# H. R. 4940

#### IN THE SENATE OF THE UNITED STATES

October 25 (legislative day, September 22), 2000 Received

### AN ACT

To designate the museum operated by the Secretary of Energy in Oak Ridge, Tennessee, as the "American Museum of Science and Energy", and for other purposes.

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

## 1 TITLE I—AMERICAN MUSEUM OF 2 SCIENCE AND ENERGY

2	SCIENCE AND ENERGY
3	SEC. 101. DESIGNATION OF AMERICAN MUSEUM OF
4	SCIENCE AND ENERGY.
5	(a) In General.—The Museum—
6	(1) is designated as the "American Museum of
7	Science and Energy"; and
8	(2) shall be the official museum of science and
9	energy of the United States.
10	(b) References.—Any reference in a law, map, reg-
11	ulation, document, paper, or other record of the United
12	States to the Museum is deemed to be a reference to the
13	"American Museum of Science and Energy".
14	(c) Property of the United States.—
15	(1) In general.—The name "American Mu-
16	seum of Science and Energy" is declared the prop-
17	erty of the United States.
18	(2) Injunction.—Whoever, except as author-
19	ized by the Secretary, uses or reproduces the name
20	"American Museum of Science and Energy", or a
21	facsimile or simulation of such name in such manner
22	as suggests "American Museum of Science and En-
23	ergy", may be enjoined from such use or reproduc-
24	tion at the suit of the Attorney General upon com-
25	plaint by the Secretary.

1	(3) Effect on other rights.—This sub-
2	section shall not be construed to conflict or interfere
3	with established or vested rights.
4	SEC. 102. AUTHORITY.
5	To carry out the activities of the Museum, the Sec-
6	retary may—
7	(1) accept and dispose of any gift, devise, or be-
8	quest of services or property, real or personal, that
9	is—
10	(A) designated in a written document by
11	the person making the gift, devise, or bequest
12	as intended for the Museum; and
13	(B) determined by the Secretary to be suit-
14	able and beneficial for use by the Museum;
15	(2) operate a retail outlet on the premises of
16	the Museum for the purpose of selling or distrib-
17	uting items (including mementos, food, educational
18	materials, replicas, and literature) that are—
19	(A) relevant to the contents of the Mu-
20	seum; and
21	(B) informative, educational, and tasteful;
22	(3) collect reasonable fees where feasible and
23	appropriate;

1	(4) exhibit, perform, display, and publish mate-
2	rials and information of or relating to the Museum
3	in any media or place;
4	(5) consistent with guidelines approved by the
5	Secretary, lease space on the premises of the Mu-
6	seum at reasonable rates and for uses consistent
7	with such guidelines; and
8	(6) use the proceeds of activities authorized
9	under this section to pay the costs of the Museum.
10	SEC. 103. MUSEUM VOLUNTEERS.
11	(a) Authority To Use Volunteers.—The Sec-
12	retary may recruit, train, and accept the services of indi-
13	viduals or entities as volunteers for services or activities
14	related to the Museum.
15	(b) Status of Volunteers.—
16	(1) In general.—Except as provided in para-
17	graph (2), service by a volunteer under subsection
18	(a) shall not be considered Federal employment.
19	(2) Exceptions.—
20	(A) Federal tort claims act.—For
21	purposes of chapter 171 of title 28, United
22	States Code, a volunteer under subsection (a)
23	shall be treated as an employee of the govern-
24	ment (as defined in section 2671 of that title).

1	(B) Compensation for work inju-
2	RIES.—For purposes of subchapter I of chapter
3	81 of title 5, United States Code, a volunteer
4	described in subsection (a) shall be treated as
5	an employee (as defined in section 8101 of title
6	5, United States Code).
7	(c) Compensation.—A volunteer under subsection
8	(a) shall serve without pay, but may receive nominal
9	awards and reimbursement for incidental expenses, includ-
10	ing expenses for a uniform or transportation in further-
11	ance of Museum activities.
12	SEC. 104. DEFINITIONS.
13	For purposes of this title:
14	(1) Museum.—The term "Museum" means the
15	museum operated by the Secretary of Energy and lo-
16	cated at 300 South Tulane Avenue in Oak Ridge,
17	Tennessee.
18	(2) Secretary.—The term "Secretary" means
19	the Secretary of Energy or a designated representa-
20	tive of the Secretary.
21	TITLE II—NETWORKING AND
22	INFORMATION TECHNOLOGY
23	SEC. 201. SHORT TITLE.
24	This title may be cited as the "Networking and Infor-
25	mation Technology Research and Development Act".

#### 1 SEC. 202. FINDINGS.

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- 2 The Congress makes the following findings:
- 3 (1) Information technology will continue to 4 change the way Americans live, learn, and work. The 5 information revolution will improve the workplace and the quality and accessibility of health care and 6 7 education and make Government more responsible 8 and accessible. It is important that access to information technology be available to all citizens, includ-9 10 ing elderly Americans and Americans with disabil-11 ities.
  - (2) Information technology is an imperative enabling technology that contributes to scientific disciplines. Major advances in biomedical research, public safety, engineering, and other critical areas depend on further advances in computing and communications.
  - (3) The United States is the undisputed global leader in information technology.
  - (4) Information technology is recognized as a catalyst for economic growth and prosperity.
  - (5) Information technology represents one of the fastest growing sectors of the United States economy, with electronic commerce alone projected to become a trillion-dollar business by 2005.

- 1 (6) Businesses producing computers, semi-2 conductors, software, and communications equip-3 ment account for one-third of the total growth in the 4 United States economy since 1992.
  - (7) According to the United States Census Bureau, between 1993 and 1997, the information technology sector grew an average of 12.3 percent per year.
  - (8) Fundamental research in information technology has enabled the information revolution.
  - (9) Fundamental research in information technology has contributed to the creation of new industries and new, high-paying jobs.
  - (10) Our Nation's well-being will depend on the understanding, arising from fundamental research, of the social and economic benefits and problems arising from the increasing pace of information technology transformations.
  - (11) Scientific and engineering research and the availability of a skilled workforce are critical to continued economic growth driven by information technology.
  - (12) In 1997, private industry provided most of the funding for research and development in the information technology sector. The information tech-

- nology sector now receives, in absolute terms, onethird of all corporate spending on research and development in the United States economy.
- 4 (13) The private sector tends to focus its 5 spending on short-term, applied research.
- 6 (14) The Federal Government is uniquely posi-7 tioned to support long-term fundamental research.
- 8 (15) Federal applied research in information 9 technology has grown at almost twice the rate of 10 Federal basic research since 1986.
- 11 (16) Federal science and engineering programs
  12 must increase their emphasis on long-term, high-risk
  13 research.
- 14 (17) Current Federal programs and support for 15 fundamental research in information technology is 16 inadequate if we are to maintain the Nation's global 17 leadership in information technology.

#### 18 SEC. 203. AUTHORIZATION OF APPROPRIATIONS.

- 19 (a) NATIONAL SCIENCE FOUNDATION.—Section
- 20 201(b) of the High-Performance Computing Act of 1991
- 21 (15 U.S.C. 5521(b)) is amended—
- 22 (1) by striking "From sums otherwise author-
- 23 ized to be appropriated, there" and inserting
- 24 "There";

(2) by striking "1995; and" and inserting 1 2 "1995;"; and 3 (3) by striking the period at the end and insertfiscal 4 ing \$580,000,000 for year 2000; 5 \$699,300,000 for fiscal year 2001; \$728,150,000 for 6 fiscal year 2002; \$801,550,000 for fiscal year 2003; 7 and \$838,500,000 for fiscal year 2004. Amounts au-8 thorized under this subsection shall be the total 9 amounts authorized to the National Science Founda-10 tion for a fiscal year for the Program, and shall not 11 be in addition to amounts previously authorized by 12 law for the purposes of the Program.". (b) NATIONAL AERONAUTICS AND SPACE ADMINIS-13 14 TRATION.—Section 202(b) of the High-Performance Com-15 puting Act of 1991 (15 U.S.C. 5522(b)) is amended— (1) by striking "From sums otherwise author-16 17 ized to be appropriated, there" and inserting 18 "There"; (2) by striking "1995; and" and inserting 19 20 "1995;"; and 21 (3) by striking the period at the end and insert-22 ing \$164,400,000 for fiscal year 2000; 23 \$201,000,000 for fiscal year 2001; \$208,000,000 for 24 fiscal year 2002; \$224,000,000 for fiscal year 2003; 25 and \$231,000,000 for fiscal year 2004.".

- 1 (c) Department of Energy.—Section 203(e)(1) of
- 2 the High-Performance Computing Act of 1991 (15 U.S.C.
- 3 5523(e)(1) is amended—
- 4 (1) by striking "1995; and" and inserting
- 5 "1995;"; and
- 6 (2) by striking the period at the end and insert-
- 7 ing "; \$119,500,000 for fiscal year 2000;
- 8 \$175,000,000 for fiscal year 2001; \$183,000,000 for
- 9 fiscal year 2002; \$193,000,000 for fiscal year 2003;
- and \$203,000,000 for fiscal year 2004.".
- 11 (d) National Institute of Standards and
- 12 Technology.—(1) Section 204(d)(1) of the High-Per-
- 13 formance Computing Act of 1991 (15 U.S.C. 5524(d)(1))
- 14 is amended—
- 15 (A) by striking "1995; and" and inserting
- 16 "1995;"; and
- 17 (B) by striking "1996; and" and inserting
- 18 "1996; \$9,000,000 for fiscal year 2000; \$9,500,000
- 19 for fiscal year 2001; \$10,500,000 for fiscal year
- 20 2002; \$16,000,000 for fiscal year 2003; and
- \$17,000,000 for fiscal year 2004; and".
- 22 (2) Section 204(d) of the High-Performance Com-
- 23 puting Act of 1991 (15 U.S.C. 5524(d)) is amended by
- 24 striking "From sums otherwise authorized to be appro-
- 25 priated, there" and inserting "There".

- 1 (e) National Oceanic and Atmospheric Admin-
- 2 ISTRATION.—Section 204(d)(2) of the High-Performance
- 3 Computing Act of 1991 (15 U.S.C. 5524(d)(2)) is
- 4 amended—
- 5 (1) by striking "1995; and" and inserting
- 6 "1995;"; and
- 7 (2) by striking the period at the end and insert-
- 8 ing "; \$13,500,000 for fiscal year 2000;
- 9 \$13,900,000 for fiscal year 2001; \$14,300,000 for
- 10 fiscal year 2002; \$14,800,000 for fiscal year 2003;
- and \$15,200,000 for fiscal year 2004.".
- 12 (f) Environmental Protection Agency.—Sec-
- 13 tion 205(b) of the High-Performance Computing Act of
- 14 1991 (15 U.S.C. 5525(b)) is amended—
- 15 (1) by striking "From sums otherwise author-
- ized to be appropriated, there" and inserting
- 17 "There";
- 18 (2) by striking "1995; and" and inserting
- 19 "1995;"; and
- 20 (3) by striking the period at the end and insert-
- 21 ing "; \$4,200,000 for fiscal year 2000; \$4,300,000
- for fiscal year 2001; \$4,500,000 for fiscal year
- 23 2002; \$4,600,000 for fiscal year 2003; and
- 24 \$4,700,000 for fiscal year 2004.".

- 1 (g) National Institutes of Health.—Title II of
- 2 the High-Performance Computing Act of 1991 (15 U.S.C.
- 3 5521 et seq.) is amended by inserting after section 205
- 4 the following new section:

#### 5 "SEC. 205A. NATIONAL INSTITUTES OF HEALTH ACTIVITIES.

- 6 "(a) GENERAL RESPONSIBILITIES.—As part of the
- 7 Program described in title I, the National Institutes of
- 8 Health shall conduct research directed toward the ad-
- 9 vancement and dissemination of computational techniques
- 10 and software tools in support of its mission of biomedical
- 11 and behavioral research.
- 12 "(b) Authorization of Appropriations.—There
- 13 are authorized to be appropriated to the Secretary of
- 14 Health and Human Services for the purposes of the Pro-
- 15 gram \$223,000,000 for fiscal year 2000, \$233,000,000
- 16 for fiscal year 2001, \$242,000,000 for fiscal year 2002,
- 17 \$250,000,000 for fiscal year 2003, and \$250,000,000 for
- 18 fiscal year 2004.".

#### 19 SEC. 204. NETWORKING AND INFORMATION TECHNOLOGY

- 20 RESEARCH AND DEVELOPMENT.
- 21 (a) National Science Foundation.—Section 201
- 22 of the High-Performance Computing Act of 1991 (15
- 23 U.S.C. 5521) is amended by adding at the end the fol-
- 24 lowing new subsections:

- 1 "(c) Networking and Information Technology
- 2 Research and Development.—(1) Of the amounts au-
- 3 thorized under subsection (b), \$350,000,000 for fiscal
- 4 year 2000, \$421,000,000 for fiscal year 2001,
- 5 \$442,000,000 for fiscal year 2002, \$486,000,000 for fis-
- 6 cal year 2003, and \$515,000,000 for fiscal year 2004 shall
- 7 be available for grants for long-term basic research on net-
- 8 working and information technology, with priority given
- 9 to research that helps address issues related to high end
- 10 computing and software; network stability, fragility, reli-
- 11 ability, security (including privacy and counterinitiatives),
- 12 and scalability; and the social and economic consequences
- 13 (including the consequences for healthcare) of information
- 14 technology.
- 15 "(2) In each of the fiscal years 2000 and 2001, the
- 16 National Science Foundation shall award under this sub-
- 17 section up to 25 large grants of up to \$1,000,000 each,
- 18 and in each of the fiscal years 2002, 2003, and 2004, the
- 19 National Science Foundation shall award under this sub-
- 20 section up to 35 large grants of up to \$1,000,000 each.
- 21 "(3)(A) Of the amounts described in paragraph (1),
- 22 \$40,000,000 for fiscal year 2000, \$45,000,000 for fiscal
- 23 year 2001, \$50,000,000 for fiscal year 2002, \$55,000,000
- 24 for fiscal year 2003, and \$60,000,000 for fiscal year 2004

- 1 shall be available for grants of up to \$5,000,000 each for
- 2 Information Technology Research Centers.
- 3 "(B) For purposes of this paragraph, the term 'Infor-
- 4 mation Technology Research Centers' means groups of six
- 5 or more researchers collaborating across scientific and en-
- 6 gineering disciplines on large-scale long-term research
- 7 projects which will significantly advance the science sup-
- 8 porting the development of information technology or the
- 9 use of information technology in addressing scientific
- 10 issues of national importance.
- 11 "(d) Major Research Equipment.—(1) In addi-
- 12 tion to the amounts authorized under subsection (b), there
- 13 are authorized to be appropriated to the National Science
- 14 Foundation \$70,000,000 for fiscal year 2000,
- 15 \$70,000,000 for fiscal year 2001, \$80,000,000 for fiscal
- 16 year 2002, \$80,000,000 for fiscal year 2003, and
- 17 \$85,000,000 for fiscal year 2004 for grants for the devel-
- 18 opment of major research equipment to establish terascale
- 19 computing capabilities at one or more sites and to promote
- 20 diverse computing architectures. Awards made under this
- 21 subsection shall provide for support for the operating ex-
- 22 penses of facilities established to provide the terascale
- 23 computing capabilities, with funding for such operating
- 24 expenses derived from amounts available under subsection
- 25 (b).

1	"(2) Grants awarded under this subsection shall be
2	awarded through an open, nationwide, peer-reviewed com-
3	petition. Awardees may include consortia consisting of
4	members from some or all of the following types of institu-
5	tions:
6	"(A) Academic supercomputer centers.
7	"(B) State-supported supercomputer centers.
8	"(C) Supercomputer centers that are supported
9	as part of federally funded research and development
10	centers.
11	Notwithstanding any other provision of law, regulation, or
12	agency policy, a federally funded research and develop-
13	ment center may apply for a grant under this subsection,
14	and may compete on an equal basis with any other appli-
15	cant for the awarding of such a grant.
16	"(3) As a condition of receiving a grant under this
17	subsection, an awardee must agree—
18	"(A) to connect to the National Science Foun-
19	dation's Partnership for Advanced Computational
20	Infrastructure network;
21	"(B) to the maximum extent practicable, to co-
22	ordinate with other federally funded large-scale com-
23	puting and simulation efforts; and
24	"(C) to provide open access to all grant recipi-
25	ents under this subsection or subsection (c).

1	"(e) Information Technology Education and
2	Training Grants.—
3	"(1) Information technology grants.—
4	The National Science Foundation shall provide
5	grants under the Scientific and Advanced Tech-
6	nology Act of 1992 for the purposes of section 3(a)
7	and (b) of that Act, except that the activities sup-
8	ported pursuant to this paragraph shall be limited to
9	improving education in fields related to information
10	technology. The Foundation shall encourage institu-
11	tions with a substantial percentage of student enroll-
12	ments from groups underrepresented in information
13	technology industries to participate in the competi-
14	tion for grants provided under this paragraph.
15	"(2) Internship grants.—The National
16	Science Foundation shall provide—
17	"(A) grants to institutions of higher edu-
18	cation to establish scientific internship pro-
19	grams in information technology research at
20	private sector companies; and
21	"(B) supplementary awards to institutions
22	funded under the Louis Stokes Alliances for Mi-
23	nority Participation program for internships in
24	information technology research at private sec-
25	tor companies.

- 1 "(3) MATCHING FUNDS.—Awards under para-2 graph (2) shall be made on the condition that at 3 least an equal amount of funding for the internship 4 shall be provided by the private sector company at 5 which the internship will take place.
- 6 "(4) DEFINITION.—For purposes of this sub-7 section, the term 'institution of higher education' 8 has the meaning given that term in section 1201(a) 9 of the Higher Education Act of 1965 (20 U.S.C. 10 1141(a)).
  - "(5) AVAILABILITY OF FUNDS.—Of the amounts described in subsection (c)(1), \$10,000,000 for fiscal year 2000, \$15,000,000 for fiscal year 2001, \$20,000,000 for fiscal year 2002, \$25,000,000 for fiscal year 2003, and \$25,000,000 for fiscal year 2004 shall be available for carrying out this subsection.
- 18 "(f) Educational Technology Research.—
  - "(1) Research program.—As part of its responsibilities under subsection (a)(1), the National Science Foundation shall establish a research program to develop, demonstrate, assess, and disseminate effective applications of information and computer technologies for elementary and secondary education. Such program shall—

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- "(A) support research projects, including collaborative projects involving academic resecondary searchers and elementary and schools, to develop innovative educational materials, including software, and pedagogical ap-proaches based on applications of information and computer technology;
  - "(B) support empirical studies to determine the educational effectiveness and the cost effectiveness of specific, promising educational approaches, techniques, and materials that are based on applications of information and computer technologies; and
  - "(C) include provision for the widespread dissemination of the results of the studies carried out under subparagraphs (A) and (B), including maintenance of electronic libraries of the best educational materials identified accessible through the Internet.
  - "(2) Replication.—The research projects and empirical studies carried out under paragraph (1)(A) and (B) shall encompass a wide variety of educational settings in order to identify approaches, techniques, and materials that have a high potential

- for being successfully replicated throughout the
- 2 United States.
- 3 "(3) AVAILABILITY OF FUNDS.—Of the
- 4 amounts authorized under subsection (b),
- 5 \$10,000,000 for fiscal year 2000, \$10,500,000 for
- 6 fiscal year 2001, \$11,000,000 for fiscal year 2002,
- 7 \$12,000,000 for fiscal year 2003, and \$12,500,000
- 8 for fiscal year 2004 shall be available for the pur-
- 9 poses of this subsection.
- 10 "(g) Peer Review.—All grants made under this sec-
- 11 tion shall be made only after being subject to peer review
- 12 by panels or groups having private sector representation.".
- 13 (b) OTHER PROGRAM AGENCIES.—
- 14 (1) National aeronautics and space ad-
- 15 MINISTRATION.—Section 202(a) of the High-Per-
- formance Computing Act of 1991 (15 U.S.C.
- 17 5522(a)) is amended by inserting ", and may par-
- 18 ticipate in or support research described in section
- 19 201(c)(1)" after "and experimentation".
- 20 (2) Department of energy.—Section 203(a)
- of the High-Performance Computing Act of 1991
- 22 (15 U.S.C. 5523(a)) is amended by striking the pe-
- 23 riod at the end and inserting a comma, and by add-
- ing after paragraph (4) the following:

- 1 "conduct an integrated program of research, development,
- 2 and provision of facilities to develop and deploy to sci-
- 3 entific and technical users the high performance com-
- 4 puting and collaboration tools needed to fulfill the statu-
- 5 tory mission of the Department of Energy, and may par-
- 6 ticipate in or support research described in section
- 7 201(c)(1).".
- 8 (3) National institute of standards and
- 9 TECHNOLOGY.—Section 204(a)(1) of the High-Per-
- formance Computing Act of 1991 (15 U.S.C.
- 11 5524(a)(1)) is amended by striking "; and" at the
- end of subparagraph (C) and inserting a comma,
- and by adding after subparagraph (C) the following:
- 14 "and may participate in or support research de-
- scribed in section 201(c)(1); and".
- 16 (4) National Oceanic and atmospheric ad-
- 17 MINISTRATION.—Section 204(a)(2) of the High-Per-
- formance Computing Act of 1991 (15 U.S.C.
- 5524(a)(2)) is amended by inserting ", and may
- 20 participate in or support research described in sec-
- tion 201(c)(1)" after "agency missions".
- 22 (5) Environmental protection agency.—
- Section 205(a) of the High-Performance Computing
- 24 Act of 1991 (15 U.S.C. 5525(a)) is amended by in-
- serting ", and may participate in or support re-

1	search described in section 201(c)(1)" after "dynam-
2	ics models".
3	(6) United states geological survey.—
4	Title II of the High-Performance Computing Act of
5	1991 (15 U.S.C. 5521 et seq.) is amended—
6	(A) by redesignating sections 207 and 208
7	as sections 208 and 209, respectively; and
8	(B) by inserting after section 206 the fol-
9	lowing new section:
10	"SEC. 207. UNITED STATES GEOLOGICAL SURVEY.
11	"The United States Geological Survey may partici-
12	pate in or support research described in section
13	201(e)(1).".
14	SEC. 205. NEXT GENERATION INTERNET.
15	(a) In General.—Section 103(d) of the High-Per-
16	formance Computing Act of 1991 (15 U.S.C. 5513(d)) is
17	amended—
18	(1) in paragraph (1)—
19	(A) by striking "1999 and" and inserting
20	"1999,"; and
21	(B) by inserting ", \$15,000,000 for fiscal
22	year 2001, and $$15,000,000$ for fiscal year
23	2002" after "fiscal year 2000";

(2) in paragraph (2), by inserting ", and 1 2 \$25,000,000 for fiscal year 2001 and \$25,000,000 for fiscal year 2002" after "Act of 1998"; 3 4 (3) in paragraph (4)— (A) by striking "1999 and" and inserting 5 "1999,"; and 6 7 (B) by inserting ", \$10,000,000 for fiscal 8 year 2001, and \$10,000,000 for fiscal year 9 2002" after "fiscal year 2000"; and 10 (4) in paragraph (5)— 11 (A) by striking "1999 and" and inserting "1999,"; and 12 (B) by inserting ", \$5,500,000 for fiscal 13 14 vear 2001, and \$5,500,000 for fiscal year 2002" after "fiscal year 2000". 15 16 (b) Rural Infrastructure.—Section 103 of the High-Performance Computing Act of 1991 (15 U.S.C. 17 18 5513) is amended by adding at the end thereof the fol-19 lowing: 20 "(e) Rural Infrastructure.—Out of appropriated 21 amounts authorized by subsection (d), not less than 10 percent of the total amounts shall be made available to 23 fund research grants for making high-speed connectivity more accessible to users in geographically remote areas. The research shall include investigations of wireless, hy-

- 1 brid, and satellite technologies. In awarding grants under
- 2 this subsection, the administering agency shall give pri-
- 3 ority to qualified, post-secondary educational institutions
- 4 that participate in the Experimental Program to Stimu-
- 5 late Competitive Research.".
- 6 (c) Minority and Small College Internet Ac-
- 7 CESS.—Section 103 of the High-Performance Computing
- 8 Act of 1991 (15 U.S.C. 5513), as amended by subsection
- 9 (b), is further amended by adding at the end thereof the
- 10 following:
- 11 "(f) Minority and Small College Internet Ac-
- 12 CESS.—Not less than 5 percent of the amounts made
- 13 available for research under subsection (d) shall be used
- 14 for grants to institutions of higher education that are His-
- 15 panic-serving, Native American, Native Hawaiian, Native
- 16 Alaskan, Historically Black, or small colleges and univer-
- 17 sities.".
- 18 (d) DIGITAL DIVIDE STUDY.—
- 19 (1) In General.—The National Academy of
- 20 Sciences shall conduct a study to determine the ex-
- 21 tent to which the Internet backbone and network in-
- frastructure contribute to the uneven ability to ac-
- cess to Internet-related technologies and services by
- 24 rural and low-income Americans. The study shall
- 25 include—

1	(A) an assessment of the existing geo-
2	graphical penalty (as defined in section $7(a)(1)$
3	of the Next Generation Internet Research Act
4	of 1998 (15 U.S.C. 5501 nt.)) and its impact
5	on all users and their ability to obtain secure
6	and reliable Internet access;
7	(B) a review of all current federally funded
8	research to decrease the inequity of Internet ac-
9	cess to rural and low-income users; and
10	(C) an estimate of the potential impact of
11	Next Generation Internet research institutions
12	acting as aggregators and mentors for nearby
13	smaller or disadvantaged institutions.
14	(2) Report.—The National Academy of
15	Sciences shall transmit a report containing the re-
16	sults of the study and recommendations required by
17	paragraph (1) to the House of Representatives Com-
18	mittee on Science and the Senate Committee on
19	Commerce, Science, and Transportation within 1
20	year after the date of enactment of this Act.
21	(3) Authorization of appropriations.—
22	There are authorized to be appropriated to the Na-

tional Academy of Sciences such sums as may be

### 1 SEC. 206. REPORTING REQUIREMENTS.

2	Section 101 of the High-Performance Computing Act
3	of 1991 (15 U.S.C. 5511) is amended—
4	(1) in subsection (b)—
5	(A) by redesignating paragraphs (1)
6	through (5) as subparagraphs (A) through (E),
7	respectively;
8	(B) by inserting "(1)" after "Advisory
9	COMMITTEE.—"; and
10	(C) by adding at the end the following new
11	paragraph:
12	"(2) In addition to the duties outlined in paragraph
13	(1), the advisory committee shall conduct periodic evalua-
14	tions of the funding, management, implementation, and
15	activities of the Program, the Next Generation Internet
16	program, and the Networking and Information Tech-
17	nology Research and Development program, and shall re-
18	port not less frequently than once every 2 fiscal years to
19	the Committee on Science of the House of Representatives
20	and the Committee on Commerce, Science, and Transpor-
21	tation of the Senate on its findings and recommendations.
22	The first report shall be due within 1 year after the date
23	of the enactment of the Networking and Information
24	Technology Research and Development Act."; and
25	(2) in subsection (c)(1)(A) and (2), by inserting
26	", including the Next Generation Internet program

- and the Networking and Information Technology
- 2 Research and Development program" after "Pro-
- gram" each place it appears.

#### 4 SEC. 207. REPORT TO CONGRESS.

- 5 Section 103 of the High-Performance Computing Act
- 6 of 1991 (15 U.S.C. 5513), as amended by section 205 of
- 7 this title, is further amended by redesignating subsections
- 8 (b), (c), and (d) as subsections (e), (d), and (e), respec-
- 9 tively, and by inserting after subsection (a) the following
- 10 new subsection:

- "(b) Report to Congress.—
- 12 "(1) REQUIREMENT.—The Director of the Na-
- tional Science Foundation shall conduct a study of
- the issues described in paragraph (3), and not later
- than 1 year after the date of the enactment of the
- 16 Networking and Information Technology Research
- and Development Act, shall transmit to the Congress
- a report including recommendations to address those
- issues. Such report shall be updated annually for 6
- additional years.
- 21 "(2) Consultation.—In preparing the reports
- under paragraph (1), the Director of the National
- Science Foundation shall consult with the National
- Aeronautics and Space Administration, the National
- 25 Institute of Standards and Technology, and such

1	other Federal agencies and educational entities as
2	the Director of the National Science Foundation
3	considers appropriate.
4	"(3) Issues.—The reports shall—
5	"(A) identify the current status of high-
6	speed, large bandwidth capacity access to all
7	public elementary and secondary schools and li-
8	braries in the United States;
9	"(B) identify how high-speed, large band-
10	width capacity access to the Internet to such
11	schools and libraries can be effectively utilized
12	within each school and library;
13	"(C) consider the effect that specific or re-
14	gional circumstances may have on the ability of
15	such institutions to acquire high-speed, large
16	bandwidth capacity access to achieve universal
17	connectivity as an effective tool in the education
18	process; and
19	"(D) include options and recommendations
20	for the various entities responsible for elemen-
21	tary and secondary education to address the
22	challenges and issues identified in the reports.".

1	SEC. 208. STUDY OF ACCESSIBILITY TO INFORMATION
2	TECHNOLOGY.
3	Section 201 of the High-Performance Computing Act
4	of 1991 (15 U.S.C. 5524), as amended by sections 3(a)
5	and 4(a) of this Act, is amended further by inserting after
6	subsection (g) the following new subsection:
7	"(h) Study of Accessibility to Information
8	TECHNOLOGY.—
9	"(1) Study.—Not later than 90 days after the
10	date of the enactment of the Networking and Infor-
11	mation Technology Research and Development Act,
12	the Director of the National Science Foundation, in
13	consultation with the National Institute on Dis-
14	ability and Rehabilitation Research, shall enter into
15	an arrangement with the National Research Council
16	of the National Academy of Sciences for that Coun-
17	cil to conduct a study of accessibility to information
18	technologies by individuals who are elderly, individ-
19	uals who are elderly with a disability, and individ-
20	uals with disabilities.
21	"(2) Subjects.—The study shall address—
22	"(A) current barriers to access to informa-
23	tion technologies by individuals who are elderly,
24	individuals who are elderly with a disability,
25	and individuals with disabilities;

1	"(B) research and development needed to
2	remove those barriers;
3	"(C) Federal legislative, policy, or regu-
4	latory changes needed to remove those barriers;
5	and
6	"(D) other matters that the National Re-
7	search Council determines to be relevant to ac-
8	cess to information technologies by individuals
9	who are elderly, individuals who are elderly with
10	a disability, and individuals with disabilities.
11	"(3) Transmittal to congress.—The Direc-
12	tor of the National Science Foundation shall trans-
13	mit to the Congress within 2 years of the date of the
14	enactment of the Networking and Information Tech-
15	nology Research and Development Act a report set-
16	ting forth the findings, conclusions, and rec-
17	ommendations of the National Research Council.
18	"(4) Federal agency cooperation.—Fed-
19	eral agencies shall cooperate fully with the National
20	Research Council in its activities in carrying out the
21	study under this subsection.
22	"(5) Availability of funds.—Funding for
23	the study described in this subsection shall be avail-
24	able, in the amount of \$700,000, from amounts de-

scribed in subsection (c)(1).".

#### 1 SEC. 209. COMPTROLLER GENERAL STUDY.

- 2 Not later than 1 year after the date of the enactment
- 3 of this Act, the Comptroller General shall transmit to the
- 4 Congress a report on the results of a detailed study ana-
- 5 lyzing the effects of this title, and the amendments made
- 6 by this title, on lower income families, minorities, and
- 7 women.

Passed the House of Representatives October 24, 2000.

Attest: JEFF TRANDAHL,

Clerk.