriers;

18 (B) modifying the rates, terms, and condi-
19 tions for the purchasing or leasing of such ele-
20 ments; and

21 (C) reducing the oversight of the rates,
22 charges, terms, and conditions for the pur-
23 chasing or leasing of telecommunications serv-
24 ices provided by such carriers; and

1 (3) the effect of such changes on competition in
2 the provision of telecommunications services.

3 **SEC. 206. BLOCK GRANTS TO STATES FOR BROADBAND**
4 **DEPLOYMENT.**

5 (a) IN GENERAL.—The Secretary of Commerce shall
6 establish a grant program to provide funding to State and
7 local governments to encourage and support the deploy-
8 ment of broadband technologies and services, particularly
9 in eligible rural communities (as defined in section
10 201(b)(2)) and eligible underserved communities (as de-
11 fined in section 201(b)(3)).

12 (b) PURPOSES.—State and local governments receiv-
13 ing grants under this section shall use the funds—

14 (1) to spur investment in broadband facilities;

15 (2) to stimulate deployment of broadband tech-
16 nology and services;

17 (3) to encourage the adoption of broadband in
18 eligible rural communities (as defined in section
19 201(b)(2)) and eligible underserved communities (as
20 defined in section 201(b)(3)); and

21 (4) to provide e-government services through
22 improved access to government services through
23 broadband Internet connections.

24 (c) APPLICATIONS.—To be eligible to receive a grant
25 under this section, a State or local government shall sub-

1 mit an application to the Secretary at such time, in such
2 manner, and containing such information as the Secretary
3 may require. The Secretary shall establish a procedure for
4 accepting, processing, and evaluating applications and
5 publish an announcement of the procedure, including a
6 statement regarding the availability of funds, in the Fed-
7 eral Register.

8 (d) FUNDING.—The Secretary shall make available
9 from amounts in the Broadband Deployment and Demand
10 Trust Fund \$1,000,000,000 for each of fiscal years 2003
11 through 2007 for grants under this section, of which
12 \$250,000,000 shall be made available for each such fiscal
13 year for e-government enhancement activities described in
14 subsection (b)(4) in all communities.

15 **SEC. 207. GAO TO STUDY BROADBAND DEPLOYMENT IN**
16 **OTHER COUNTRIES.**

17 The Comptroller General shall survey countries with
18 broadband deployment and subscriber rates that are simi-
19 lar to, or greater than, the broadband deployment and
20 subscriber rates in the United States in order to determine
21 the actions governments, carriers, and other parties have
22 taken to facilitate the deployment of broadband (including
23 the factors that encourage consumers to subscribe to
24 broadband service) and report the results of his survey to
25 the Congress by May 1, 2003.

1 **SEC. 208. ASSESSMENT OF HOMELAND SECURITY AND PUB-**
 2 **LIC SAFETY NEEDS IN RURAL AND UNDER-**
 3 **SERVED AREAS.**

4 (a) IN GENERAL.—No later than 6 months after the
 5 date of enactment of this Act, the National Telecommuni-
 6 cations and Information Administration shall issue a re-
 7 port on the potential role of broadband in rural and under-
 8 served areas in addressing homeland security and public
 9 safety needs, and, as necessary, make recommendations
 10 to enhance deployment to improve emergency response
 11 systems.

12 (b) FUNDING.—The Secretary of Commerce shall
 13 make available from the Broadband Deployment and De-
 14 mand Trust Fund up to \$500,000 for the study under
 15 subsection (a).

16 **TITLE III—RESEARCH ON TECH-**
 17 **NICAL AND FINANCIAL RE-**
 18 **QUIREMENTS FOR FASTER**
 19 **BROADBAND SERVICES**

20 **SEC. 301. RESEARCH ENHANCEMENT OF BROADBAND**
 21 **TELECOMMUNICATIONS SERVICES.**

22 (a) IN GENERAL.—

23 (1) NATIONAL SCIENCE BOARD RESEARCH.—

24 The Director of the National Science Board, without
 25 considering any changes in telecommunications regu-
 26 lation, shall research—

1 (A) technical changes that would be nec-
2 essary with respect to wireline, wireless facili-
3 ties, and satellite facilities to provide broadband
4 telecommunications services in order to provide
5 speeds between 50 megabits-per-second and 100
6 megabits-per-second; and

7 (B) the financial cost of ensuring that all
8 Americans have access to broadband services
9 with speeds between 50 megabits-per-second
10 and 100 megabits-per-second.

11 (2) ITS BROADBAND RESEARCH.—The Director
12 of the Institute of Telecommunications Sciences of
13 the National Telecommunications and Information
14 Administration, in consultation with the Director of
15 the National Institute of Science and Technology
16 Laboratories, shall engage in research and
17 development—

18 (A) of wireline, wireless facilities, and sat-
19 ellite facilities to provide broadband tele-
20 communications services in order to provide
21 speeds between 50 megabits-per-second and 100
22 megabits-per-second;

23 (B) of new broadband technologies to meet
24 government and commercial needs; and

1 (C) with respect to the technical capabili-
2 ties of existing technologies to improve their
3 speed, quality, and availability and extend the
4 reach of broadband services to individuals living
5 in rural areas.

6 (3) SPECTRUM-SHARING AND INTERFERENCE
7 ISSUES.—The Director of the Institute of Tele-
8 communications Sciences shall also conduct research
9 or studies—

10 (A) to enhance spectrum-sharing between
11 governmental and private sector users of
12 broadband services;

13 (B) to develop technologies that would en-
14 able government and private sector users to use
15 spectrum more efficiently; and

16 (C) to provide recommendations to the Ad-
17 ministrator of the National Telecommunications
18 and Information Administration that would
19 enhance—

20 (i) government and private sector
21 spectrum sharing opportunities and coordi-
22 nation; and

23 (ii) private sector innovation of new
24 wireless technologies that benefit govern-
25 ment and private sector users.

1 (b) CONSULTATION AND COORDINATION.—The Di-
2 rectors of the National Science Board, the Institute of
3 Telecommunications Sciences, and the National Institute
4 of Science and Technology Laboratories shall—

5 (1) consult with governmental and commercial
6 users of broadband services as appropriate to facili-
7 tate research under subsection (a); and

8 (2) consult with each other in order to coordi-
9 nate their activities under subsection (a).

10 (c) RESULTS OF RESEARCH.—The Director shall
11 make available to the public, in such manner as the Direc-
12 tor considers appropriate, the results of any research car-
13 ried out under this section.

14 (d) FUNDING.—The Secretary of Commerce shall
15 make available from amounts in the Broadband Deploy-
16 ment and Demand Trust Fund for each of fiscal years
17 2003 through 2007 to carry out this section not more
18 than—

19 (1) \$60,000,000 to the Director of the Institute
20 of Telecommunications Sciences of the National
21 Telecommunications and Information Administra-
22 tion, of which not more than \$10,000,000 shall be
23 used to carry out subsection (a)(2);

1 **TITLE IV—STIMULATING DE-**
2 **MAND FOR BROADBAND**
3 **SERVICES**

4 **SEC. 401. GRANTS TO COLLEGES AND UNIVERSITIES FOR**
5 **RESEARCH.**

6 (a) IN GENERAL.—The National Telecommuni-
7 cations and Information Administration shall establish
8 and administer a grant program to fund research at col-
9 leges and universities to develop computer or Internet ap-
10 plications that require broadband facilities and are of par-
11 ticular use to residential consumers.

12 (b) FUNDING.—The Secretary of Commerce shall
13 make available from amounts in the Broadband Deploy-
14 ment and Demand Trust Fund not more than
15 \$50,000,000 for each of fiscal years 2003 through 2007
16 for grants under this section.

17 **SEC. 402. GRANTS TO LIBRARIES TO DIGITIZE COLLEC-**
18 **TIONS.**

19 (a) IN GENERAL.—The National Telecommuni-
20 cations and Information Administration shall establish
21 and administer a grant program for libraries to enable
22 them to make a record in digital format of their collec-
23 tions.

24 (b) CONSULTATION WITH KNOWLEDGEABLE PER-
25 SONS.—In making grants under subsection (a), the Na-

1 tional Telecommunications and Information Administra-
2 tion shall consult with—

3 (1) the Librarian of Congress;

4 (2) the Archivist of the United States; and

5 (3) representatives of libraries, academic insti-
6 tutions, and other individuals with professional re-
7 sponsibilities related to collection, curation, preserva-
8 tion, and display of books, records, films, and other
9 written or recorded matter of public interest.

10 (c) FUNDING.—The Secretary of Commerce shall
11 make available from amounts in the Broadband Deploy-
12 ment and Demand Trust Fund not more than
13 \$100,000,000 for each of fiscal years 2003 through 2007
14 for grants under this section.

15 **SEC. 403. GRANTS TO MUSEUMS TO DIGITIZE COLLEC-**
16 **TIONS.**

17 (a) IN GENERAL.—The National Telecommuni-
18 cations and Information Administration shall establish
19 and administer a grant program for museums to enable
20 them to make a record in digital format of their collec-
21 tions.

22 (b) CONSULTATION WITH KNOWLEDGEABLE PER-
23 SONS.—In making grants under subsection (a), the Na-
24 tional Telecommunications and Information Administra-
25 tion shall consult with—

1 and to develop educational and public interest digital pro-
 2 gramming.

3 **TITLE V—DIGITAL NETWORK**
 4 **TECHNOLOGY PROGRAM**

5 **SEC. 501. AMENDMENT OF NATIONAL TELECOMMUNI-**
 6 **CATIONS AND INFORMATION ADMINISTRA-**
 7 **TION ORGANIZATION ACT.**

8 Title I of the National Telecommunications and In-
 9 formation Administration Organization Act (47 U.S.C.
 10 901 et seq.), as amended by section 101, is amended by
 11 adding at the end the following:

12 “PART E—DIGITAL NETWORK TECHNOLOGY
 13 PROGRAM

14 **“SEC. 171. PROGRAM AUTHORIZED.**

15 “The Secretary shall establish, within the NTIA’s
 16 Technology Opportunities Program a digital network tech-
 17 nologies program to strengthen the capacity of eligible in-
 18 stitutions to provide instruction in digital network tech-
 19 nologies by providing grants to, or executing contracts or
 20 cooperative agreements with, those institutions to provide
 21 such instruction.

22 **“SEC. 172. ACTIVITIES SUPPORTED.**

23 “An eligible institution shall use a grant, contract,
 24 or cooperative agreement awarded under this part—

1 “(1) to acquire the equipment, instrumentation,
2 networking capability, hardware and software, dig-
3 ital network technology, and infrastructure necessary
4 to teach students and teachers about technology in
5 the classroom;

6 “(2) to develop and provide educational serv-
7 ices, including faculty development, to prepare stu-
8 dents or faculty seeking a degree or certificate that
9 is approved by the State, or a regional accrediting
10 body recognized by the Secretary of Education;

11 “(3) to provide teacher education, library and
12 media specialist training, and preschool and teacher
13 aid certification to individuals who seek to acquire or
14 enhance technology skills in order to use technology
15 in the classroom or instructional process;

16 “(4) to implement a joint project to provide
17 education regarding technology in the classroom
18 with a State or State education agency, local edu-
19 cation agency, community-based organization, na-
20 tional non-profit organization, or business, including
21 minority business or a business located in HUB
22 zones, as defined by the Small Business Administra-
23 tion;

24 “(5) to provide leadership development to ad-
25 ministrators, board members, and faculty of eligible

1 institutions with institutional responsibility for tech-
2 nology education; or

3 “(6) to acquire equipment, instrumentation,
4 networking capability, hardware and software, dig-
5 ital network technology, and infrastructure necessary
6 to meet community networking needs.

7 **“SEC. 173. APPLICATION AND REVIEW PROCEDURE.**

8 “(a) IN GENERAL.—To be eligible to receive a grant,
9 contract, or cooperative agreement under this part, an eli-
10 gible institution shall submit an application to the Sec-
11 retary at such time, in such manner, and accompanied by
12 such information as the Secretary may reasonably require.
13 The Secretary, in consultation with the panel described
14 in subsection (b), shall establish a procedure by which to
15 accept such applications and publish an announcement of
16 such procedure, including a statement regarding the avail-
17 ability of funds, in the Federal Register.

18 “(b) PEER REVIEW PANEL.—The Secretary shall es-
19 tablish a peer review panel to aid the Secretary in estab-
20 lishing the application procedure described in subsection
21 (a) and selecting applicants to receive grants, contracts,
22 and cooperative agreements under section 171. In select-
23 ing the members for such panel, the Secretary may consult
24 with appropriate cabinet-level officials, representatives of
25 non-Federal organizations, and representatives of eligible

1 institutions to ensure that the membership of such panel
2 reflects membership of the minority higher education com-
3 munity, including Federal agency personnel and other in-
4 dividuals who are knowledgeable about issues regarding
5 minority education institutions.

6 **“SEC. 174. MATCHING REQUIREMENT.**

7 “The Secretary may not award a grant, contract, or
8 cooperative agreement to an eligible institution under this
9 part unless such institution agrees that, with respect to
10 the costs to be incurred by the institution in carrying out
11 the program for which the grant, contract, or cooperative
12 agreement was awarded, such institution will make avail-
13 able (directly or through donations from public or private
14 entities) non-Federal contributions in an amount equal to
15 $\frac{1}{4}$ of the amount of the grant, contract, or cooperative
16 agreement awarded by the Secretary, or \$500,000, which-
17 ever is the lesser amount. The Secretary shall waive the
18 matching requirement for any institution or consortium
19 with no endowment, or an endowment that has a current
20 dollar value lower than \$50,000,000.

21 **“SEC. 175. LIMITATION.**

22 “An eligible institution that receives a grant, con-
23 tract, or cooperative agreement under this part that ex-
24 ceeds \$2,500,000, shall not be eligible to receive another
25 grant, contract, or cooperative agreement under this part

1 until every other eligible institution has received a grant,
2 contract, or cooperative agreement under this part.

3 **“SEC. 176. ANNUAL REPORT AND EVALUATION.**

4 “(a) ANNUAL REPORT REQUIRED FROM RECIPI-
5 ENTS.—Each institution that receives a grant, contract,
6 or cooperative agreement under this part shall provide an
7 annual report to the Secretary on its use of the grant,
8 contract, or cooperative agreement.

9 “(b) EVALUATION BY SECRETARY.—The Secretary,
10 in consultation with the Secretary of Education, shall—

11 “(1) review the reports provided under sub-
12 section (a) each year;

13 “(2) evaluate the program authorized by section
14 171 on the basis of those reports; and

15 “(3) conduct a final evaluation at the end of
16 the third year

17 “(c) CONTENTS OF EVALUATION.—The
18 Secretary, in the evaluation, shall describe the
19 activities undertaken by those institutions and
20 shall assess the short-range and long-range im-
21 pact of activities carried out under the grant,
22 contract, or cooperative agreement on the stu-
23 dents, faculty, and staff of the institutions.

24 “(d) REPORT TO CONGRESS.—The Sec-
25 retary shall submit a report to the Congress

1 based on the final evaluation within 1 year after
2 conducting the final evaluation. In the report,
3 the Secretary shall include such recommenda-
4 tions, including recommendations concerning
5 the continuing need for Federal support of the
6 program, as may be appropriate.

7 “PART F—COMMUNITY NETWORKING PROGRAM

8 **“SEC. 191. PROGRAM AUTHORIZED.**

9 “(a) IN GENERAL.—The Secretary shall establish,
10 within NTIA’s Technology Opportunities Program, a com-
11 munity networking program to enable underserved com-
12 munities to deploy broadband capable networks, aggregate
13 demand for broadband services, and provide broadband
14 access for economic development, public safety, health
15 care, and educational needs of the community.

16 “(b) CONFERENCES.—The Secretary shall conduct
17 conferences throughout each of the fiscal years 2003
18 through 2007 to inform State and local governments and
19 the public about best practices in community networking
20 and broadband applications for small businesses, telemedi-
21 cine, distance learning, teleagriculture, and other special-
22 ized uses of such applications.

23 **“SEC. 192. ACTIVITIES SUPPORTED.**

24 “An eligible entity shall use a grant under this part
25 to acquire the equipment, instrumentation, networking ca-

1 pability, hardware, software, broadband network tech-
2 nology, and infrastructure necessary to provide access to
3 broadband telecommunications and information services
4 necessary to promote economic development and enhance
5 the public safety, educational, and health care needs of
6 the eligible community.

7 **“SEC. 193. APPLICATION PROCEDURE.**

8 “(a) IN GENERAL.—To be eligible to receive a grant
9 under this part, an eligible entity shall submit an applica-
10 tion to the Secretary at such time, in such manner, and
11 accompanied by such information as the Secretary may
12 reasonably require. The Secretary, in consultation with the
13 panel described in subsection (b), shall establish a proce-
14 dure by which to accept such applications and publish an
15 announcement of such procedure, including a statement
16 regarding the availability of funds, in the Federal Reg-
17 ister.

18 “(b) PEER REVIEW PANEL.—The Secretary shall es-
19 tablish a peer review panel to aid the Secretary in estab-
20 lishing the application procedure described in subsection
21 (a) and selecting applicants to receive grants, contracts,
22 and cooperative agreements under section 191.

23 **“SEC. 194. MATCHING REQUIREMENT.**

24 “The Secretary may not award a grant to an eligible
25 entity under this part unless the entity agrees to make

1 available, directly or in kind, non-Federal contributions to
2 the costs of the program equal to the amount of the
3 grant.”.

4 **SEC. 502. DEFINITIONS.**

5 Section 102(a) of the National Telecommunications
6 and Information Administration Organization Act (47
7 U.S.C. 901(a)) is amended by adding at the end the fol-
8 lowing:

9 “(6) ELIGIBLE INSTITUTION.—The term ‘eligi-
10 ble institution’ means an institution that is—

11 “(A) a historically Black college or univer-
12 sity that is a part B institution, as defined in
13 section 322(2) of the Higher Education Act of
14 1965 (20 U.S.C. 1061(2)), an institution de-
15 scribed in section 326(e)(1) (A), (B), or (C) of
16 that Act (20 U.S.C. 1063b(e)(1) (A), (B), or
17 (C)), or a consortium of institutions described
18 in this subparagraph;

19 “(B) a Hispanic-serving institution, as de-
20 fined in section 502(a)(5) of the Higher Edu-
21 cation Act of 1965 (20 U.S.C. 1101a(a)(5));

22 “(C) a tribally controlled college or univer-
23 sity, as defined in section 316(b)(3) of the
24 Higher Education Act of 1965 (20 U.S.C.
25 1059c(b)(3));

1 “(D) an Alaska Native-serving institution
2 under section 317(b) of the Higher Education
3 Act of 1965 (20 U.S.C. 1059d(b));

4 “(E) a Native Hawaiian-serving institution
5 under section 317(b) of the Higher Education
6 Act of 1965 (20 U.S.C. 1059d(b)); or

7 “(F) an institution determined by the Sec-
8 retary, in consultation with the Secretary of
9 Education, to have enrolled a substantial num-
10 ber of minority, low-income students during the
11 previous academic year who received assistance
12 under subpart I of part A of title IV of the
13 Higher Education Act of 1965 (20 U.S.C.
14 1070a et seq.) for that year.

15 “(7) ELIGIBLE ENTITY.—The term ‘eligible en-
16 tity’ means a State, local, or Tribal government or
17 a nonprofit organization.

18 “(8) ELIGIBLE COMMUNITY.—The term ‘eligible
19 community’ means a community that satisfactorily
20 demonstrates to the Secretary that access to
21 broadband services or broadband service applications
22 are essential to the economic development, public
23 safety, education, and health care needs of the com-
24 munity and such access is not available at affordable
25 rates or on reasonable terms.”.

1 **SEC. 503. FUNDING.**

2 The Secretary of Commerce shall make available,
3 from amounts in the Broadband Deployment and Demand
4 Trust Fund, for each of the fiscal years 2003 through
5 2007—

6 (1) \$250,000,000 to entities described in sec-
7 tion 102(a)(6) of the National Telecommunications
8 and Information Administration Organization Act to
9 carry out part E of title I of that Act; and

10 (2) \$250,000,000 to carry out part F of title I
11 of that Act, of which \$25,000,000 shall be used to
12 acquire equipment, instrumentation, networking ca-
13 pability, hardware and software, and infrastructure
14 necessary to improve homeland security and public
15 safety needs in rural and underserved communities.

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