

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.

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## 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

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## 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-Re-  
19 lated 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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