

105TH CONGRESS
2D SESSION

H. R. 4063

To amend the Rehabilitation Act of 1973 to provide for research and development of assistive technology and universally designed technology, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JUNE 16, 1998

Mrs. MORELLA introduced the following bill; which was referred to the Committee on Education and the Workforce, and in addition to the Committees on Ways and Means, and Science, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To amend the Rehabilitation Act of 1973 to provide for research and development of assistive technology and universally designed technology, 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,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Assistive and Univer-
5 sally Designed Technology Improvement Act for Individ-
6 uals with Disabilities”.

7 **SEC. 2. FINDINGS.**

8 Congress finds the following:

1 (1) The area of assistive technology is greatly
2 overlooked by the Federal Government and the pri-
3 vate sector. While assistive technology's importance
4 spans age and disability classifications, assistive
5 technology does not maintain the recognition in the
6 Federal Government necessary to provide important
7 assistance for research and development programs or
8 to individuals with disabilities. The private sector
9 lacks adequate incentives to produce assistive tech-
10 nology, and end-users lack adequate resources to ac-
11 quire assistive technology.

12 (2) As technology has come to play an increas-
13 ingly important role in the lives of all persons in the
14 United States, in the conduct of business, in the
15 functioning of government, in the fostering of com-
16 munication, in the conduct of commerce, in the
17 transformation of employment, and in the provision
18 of education, technology's impact upon the lives of
19 the more than 50,000,000 individuals with disabil-
20 ities in the United States has been comparable to
21 technology's impact upon the remainder of our Na-
22 tion's citizens. No development in mainstream tech-
23 nology can be imagined that will not have profound
24 implications for individuals with disabilities.

1 (3) In a technological environment, the line of
2 demarcation between assistive and mainstream tech-
3 nology becomes ever more difficult to draw, and the
4 decisions made by the designers of mainstream
5 equipment and services will increasingly determine
6 whether and to what extent the equipment and serv-
7 ices can be accessed and used by individuals with
8 disabilities.

9 (4) A commitment to assistive technology, while
10 remaining important, cannot alone ensure access to
11 technology and communications networks by individ-
12 uals with disabilities. An agenda, including support
13 for universal design, represents the only effective
14 means for guaranteeing the benefits of technology to
15 all persons in the United States, regardless of dis-
16 ability or age, and for assuring for United States in-
17 dustry the continued growth in markets that will
18 warrant continued high levels of innovation and re-
19 search.

20 (5) The Federal Government needs to make im-
21 provements to peer review processes that affect as-
22 sistive technology research and development.

23 (6) There are insufficient links between feder-
24 ally funded assistive technology research and devel-
25 opment programs and the private sector entities re-

1 sponsible for translating research and development
2 into significant new products in the marketplace for
3 end-users.

4 (7) The Federal Government does not provide
5 assistive technology that is universally designed and
6 targets older and rural assistive technology end-
7 users.

8 (8) The Federal Government does not coordi-
9 nate all Federal assistive technology research and
10 development.

11 (9) Small businesses, which provide many inno-
12 vative ideas for assistive technology and provide the
13 vast majority of research and development efforts
14 that lead to viable commercial assistive technology
15 products, are not utilized in Federal assistive tech-
16 nology research and development efforts to the ex-
17 tent that small businesses may play a key role in as-
18 sistive technology research and development. In ad-
19 dition, small businesses lack access to the resources
20 of the Federal laboratories and would benefit from
21 partnerships with the Federal laboratories.

22 (10) Many more individuals with disabilities
23 could secure and maintain employment and move
24 from income supports to competitive work if given
25 the ability to purchase assistive technology. Tax in-

1 centives for businesses to purchase assistive tech-
2 nology for their employees, and micro loans for indi-
3 viduals to purchase assistive technology, help indi-
4 viduals with disabilities improve their quality of life.
5 Such incentives and loans lead to more productive
6 lives, while lessening the financial burdens on soci-
7 ety.

8 **SEC. 3. PURPOSE.**

9 The purposes of this Act are—

10 (1) to improve the quality, functional capability,
11 distribution, and affordability of assistive technology
12 and universally designed technology, through feder-
13 ally supported incentives for all the participants in
14 need identification, research and development, prod-
15 uct evaluation, technology transfer, and commer-
16 cialization, for such technologies, to enhance quality
17 of life and ability to obtain employment for all indi-
18 viduals with disabilities;

19 (2) to clarify the role of the National Institute
20 on Disability and Rehabilitation Research at the De-
21 partment of Education so as to provide for better
22 peer reviews;

23 (3) to improve coordination of Federal assistive
24 technology research and development by strengthen-

1 ing the Interagency Committee on Disability Re-
2 search;

3 (4) to prioritize assistive technology research,
4 development, and dissemination efforts to match the
5 needs of the underserved assistive technology end-
6 users such as older and rural end-users;

7 (5) to increase the use of universal design in
8 the commercial development of standard products;

9 (6) to incorporate the principles of universal de-
10 sign in the development of assistive technology;

11 (7) to increase usage of the Small Business In-
12 novative Research Program as defined in section
13 9(e) of the Small Business Act (15 U.S.C. 638(e));

14 (8) to improve coordination between the Fed-
15 eral laboratories and the members of the Inter-
16 agency Committee on Disability Research;

17 (9) to improve the transfer of technology from
18 mission-oriented applications in Federal laboratories
19 to assistive technology applications in research and
20 development programs, and to transfer prototype as-
21 sistive technology products from federally sponsored
22 programs to the private sector;

23 (10) to increase the availability of assistive
24 technology products and universally designed tech-

1 nology products in the marketplace for the end-
2 users; and

3 (11) to create tax incentives and micro loans to
4 assist individuals with disabilities to obtain assistive
5 technology and universally designed technology in
6 order to improve their quality of life and to secure
7 and maintain employment.

8 **SEC. 4. PEER REVIEW PROCESS.**

9 Title II of the Rehabilitation Act of 1973 (29 U.S.C.
10 761a et seq.) is amended by adding at the end the follow-
11 ing:

12 **“SEC. 206. PEER REVIEW PROCESS.**

13 “(a) PEER REVIEW PANELS.—

14 “(1) COMPOSITION.—

15 “(A) IN GENERAL.—The Director shall es-
16 tablish a peer review process, involving peer re-
17 view panels composed of members appointed by
18 the Director, for the review of applications for
19 grants, contracts, or cooperative agreements
20 under this title for research and development of
21 assistive technology and universally designed
22 technology.

23 “(B) DURATION.—The members of such a
24 peer review panel shall serve for terms of 3

1 years, except that the members initially ap-
2 pointed may serve for shorter terms.

3 “(C) MEMBER TERMS.—Members of a peer
4 review panel shall serve staggered terms so as
5 to provide for institutional memory and experi-
6 ence at all times.

7 “(D) SELECTION AND APPOINTMENT.—

8 “(i) IN GENERAL.—Members of peer
9 review panels shall be selected and ap-
10 pointed based upon their training and ex-
11 perience in relevant scientific or technical
12 fields, taking into account, among other
13 factors—

14 “(I) the level of formal scientific
15 or technical education completed or
16 experience acquired by an individual;

17 “(II) the extent to which the in-
18 dividual has engaged in relevant re-
19 search, the capacities (such as prin-
20 cipal investigator or assistant) in
21 which the individual has so engaged,
22 and the quality of such research;

23 “(III) the recognition of the indi-
24 vidual, as reflected by awards and
25 other honors received from scientific

1 and professional organizations outside
2 the Department of Education; and

3 “(IV) the need for a panel to in-
4 clude experts from various areas or
5 specializations within the fields of as-
6 sistive technology and universally de-
7 signed technology.

8 “(ii) SPECIAL RULES.—To the extent
9 practicable, the peer review panels shall
10 have, collectively, a significant number of
11 members who are individuals with disabil-
12 ities, and the members of the panels shall
13 reflect the population of the United States
14 as a whole in terms of gender, race, and
15 ethnicity.

16 “(E) OFFICERS AND EMPLOYEES OF THE
17 FEDERAL GOVERNMENT.—Not more than $\frac{1}{4}$ of
18 the members of any peer review panel may be
19 officers or employees of the Federal Govern-
20 ment. For purposes of the preceding sentence,
21 an individual who is a member of a peer review
22 panel shall not, by virtue of such service, be
23 considered to be an officer or employee of the
24 Federal Government.

25 “(2) CONFLICT OF INTEREST.—

1 “(A) IN GENERAL.—No member of a peer
2 review panel may participate in or be present
3 during any review by the peer review panel of
4 an application for a grant, contract, or coopera-
5 tive agreement, in which, to the member’s
6 knowledge, any of the following has a financial
7 interest:

8 “(i) The member of the panel or the
9 member’s spouse, parent, child, or business
10 partner.

11 “(ii) Any organization with which the
12 member or the member’s spouse, parent,
13 child, or business partner is negotiating or
14 has any arrangement concerning employ-
15 ment or any other similar association.

16 “(B) DISQUALIFIED PANEL.—In the event
17 any member of a peer review panel or the mem-
18 ber’s spouse, parent, child, or business partner
19 is currently, or is expected to be, the principal
20 investigator or a member of the staff respon-
21 sible for carrying out any research or develop-
22 ment activities described in an application for a
23 grant, contract, or cooperative agreement, the
24 Secretary shall disqualify the panel from re-
25 viewing the application and ensure that the re-

1 view will be conducted by another peer review
2 panel with the expertise to conduct the review.
3 If there is no other panel with the requisite ex-
4 pertise, the Secretary shall ensure that the re-
5 view will be conducted by an ad hoc panel of
6 members of the peer review panels, not more
7 than 50 percent of whom may be from the dis-
8 qualified panel.

9 “(C) PROHIBITION.—No member of a peer
10 review panel may participate in or be present
11 during any review under this title of a specific
12 application for a grant, contract, or cooperative
13 agreement for an activity for which the member
14 has had or is expected to have any other re-
15 sponsibility or involvement (either before or
16 after the grant, contract, or cooperative agree-
17 ment was awarded for the activity) as an officer
18 or employee of the Federal Government.

19 “(3) AVAILABILITY OF INFORMATION.—Tran-
20 scripts, minutes, and other documents made avail-
21 able to or prepared for or by a peer review panel
22 shall be available for public inspection and copying
23 to the extent provided in section 552 of title 5,
24 United States Code (commonly known as the ‘Free-
25 dom of Information Act’), the Federal Advisory

1 Committee Act (5 U.S.C. App.), and section 552a of
2 title 5, United States Code (commonly known as the
3 ‘Privacy Act of 1974’).

4 “(4) EVALUATION OF APPLICATION.—A peer
5 review panel shall—

6 “(A) evaluate applications for grants, con-
7 tracts, or cooperative agreements under this
8 title with respect to research and development
9 of assistive technology and universally designed
10 technology to assure duplication of such re-
11 search and development does not occur across
12 Federal departments and agencies; and

13 “(B) evaluate the applications with respect
14 to meeting immediate needs for research and
15 development of assistive technology and univer-
16 sally designed technology in the disabled com-
17 munity (as identified in data collected by the
18 Interagency Committee on Disability Research),
19 through criteria that will ensure the effective-
20 ness of the priorities of the Interagency Com-
21 mittee for such research and development.

22 “(5) APPLICATION REVIEW CRITERIA.—In car-
23 rying out a review of an application for a grant, con-
24 tract, or cooperative agreement with respect to re-
25 search and development of assistive technology or

1 universally designed technology under this section,
2 the peer review panel, among other factors, shall
3 take into account—

4 “(A) the need for research and develop-
5 ment of assistive technology and universally de-
6 signed technology that facilitates individuals
7 with disabilities obtaining employment;

8 “(B) the need to allocate amounts of as-
9 sistance through grants, contracts, or coopera-
10 tive agreements for research and development
11 of assistive technology and universally designed
12 technology in a manner proportionate to need
13 for assistive technology and universally designed
14 technology, and proportionate to the population
15 of disability groups, including individuals with
16 physical disabilities, individuals with cognitive
17 disabilities, older individuals with disabilities,
18 and rural assistive technology and universally
19 designed technology end-users;

20 “(C) the significance and originality from
21 a scientific or technical standpoint of the goals
22 of the proposed research and development;

23 “(D) the adequacy of the methodology pro-
24 posed to carry out the research and develop-
25 ment;

1 “(E) the qualifications and experience of
2 the proposed principal investigator and staff for
3 the research and development;

4 “(F) the reasonable availability of re-
5 sources necessary to the research and develop-
6 ment;

7 “(G) the reasonableness of the proposed
8 budget and the duration in relation to the pro-
9 posed research and development;

10 “(H) if an application involves activities
11 that may have an adverse effect upon humans,
12 animals, or the environment, the adequacy of
13 the proposed means for protecting against or
14 minimizing such effects;

15 “(I) the extent to which appropriate meas-
16 ures will be taken to advance the cause of uni-
17 versal design through proposed assistive tech-
18 nology research and development, including the
19 extent to which the applicant has reviewed a va-
20 riety of existing measures (as of the date of the
21 review) on the part of the designers and pro-
22 ducers of assistive technology and the providers
23 of related services to produce universally de-
24 signed technology;

1 “(J) the extent to which efforts shall be
2 made to include small businesses in the pro-
3 posed research and development of assistive
4 technology or universally designed technology
5 through increased usage of the Small Business
6 Innovative Research Program as defined in sec-
7 tion 9(e) of the Small Business Act (15 U.S.C.
8 638(e));

9 “(K) the extent to which the proposed re-
10 search and development of assistive technology
11 or universally designed technology will result in
12 the production of actual products for the mar-
13 ketplace for assistive technology or universally
14 designed technology end-users;

15 “(L) the extent to which the applicant
16 identifies secondary benefits or applications of
17 the assistive technology or universally designed
18 technology involved, or agrees to make match-
19 ing contributions (in cash or in kind, fairly
20 evaluated) toward the cost of the research and
21 development, in partnership with representa-
22 tives of industry, government, and educational
23 institutions; and

24 “(M) the extent to which proposed re-
25 search and development of universally designed

1 technology will result in a change in design of
2 standard products, so that the products are
3 more usable by a broad range of individuals
4 with disabilities or older individuals.

5 “(6) COMPENSATION.—Each member of a peer
6 review panel who is not an officer or employee of the
7 Federal Government shall be compensated at a rate
8 equal to the daily equivalent of the annual rate of
9 basic pay prescribed for level IV of the Executive
10 Schedule under section 5315 of title 5, United
11 States Code, for each day (including travel time)
12 during which such member is engaged in the per-
13 formance of the duties of the panel. All members of
14 the panel who are officers or employees of the Fed-
15 eral Government shall serve without compensation in
16 addition to compensation received for their services
17 as officers or employees of the Federal Government.

18 “(7) TRAVEL EXPENSES.—The members of the
19 panel shall be allowed travel expenses, including per
20 diem in lieu of subsistence, at rates authorized for
21 employees of agencies under subchapter I of chapter
22 57 of title 5, United States Code, while away from
23 their homes or regular places of business in the per-
24 formance of services for the panel.

1 “(8) TERMINATION.—Section 14 of the Federal
2 Advisory Committee Act (5 U.S.C. App.) shall not
3 apply to the peer review panels.

4 **“SEC. 207. DEFINITIONS.**

5 “In this title:

6 “(1) ASSISTIVE TECHNOLOGY.—The term ‘as-
7 sistive technology’ means technology designed to be
8 utilized in an assistive technology device or assistive
9 technology service.

10 “(2) ASSISTIVE TECHNOLOGY AND UNIVER-
11 SALLY DESIGNED TECHNOLOGY END-USER.—The
12 term ‘assistive technology and universally designed
13 technology end-user’ means any individual with a
14 disability who uses assistive technology or univer-
15 sally designed technology to improve the quality of
16 life of the individual or to obtain employment, in-
17 cluding an individual with a physical disability, a
18 cognitive disability, or a sensory disability, or an
19 older individual.

20 “(3) TECHNOLOGY TRANSFER.—The term
21 ‘technology transfer’ means the transmittal of devel-
22 oped ideas, products, and techniques—

23 “(A) from a research environment to an
24 environment of practical application; or

1 “(B) from application in a prototype inven-
2 tion to mass production in a commercial prod-
3 uct.

4 “(4) UNIVERSAL DESIGN.—The term ‘universal
5 design’ means the design, development, fabrication,
6 marketing, and technical support of products, serv-
7 ices, and environments designed to be usable, to the
8 greatest extent possible, by the largest number of
9 persons, including individuals with disabilities and
10 individuals without disabilities. No product, service,
11 or environment shall be considered to have a univer-
12 sal design if use of the product, service, or environ-
13 ment is substantially limited or prevented by reason
14 of—

15 “(A) a disability related to hearing, vision,
16 learning, strength, reach, or movement; or

17 “(B) the existence of any other limitation
18 of a major life function.”.

19 **SEC. 5. TECHNOLOGY TRANSFER.**

20 (a) AMENDMENTS TO PROVISIONS RELATING TO THE
21 INTERAGENCY COMMITTEE ON DISABILITY RESEARCH.—
22 Section 203 of the Rehabilitation Act of 1973 (29 U.S.C.
23 761b) is amended—

24 (1) in subsection (a), by adding at the end the
25 following:

1 “(3) Each member of the Committee shall attend all
2 meetings of the Committee or delegate the responsibility
3 for attending the meetings to a designee with the authority
4 to commit the department or agency represented to par-
5 ticipate in a joint project, the authority to comment on
6 issues on behalf of the department or agency, and the ex-
7 pertise to participate in Committee discussions.”;

8 (2) in subsection (b)—

9 (A) by inserting “(1)” before “After receiv-
10 ing”; and

11 (B) by adding at the end the following:

12 “(2) The Committee shall—

13 “(A) monitor the range of research and de-
14 velopment of assistive technology and univer-
15 sally designed technology carried out by the
16 Federal departments and agencies represented
17 on the Committee;

18 “(B) ensure that the highest quality re-
19 search and development of assistive technology
20 and universally designed technology (through
21 methods such as peer review) is carried out by
22 the departments and agencies;

23 “(C) identify and establish clear research
24 priorities for research and development of as-
25 sistive technology and universally designed tech-

1 nology that will benefit individuals with disabil-
2 ities, and permit joint ventures concerning re-
3 search and development of assistive technology
4 and universally designed technology among the
5 department needs and agencies;

6 “(D) ensure interagency collaboration and
7 joint research activities and reduce unnecessary
8 duplication of effort by the departments and
9 agencies;

10 “(E) develop effective technology transfer
11 activities for the departments and agencies, in-
12 cluding activities resulting from increased sup-
13 ply of assistive technology and universally de-
14 signed technology or increased demand of as-
15 sistive technology and universally designed tech-
16 nology end-users;

17 “(F) help establish and maintain the use
18 of consistent definitions and terminologies
19 among the departments and agencies, which
20 definitions shall contribute to the production of
21 comparable research and to the development of
22 reliable statistical data across departments and
23 agencies;

1 “(G) optimize the productivity of the de-
2 partments and agencies through resource shar-
3 ing and other cost-saving activities;

4 “(H) identify gaps in needed research and
5 development and make efforts to ensure that
6 the gaps are filled by a Federal department or
7 agency represented on the Committee; and

8 “(I) collaborate with member agencies on
9 specific projects that need additional funding
10 beyond the capacity of 1 Federal department or
11 agency represented on the Committee.”;

12 (3) by redesignating subsection (c) as sub-
13 section (d);

14 (4) by inserting after subsection (b) the follow-
15 ing:

16 “(c)(1) The Director shall establish special task
17 forces and subcommittees of the Committee for research
18 and development of assistive technology and universally
19 designed technology, including task forces and subcommit-
20 tees related to medical rehabilitation, technology (includ-
21 ing universal design), and the employment of individuals
22 with disabilities.

23 “(2) The Director shall appoint 2 full-time staff
24 members to assist the Director in the operation of the
25 Committee.”;

1 (5) in subsection (d) (as redesignated by para-
2 graph (3))—

3 (A) by inserting “(1)” before “The Com-
4 mittee”; and

5 (B) by adding at the end the following:

6 “(2) The Director shall issue a biannual report an-
7 nouncing the availability of the grants, contracts, or coop-
8 erative agreements made available through Federal de-
9 partments and agencies represented on the Committee for
10 research and development of assistive technology and uni-
11 versally designed technology.

12 “(3) The Director shall submit to the Commissioner
13 for inclusion in the annual report to Congress described
14 in section 13—

15 “(A) the results and an analysis of the activities
16 conducted under grants, contracts, or cooperative
17 agreements awarded by departments and agencies
18 represented on the Interagency Committee on Dis-
19 ability Research for research and development of as-
20 sistive technology and universally designed tech-
21 nology;

22 “(B) a detailed summary of the activities and
23 the effectiveness of the Committee in expanding re-
24 search opportunities that lead to direct development

1 of assistive technology devices and assistive tech-
2 nology services; and

3 “(C) results of periodic surveys of manufactur-
4 ers and suppliers of assistive technology and univer-
5 sally designed technology, and of assistive technology
6 and universally designed technology end-users.”.

7 (b) AMENDMENTS TO THE STEVENSON-WYDLER
8 TECHNOLOGY INNOVATION ACT OF 1980.—Section 11(e)
9 of the Stevenson-Wydler Technology Innovation Act of
10 1980 (15 U.S.C. 3710(e)) is amended—

11 (1) in paragraph (1)—

12 (A) in subparagraph (I), by striking “and”
13 after the semicolon;

14 (B) in subparagraph (J), by striking the
15 period and inserting “; and”; and

16 (C) by adding at the end the following:

17 “(K) develop and disseminate, including
18 through accessible electronic formats, to all Federal,
19 State, and local agencies and instrumentalities in-
20 volved in assistive technology and universally de-
21 signed technology, in order to maximize research
22 and development of assistive technology and univer-
23 sally designed technology, information that indi-
24 cates—

1 “(i) the extent of all activities undertaken
2 by the Federal laboratories in the previous year
3 having an intended or a recognized potential
4 impact upon individuals with disabilities;

5 “(ii) the degree to which ongoing or pro-
6 jected activities of the Federal laboratories are
7 expected to have an impact upon the available
8 range of, or applications for, assistive tech-
9 nology and universally designed technology;

10 “(iii) the extent to which expert resources
11 within the Consortium are made available or
12 can be accessed for the purpose of meeting
13 needs related to assistive technology and univer-
14 sally designed technology in the communities
15 where the Federal laboratories operate; and

16 “(iv) the extent to which each Federal lab-
17 oratory has attempted to involve, and succeeded
18 in involving, individuals with disabilities in the
19 development of priorities, plans, and prototypes
20 with respect to assistive technology and univer-
21 sally designed technology.”; and

22 (2) by adding at the end the following:

23 “(8)(A) The Director of the National Institute on
24 Disability and Rehabilitation Research shall participate

1 annually in the national meeting and interagency meeting
2 of the Consortium.

3 “(B) The Director, in collaboration with other mem-
4 bers of the Interagency Committee on Disability Research,
5 where appropriate, shall coordinate the activities of the
6 Federal laboratories, with respect to research and develop-
7 ment of assistive technology and universally designed tech-
8 nology.

9 “(C) In conjunction with members of the Interagency
10 Committee on Disability Research, the Director shall uti-
11 lize the resources of the Consortium to identify potential
12 public and private sector partners for research and devel-
13 opment collaboration regarding assistive technology and
14 universally designed technology.

15 “(9) In this section:

16 “(A) The terms ‘individual with a disability’
17 and ‘individuals with disabilities’ have the meanings
18 given the terms in section 3 of the Technology-Rel-
19 ated Assistance for Individuals With Disabilities Act
20 of 1988 (29 U.S.C. 2202).

21 “(B) The terms ‘universal design’ and ‘assistive
22 technology’ have the meaning given the term in sec-
23 tion 207 of the Rehabilitation Act of 1973.”

1 **SEC. 6. MICRO LOANS.**

2 (a) TERRITORIES.—Section 301 of the Technology-
3 Related Assistance for Individuals With Disabilities Act
4 of 1988 (29 U.S.C. 2281) is amended—

5 (1) by redesignating subsection (b) as sub-
6 section (c); and

7 (2) by inserting after subsection (a) the follow-
8 ing:

9 “(b) AWARD BASIS.—The Secretary shall award
10 grants to States under this section on the basis of the pop-
11 ulation of the States.”.

12 (b) MECHANISMS.—Subsection (d) of section 301 of
13 the Technology-Related Assistance for Individuals With
14 Disabilities Act of 1988 (as redesignated by subsection
15 (a)(1)) is amended to read as follows:

16 “(c) MECHANISMS.—

17 “(1) IN GENERAL.—The alternative financing
18 mechanisms shall include—

19 “(A) an interest buy-down loan program;

20 “(B) a revolving loan fund program; or

21 “(C) a loan guarantee program.

22 “(2) REQUIREMENTS.—Each program de-
23 scribed in paragraph (1) shall—

24 “(A) provide assistance for assistive tech-
25 nology devices, assistive technology services,

1 and universally designed technology products
2 and services; and

3 “(B) maximize consumer participation in
4 all aspects of the program.

5 “(3) DEFINITIONS.—

6 “(A) INTEREST BUY-DOWN LOAN PRO-
7 GRAM.—The term ‘interest buy-down loan pro-
8 gram’ means a loan program that involves an
9 organization, using the organization’s funds, to
10 reduce the interest rate of a loan made by a
11 lending institution to a borrower.

12 “(B) LOAN GUARANTEE PROGRAM.—The
13 term ‘loan guarantee program’ means a loan
14 program that provides loans that are backed by
15 a promise or guarantee that, if there is a de-
16 fault on a loan made under the program, the
17 loan will be paid back.

18 “(C) REVOLVING LOAN FUND PROGRAM.—
19 The term ‘revolving loan fund program’ means
20 a loan program in which individuals borrow
21 money from a loan fund, loan repayments are
22 dedicated to the recapitalization of the loan
23 fund, and the repayments are used to make ad-
24 ditional loans.”.

1 (c) AUTHORIZATION OF APPROPRIATIONS.—Section
2 308(a) of the Technology-Related Assistance for Individ-
3 uals With Disabilities Act of 1988 (29 U.S.C. 2288(a))
4 is amended by striking “this title” and all that follows and
5 inserting “this title, such sums as may be necessary for
6 each of fiscal years 1999 through 2001.”.

7 **SEC. 7. AUTHORIZATION OF APPROPRIATIONS.**

8 Section 201(a) of the Rehabilitation Act of 1973 (29
9 U.S.C. 761(a)) is amended to read as follows:

10 “(a) There are authorized to be appropriated—

11 “(1) such sums as may be necessary for each
12 of fiscal years 1999 through 2001, for the purpose
13 of providing for the expenses of the National Insti-
14 tute on Disability and Rehabilitation Research under
15 section 202, which—

16 “(A) shall include the expenses of the
17 Interagency Committee on Disability Research
18 under section 203, the Rehabilitation Research
19 Advisory Council under section 205, and the
20 peer review panels under section 206; and

21 “(B) shall not include the expenses of such
22 Institute to carry out section 204; and

23 “(2)(A) such sums as may be necessary for
24 each of fiscal years 1999 through 2001 to carry out
25 section 204, including providing financial assistance

1 for research and development on assistive technology
 2 and universally designed technology at the level of
 3 assistance provided for fiscal year 1998; and

4 “(B) \$10,000,000 for each of fiscal years 1999
 5 through 2001, to provide, under section 204, such fi-
 6 nancial assistance (in addition to the level of assist-
 7 ance provided for fiscal year 1998).”.

8 **SEC. 8. TAX INCENTIVES FOR ASSISTIVE TECHNOLOGY.**

9 (a) ASSISTIVE TECHNOLOGY DEVELOPMENT BUSI-
 10 NESS TAX CREDIT.—

11 (1) IN GENERAL.—Subpart D of part IV of
 12 subchapter A of chapter 1 of the Internal Revenue
 13 Code of 1986 (relating to business related credits) is
 14 amended by adding at the end the following:

15 **“SEC. 45D. CREDIT FOR ASSISTIVE TECHNOLOGY.**

16 “(a) GENERAL RULE.—For purposes of section 38,
 17 the assistive technology credit of any taxpayer for any tax-
 18 able year is an amount equal to so much of the qualified
 19 assistive technology expenses paid or incurred by the tax-
 20 payer during such year as does not exceed \$100,000.

21 “(b) QUALIFIED ASSISTIVE TECHNOLOGY EX-
 22 PENSES.—For purposes of this section—

23 “(1) IN GENERAL.—The term ‘qualified assist-
 24 ive technology expenses’ means expenses for the de-

1 sign, development, and fabrication of assistive tech-
2 nology devices.

3 “(2) ASSISTIVE TECHNOLOGY DEVICE.—The
4 term ‘assistive technology device’ means any item,
5 piece of equipment, or product system, including any
6 item acquired commercially off the shelf and modi-
7 fied or customized by the taxpayer, that is used to
8 increase, maintain, or improve functional capabilities
9 of individuals with disabilities.

10 “(3) INDIVIDUALS WITH DISABILITIES.—The
11 term ‘individuals with disabilities’ has the meaning
12 given the term by section 3 of the Technology Relat-
13 ed Assistance for Individuals with Disabilities Act of
14 1988 (29 U.S.C. 2202).

15 “(c) NO DOUBLE BENEFIT.—Any amount taken into
16 account under section 41 may not be taken into account
17 under this section.

18 “(d) TERMINATION.—This section shall not apply to
19 any amount paid or incurred after December 31, 2003.”.

20 (2) CREDIT TREATED AS BUSINESS CREDIT.—
21 Section 38(b) of the Internal Revenue Code of 1986
22 (relating to current year business credit) is amended
23 by striking “plus” at the end of paragraph (11), by
24 striking the period at the end of paragraph (12) and

1 inserting “, plus”, and by adding at the end the fol-
2 lowing:

3 “(13) the assistive technology credit determined
4 under section 45D(a).”.

5 (3) TRANSITIONAL RULE.—Section 39(d) of the
6 Internal Revenue Code of 1986 (relating to transi-
7 tional rules) is amended by adding at the end the
8 following:

9 “(9) NO CARRYBACK OF SECTION 45D CREDIT
10 BEFORE EFFECTIVE DATE.—No portion of the un-
11 used business credit for any taxable year which is
12 attributable to the assistive technology credit deter-
13 mined under section 45D(a) may be carried back to
14 a taxable year ending before January 1, 1999.”.

15 (4) CLERICAL AMENDMENT.—The table of sec-
16 tions for subpart D of part IV of subchapter A of
17 chapter 1 of the Internal Revenue Code of 1986 is
18 amended by adding at the end the following:

“Sec. 45D. Credit for assistive technology.”.

19 (5) EVALUATION OF EFFECTIVENESS OF CRED-
20 IT.—The Secretary of the Treasury shall evaluate
21 the effectiveness of the assistive technology credit
22 under section 45D of the Internal Revenue Code of
23 1986, as added by this subsection, and report to the
24 Congress the results of such evaluation not later
25 than January 1, 2003.

1 (b) EXPANSION OF ARCHITECTURAL AND TRANSPOR-
2 TATION BARRIER REMOVAL DEDUCTION.—

3 (1) IN GENERAL.—Section 190 of the Internal
4 Revenue Code of 1986 is amended—

5 (A) by inserting “and qualified commu-
6 nications barrier removal expenses” after “re-
7 moval expenses” in subsections (a)(1),

8 (B) by adding at the end of subsection (b)
9 the following:

10 “(4) QUALIFIED COMMUNICATIONS BARRIER
11 REMOVAL EXPENSES.—

12 “(A) IN GENERAL.—The term ‘qualified
13 communications barrier removal expense’ means
14 a communications barrier removal expense with
15 respect to which the taxpayer establishes, to the
16 satisfaction of the Secretary, that the resulting
17 removal of any such barrier meets the stand-
18 ards promulgated by the Secretary and set
19 forth in regulations prescribed by the Secretary.
20 Such term shall not include the costs of general
21 communications system upgrades or periodic re-
22 placements that do not heighten accessibility as
23 the primary purpose and result of such replace-
24 ments.

1 “(B) COMMUNICATIONS BARRIER REMOVAL
2 EXPENSES.—The term ‘communications barrier
3 removal expense’ means an expenditure for the
4 purpose of identifying and implementing alter-
5 native technologies or strategies to remove
6 those features of the physical, information-proc-
7 essing, telecommunications equipment or other
8 technologies that limit the ability of handicap
9 individuals to obtain, process, retrieve, or dis-
10 seminate information that nonhandicapped indi-
11 viduals in the same or similar setting would or-
12 dinarily be expected and be able to obtain, re-
13 trieve, manipulate, or disseminate.”, and

14 (C) by striking “**AND TRANSPOR-**
15 **TATION**” in the heading and inserting “,
16 **TRANSPORTATION, AND COMMUNICA-**
17 **TIONS**”.

18 (2) CONFORMING AMENDMENT.—The item re-
19 lating to section 190 in the table of sections for part
20 VI of subchapter B of chapter 1 of the Internal Rev-
21 enue Code of 1986 is amended by striking “and
22 transportation” and inserting “, transportation, and
23 communications”.

24 (c) EXPANSION OF WORK OPPORTUNITY CREDIT.—
25 Section 51(c) of the Internal Revenue Code of 1986 (de-

1 fining wages) is amended by redesignating paragraph (4)
2 as paragraph (5) and by inserting after paragraph (3) the
3 following:

4 “(4) ASSISTIVE TECHNOLOGY EXPENSES.—

5 “(A) IN GENERAL.—The term ‘wages’ in-
6 cludes expenses incurred in the acquisition and
7 use of technology—

8 “(i) to facilitate the employment of
9 any individual, including a vocational reha-
10 bilitation referral; or

11 “(ii) to provide a reasonable accom-
12 modation for any employee who is a quali-
13 fied individual with a disability, as such
14 terms are defined in section 101 of the
15 Americans with Disabilities Act of 1990
16 (42 U.S.C. 12111).

17 “(B) REGULATIONS.—The Secretary shall
18 by regulation provide rules for allocating ex-
19 penses described in subparagraph (A) among
20 individuals employed by the employer.”.

21 (d) EFFECTIVE DATE.—The amendments made by
22 this section shall apply to taxable years beginning after
23 December 31, 1998.

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