

**REAUTHORIZATION OF THE TECHNOLOGY-RELATED
ASSISTANCE FOR INDIVIDUALS WITH DISABIL-
ITIES ACT**

HEARING
BEFORE THE
SUBCOMMITTEE ON SELECT EDUCATION
AND CIVIL RIGHTS
OF THE
COMMITTEE ON EDUCATION AND LABOR
HOUSE OF REPRESENTATIVES
~~ONE HUNDRED THIRD~~ CONGRESS
FIRST SESSION

HEARING HELD IN WASHINGTON, DC, JUNE 10, 1993

Serial No. 103-36

Printed for the use of the Committee on Education and Labor



Legislative Office
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U.S. Dept. of Justice

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1994

75-128 ⇐

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402
ISBN 0-16-043474-2

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REAUTHORIZATION OF THE TECHNOLOGY-RELATED ASSISTANCE FOR INDIVIDUALS WITH DISABILITIES ACT

THURSDAY, JUNE 10, 1993

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON SELECT EDUCATION AND CIVIL RIGHTS,
COMMITTEE ON EDUCATION AND LABOR,
Washington, DC.

The subcommittee met, pursuant to call, at 10 a.m., Room 2261, Rayburn House Office Building, Hon. Major R. Owens, Chairman, presiding.

Members present: Representatives Owens, Payne, Ballenger, and Barrett.

Staff present: Maria Cuprill; Wanser Green; Paul Seltman; and Sally Lovejoy.

Chairman OWENS. The hearing of the Subcommittee on Select Education and Civil Rights is now in session.

This is the final hearing regarding the Technology-Related Assistance for Individuals with Disabilities Act of 1988. We will hear tomorrow concerning our draft bill and explore different ways to achieve the policy objectives of the bill.

We have heard from State project directors and other witnesses who indicated the States need clearer standards of accountability and need to establish low-interest loan programs for consumers when public funds are not available for acquiring assistive technology. There is also a need for more assistive technology training, outreach to minority populations, and dissemination of information across State lines to avoid duplication of efforts.

In addition to addressing all of these concerns, our draft bill moves beyond them and looks to the future. Increased ability of consumers to locate funding for the devices they need will be of little consequence unless there is continued development of assistive technologies.

The Federal Government must make a commitment to help establish more businesses owned and operated by individuals with disabilities to engage in the development of assistive technology devices.

Moreover, we must take advantage of opportunities presented by dual-use technology—technology that can be transferred from one intended use to another.

Finally, we must encourage companies to continue their development of products of universal design which can be used by all people regardless of functional limitation.

I look forward to this morning's testimony.
 [The prepared statement of Hon. Major R. Owens follows:]

STATEMENT OF HON. MAJOR R. OWENS, A REPRESENTATIVE IN CONGRESS FROM THE
 STATE OF NEW YORK

This is the final hearing regarding the Reauthorization of the "Technology-Related Assistance for Individuals with Disabilities Act of 1988." Today, we will hear testimony concerning our draft bill, and explore different ways to achieve the policy objectives of the bill.

We have heard from State project directors and other witnesses who indicated: the States need clearer standards of accountability; the need to establish low-interest loan programs for consumers when public funds are not available for acquiring assistive technology; the need for more assistive technology training; the need for outreach to minority populations; and the need to disseminate information across State lines to avoid duplication of efforts.

In addition to addressing all of these concerns, our draft bill moves beyond them and looks to the future. The increased ability of consumers to locate funding for devices they need will be of little consequence unless there is continued development of assistive technologies. The Federal Government must make a commitment to help establish small businesses, owned and operated by individuals with disabilities, to engage in the development of assistive technology devices. Moreover, we must take advantage of opportunities presented by dual-use technology—technology that can be transferred from one intended use to another. Finally, we must encourage companies to continue their development of products of universal design, which can be used by all people, regardless of functional limitation.

I look forward to this morning's testimony.

Chairman OWENS. I yield to Mr. Ballenger for an opening statement.

Mr. BALLENGER. Thank you, Mr. Chairman.

If I may, may I enter into the record a statement by Congressman Fawell?

Chairman OWENS. Yes, without objection.

[The prepared statement of Hon. Harris W. Fawell follows:]

STATEMENT OF HON. HARRIS W. FAWELL, A REPRESENTATIVE IN CONGRESS FROM THE
 STATE OF ILLINOIS

Thank you Mr. Chairman. I am looking forward to today's testimony and the opportunity to examine some of the issues surrounding the reauthorization of the Technology-Related Assistance Act for Individuals With Disabilities [Public Law 100-407]. I am especially looking forward to hearing testimony on what types of projects have been supported in the 42 States which have received grants under the program to date.

My own State of Illinois has used the grant money it has received over the past four years to implement a program to increase the availability of assistive technology to persons with disabilities and older adults with age-related impairments in a variety of ways. In order to increase awareness of the various services, devices, and possible funding sources, the Illinois Assistive Technology Project publishes a handbook on the basic skills in assistive technology, a funding manual, and a bimonthly newsletter called *Techtalk*.

The Project has also established five Assistive Technology Demonstration and Loan Centers which provide opportunities for persons with disabilities to learn about assistive technology devices and services to help them in their daily lives. Persons with disabilities are able to borrow devices on a trial basis to help them decide which tools are best suited to their needs. The Illinois Assistive Technology Project has also established eight service delivery models in the State. These sites provide a broader range of services than the demonstration and loan centers.

Finally, the Illinois project has also established a statewide information and referral network to help persons with disabilities find information about assistive technology devices and services. This information network includes a database, accessible by an 800 number, of manufacturers of equipment, the merchants that sell the equipment, the professional therapists that can recommend the right device, training programs on using the devices, repair and maintenance providers, and possible

funding sources. The network also includes nine organizations throughout the State which provide information and referrals for persons with disabilities.

The Illinois project exemplifies the intent of Public Law 100-407. As passed in 1988, the Technology-Related Assistance Act for Individuals with Disabilities was intended to be a limited five-year grant program to provide States with seed money to establish statewide programs to increase access to, and the availability of, assistive technology devices and services to individuals with disabilities. The goal, as I understand it, was to have States and localities assume the cost of continuing operations of the systems once they had been established by the Federal seed money.

I will be most interested to hear today's hearing and hope we examine the issue of whether continued Federal involvement in this program is necessary and, if so, at what level. I look forward to the testimony and want to welcome our witnesses.

Mr. BALLENGER. Thank you, sir.

Mr. Chairman, today this hearing will focus on the reauthorization of Public Law 100-407, the Technology-Related Assistance Act for Individuals with Disabilities, and specifically on the staff draft that has been circulated to our witnesses.

I am especially pleased that we will hear from two witnesses from North Carolina today, and I want to welcome them both: Ricki Cook of the North Carolina Technology Program, and Steve Sallee, a constituent who is served by assistive technology and works with the North Carolina Assistive Technology Center in Winston-Salem. I am glad the subcommittee will have their expertise and input as we begin to reauthorize this important legislation.

North Carolina received a grant under this Act in 1989, and has been considered a national model for other States to look to when developing and implementing their technology programs.

I recently had the opportunity to visit one of the four Assistive Technology Demonstration Centers in Winston-Salem, and to see how assistive technology can change individuals lives if they know it is available and how to access it. The Assistive Technology Demonstration Centers are excellent in allowing individuals with disabilities to see what technology is available, and to test a specific device to see if it is right for them before purchasing it.

I am particularly interested in hearing what all of our witnesses think about the draft bill and what specific changes should be made to ensure that States are making changes in their State systems to make assistive technology available and accessible to individuals with disabilities.

When Congressman Jeffords, now Senator Jeffords, introduced this bill in 1988, with bipartisan support from Chairman Owens and other members of this subcommittee, it was intended to provide Federal seed money to States to help develop a statewide system that makes assistive technology accessible and available to individuals with disabilities. The goal being that once this was accomplished, this Federal program would no longer be needed.

And while I know that no Federal program up here has ever been terminated, it was my hope that this one may be the first, once States reached that goal. Therefore, I strongly support the language in the staff draft that maintains this program as a competitive State grant program with the hope that this will be the only reauthorization.

I am concerned, though, about provisions in this draft authorizing new grant programs and new set-asides for specific activities. I believe such provisions send the message that we are creating yet another full-blown Federal program and increasing expectations

from individuals with disabilities and their families without the resources there to fund these new activities.

Should we create nine new discretionary grant programs and five set asides in a \$34 million program?

I believe our focus should be on strengthening provisions in the State grant program so that States will change their systems in order to ensure that individuals with disabilities know about and can get assistive technology services and devices.

There are certainly specific activities that must be done in order to accomplish this goal such as information and referral, consumer-responsive and consumer-driven policies, and protection and advocacy activities which many States are already doing. However, I became concerned when the Federal Government dictates specific activities that must be done by each State in order to meet these priorities. What works in North Carolina may not work in New York or California; and I hope we can maintain the flexibility this law gives States to set up programs that fit their specific needs.

Again, I thank the Chairman for inviting the two distinguished North Carolinians to speak to the subcommittee today and I look forward to hearing from all of the witnesses on this reauthorization.

Thank you, Mr. Chairman.

Chairman OWENS. Thank you.

For our first witness we are pleased to welcome Dr. William Smith, the acting Assistant Secretary, Office of Special Education and Rehabilitative Services, Department of Education.

Dr. Smith, the bell has just sounded for a vote. If you would please be patient, we will recess for about 10 minutes to vote. Your testimony can begin when we return.

Dr. SMITH. Thank you, Mr. Chairman.

[Recess.]

Chairman OWENS. Before we proceed with the testimony of Dr. Smith, I see we have been joined by another member of the subcommittee. I yield to Mr. Barrett for an opening statement.

Mr. BARRETT. Thank you, Mr. Chairman.

I compliment you on the hearing today and I think you have a very outstanding list of witnesses today.

I have had an opportunity to scan the draft of the legislation that is being introduced to reauthorize the Technology-Related Assistance for Individuals with Disabilities Act of 1988, and I would like to pay tribute, I think, Mr. Chairman, to the staff work. I believe that this is an extraordinary job that the staff has done in preparing us for this hearing, and I must say that I admire the dedication and the efforts of the staff in giving us the backup to launch into the reauthorization and I simply wanted to make a public statement.

Thank you very much.

Chairman OWENS. You may proceed, Dr. Smith.

STATEMENTS OF HON. WILLIAM SMITH, ACTING ASSISTANT SECRETARY, OFFICE OF SPECIAL EDUCATION AND REHABILITATIVE SERVICES (OSERS), U.S. DEPARTMENT OF EDUCATION, ACCOMPANIED BY CAROL CICHOWSKI, DEPARTMENT OF EDUCATION, OFFICE OF MANAGEMENT AND BUDGET; AND BETTY JO BERLAND, PLANNING OFFICER, NATIONAL INSTITUTE ON DISABILITY AND REHABILITATION RESEARCH

Dr. SMITH. Thank you, Mr. Chairman.

I would like to introduce the two persons who are at the table with me. On my right is Ms. Carol Cichowski who is from our Office of Management and Budget, who has the prime responsibility for the review of the legislation, and I would defer to her on any question that you may have relative to it.

On my left is Dr. Betty Jo Berland, who is the planning officer for NIDRR. And I would like to feel comfortable in referring the hot questions to her as well.

Thank you for the opportunity to be present. I am pleased to be here today to discuss the reauthorization of Technology-Related Assistance for Individuals with Disabilities Act of 1988. I have submitted for the record the full testimony, so I will just simply highlight a couple of the items so that they may be used as a basis for discussion.

The Tech. Act, as it is called, is administered by the National Institute on Disability and Rehabilitation Research [NIDRR], one of the three components in the Office of Special Education and Rehabilitative Services. The purpose of the Technology Act is to provide support to States to develop and implement comprehensive, consumer-responsive statewide systems of technology-related assistance for individuals with disabilities.

In its first year, fiscal year 1989, the Congress appropriated \$5.1 million for this program, with which the Department awarded initial grants to nine States at an average of \$515,000, and a mandated technical assistance contract. Since that time, the appropriation levels have increased to over \$34 million for fiscal year 1993, and NIDRR has made grants to 42 of the States. Eight States are remaining, and also the District of Columbia and Puerto Rico, and funds have been set aside should they submit acceptable applications this year.

The statute requires each government to designate an entity responsible for applying for and managing the State's grants. Grants to States are awarded on a competitive basis using an independent peer review process. Every State had applied for a grant at least once in the program's first 4 years, and many made several applications.

We believe the Tech. Act should be reauthorized to give all States sufficient opportunity to establish statewide systems as envisioned by the Act. The statute permits the State grantees to select from a wide range of authorized activities. All of these grantees have certain common elements in their programs, such as information and referral systems.

All of the State projects also conduct extensive public awareness efforts. Consumer advisory boards, consumer training, and technol-

ogy demonstration centers are other typical activities in the effort to create comprehensive consumer responsive statewide systems.

States also have the opportunity to be innovative and to try unique approaches. For example, North Carolina and Maine have set up income-contingent loan programs. New York has equipment loan programs and recycling centers. Alaska and New Mexico have aggressive outreach programs to serve Native American groups that are typically underserved, while Massachusetts has targeted outreach to Hispanic, African-American and Asian-American populations. Maine and Utah are using videodisc training. Minnesota and Vermont are using mobile vans to demonstrate assistive technology in remote and rural regions of the States.

The statute mandated that the Department of Education conduct an evaluation of the program. This was done through a contract to the Research Triangle Institute of North Carolina. It is called RTI. The report indicated that there has been enough progress to suggest that with additional time and Federal support, the States would be able to make significant improvements.

The RTI study indicated that the States have been most successful in raising awareness about the potential of assistive technology. The study also found that States have not been focused uniformly on undertaking those system change activities that hold the most promise of facilitating the implementation of a comprehensive statewide system.

The evaluator found that many States were not as consumer responsive in the operation of the technology grants as they could have been. RTI found that the State projects have not been able to reach all segments of the population with disabilities.

Traditionally underserved groups remain difficult to reach. The States reported that they had difficulty in reaching elderly persons with disabilities, persons in rural areas, and those who are not English speaking. In the future, the program must have a strong emphasis on outreach to underserved groups.

The administration is developing a bill to amend and reauthorize the Tech. Act, and we look forward to continuing to work closely with the committee.

Among the most important issues that we will be addressing in our bill are: one, providing up to 5 years of additional Federal support; two, requiring all projects to focus on systems change; three, ensuring that persons with disabilities are involved in meaningful ways in the development and implementation of a statewide system; four, promoting the implementation of a comprehensive system through such activities as outreach to underserved populations; five, increasing the accountability of the grantees; and six, expanding the provision of technical assistance and information to the grantees and others to enhance the capacity of the States to provide assistive technology.

Mr. Chairman, I appreciate this opportunity to discuss this very important program with you, and will be pleased to answer or attempt to answer any question that you may ask either here or in writing.

Thank you.

[The prepared statement of Dr. Smith follows:]

STATEMENT OF DR. WILLIAM L. SMITH, ACTING ASSISTANT SECRETARY FOR SPECIAL
EDUCATION AND REHABILITATIVE SERVICES

Mr. Chairman and members of the committee.

I am pleased to be here today to discuss the reauthorization of the Technology-Related Assistance for Individuals with Disabilities Act of 1988 [Public Law 100-407]. The "Tech Act," as it is called, is administered by the National Institute on Disability and Rehabilitation Research [NIDRR], one of the three components in the Office of Special Education and Rehabilitative Services [OSERS] in the Department of Education.

The purpose of the Tech. Act is to provide support to States to develop and implement comprehensive, consumer-responsive, statewide systems of technology-related assistance for individuals with disabilities. Technology-related assistance includes assistive devices—such as wheelchairs or communications boards—and assistive technology services—such as evaluation, prescription, or fitting for a device and training in its use.

In its first year, fiscal year 1989, the Congress appropriated \$5.1 million for this program, with which the Department awarded initial grants to nine States—an average of \$515,000—and a mandated technical assistance contract to provide information and technical expertise to the grantees and designated entities in other States.

Since that time, the appropriation level has increased to over \$34 million for fiscal year 1993, and NIDRR has made grants to 42 States. NIDRR has sufficient funds to make awards to the remaining eight States, the District of Columbia, and Puerto Rico this fiscal year, assuming that they submit acceptable applications.

The statute requires each governor to designate an entity responsible for applying for and managing the State's grants. Of the current 42 grantees, 24 are administered by State Vocational Rehabilitation agencies. Other designated entities include other State agencies, universities, and independent commissions.

Grants to States are awarded on a competitive basis, using an independent peer review process. Every State had applied for a grant at least once in the program's first four years, and many made several applications. This indicates to us that individuals with disabilities and their families, as well as those who provide services to them, recognize that there are major benefits to be obtained through improving the provision of assistive technology. This is the main reason we believe the Tech. Act should be reauthorized: to give all States sufficient opportunity to establish statewide systems as envisioned by the Act.

As you know, the statute permits the State grantees to select from a wide range of authorized activities. All of these grantees have certain common elements in their programs, such as information and referral systems that provide ready access to information about assistive technology resources and products.

All of the State projects also conduct extensive public awareness efforts to inform persons with disabilities, parents, advocates, service providers, employers, and the general public about the potential benefits of assistive technology. Grantees use such techniques as public service announcements, local access television, traveling exhibits, and targeted mailings to "spread the word" about AT—as it is called—to a broad audience. Consumer advisory boards, consumer training, and technology demonstration centers are other typical activities in the effort to create comprehensive, consumer-responsive, statewide systems.

States also have the opportunity to be innovative and to try unique approaches. For example, North Carolina and Maine have set up income-contingent loan programs. New York has equipment loan programs and recycling centers. Alaska and New Mexico have aggressive outreach programs to serve Native American groups that are typically underserved, while Massachusetts has targeted outreach to Hispanic, African-American, and Asian-American populations. Maine and Utah are using videodisc training programs and televised training in creative ways. Mobile vans are used in Minnesota and Vermont to demonstrate assistive technology in remote and rural regions of those States.

The statute mandated that the Department conduct an evaluation of the program. This was done through a contract to the Research Triangle Institute of North Carolina [RTI], and the four-volume report was sent to Congress in April of this year. At the time of the evaluation, nine States were beginning their third year of operation, 14 their second year, and 11 had just received grants for their first year. Because these State programs were phased in year by year, we could not have as much data, particularly outcome data, as we would have liked at the time of the evaluation.

A key finding was that the States had not yet succeeded fully in establishing comprehensive, consumer-responsive, statewide systems to provide technology-related assistance to persons with disabilities. However, the report indicated there has been

enough progress to suggest that, with additional time and Federal support, the States would be able to make significant improvements.

The RTI study indicated that the States have been most successful in raising awareness about the potential of assistive technology, but the lack of access to funds to purchase AT remains a significant obstacle to widespread use.

The study also found that States have not been focused uniformly on undertaking those systems change activities that hold the most promise of facilitating the implementation of a comprehensive statewide system.

The evaluator found that many States were not as "consumer-responsive" in the operation of the "Tech grants" as they could have been. For example, some States relied on having individuals with disabilities on advisory boards as their major consumer-responsiveness strategy. However, those individuals with disabilities often were staff members of the service delivery agencies that might have been targeted for change. In many cases, individuals with disabilities and their family members were not full participants in Advisory Boards due to their lack of experience and training for the decisionmaking role.

RTI found that the State projects have not been able to reach all segments of the population with disabilities. Traditionally underserved groups remain difficult to reach. The States reported that they had difficulty in reaching elderly persons with disabilities, persons in rural areas, and those who are not English-speaking. In the future, the program must have a strong emphasis on outreach to underserved groups, and we must provide more technical assistance to the States to help them achieve more comprehensive coverage.

RTI found that certain problems seemed to be related to the nature of the entity designated to administer the project. State agencies often were hampered by employment and acquisition policies in the States; universities, as well as some State agencies, were perceived as remote by consumers. It is important that the designated entity be responsive to consumers and be able to conduct effectively the activities of the grant.

The administration is developing a bill to amend and reauthorize the Tech. Act, and we look forward to continuing to work closely with the committee during this reauthorization process.

Among the most important issues that we will be addressing in our bill are:

- Providing up to five years of additional Federal support for States that have completed their extension grants, but, despite significant progress, need more time and additional Federal funding to complete implementation of their statewide systems;
- Requiring all projects to focus on systems change activities to help ensure that the benefits of this program are long-term and significant;
- Ensuring that persons with disabilities are involved in meaningful ways in the development and implementation of the statewide systems and in decisions about the provision of assistive technology to individuals;
- Promoting the implementation of a comprehensive system through such activities as outreach to underserved populations;
- Increasing the accountability of the grantees by requiring annual reports that document specific progress in achieving systems change; and
- Expanding the provision of technical assistance and information to the grantees, and others to enhance the capacity of the States to provide assistive technology and the ability of individuals with disabilities to access assistive technology.

Mr. Chairman, I appreciate this opportunity to discuss this important program with you, and will be pleased to answer any question, either here or in writing.

Chairman OWENS. Thank you.

I yield to Mr. Ballenger for questions.

Mr. BALLENGER. Thank you, Mr. Chairman.

Dr. Smith, I was just wondering if you could venture an opinion as to what the administration thinks of the new discretionary grant or set aside provisions in this bill that has been drafted.

Dr. SMITH. May I defer to Ms. Cichowski?

Mr. BALLENGER. Sure.

Ms. CICHOWSKI. In general, Mr. Ballenger, we think the new discretionary proposals address important issues that need to be considered in developing reauthorization legislation. However, I would

note that we would be concerned about any new programs that would drain resources from the State grant program.

The administration included an 11 percent increase in its 1994 budget for the Technology Assistance program because we think it has great potential to contribute to improving the lives of people with disabilities. However, we anticipated that most of that money would be used for the State grant program.

We are particularly concerned about the needs of large States and also the more mature projects. We have been trying to provide increased funding as the projects proceed to help ensure that at the completion of 8 or 10 years that they really will have accomplished what we are asking of them. And as we look to strengthening the provisions in Title I, I think it is important to provide adequate resources.

We would like to work with the committee to identify ways of strengthening Title I to address some of the issues in the staff draft includes in the new provisions such as outreach to urban populations.

Rather than authorizing separate grants or contracts to deal with these issues, we should look to putting greater emphasis in our basic State grant program on those areas that we think are important.

One other comment I would make is on technical assistance; we certainly agree that our technical assistance contract has played an important role in helping States develop comprehensive systems. And I think we would like to see that role expanded vis-a-vis not only the State projects but also toward helping other organizations and service providers and consumer groups as well.

But I think at least the Department would like to have as much flexibility as we can in determining the appropriate amount for particular activities rather than having the law specify how much to spend on each component. I think from an administrative perspective that would be better for us.

And again, with limited resources and uncertainty about appropriations, we should, I think, provide as much flexibility in the legislation as we can.

Mr. BALENGER. As a Republican, I commend you for your statement. What you just said is exactly the way I feel myself.

I am just curious in the information—maybe because I represent a very rural area—about the vans that are used in Minnesota. Is there information available as to the efficacy of those particular programs?

Just curious, because I have so many mountain areas of North Carolina that people probably can't get to Winston-Salem to be able to find out.

Dr. SMITH. Let me have Dr. Berland respond to that.

Dr. BERLAND. Yes, our evaluator found that there were a number of different ways of outreach, including the demonstration centers that are quite successful in North Carolina. That was highlighted by the evaluator as one of the best examples of programs.

Vermont, Minnesota, and I think to some extent Utah, have had success taking technology equipped vans around the State. That can be expensive to equip those vans, and they don't necessarily

meet the needs of everybody. You can't have all the equipment in them. But, yes, they have been successful.

Mr. BALLENGER. Would they have been considered cost-effective in those particular cases?

Dr. BERLAND. Well, I think when you are trying to reach a dispersed rural population, cost-effectiveness takes on a new dimension. It is quite expensive for every person you reach, but there may not be any other way to reach them.

Mr. BALLENGER. Like I say, I am very proud of the ones—I had never been involved in all of North Carolina's effort here until I had the opportunity to visit a site in Winston-Salem. And for those in the audience that don't know the technology that is available to people, until you walk into a room and you have all the walls covered with these various and sundry way-out electronic things and have somebody explain them to you, you really don't know what—that such things do exist and such ways. I am proud I am on the committee and happy to be involved in something this constructive as far as those people are concerned.

Thank you, Mr. Chairman.

Dr. SMITH. I was going to respond to Mr. Ballenger. There is no reason why we can't provide information relative to what we have discovered with regard to the rural isolated areas.

And it may be from a cost-effectiveness point of view, cost-effective to at least have a working model that could in fact be used not only in North Carolina, but in other areas in that same situation. So that it may be cost-effective since looking at the rural area has become a major priority for us.

We would be more than pleased to provide that kind of information.

[The information follows:]

Innovative Approaches Utilized by Assistive Technology Projects That Provide Outreach to Rural and Underserved Populations Include:

[1] South Dakota—The Dakotalink project has two 32-foot fifth wheel mobile units. Each unit contains a wide variety of assistive devices for all types of disability. The purpose of the mobile units is to demonstrate assistive technology anywhere in the State and to permit consumers to try different products in their own community. The project has found that individuals other than those with disabilities have also been exposed to assistive technology as a direct result of the mobile van visits.

[2] New Mexico—The NMTAP, through a contractual arrangement with Adelante-Techworks, a non-profit corporation, provides statewide mobile van based assistive technology in-home service delivery for seniors and children with disabilities who lack personal resources and who are located in particularly rural and remote areas of the State. Home modifications, seating and positioning, van lift assessments and computer access have been the primary types of service delivery provided to NMTAP consumers. The majority of service provided to Native Americans and elderly Hispanic individuals has been offered through the mobile van services. Since 1990, 180 consumers have been served at an approximate cost of \$545 per person. The New Mexico project also awarded a contract for home modifications for seniors residing in Southern New Mexico through an Independent Living Center.

[3] New Mexico and Alaska—Under a Title II grant, these two States are utilizing Native American public radio and other outreach approaches including home visits, meetings with the tribal chairpersons, Native American liaisons to introduce and familiarize Native Americans in Alaska and in New Mexico with assistive technology. This project [AIDPAC] has been successful in reaching out to rural, remote and underserved communities.

[4] Illinois—Given the size and rural complexion of much of Illinois, mobile services fill a large gap in the capacity of the State to provide technology-related assistance. The ITAP began providing mobile services with a single unit in 1992 offering assistance to 131 individuals in central and southern Illinois. A second unit was in-

roduced in 1990 and provided service to more than 400 persons per year in the Chicago metropolitan and northern Illinois region. Of 131 assessments in the central and southern regions, all have been conducted in rural areas where few or no other resources exist. The Illinois project has reported a number of unanticipated benefits from mobile services including, greater family involvement and participation and positive impact on the communities visited. The service has fostered an increase in the number of local advocacy groups and improved the communication between rural regions and the State technology offices.

[5] Indiana—The Breaking New Ground Outreach Program provides farm/work-site assessments, resource referrals and assistive technology to farm families, statewide, across Indiana. The van is equipped with a variety of adaptive aids specializing in farm and shop tools, and independent living aids for the home and the farm. These items are used as demonstration aids during direct service farm visits and as educational tools for public awareness events and training sessions. The van has made 75 farm visits to farmers and their families and assisted another 68 individuals in rural areas to find needed information and technology-related services. In addition, the van is used for public outreach activities and plays a part in raising general public awareness about assistive technology.

[6] Minnesota—Currently, there are two grantees providing technology-related assistance to underserved populations in 10 remote, geographic regions of Minnesota. Each outreach site has a local volunteer clinic coordinator and local consumer advisory committee. Since 1989, 3,440 individuals have been served by this program. Through mobile outreach, STAR has been able to expand the capacity for service delivery throughout rural Minnesota. The current budget for this program [Year 4] is \$145,000 which pays for staff time, travel expenses, and equipment for demonstration.

[7] Iowa—The Iowa application for funds under Title I identified three underserved groups; elderly Iowans, farmers with disabilities and minorities. Services for older persons in Iowa are organized through 16 Area Agencies on Aging and the Iowa Assistive Technology Project. Activities include awareness programs, displays, presentations and demonstrations at county fairs and elder healthcare conferences. The FARM program of the Iowa Easter Seal Society is an internationally recognized model for the delivery of assistive technology services to rural, disabled farmers. The Iowa State University Extension Services supports a model home display which demonstrates optimum functional design and furnishings for persons with disabilities; this model is on display at State and county fairs. The ITAP collaborates with these groups.

Mr. BALLENGER. I appreciate that very much, sir.

Chairman OWENS. Mr. Barrett.

Mr. BARRETT. Thank you, Mr. Chairman.

Perhaps just a takeoff on Mr. Ballenger's comment about transportation, I too serve a rural district, and you suggested in your testimony that State projects have not been able to reach all segments. And there is an underserved population out there.

What specific recommendations, if any, do you have in providing outreach services to these underserved areas?

Dr. BERLAND. Well, I will try to talk about some of the things that actually are being done. The State of Nebraska has recently trained 70 individuals as peer counselors around the State. The Department's bill is looking at greater involvement of people with disabilities in this program, and we think that the peer counseling route that the evaluator also recommended is one of the mechanisms that we ought to use.

The other—the State of Maine, which has a lot of rural areas, has been using public access media as a method to get training around the States and satellite broadcasts with videodiscs that they have prepared for this kind of training.

Mr. BARRETT. Are they using public television, or do you know?

Dr. BERLAND. Well, I think they are using closed-circuit television and public access channels, some public television, but that is a little pricey.

Dr. SMITH. We can get the details for you, though, and we will submit it in the revised testimony so that you will have some sense of what the whole thing looks like.

[The information follows:]

Examples of Electronic or Telecommunications Outreach Activities include:

[1] Maine—Since September, 1989, the State Technology Project in Maine has operated a comprehensive, statewide audio and video fiber-optic spine, leased from New England Telephone which connects electronic rooms located at the seven University of Maine System campuses. Visual images are transmitted to sites where Maine citizens can see and hear via television monitors. An audio talk-back system permits people in these distant locations to interact with each other as well as with the presenters. Seventy percent of Maine's nearly 1.2 million people live in rural communities of less than 10,000 people. In 1992, over 700 hours of statewide teleconferences were conducted including 350 conducted by the Maine Department of Education [lead agency for Tech. Act project]. A 1992 survey of western Maine ITV users showed that 69 percent would not have attended classes, presentations or demonstrations without this electronic network. Evaluations completed in 1991 and 1992 revealed a preference for electronic [long distance] learning as opposed to traveling to a central location.

[2] Utah—The UATP's rural outreach is centered around coordinators located in community-based independent living centers in the most rural parts of Utah. The assistive device coordinators serve people with disabilities directly without the expense and inconvenience of travel for the consumer. A major part of the UATP rural outreach is accomplished through video-based awareness and training programs. Videotapes describing the power of assistive technology, the ADA, recreational technology and computer access have been developed and distributed to over 600 State organizations and individuals. These videotapes have been broadcast and/or distributed nationally and have won four prestigious national awards. Public service announcements, which describe the Utah assistive technology services, have been broadcast throughout the State. Through these programs, UATP staff are providing interdisciplinary training to university students and practicing service agency personnel, many from remote areas of the State. Laser videodisc-based training programs are being field tested and will be available for national distribution in the fall of 1994. The programs will be available in alternative formats, are self-contained, portable, and will be ideal for rural outreach training.

Mr. BARRETT. I would appreciate it.

My State has been a leader in certain areas in serving people with disabilities, but I have a little hangup, a little problem about some of the more remote areas and those people that really aren't availing themselves of services.

Dr. SMITH. Fine. We will add that to what we are going to provide for Mr. Ballenger.

[The information follows:]

Nebraska—Nebraska has documented success in its outreach efforts through the development and implementation of a peer support network. Members of the network are primarily located in rural areas of the State; 58 of the 72 volunteers live in regions outside of Lincoln and Omaha. These volunteers promote interest in all types of assistive technology through awareness workshops, county fairs, conferences, workshops, demonstrations and displays. Public service announcements and press releases are distributed through the members of the peer support network and they in turn contact the local media.

Mr. BARRETT. Thank you.

Ms. CICHOWSKI. Mr. Barrett, if I could comment on that as well. Our bill—and I think the staff draft also reflects this—will include changes that will strengthen the emphasis on outreach to underserved populations, including people in rural areas. We are looking at provisions that would require the States to specifically address this in their applications, which we are also going to ask them to submit for public comment.

But in addition to that, we can also ask our technical assistance provider to work with the States on identifying better ways of reaching populations that are not being reached. And I think that is certainly something that could be improved upon.

Mr. BARRETT. Thank you.

Thank you, Mr. Chairman.

Dr. SMITH. One of the things we are very genuinely interested in considering is the development of some kinds of publications that would make available to all of the different States the things that are going on in other States, especially as it relates to urban or rural. It is something that we are considering, which we think makes an awful lot of sense because then it provides an opportunity for States to share in different kinds of ways.

Mr. BARRETT. Good. Thank you.

Chairman OWENS. Do you think we can have new initiatives to serve rural areas with the current funding or are we going to need more money for that?

Dr. SMITH. Well, part of the problem is that the evaluation that we presently have came so early in the history of the events that we haven't had an opportunity to ask some hard questions about the use of funds. My sense is that it may take us a little longer to really get a handle on what the costs are and how those costs are being most effectively used.

Chairman OWENS. When was the evaluation conducted? Can you state your title and name again for the record?

Dr. SMITH. Yes, go ahead.

Dr. BERLAND. Yes, it is Betty Jo Berland and I am the planning officer at NIDRR.

The study was started in 1991. We had States that were in their second year and some States that were in their third year at that time. The study did find that States took quite a bit of time for start-up because they had recruitment problems. They had to get people hired, often in State Civil Service systems, and also there was simply a lack of expertise out there, a lack of people to recruit. So it took them a while to get started and there were really only a few months of operating data in each State available to the evaluator.

Dr. SMITH. Go ahead.

Ms. CICHOWSKI. As I said earlier—

Chairman OWENS. State your title and name again.

Ms. CICHOWSKI. I am Carol Cichowski. I am the Director of the Division of Special Education and our Research Analysis in the Department's budget service.

As I stated earlier, I can't comment on the specific budget needs of rural States, although, in general, we believe that as the projects mature we should be providing increased funding.

You know, we have been particularly concerned about larger States because the funding has been relatively modest. States regardless of size have been getting virtually the same amounts of money, and that doesn't seem to make a lot of sense to us. So we would like to see more money for this program in 1994, and I would expect beyond that, so we give the States a real chance to do what we are asking them to do before we think about phasing out the program.

Chairman OWENS. From the evaluation, do you have an idea of how much is being currently spent on advocacy? There is a kind of tension out there between advocacy and direct services. We are wondering just how much tension can you ascertain at this point?

Dr. SMITH. The evaluation was very gentle in its response. It pointed out that there is tension between those that are focusing on system change and those that are focusing on service delivery. And the recommendation of the evaluator was that there has to be some of both in it.

The belief is that—at least my belief is that there will continue to be the kind of advocacy that one would want on the advisory councils. They pointed out that those advisory councils that had consumers rather than individuals with disabilities who were part of the staff were much more consumer responsive and had a much more realistic sense of advocacy.

So I think that while there may be some tension, it could be healthy tension in that as it now stands the advisory committees have the option for the policymaking that reduces the ill winds and allows for the kind of advocacy that needs to take place to take place. I see that as continuing to grow and I am comfortable that the evaluation, the evaluators in looking at that, were able to at least feel that there is a balance.

One of the real questions has to do with how long will it take to be State systemwide, how long will it—and what will it take in the way of resources. And I think Ms. Cichowski's comment with regard to the size of the State makes that somewhat a more important question.

I have always found as a program manager that any time you try to do something on a systemwide basis, it is going to take longer because of the nature of the politics with regard to what happens in trying to develop those kinds of strategies and what the tradeoffs have to be for getting it accomplished.

One of the things I would hope that we would consider in reauthorization is a very close look at the process that the States are going through in putting their system together, so that as we go from year to year we are able to get some data that help us know whether the direction that they are going makes sense or does not.

Chairman OWENS. With what we know at this point, would you agree that the primary mission of an Assistive Technology Act should remain to affect systems change as opposed to providing service?

Dr. SMITH. I think that is an excellent long-term goal. I think that one of the things that I find as the acting Commissioner for RSA, in addition to being the acting Assistant Secretary, is that people are very, very client-service oriented and service-delivery oriented. It gets to be a problem very often when a group of people are sitting around talking about the long-term impact of a State system and the needs of the individuals who are not getting service.

As soon as we start dealing with the question of underserved and unserved, then the question of service delivery becomes an even more important issue than it would be if people were getting service and we were now developing a system that impacts on everyone. So I would think that it really does become important to continue to focus on a State system and a systemic process.

But I think it also requires a realistic assessment of how long it is going to take. And in talking with people, you get the sense that the first 5 years may not be able to deliver it. The question that we have got to ask is, how much time does it take and what does it require in the way of resources to get it accomplished.

But I think it is an excellent long-term goal, but it is very hard to achieve.

Chairman OWENS. Thank you very much. We look forward to working with you as we continue to refine the Act.

Our next panel is Mr. Stephen Sallee, Winston-Salem, North Carolina; Ms. Ricki Cook, Project Director, North Carolina Assistive Technology Project; and Mr. Andrew Winnegar, Project Director, New Mexico Technology-Related Assistance Program.

I would also like to point out that we have been joined by another member of the committee, Congressman Donald Payne from New Jersey. Before the panelists begin, we would like to yield to Mr. Payne for an opening statement.

Mr. Payne, I really should have yielded to you for questions. I am sorry.

Mr. PAYNE. That is all right.

Chairman OWENS. You have the floor for an opening statement.

Mr. PAYNE. I will be very brief. But let me congratulate you for calling this hearing. I want to take the opportunity to thank you for all the work that you have done, especially in the area of disabilities, and for bringing these distinguished panelists before us in order to address the reauthorization of the Technology-Related Assistance Act. I am honored to be a part of this process that will examine the progress made towards achieving implementation of statewide consumer assistive programs.

I believe that the Technology Act is an important enhancement to the Americans with Disabilities Act. If implemented, we will improve the ability of individuals with disabilities in accessing devices and services that will increase their productivity in the workforce.

As a Nation we place ourselves at a disadvantage when we fail to recognize and develop the potential of physically challenged individuals. It is my hope that through this reauthorization we can open doors of hope and opportunity for many individuals with disabilities so that we may ultimately benefit from their talents.

I recall that when we had hearings on the Americans With Disabilities Act, we talked about very simple things that could be done. For example, I worked in a plant—a small business that my brother operated and owned—where I was responsible for employment. We had a paper printer and with a lot of rotisserie. Sometimes something would happen that needed the attention of a person. We had some hearing-impaired people so rather than having a whistle, we had a light. And for those who had difficulty seeing, we had a whistle where normally there was a light. These were simple devices that did not cost much, yet they enabled us to utilize people.

Also, I mentioned that at one time that we had a hearing impaired—I know there is a new terminology that I should be using, maybe hearing challenged—forklift operator and everyone knew that. A forklift makes a lot of noise. I have been in other places where people would simply yell to the driver to be more careful,

telling him to "watch out," or "I am over here." But because they knew that Leon could not hear, everyone was very careful about where the forklift was and our injury rate was nonexistent compared to other similar places because everyone looked out for Leon because they knew that he couldn't hear them yell at him as they did at other places. So, I found that it enhanced the operation and made the business more effective.

Once again, I would like to congratulate you, Mr. Chairman, for this hearing. I look forward to listening to the panelists.

Chairman OWENS. Thank you.

Mr. Sallee.

STATEMENTS OF STEPHEN SALLEE, WINSTON-SALEM, NORTH CAROLINA; RICKI COOK, PROJECT DIRECTOR, NORTH CAROLINA ASSISTIVE TECHNOLOGY PROJECT; AND ANDREW WINNEGAR, PROJECT DIRECTOR, NEW MEXICO TECHNOLOGY-RELATED ASSISTANCE PROGRAM

Mr. SALLEE. Honorable Chairman, panelists and guests, my name is Steve Sallee and I am from Winston-Salem, North Carolina. I am a long-time consumer of assistive technology and a part-time employee of the North Carolina Assistive Technology Project.

In the few minutes allotted to me, I would like to tell you how assistive technology has affected me and made my life much easier under conditions that would normally be considered impossible.

Thirty-one years ago this summer I was on top of the world. As a college sophomore, pre-med student, president of my class, president of the science club, employed as a biology lab assistant, engaged to a lovely and intelligent girl, I felt in control of my life and my future looked secure. But as so aptly written by the poet Robert Burns, "The best-laid schemes of mice and men gang aft agley." In an instant my world changed dramatically as my body suffered a devastating blow when I struck the bottom of a swimming pool. My neck was broken and my spinal cord was crushed under the sixth cervical vertebrae. This left me totally paralyzed from the chest downward, with very weakened arms and almost no finger motion. All my hopes and plans for the future were as crushed as my spinal cord and at first I felt overwhelming fear and depression which was as bad as the physical pain.

Fortunately, I received the best of medical care and was accepted into Craig Rehabilitation Center in Denver, Colorado, soon after my injury. I was first exposed to assistive technology, although it was not yet called that, immediately after I woke up from surgery to remove bone fragments from my injury site. I was face down in a metal turning frame with traction tongs embedded in the top of my skull to keep my neck pulled straight.

Instead of being fed bite by bite, I was fitted with a leather strap around my limp hand to hold a spoon. I was taught to dip the spoon in the soup and lift it up to my mouth. It may seem an insignificant action, but it was the first thing I had done for myself since becoming paralyzed and the first small step leading to my eventual rehabilitation and greater independence.

My father's local civic club presented me with a portable television set when they heard that my room in the rehabilitation center

did not have one. Fortunately, they selected a model operated by a wireless remote device, definitely high technology, and my first exposure to environmental control, which is such an important area of assistive technology today.

Having the ability to turn lights off and on, control temperature, turn pages, select programs on entertainment devices without having to wait for another busy person to do it for you does wonders to improve the normally low esteem of a person with a severe disability.

One of my most exciting days during my 6-month-long stay at Craig Rehabilitation Center was when my very own chrome-plated wheelchair was rolled in my room by my physical therapist, who began teaching me to use a wooden sliding board to transfer from bed. Upright people might consider me to be confined to a wheelchair, but I have always considered it as my most liberating assistive technology device.

At first, I could push only a few feet forward at a time using the heels of my hand protected by fingerless gloves, but after weeks of exercises I was scooting around the halls and sidewalks bugging the therapists to begin teaching me how to transfer into a car. Meanwhile, I was learning to use a number of aids for daily living such as button fasteners, zipper pullers, and reachers to help in getting dressed and undressed and keep myself neatly groomed.

The best methods of bladder and bowel control were determined, and I was instructed in techniques to prevent pressure sores, stones, and infections.

Fortunately, I didn't have to schedule appointments with the speech therapist. Everyone said I talked too much anyway. Some of my wardmates who had lost the ability to speak were introduced to low-technology items such as eye gaze charts and picture or symbol boards used to try to get messages across to another person.

Unfortunately, it would be years before high-technology augmentative communication devices would be invented which produce remarkably lifelike voices to liberate such persons from a speechless silence.

Meanwhile, I was hard at work at the occupational room learning to type on an electric typewriter with a fat first grade pencil held upside down over the keyboard. That was in anticipation of attaining my goal of returning to the college classroom and pursuing a degree in teaching biological science.

After being released from the center and undergoing several months of outpatient physical therapy in my hometown, I was finally able to wed my fiance Athene and move with her to the University of Oklahoma, where I earned both undergraduate and master's degrees in zoology and natural science, as well as teacher's credentials.

Support was provided by the Colorado Division of Rehabilitation, family, friends, and outstanding advocates defending the rights of students such as Dean Couch, who always showed up at construction sites of buildings and sidewalks on the campus to make sure that proper ramps and curb cuts were installed. And this was years before the section 504 regulations of the Rehabilitation Act of 1973 led to accessibility programs in colleges around the country.

While attending school, I achieved a great leap forward in personal independence when I purchased hand controls for my automobile and was able to provide my own transportation. Successful completion of my coursework and lab work often depended upon devising new strategies for note taking, for example using a small portable tape recorder, or lab work, like adapting dissecting tools and moving the microscopes to tables where knees in a wheelchair could fit, and test taking, occasionally a kind professor would allow extra time.

Not all my time was involved with academics. I actively pursued my hobbies of photography using a tongue-activated release on a camera mounted on the side of my wheelchair, soldering electronic kits for my ham radio activities, and tent camping on weekend outings.

Yes, it took me a couple years longer than normal to get my degrees, but I persevered and was able to enter my profession as a college-level teacher for 3 years in Kansas followed by 10 years in North Carolina.

Teaching from a wheelchair involved using an increasing number of assistive technology devices. Instead of using a blackboard, I used a portable overhead projector to project handwritten notes and diagrams onto a screen behind and above me. I also used many 35 millimeter slides and 16 millimeter movies.

For field trips on mountain trails and seaside beaches, I used a six-wheeled, all-terrain vehicle and modified it with a wrist-controlled throttle and special seat to become my off-roads wheelchair. More difficult was training my wife to change spark plugs and do carburetor adjustments on its two-cycle snowmobile engine when it broke down miles into the wilderness.

While continuing to teach, I earned an education specialist degree in adult education and audiovisual education, and then received a fellowship to do 3 years of research and advanced studies at Wake Forest University. It was there that I learned the great value of the personal computer as the all-time champ of assistive devices.

The computer has been called the great equalizer for people with disabilities. Although some learn programming languages and use these skills to obtain highly lucrative positions with large firms, most of us use the computer for word processing, managing personal finances, education at home or in school, games, recreation, communication through telephone modems to friends, or to gather information on online databases.

Visually impaired people can have the computer equipped with devices to convert text on the screen to voice output or to increase the size of the letters and graphics. People with no voice can take advantage of a variety of augmentative communications options often tied into highly portable laptop or notebook computers.

Electric-powered wheelchairs now have integrated microprocessors to make steering even over uneven terrain easier and safer. These sophisticated computer chips can serve extra duty for environmental control and/or communications.

For the past several years my wife and I have operated a small home-based computer business assembling and selling PCs and laptops. This activity, plus work with the Winston-Salem Mayor's

Council for Persons with Disabilities, led me to do volunteer work for the North Carolina Demonstration Center of the North Carolina Assistive Technology Project. This is one of the four demonstration centers set up in the State with funds provided by the original Assistive Technology Act of 1988, which is now being considered for renewal and revision.

The first time I visited the center, I was overwhelmed by the abundance and variety of high-technology computers and other devices to make life easier, more successful for persons with many types of disabilities. The walls were hung with many aids for daily living. Bookshelves were full of books and videotapes covering every aspect of assistive technology. Racks and file cabinets were stuffed with magazines, journals, brochures, advertisements and reprints of articles about disabilities. Computer software was available for consumers or professionals to try out in the computer centers. This allowed an individual to select the most helpful adaptive device.

Programs were available that allowed one-finger typists to activate several keys in sequence instead of being held down together. Others greatly increased the efficiency and speed of typing by using word prediction or abbreviation expansion.

Special adaptive keyboards were available in various sizes and designs. Interfaces allow severely disabled individuals to enter characters into word processors with a single switch using Morse code, a scanning character screen, joysticks, track balls, touch screens, a mouse, or even an Unmouse.

After my second visit, I had picked out a small keyboard to order for my home computer and some software to make my typing easier. The equipment is fantastic, but just as important is the invaluable advice from our center's regional consultant, Harriet Forbis, who not only presents many options to solve a consumer's problems, but also plans workshops, demonstrations, home visits, technology expos, and many other activities to keep people in this region well informed of the latest or best technology to make life more productive for all citizens, even those with bodies or minds that may not be considered average.

Today, because of back and pressure sore problems, I use a "tip-in-place" power wheelchair, a van equipped with a rotary lift, hand controls, and RV camping equipment. In my briefcase I carry a color notebook computer and my miniature ham radio hand-held transceiver for communications.

I keep active as President of the North Carolina Paraplegia Association and Vice President of the Adaptables Organization, a newly formed group providing information about the rights of the disabled population under the new ADA legislation. This group has been helped by information from the Assistive Technology Center and in turn has provided volunteer labor for the center.

It has also just activated the Adaptables Bulletin Board System, which, in conjunction with other BBSs and the Family Support Network, will provide local communications and disseminate information about assistive technology in North Carolina.

Finally, after starting out as a volunteer, I am now spending my most productive time serving as a half-time employee at the center,

sharing my experience and problem-solving ability with persons learning about the latest technology to improve their lives.

Because of accidents, disease, violence, genetic birth defects and aging, more people are added to the ranks of the disabled every day. It is important that today's consumers and users of technology learn to help other disabled consumers become more aware and knowledgeable of this information. Who better than the individual who uses technology daily could help consumers new to technology learn more about it?

I will let my colleague, Ricki Cook, North Carolina Assistive Technology Project State Director, discuss the details of recommended modifications of the Assistive Technology Act, but as a long-time consumer, I would vigorously add my voice to those calling for the renewal of this most needed Act. I can't wait to see what the future will bring to the disabled population from the treasure chest of assistive technology devices now on the drawing boards that will soon become reality.

Thank you for your time and attention. I will be happy to try to answer any questions you might have.

[The prepared statement of Mr. Sallee follows:]

STATEMENT OF STEPHEN E. SALLEE, WINSTON-SALEM, NORTH CAROLINA

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hand protected by fingerless gloves, but after weeks of exercises, I was scooting around the halls and sidewalks bugging the therapists to begin teaching me how to transfer into a car. Meanwhile, I was learning to use a number of aids for daily living such as button fasteners, zipper pullers, and reachers to help in getting dressed and undressed and keeping myself neatly groomed. The best methods of bladder and bowel control were determined, and I was instructed in techniques to prevent pressure sores, stones, and infections. Fortunately, I didn't have to schedule appointments with the speech therapist. Everyone said I talked too much anyway. Some of my wardmates who had lost the ability to speak were introduced to low-tech items such as eye gaze charts and picture or symbol boards used to try to get messages across to another person. Unfortunately, it would be years before high-tech augmentative communication devices would be invented which produce remarkably lifelike voices to liberate such persons from a speechless silence.

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After being released from the center and undergoing several months of outpatient physical therapy in my home town, I was finally able to wed my fiance Athene and move with her to the University of Oklahoma, where I earned both undergraduate and master's degrees in Zoology and Natural Science, as well as teacher's credentials. Support was provided by the Colorado Division of Rehabilitation, family, friends, and outstanding advocates defending the rights of students such as Dean Couch, who always showed up at construction sites of buildings and sidewalks on the campus to make sure that proper ramps and curb cuts were installed—and this was years before the section 504 regulations of the Rehabilitation Act of 1973 led to accessibility programs in colleges around the country.

While attending school, I achieved a great leap forward in personal independence when I purchased hand controls for my automobile and was able to provide my own transportation. Successful completion of my coursework and lab work often depended upon devising new strategies for note taking [using a small portable tape recorder], lab work [adapting dissecting tools and moving microscopes to tables where knees in a wheelchair could fit], and test taking [occasionally a kind professor would allow extra time].

Not all my time was involved with academics. I actively pursued my hobbies of photography using a tongue-activated release on a camera mounted on the side of my wheelchair, soldering electronic kits for my ham radio activities, and tent camping on weekend outings. Yes, it took me a couple of years longer than normal to get my degrees, but I persevered and was able to enter my profession as a college-level teacher for three years in Kansas followed by 10 years in North Carolina.

Teaching from a wheelchair involved using an increasing number of assistive technology devices. Instead of using a blackboard, I used a portable overhead projector to project handwritten notes and diagrams onto a screen behind and above me. I also used many 35 mm slides and 16 mm movies. For field trips along mountain trails and seaside beaches, I used a six-wheeled all-terrain vehicle and modified it with a wrist-controlled throttle and special seat to become my off-roads wheelchair. More difficult was training my wife to change spark plugs and do carburetor adjustments on its two-cycle snowmobile engine when it broke down miles into the wilderness.

While continuing to teach, I earned an Education Specialist Degree in Adult Education and Audiovisual Education and then received a fellowship to do three years of research and advanced studies at Wake Forest University. It was there that I learned the great value of the personal computer as the all-time champ of assistive devices. The computer has been called the great equalizer for people with disabilities. Although some learn programming languages and use these skills to obtain highly lucrative positions with large firms, most of us use the computer for word processing, managing personal finances, education at home or in school, games, recreation, communication through telephone modems to friends, or to gather information on on-line databases. Visually impaired people can have the computer equipped with devices to convert text on the screen to voice output or to increase the size of the letters and graphics. People with no voice can take advantage of a variety of augmentative communication options often tied into highly portable laptop or notebook computers. Electric-powered wheelchairs now have integrated microprocessors to make steering even over uneven terrain easier and safer. These sophisticated computer chips can serve extra duty for environmental control and/or communications.

For the past several years my wife and I have operated a small home-based computer business assembling and selling PCs and laptops. This activity, plus work with the Winston-Salem Mayor's Council for Persons with Disabilities led me to do volunteer work for the North Carolina Demonstration Center of the North Carolina Assistive Technology Project. This is one of the four demonstration centers set up in the State with funds provided by the original Tech. Act of 1988, which is now being considered for renewal and revision. The first time I visited the center I was overwhelmed by the abundance and variety of high-tech computers and other devices to make life easier and more successful for persons with many types of disabilities. The walls were hung with many aids for daily living. Bookshelves were full of books and videotapes covering every aspect of assistive technology. Racks and file cabinets were stuffed with magazines, journals, brochures, advertisements and reprints of articles about disabilities. Computer software was available for consumers or professionals to try out in the center's computers. This allowed an individual to select the most helpful adaptive devices. Programs were available that allowed one-fingered typists to activate several keys in sequence instead of being held down together. Others greatly increased the efficiency and speed of typing by using word prediction or abbreviation expansion. Special adaptive keyboards were available in various sizes and designs. Interfaces allow severely disabled individuals to enter characters into word processors with a single switch using Morse code, a scanning character screen, joysticks, track balls, touch screens, a mouse, or even an Unmouse. After my second visit, I had picked out a small keyboard to order for my home computer and some software to make my typing easier.

The equipment is fantastic, but just as important is the invaluable advice from our center's Regional Consultant, Harriet Forbis, who not only presents many options to solve a consumer's problems but also plans workshops, demonstrations, home visits, tech expos, and many other activities to keep people in this region well informed of the latest or best technology to make life more productive for all citizens, even those with bodies or minds that may not be considered average.

Today, because of back and pressure sore problems, I use a "tip-in-place" power wheelchair, a van equipped with a rotary lift, hand controls, and RV camping equipment. In my briefcase I carry a color notebook computer and my miniature ham radio hand-held transceiver for communications. I keep active as President of the North Carolina Paraplegia Association and Vice President of the Adaptables Organization, a newly formed group providing information about the rights of the disabled population under the new ADA legislation. This group has been helped by information from the Assistive Technology Center and in turn has provided volunteer labor for the center. It has also just activated the Adaptables Bulletin Board System, which, in conjunction with other area BBSs and the Family Support Network will provide local communications and will disseminate information about assistive technology in North Carolina.

Finally, after starting out as a volunteer, I am now spending my most productive time serving as a half-time employee at the center sharing my experiences and problem-solving ability with persons learning about the latest technology to improve their lives. Because of accidents, disease, violence, genetic birth defects, and aging, more people are added to the ranks of the disabled every day. It is important that today's consumers and users of technology learn to help other disabled consumers become more aware and knowledgeable of this information. Who better than the individual who uses technology daily could help consumers new to technology learn more about it?

I will let my colleague Ricki Cook, North Carolina Assistive Technology Project State Director, discuss the details of recommended modifications of the Tech. Act, but as a long-time consumer, I would vigorously add my voice to those calling for the renewal of this most-needed Act. I can't wait to see what the future will bring to the disabled population from the treasure chest of assistive technology devices now on the drawing boards that will soon become reality.

Thank you for your time and attention. I will be happy to try to answer any questions you might have.

Chairman OWENS. Thank you.

Ms. Ricki Cook.

Ms. COOK. Thank you, Major Owens. It is a pleasure to be invited and I really thank you for that invitation. I appreciate the expertise that is before me with the membership of your committee.

New York is an excellent example of the technology project, and of course we are proud of our North Carolina project and the sup-

port that we have gotten from Cass Ballenger. Nebraska, in turn, with Mark Schultz as project director there, is doing an excellent job. New Jersey is a fairly new project, but I know UCP in New Jersey has done quite a bit over the years in engineering and the field of rehabilitation technology. So I appreciate the knowledge that is represented here before me.

I submit to you my written document for the record. It is lengthy so I am not going to read every bit of it. I am going to hit the high points.

As most of you know, technology really does make a difference in the lives of people with disabilities. Steve has told you about his own personal experiences. Many, many consumers could tell you that from each of your States and many of them probably have, because I know you have had contact with them.

Every day in our demonstration centers we see—in the faces of people that come to our demonstration centers, the consumers, the family members and friends that come with them—that technology can make a real difference. It can mean a difference of whether you can work or not, whether you can go to school, and whether you achieve what you would like to with your life.

It makes a difference in recreation, for a child to be able to play with a toy and to learn just as any other child, for an adult to be able to participate in recreational leisure activities, as well as work, and to do simple things like go on a vacation. These things we take for granted, but thanks to you and other groups that have worked to pull together the Assistive Technology Act that we currently have and the revision, it makes a great deal of difference to everyone's lives.

We do feel that it is important to continue the reauthorization of the Assistive Technology Act for at least 3 more years to allow for the systems change that really needs to occur. And this is all for the greater independence of people with disabilities. That is our overall purpose.

We would like the committee to consider, as has been mentioned earlier in some testimony, looking at the States and the size of the States and the populations of the States involved and in the awards of funding and putting some language into the bill that would encourage looking at relative population. For example, with New York getting the same amount of money as a small State like Delaware, it doesn't make sense. So we would like you to consider that.

The programs are currently funded at the minimum levels, and that concerns us. There are some very innovative, very creative ideas within the draft bill, and we support many of those. We are concerned at the same time, however, that if the minimum funding continues, how are these going to be possible to accomplish? So, we would like you to consider that in looking at what is realistic with the funding levels.

We also support and have started steps in North Carolina to put some special emphasis on minorities and underserved. We are very pleased to see language in the draft bill on that. We have what we call technology expansion projects that we award to local grass-roots programs on a competitive basis each year. And those are \$25,000 grants to small programs that are serving people with disabilities and want to expand into assistive technology areas.

One of our priorities this year, that we will be able to award in July, is underserved and minority populations' priority.

In regards to advocacy, we frankly support advocacy as an activity within the Act, and I know in North Carolina that we are doing a lot of advocacy. Many of the State projects are, but we would like to go on record as supporting advocacy.

We are not supportive of set-asides, whether it be advocacy you are talking about or training, information referral, any of the activities. We really feel because the State projects are small and have small amounts of money with really large responsibilities, we really would hate to see set-asides for any activity. It sets you up for a situation where you are going to divvy up the small pot of money into even smaller pots. It kind of ties your hands; you don't have the flexibility to enter into a lot of the kind of relationships if you are mandated to spend a certain percent of money. I know there is some compromise work being done in that area.

Another major concern we have is, as I mentioned earlier, there are some new things in the reauthorization and many of them are excellent. There are a lot of additional reporting and data collection responsibilities—we are very much into data collection and have a lot of good data—but we want to also be careful about how many more responsibilities we are placing on the States that have minimal amounts of administrative dollars. And we really want to put most of our dollars into service delivery, systems change, and being consumer responsive.

We support the low-interest loan programs. In North Carolina last year, a consumer group in North Carolina, the Programs for Accessible Living in Charlotte, has received one of the Title II demonstrations, the only one that was awarded last year for low-interest loan programs.

So it is getting underway and we are very actively involved from the development stage of the grant on into the implementation of it. So we see that it's a very good option to have low-interest loan programs.

We see a lot of it is just making the banks aware of the needs of people with disabilities and the advisability of awarding loans and maybe some better terms, longer amounts of time, to pay off a loan for an electric wheelchair.

I know Mr. Ballenger asked Steve earlier today how much this wheelchair cost. He said about \$10,000. Most of us are not used to having to go out and buy something that is \$10,000 just like that without a loan. And that is true for most consumers.

So they need some options there. And the low-interest loan programs are excellent options. What concerns us is that right now there is a suggestion for a required match from the States. North Carolina is in fairly good shape, so I am really not speaking from a personal viewpoint. I think we could probably come up with some match.

Most other States I talk to have trouble with their State legislatures at this point in getting new dollars. So you need to consider that. You will not be awarding to some of the more wealthier States and some of the more needy States may not get special awards for things like low-financing programs if you require a huge match.

In regard to recycling programs, again, we are dabbling in that. I think most States are. We would encourage the committee to look at some low-cost, efficient, and low-liability ways to administer recycling. The best way we have found is to have a database of information where you keep information on who is trying to sell a piece of equipment, who has something to give away, and who wants to buy it or who wants to obtain a piece of equipment.

There is a lot of used equipment out there. But the communication is not there. So we would encourage instead of setting up warehousing, which is high cost, high maintenance, or physical recycling centers, we are suggesting more information exchange, both through databases and electronic bulletin boards. And it would be, we feel, a very cost-efficient way to go about it.

Iowa, in particular, has had an excellent program going for a long time and it would be a model you might want to look at. They have done a lot of that. There are a lot of liability issues with a lot of health concerns right now with used equipment that you need to consider. People are concerned, and might even want to file suit, if you are responsible for equipment and exchange the equipment if there is some communicable disease or things like that.

So there are health issues and liability issues; there are financial issues of having warehousing; and transportation issues of transporting equipment from place to place, even within a State. So recycling is a very good idea but one that needs to be thought through.

North Carolina has four demonstration centers right now and hopefully by the end of this calendar year, we will have two more through some additional funding outside of the Assistive Technology Act.

These demonstration centers are very effective because you can come in and try things out. None of us would go buy a stereo system without going to the store and seeing what our options were, and you know there is a wide range of options. You want to be able to see the high-price item as well as the low price and see where your pocketbook fits. If you are a high-tech person and like all the gadgets or if you want something very simple, you want to get your hands on it.

So, the same is true with assistive technology. You want to be able to try it out and figure out what you are comfortable with and what you can afford, either from your pocketbook personally or what an agency will be able to help you pay for. So, we have found the demonstration centers to be the prime activity that is very well received by the public. It is a physical place where you can see devices and can get an awareness of what technology is all about.

So we do a lot of different activity through the demonstration centers. Mr. Ballenger's question about getting outreach to rural areas is very valid. You can do that without having to go to the expense of a van; all of our equipment is very mobile and we take it out. Our regional consultant covers a whole region, several counties within the State, taking the devices to the individual in their home or at work, and setting it up to be tried out.

That has worked for us and we just haven't had the funds to look at vans and upkeep of vans. Finding a driver that would also be a rehabilitation engineer is sometimes difficult. They are on the road

all the time and it is not a fun job, so we have a lot of turnover in staff.

There are a lot of issues there, too, and I know some of the other States have tried it. Going into the mountains of North Carolina, if you had a big enough vehicle to hold all the different types of equipment, you couldn't get around in the mountains.

So we have tried to look for the best low-cost ways, and effective ways to make these things happen.

In regards to technical assistance, we have been very, very pleased with the RESNA technical assistance project, the current contractor for technical assistance. I can't say enough good things about them; they have done a great job. We feel it should be competitive, of course, but we are concerned that if you divide up—you have got a lot of different listings right now of different kinds of technical assistance—again, you divide a small pot of money for technical assistance and you may not get assistance as effective as you would like. Just as consumers would rather have one-stop shopping with a place to look at technology, we as State projects would like to have one-stop shopping, one group that we work with closely that can meet our needs on technical assistance.

Under Title II activities, we support the continuation of public awareness, training, and demonstration programs to look at grass-roots programs that demonstrate successful service delivery. As for clarification for those that are not familiar with it, under the current law, State agencies cannot apply for the Title II demonstration projects. Most of the State technology grants run or flow through a State agency, so our hands have been tied in expanding some of our programs.

So, what we do right now is go out and try to encourage other programs; we work with the Program for Accessible Living to apply for a grant. We try to get those resources in our State as much as possible, but many times it would be more effective to add on to the State programs and work with the demonstration under Title II. In some instances, it should be open to all entities; the State agency should not be ruled out.

Maybe we need new ideas and maybe we don't, but there are two effective ideas that we think would consolidate some of the ideas that are in the draft law, under Title II. We suggest a National Institute of Assistive Technology Study to coordinate nationally the development, dissemination, and evaluation of education and training curriculum. So we are looking at development of curriculum, materials, and methods of service provision related to technology.

What is happening right now is that a lot of the States are developing curricula, and there is a lack of good communication going on between States. Because we don't have a good mechanism, we are trying to do so much. So we would like emphasis on that because we know professional development is lacking in some professions. We would like to encourage professional development through some national effort.

The second idea is a National Clearinghouse on Assistive Technology Research, Information, and Public Awareness Materials. Again, we feel there is some repetition of activities going on across the Nation. So those are two new ideas if you would like to consider them.

In your letter, Chairman Owens, you had asked us to talk about some keys to the success that we have had in North Carolina, so I will share a few of those. Consumer involvement, of course, has been very, very critical. We have had consumer involvement from day one, from the first day we even started talking about writing the grant, before we ever even were awarded it. Just as Steve said, we use many consumers in our activities such as our demonstration centers and training. Many of our staff are consumers also. We feel very good about our consumer involvement. We feel that it is critical, and we appreciate the committee's including that again in the reauthorization language.

Second, utilization of existing resources. Because our pot of money is small and because we want to coordinate with other agencies for every activity we get involved in, we pull one or more different groups together to make it happen. And that is a very effective way to do it. The interagency cooperation has been excellent and that is something that we push all of the time.

Third, we have highly qualified staff. Again, in Title II, we need to emphasize training to keep that level high for both professionals that work directly with our products and the many other professionals that are in the related fields. We have an excellent staff and have been able to recruit people with a lot of experience. So that really helped us get off the ground quickly.

We have had very good support from our administrative agency. In our case, that has been vocational rehabilitation. They have really been there for us and helped us get through some of the bureaucracy. Even though vocational rehabilitation typically works only with people of adult age, they have been very, very supportive of us in looking at all ages, all disability areas, and all aspects of life.

And last of all, I think we, as staff, have a very thorough understanding of systems change and the need to look at systems change as the thrust of all of our activities. This is the third systems change Federal grant that I have run, so I am very strong in that area and very committed to it. My staff is, likewise, very committed and understand the need for systems change.

We have shared this vision with many other agencies, legislators, employers, consumer groups, professional groups. We are pulling those groups together right now in a partnership effort. We had what we call an Assistive Technology Summit about two weeks ago, to pull that together and to begin planning for the future after the Federal dollars end.

We feel overall that our philosophy is that together we can make a difference. We appreciate the time that you have given us to testify today.

Thank you.

[The prepared statement of Ms. Cook follows:]

Testimony

Ricki Cook
Project Director
North Carolina Assistive Technology Project

Technology makes a real difference in the lives of people with disabilities. Steve Sallee, my fellow panelist from North Carolina, will tell you this clearly from his own experience as a technology user. We, the staff of the North Carolina Assistive Technology Project (NCATP) see it everyday - in the faces of consumers and their families when they visit one of our regional demonstration centers to try out a device. Acquiring the appropriate adaptive equipment often means an individual can now work, go to school, play with friends, tell a loved one how they feel, or go on a vacation - all the things most of us take for granted.

The reauthorization of the Tech Act is critical to meeting the on-going need for persons with disabilities to achieve greater independence in their lives. In a constantly changing field such as technology, it is impossible for consumers or professionals to keep up with all the new products and product applications in addition to their regular work and lives. The concentrated and coordinated efforts of the state technology grant provide a central contact point for anyone needing essential information and technical assistance in the selection of adaptive devices.

A minimum of a three (3) year reauthorization period for the state technology programs funded under Title I of the Act is necessary. In addition, we recommend to you that it is now time to move the technology programs into a state plan process instead of a competitive grant process. Under this process state projects that have successfully completed five (5) years through the state development grant and the extension grant cycles, would submit a three (3) year state plan of services for approval by the Secretary or his/her designee. We suggest this move to state allotments should be based on the state's relative population and per capita income. The state grant application process is appropriate for the first five years. However, after state projects have demonstrated success in accomplishing the purposes of the act, the staff time to develop and write 100-200 page grant applications would be better used in providing services and conducting systems change efforts.

Further discussion follows regarding issues being considered in the reauthorization of the Tech Act.

Purposes (page 3 of draft bill)

The Tech Act remains a vital piece of federal legislation for improving access to and removing barriers of technology related assistance. As we have seen in the relatively short time since the law's inception, much progress has been made by individual states to increase awareness of assistive technology's benefits. In addition, many state grantees have successfully begun the slow but important process of true systems change. However, we cannot abandon the initial purposes of the act (for example, information, training, and awareness) in favor of a law that overburdens states with reporting, regulatory, advocacy and other administrative requirements. The true purpose of the act should remain to help people with disabilities learn about and obtain needed assistive technologies. We find the revised purposes straying from this intent. The draft bill appears to: 1) require state projects to regulate in areas the projects have no authorized authority over, 2) place excessive monitoring duties upon the state projects and 3) emphasize regulated advocacy instead of promoting positive systems change. Consumers have repeatedly asked for access to assistive technology. This is what the reauthorized legislation should strive to provide.

Advocacy (throughout draft bill)

We support advocacy as an approved activity under the Tech Act. I personally am a supporter of advocacy as evidenced in my previous work as a staff member of a Client Assistance Program (CAP) in another state - back in the early '80s as CAP began nationally. In North Carolina we have a very positive, cooperative relationship with the state protection and advocacy agency. Much cross referral occurs between NCATP and advocacy programs such as the Governor's Advocacy Council on Persons with Disabilities, the Client Assistance Program, and the Exceptional Children's Assistance Center. We work together well and plan to continue expanding our joint initiatives to cosponsor consumer self-advocacy training, to educate the state regarding electronic accessibility issues, etc.

However, we oppose any set aside amount designated to a specific agency for this activity or any other activity of the state programs. Likewise we would oppose a 10% set aside to go to the state vocational rehabilitation agency for training of rehab staff, or 15% to the University Affiliated Program's (UAP's) for training of other professionals, or 30% for information and referral services, or 60% for demonstration and tryout, etc. All of these are major activities under the law and meet critical needs. As you can readily see, through this example, however the state programs would soon have their hands tied and accomplish less in a less cost efficient manner if mandated set asides become a part of the law.

The state technology grants are small awards of money with huge amounts of responsibility to serve all ages, all disabilities, across all areas of technology and life domains. The beauty of the current law lies in its allowing states the flexibility to work out cooperative relationships and initiatives to accomplish the mammoth tasks set out in the law. If we begin to "divvy up" this small grant into even smaller pots of money and require the dollars go to a specific agency, then we set ourselves up for failure.

In addition, NIDRR under the current Tech Act implementation has emphasized to state projects the need to ensure project funds are not used to supplant activities other programs are mandated to perform under the law. This should apply to advocacy as well as it does other activities. We encourage congress not to set a precedent for set asides under the act, not to supplant activities currently mandated and funded through other federal legislation.

Required Activities (page 6 of draft bill)

Implementation of primary concepts such as systems change, consumer responsiveness and advocacy are best achieved if state flexibility in coordination and funding of specific activities is maintained. A major strength of the original act is that states could design and develop these ideals through a statewide program of technology related assistance that best fit their unique needs and environments. Maintaining the states flexibility is critical in the reauthorized Tech Act. We find the proposed law too restrictive on states for causing systems change, developing consumer-responsive, consumer-driven activities and providing advocacy services. As currently stated in the staff draft bill, such activities place undue burden on state grantees for reporting, carrying out legislative and policy activities and providing consumer advocacy. In addition, the proposed, required activities place state projects in a position of changing policy of other state agencies when in fact the projects are not in any legal position to do so. Systems change occurs best when working with a system to create positive change, enlisting the system so it takes ownership of both the problem and it's resolution. The system then modify its' policies and procedures that are creating barriers with input from the state tech program, consumer groups and advocacy groups.

Further, advocacy efforts should be within the state projects cooperative relationships perview just as other activities are. Advocacy should not be mandated as either a set-aside or to be provided by any one state agency.

Progress Reports (page 19 of draft bill)

We acknowledge and support the need for accountability in a program as large as the Tech Act. However, we fear that the level of regulation, data collection, monitoring and reporting proposed in the draft bill will undermine states' efforts for improving access to and removing barriers of technology related assistance. Further, such reporting demands may or may not be achievable by all state programs depending on their administrative location, relationship to other agencies, etc. There is, in effect, a demand on state projects to become the "political watchdog" of assistive technology. Ultimately, this may very well alienate those agencies the project desires to cooperate with, and could result in decreased benefits to those consumers most in need of assistive technology. The positive relationships we have developed over the past few years may be destroyed resulting in slower and less effective systems change.

Low Interest Loan Programs (page 16 of draft bill)

Increased access to assistive technology devices and services is a goal for all citizens with disabilities. Unfortunately, as is the case in many other parts of our health care system, financial constraints often preclude access to the very technologies and services most needed. These constraints may bear directly upon the individual with a disability or their family, or they may be upon the insurer, agency or service organization working with that individual. Faced with a climate of budget tightening both at the system and personal levels, creative funding alternatives are needed to help persons with disabilities and families acquire assistive technology.

Financial loan programs have successfully demonstrated that they offer greater individual choice in purchasing assistive technologies. Such autonomy leads to increased independence and greater opportunities for full participation in the mainstream of our society. Currently, approximately six states have operational loan programs with many others in the planning or development stages.

Here in North Carolina, the consumer-run independent living center, Programs for Accessible Living (PAL) was awarded a two-year demonstration grant under Title II of the 1988 Tech Act to develop and test a model loan financing program. PAL's program is based on a public-private partnership whereby a bank would use their funds for the loan with the federal grant being used as a guarantee and possibly a loan subsidy. Currently in the first few months of operation, PAL is negotiating with one of the largest banks in the southeastern United States to participate in the program. If these negotiations are successful, we expect the first consumer loans could be made by the end of this calendar year.

Recognizing each state's uniqueness, we support states' choice in the design and development of loan financing programs. However, as we have learned from Maine's highly successful model, the amount of initial capital investment is directly related to the program's success. (Maine's program was financed with a \$5 million state bond.) Therefore, we also support increased federal seed money to states for loan program development. We would recommend a base level of support with additional federal dollars available based upon the state's ability to attract public or private dollars into the program. An allocation system based totally upon matching state dollars, however, would preclude many states' ability to participate, thereby denying consumers and families access to loans. The reauthorized act should not include this type of disparate federal allocation.

Recycling (page 17 of draft bill)

Equipment recycling is an important yet often overlooked component in the delivery of assistive technology. A recent study shows equipment abandonment rates of almost 30% (Phillips and Zhao, 1993). Abandonment is highest in the first year and after five years of use. This indicates that 1) user needs may not be adequately considered in device selection, 2) many devices fail early on, and 3) user needs change over time. While today's technology often has a short shelf-life, for many people with disabilities any piece of assistive technology is often more than they had before. Equipment recycling offers benefits to technology users as well as agencies and organizations who pay for this equipment. We strongly encourage states to develop and promote equipment recycling programs. However, based on our experience in North Carolina and that of other states, we recommend that recycling take the form of used equipment referral services rather than warehouses or recycling centers. For example, here in North Carolina we operate the "Technology Exchange Post." This is a computerized listing of over 125 used pieces of equipment for sale as well as items wanted. Consumers, families and providers regularly call in with items to sell or equipment they are looking for. Our Consumer Resource Specialist then provides them with a name and phone number to call for a possible match to their needs. In addition, the Exchange Post is mailed monthly to other programs around the state, and soon will be offered electronically over our statewide computer bulletin board system. Using this type of used equipment referral system, state projects help match buyers and sellers while avoiding the costs and liabilities of directly dealing with many pieces of equipment.

Demonstration Centers (page 17 of draft bill)

Assistive technology demonstration centers have proven to be one of the North Carolina Assistive Technology Project's most beneficial components. Through our four regional centers, consumers, families and providers have the opportunity for hands-on exploration with a variety of assistive technology devices. Demonstration products include low-tech aids for daily living as well as more costly ones for computer access, augmentative communication devices and environmental controls. In our second year of operation, over 500 people visited these centers for one-on-one or small group assistance. In addition the centers host workshops, vendor demonstrations and other training sessions providing more formal learning experiences with new products. This opportunity for no-pressure, device try-out is not available through any other means in most states or communities. We strongly support the development of assistive technology demonstration centers as part of states' overall service delivery systems. However, we would encourage states' choice of where to locate such centers and who is best qualified to operate the center based upon demographics and existing programmatic and staff resources.

Technical Assistance (page 25 of draft bill)

The technical assistance provided by RESNA under contract to the NIDRR has been invaluable during the development grant period. Here in North Carolina, we have made extensive use of materials, training workshops, teleconferences, and electronic communication offered by the RESNA TA Project. We support ongoing technical assistance activities in the reauthorized act. However, we do not recommend subdividing the technical assistance efforts into separate and distinct entities based on the nature of the program being assisted. As a "technical assistance customer", it is far easier to have "one-stop shopping" for all our questions on implementing programs of technology related assistance. By breaking the technical assistance activities into many discreet components, we fear that the assistance will also become fragmented and ultimately of little benefit to the state projects.

Title II

In addition to reauthorization of state programs funded under Title I of the act, we strongly support reauthorization of public awareness, training, and demonstration programs funded under Title II. These programs provide opportunities to develop and test innovative concepts and models meeting many assistive technology service delivery needs. We recommend that competition for grant funds under Title II be open to all programs, including public and private for-profit and non-profit organizations, institutions of higher education and state agencies to ensure the most qualified organizations are eligible to apply and receive awards.

We also recommend two additions to Title II authorizations. The first would be the formation of a National Institute of Assistive Technology Studies. Such an institute would be responsible for developing, demonstrating, disseminating, and evaluating curricula, materials, methods and outcomes used to educate and train individuals regarding the provision of technology related assistance; conducting education and training sessions for both consumers and providers of assistive technology; and acting as a national resource and information center on the education and training of individuals regarding the provision of technology related assistance.

A National Institute of Assistive Technology Studies is needed to coordinate nationally the development, dissemination, and evaluation of education and training curricula, materials and methods relating to assistive technology provision. This applies to preservice and inservice education and training of professionals, as well as families and consumers. There is too much repetition of materials development occurring, much of it federally funded. There is also no systematic evaluation of education and training outcomes. Such a National Institute could act as a clearinghouse for best education and training practices, host ongoing training sessions, prepare materials for national dissemination, and help evaluate outcomes of education and training programs.

The second addition we suggest is the formation of a National Clearinghouse of Assistive Technology Research, Information and Public Awareness Materials. Such a clearinghouse is needed to develop, collect and disseminate appropriate information materials on assistive technology. There is currently no organization whose sole purpose is to house and disseminate such materials. This creates endless duplication and repetition in the production of information and awareness products. Such a clearinghouse would benefit all groups, including consumers, families, service providers, educators, researchers and policy makers.

State agencies, as well as institutions of higher education, nonprofit and for-profit entities and other public organizations should be allowed to apply for both the institute and clearinghouse programs. This ensures the most qualified organization will be selected to implement these activities under Title II. Title II applicants should be required to contact their state's Title I grantee prior to submitting an application.

Keys to Success

Major Owens requested that we tell you a little about why our North Carolina program has been so successful. I believe we can attribute our success to five (5) primary factors:

- 1) **Consumer involvement.** Consumers were a part of the initial grant development and have been involved in all major activities under the grant. Several of our project staff are consumers and many of the individuals and groups we contract with are consumers, parents or consumer organizations. We frequently have consumers as presenters at training sessions and many consumers volunteer their time in our demonstration centers or in other project initiatives.
- 2) **Utilization of existing resources, building upon the strengths and abilities of various programs and agencies through constant coordinated interagency cooperative relationships.** Every activity our project initiates includes one or more cooperative programs helping us accomplish our objectives.
- 3) **Selection of highly qualified, dedicated project staff.** The NCATP staff are tremendous. They are committed to making this world a better place for people with disabilities through awareness and knowledge of technology. Many came to the project with previous experience in rehabilitation engineering and assistive technology which enabled us to hit the ground running.
- 4) **Support of the administrating agency.** The N.C. Division of Vocational Rehabilitation Services has been extremely supportive and helped us in innumerable ways to accomplish our goals. They have "been there" for us whether it entailed walking purchase requests through the system, approving exceptions to procedures, and supporting us in making this a program for everyone of all ages and disabilities.
- 5) **Thorough understanding of systems change.** As project director of two previous systems change federal grants, I feel more comfortable than the average person with systems change. My staff and I have both an understanding and deep commitment to working within the system to create positive systems change for persons with disabilities. We share this vision with many others in North Carolina including consumers, leaders in state government, parents, legislators, professionals in related disciplines, local service providers, professional organizations, and university department heads.

Together we can make a difference! Thank you.

Chairman OWENS. Thank you.

Mr. Winnegar, New Mexico.

Mr. WINNEGAR. Thank you, Mr. Chairman. I am happy to be here. I appreciate you inviting me from New Mexico to come all the way up here. I will make my presentation short. You have my testimony.

I would first like to thank the members of the subcommittee and the staff for their work on the reauthorization of the Rehabilitation Act as well as the Individuals with Disabilities Education Act. I think both of those Acts are better.

The Rehabilitation Act provides for a streamlined eligibility process, greater consumer choice, increased independent living and personal assistance services, expanded roles of advisory councils, new transportation services and more emphasis on minority needs.

The Individuals with Disabilities Act provides greater emphasis on the individual education program and parent participation in the IEP team, as well as the students' participation in that team. It provides a clearly defined transition process for students. Parents have greater rights regarding testing and classification of their children. Special education students are to be included within the regular classroom and provided timely services. Although both Acts provided that before, I think the emphasis of this committee and the Senate work have really enhanced those Acts.

Chairman Owens, Congressman Don Payne and staff of the subcommittee, as well as staff of the Department of Education, did a site visit of the New Mexico Technology Assistance Program in 1991. The committee was provided a demonstration of the New Mexico eligibility determination system, a computerized system which cross-references all the complicated laws, medicaid, medicare, veterans affairs, vocation rehabilitation, special education, and private insurance, for people with disabilities to get access to services like occupational therapy, devices like wheelchairs. It gives you an indication of what the right doctor's order is to write for medicaid, what you have to do to get access to private insurance.

What continues to be the problem with technology assistance is that we are dealing with all these wonderful laws that we worked so hard on that have difficulty working together to get what people with disabilities need. And people with disabilities still need access to their own homes; they still need transportation services; they still need devices and services to get along in the world, to seek employment, to participate in education. And without the integration of a program like the Technology-Related Assistance Act, those barriers will continue.

I was extremely impressed that after Chairman Owens visited our Pueblos and our tribes in New Mexico that he went back and really emphasized transportation and minority outreach within the Rehabilitation Act.

As far as transportation for us in New Mexico, we have about a hundred—I hope I am right here—but about 121,000 square miles of territory to cover in New Mexico, and most of our services are located in Albuquerque, our largest city, which has a population of about 500,000. For people to get a doctor's order on the Alamo Navaho reservation, they have to travel to Albuquerque, because many doctors won't write an order over the telephone—having not

visited with the person—and that order might be for a simple device or it might be for a life-threatening device. And so without that personal visit to Albuquerque, there is no way to get there.

Besides transportation for people who are working, we need transportation for people who need to get to devices. In New Mexico, we have a mobile view. We have an occupational therapist and rehabilitation engineer that travel the whole State. We have invested in that infrastructure because our service delivery has to reach people.

We have invested a lot of our time in people who are elderly that need access to their homes. People with disabilities who leave a hospital may be given a wheelchair to go home with but then they can't get in their trailer; they can't get to their bathroom. And these are problems that the Technology-Related Assistance Act needs to continue to work on.

We saw with the Research Triangle evaluation that people with disabilities were saying, "Fine, work on systems change, but we also need some services while you are doing it." You can't get a sense of people with disabilities without working with people with disabilities. And I have to emphasize that we have got to provide some services while we are working on this systems change activity.

I can't see the resources in this most crucial program being reduced; they need to be increased. National health care, national health care policy, could be benefited by this Technology-Related Assistance Act for people with disabilities. I see that the Technology-Related Assistance Act can focus on all systems, all ages; can work between groups, can work with transportation, can work with private insurance and can work with these bureaucratic systems that are developed both to help people but also to prevent too much access because the States don't have enough money to go around.

I thank you for my chance to talk to you. My testimony is available. It is not too long.

I fully support the reauthorization for an additional 5 years. I like the competitive nature of it. I like the sense that we are changing things, that it is not a perpetual program. I hope that the House side of this bill will go on to strengthen the Senate side and we will get it passed soon.

Thank you.

[The prepared statement of Mr. Winnegar follows:]



ALAN D. MORGAN
STATE SUPERINTENDENT OF
PUBLIC INSTRUCTION

TERRY P. BRIGANCE
ASSISTANT SUPERINTENDENT FOR
VOCATIONAL REHABILITATION

June 7, 1993

To: The Honorable Chairperson, Major R. Owens
Subcommittee on Select Education and Civil Rights
U.S. House of Representatives
518 House Annex 1
Washington, D.C. 20515-6107

Dear Congressman Owens:

Thank you very much for your invitation to provide testimony on the reauthorization of the Technology-Related Assistance for Individuals with Disabilities Act. As the former director of The New Mexico Technology Assistance Program (NMTAP) of the State Department of Education, and the new Deputy Director of Special Services (which includes the NMTAP) for the New Mexico Division of Vocational Rehabilitation, State Department of Education, I hope my comments will be useful to the Subcommittee.

I would first like to thank the Members of the Subcommittee for their work on the re-authorization of the Rehabilitation Act and the individuals with Disabilities Education Act (IDEA). You have provided better legislation in both cases. The Rehabilitation Act provides for a streamlined eligibility process, greater consumer choice, increased independent living and personal assistance services, expanded roles of advisory councils, new transportation services and more emphasis on minority needs.

Andy J. Winnegar, New Mexico Technology Assistance Program (NMTAP) 1-800-866-ABLE

The Yucca is a symbol of sturdiness and can exist where others perish

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The Individuals with Disabilities Act places greater emphasis on the individualized Educational Program (IEP) and parent participation on the IEP team. It provides a clearly defined transitional process for students. Parents have greater rights regarding testing and classification of their children. Special Education students are to be included within the regular classroom and provided timely services.

Appeal procedures regarding any aspect of the individualized programs of both Acts were more clearly defined, and funding was provided for parent and client advocates. The standardization of terminology and emphasis on coordination between the two systems should improve services for people with disabilities.

Chairperson Major Owens, and Congressman Donald Paine, with staff of the Subcommittee on Select Education took part in a site visit of the New Mexico Technology Assistance Program in November of 1991. The Committee members were provided a demonstration of the New Mexico Eligibility Determination System (NMEDS), the first computerized knowledge-based system to identify assistive technology funding options for people with disabilities.

The NMEDS provides written reports for consumers to access funding for assistive technology through comparing and matching appropriate public and private funding targets, presenting coverage options, tracking and updating the public funding eligibility requirements and appeal procedures and recommending strategies for obtaining devices and services which may not be covered. I am pleased to report that this computerized knowledge based system will be provided to all interested States this coming summer.

This summer the American Indians with Disabilities Public Awareness Campaign (AIDPAC), will be also be concluded. AIDPAC was conducted in conjunction with Alaska Public Radio's, National Native News, Dr. Everett Rogers and Assistive Technologies of Alaska through funding under Title II, part C of the Act. The AIDPAC provided paid radio ads, T.V. and one to one peer awareness and outreach regarding Assistive Technologies for Native Americans with Disabilities

throughout the country. A final evaluation report will be prepared by Dr. Rogers and provided to the Subcommittee in the fall of 1993.

I am sorry to report to you, however, that expert public and private funding knowledge, advocacy, awareness and training activities alone will not end the extreme hardships which people with disabilities face in this country. Assistive Technologies can help many people with disabilities, yet increased public expenditures will be needed.

The problems regarding in home access continue to be a major barrier for people experiencing physical disabilities. Many people are sent home from the hospital with a wheelchair or crutches, yet no way to get in their own front doors. The needs of seniors with disabilities for ramps, handrails and other home modifications is especially acute. Each day people are forced to leave their homes, extend hospital stays and enter costly nursing facilities because of the lack of funding for home modifications and personal assistant services. We must increase our in home service delivery and coordination efforts provided through the Technology Related Assistance Act so that people with disabilities can remain in their own homes.

The lack of transportation also continues to be a major barrier for people with disabilities seeking access to education, employment and community activities. Wheelchair lifts, car adaptations and hand controls are not covered items for Medicaid and Medicare. We need an increased emphasis on transportation device and service options and coordination in the Technology Related Assistance Act.

American Indians with Disabilities living in rural communities are faced with great barriers to their independence and prosperity. Many Native People lack indoor plumbing, telephones, paved roads, and other modern conveniences. The U.S. Bureau of the Census (1990) ranks New Mexico 49th for individual and family income. The state had the highest percentage of Hispanics and the second highest percentage of Native Americans—38.2% and 8.9%, respectively.

Andy J. Winnegar, New Mexico Technology Assistance Program (NMTAP) 1-800-866-ABLE

We need greater efforts to reach minority populations and greater resources to address their specific needs.

As a result of New Mexico receiving the U.S. Department of Education's NIDRR Technology-Related Assistance State Grant Award, programs have been developed and expanded to address assistive technology needs of people with disabilities. A consumer-responsive administrative and management system has been established in New Mexico to provide coordination and provision of services. NMTAP offers a toll free 1-800 number, and provides six professional staff members who have personal experience as users, developers and trainers in assistive technology. The NMTAP, through a contractual arrangement provides a mobile van equipped with assistive technology devices and power tools, and staffed by an Occupational Therapist and an Assistive Technologist to provide statewide services to individuals of all ages who have disabilities.

The re-authorized Act should allow for this type of statewide service coordination and service provision to continue as part of State's system change activities. This type of strategy was recommended in the National Evaluation of State Grant Programs prepared for the NIDRR by the Research Triangle Institute. People with disabilities want services and devices now. The Technology Related Assistance Act can directly assist in meeting those needs which are not covered by existing systems while working to expand and change systems to meet future needs.

People with disabilities do not have the resources to purchase expensive assistive technologies. Devices and related services such as environmental controls, speech and communication products, home modifications, recreational equipment, specialized training and transportation equipment and services must rely on public policy and public funding to be of any assistance to people with disabilities. Innovation must occur in government, in citizen's access of government programs, and in the operations of various related non-profit and for-profit programs and services.

Andy J. Winnegar, New Mexico Technology Assistance Program (NMTAP) 1-800-866-ABLE

Today I would like to provide support for the Technology Related Assistance Act to be re-authorized for an additional five years to assist states to achieve and implement a consumer-responsive statewide system of technology-related assistance for individuals of all ages with disabilities.

I would recommend the following regarding the re-authorization:

1. Mandate States who receive funding through the Technology Related Assistance for People with Disabilities Act to develop consumer responsive programs which coordinate and provide assistive technology services and devices for people with disabilities regardless of their age or disability.
2. Focus on improved coordination between existing systems such as Vocational Rehabilitation, Special Education, Medicaid, Medicare, Veterans Affairs, private insurance, and/or National Health Policy to identify and expand funding and services for individuals with disabilities.
3. The Technology Related Assistance State Programs should assist States, employers, transportation providers and others to meet the demands of the Americans with Disabilities Act.
4. The Act should assist States to deal with the expanding health care crisis through a coordinated and consumer responsive approach to service delivery for people with disabilities, with an emphasis placed on in-home and community based services.
5. Centralized service coordination, expert funding knowledge, evaluation and training, and last resort purchasing and/or financing of devices and services are extremely important and need to be expanded and maintained to assist people with disabilities to achieve greater independence, productivity and choice.

6. The re-authorization of the Act should place emphasis and mandates on documentation of achievements by States with specific evaluation and outcome measures of progress within each state funded through Title 1-Grants to States. The need for documentation of what works best is important to improve service delivery, awareness and training activities.

7. Joint efforts between state programs, community advocates, universities and non-profits and for profits are necessary to increase coordination of services for people with disabilities. To exclude any important player from competition for funds under the Act will decrease interaction and hinder effective collaboration and coordination of efforts. I would recommend that no requirement for contracting with any vendor of advocacy services be included in the re-authorization.

8. The Technology Related Assistance Act needs to target funding specific to the identified service system gaps. Many people who are not covered by any system of health care, lack the resources to obtain Assistive Technologies. States have continued to limit public funding options for assistive technology, as budgets have tightened. Insurers have continued to tighten coverage rules, increase premiums and limit access through preexisting condition/s exclusion rules. In New Mexico our population faces the worst access to health care in the country. Without federal assistance and guidance there is little hope for the future.

9. We need to continue awareness activities by providing people with disabilities culturally appropriate information which is personal and relevant regarding assistive technology. Minorities and low incident disability groups are not receiving information and training regarding assistive technologies and more efforts are needed to get the information out in appropriate formats.

Thank you very much for requesting my testimony. Please feel free to ask me any questions you may have.

Andrew J. Winnegar
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EDUCATION:

University of Wisconsin-Stout, 1977: M.S. in Vocational Rehabilitation/Vocational Evaluation.

University of North Texas, 1974: B.A. in Sociology and Economics.

POST GRADUATE WORK:

University of New Mexico, School Law, 1992, School Budgeting, 1991, Organization Development, 1990, Program Planning & Development, 1988, Instructional Supervision, 1987.

Highlands University, 1989, Educational Finance.

University of Oklahoma, Executive Leadership, 1989, Motivation and Management 1989.

University of Arkansas, Learning Disabilities Identification and Assessment, 1984.

University of Alabama-Birmingham, Management and Supervision, 1981.

New York University, Psychological Assessment and Deafness, 1979.

University of Texas, Program Evaluation, 1976.

EMPLOYMENT:

Deputy Director Special Services, Division of Vocational Rehabilitation, December 1992-Present. Director, New Mexico Technology Assistance Program, June 1990 to December 1992. Grants Manager/Facility Specialist/Supported Employment Coordinator, July 1987-June 1990, Division of Vocational Rehabilitation, State Department of Education, Santa Fe, New Mexico.

School Consultant/Transition Coordinator, High Plains Regional Cooperative, Governors Committee on Concerns for the Handicapped, Region 9 Cooperative, Springer, Ruidoso, and Santa Fe, New Mexico, October 1986 to July 1987.

Director, Summit Independent Living Center, Missoula, Montana-August 1985 to October 1986.

Director, New Vistas Independent Living Center, Santa Fe, New Mexico-June 1982 to August 1985. Evaluation/Training Coordinator, and Acting Director, New Vistas Independent Living Center, Santa Fe, New Mexico-January 1980 to June 1982.

Consultant/Vocational Evaluator, Santa Maria El Mirador, Alcalde, New Mexico-September 1980 to June 1982.

EMPLOYMENT CONTINUED:

Vocational Consultant, Community Services Division, Austin State School, Austin, Texas-June 1978 to December 1979.
 Vocational Counselor, Texas School for the Deaf, Austin, Texas, January 1978 to June 1978.
 Job Placement Specialist/Vocational Evaluator, Goodwill Industries, Austin, Texas-November 1975 to December 1976.
 Counselor, Vision Quest, Tucson, Arizona, October 1974 to September 1975.

CERTIFICATION:

Education Administration, & Instructional Leader, Grades K-12, and Secondary Vocational Technology, grades 7-12, NMSDE, 1991-2001, # 208907.
 Certified Vocational Evaluation Specialist, #1218, CCWAVES, 1990-1995.
 Vocational Expert, Social Security Administration, 1980.
 Vocational Consultant, Rehabilitation Services Administration, 1980.
 McCarron-Dial System Certification, 1977.
 General Aptitude Testing Battery Certification, 1977.
 Comprehensive Diagnostic and Evaluation, #E241, State of Texas, 1977.

BOARDS AND COMMISSIONS:

Advisory Board Member, East Central Oklahoma University, Rehabilitation Program, 1991 to Present.
 Advisory Board Member, Autism Program, UNM-UAP, 1990 to Present.
 Advisory Board Member, New Mexico School For the Deaf, 1987-Present.
 Advisory Board Member, University of North Texas-Center for Rehabilitation Studies, 1988-Present.
 Council Member (Proxy representing DVR Director) Developmental Disabilities Planning Council, 1987-1991.
 State Operation of Health Programs Work Group, State of New Mexico, 1987.
 Independent Living Advisory Committee, State of Montana, 1985-1986.
 Advisory Board Member-RCEP, University of Arkansas, 1987-1989.
 Long Term Care Task Force Work Group, State of New Mexico, 1985.
 Board Member, Advocacy Inc, Austin, Texas, 1979.

Chairman OWENS. Thank you.

Mr. Ballenger.

Mr. BALLENGER. Thank you, Mr. Chairman.

I think the members of the committee would recognize how fortunate we are in North Carolina to have somebody with Steve's capabilities as well as his difficulties that gives us a knowledge of individuals involved in the technology, and at the same time he is able to show other individuals that it actually can work. And I really—he gave a little bit of his background, but you wouldn't believe all the things this guy has accomplished in his situation. But I commend Steve completely on the things.

One thing I would like to ask Ms. Cook, you mentioned volunteers, and I think you and I were talking earlier about the overhead factor that you all operate with as far as using your money for staff and your money for—well, not providing outside your office a great deal of support. You had a number. I don't know whether I am misinterpreting that or not.

Ms. COOK. Our indirect rate?

Mr. BALLENGER. Yes.

Ms. COOK. Our indirect rate is just 3.1 percent. That is because we are part of a State agency. They kind of eat part of the major cost of the primary administrative costs.

Mr. BALLENGER. And I don't know whether—to me that was rather outstanding, especially living here in Washington.

Chairman OWENS. Three percent?

Ms. COOK. Three point one percent. So you can see—

Mr. BALLENGER. That is quite an average.

Ms. COOK. You can see the contribution from the State agency there, because it costs much more than that for all of the salary flow through and bookkeeping and all the support.

Mr. BALLENGER. Well, Steve, let me ask a question. You have a van that you can travel around in. It seems to me in our discussion in Winston-Salem, you said that not only were you part of the outreach in the fact that you went around and, I don't know, spoke to rotary clubs, spoke to various and sundry areas that provide the service. At least you could get the interest there because of your ability to move out.

Mr. SALLEE. Well, that certainly has helped me with my transportation and that is in addition to the recreational aspect of having it equipped as an RV for camping. But yes, we are involved with a number of organizations.

The Adaptables group I mentioned has been very active in Winston-Salem, not only providing information to the handicapped population in terms of their rights under ADA, but also bringing in businessmen and people with responsibilities in industry and schools. They are soon going to be having a seminar on that line. So I have helped with that, and the mayor's council and other groups that have asked me to come out and maybe give a little talk.

Through the North Carolina Assistive Technology Project, I have gone out to several groups to talk and been involved in a number of things. Just recently, we had the technology fair in Rockingham Community College, another sort of rural area. Although it was in association with a crafts fair, it attracted a lot of attention as we

brought in not only computers and a number of other assistive technology devices, but there were vendors there with everything from vans to rocking beds and other equipment that people with disabilities could use. So, part of our outreach is going out to these groups.

Our regional consultant goes out much more on an individual basis, carrying everything from whole computer systems to smaller devices for communication and such. So there is a lot of outreach that way in addition to people coming into the center to see things.

Mr. BALLENGER. Let me ask you, I don't know which one I am asking, but computers seem to be so obviously an instrument of being able to do constructively, substantially more things. Is the computer industry—I mean, you showed me a whole bunch of weird little computers, that I just wondered, is the computer industry doing this or, you know, when you are only going to produce 10 computers, does that mean they are going to cost \$50,000 rather than—

Mr. SALLEE. Very often it is a minor expense to add a simple part of the program into computer. For example, making text larger on the screen may be built into the operating systems. There are computer companies that don't have that, but there are even public domain no-charge programs that can be added inexpensively. There are more expensive programs that require a special interface to hook keyboards to screens, but new computers are coming out that require a card for \$25 rather than a \$500 or \$600 interface. So those are available.

Computer companies like Apple and IBM all have sections that are very concerned about using this technology for the handicapped, so a lot of information is available in our center from IBM, Apple, and some of the other companies. They are doing a respectable job; of course, they could do more, and we hope they will.

Mr. BALLENGER. Ms. Cook, you also mentioned that—well, I think everybody recognizes technology is great, but everybody cannot afford a \$10,000 wheelchair or whatever the van might cost. You were working with a banking firm that was interested in some sort of—is it low-cost loans or just regular loans or what was that?

Ms. COOK. It is through the Title II demonstration program. Larry Trackman, who is assistant project director, is technical assistant to that grant, was telling you more about it earlier; it can be low interest or it could be better terms. We are currently negotiating with First Union Bank which looks like our best prospect at this point, since First Union is located in other States—not just North Carolina—and we can see some crossover.

Looking at using part of the Title II demonstration money as a loan guarantee, or maybe a subsidy, we are working out the negotiations right now with the banks so that people can apply for loans. And in some cases, with the interest rates right now, it would be pretty low. The low-interest rates are not as critical as having better terms or getting access to it. Sometimes consumers—say a newly injured person with spinal cord injury—a year after injury may have had huge medical bills and a lot of financial difficulty that takes a long time to recover from.

Sometimes they get bad credit ratings—not because they are bad credit risks, but because the medicare and the different agencies

have not caught up in payment—and their credit rating goes down. If they just go in cold, the bank may look at their credit rating without looking at the situation and they may not even be able to access a loan.

So it is those kind of situations that programs like Maine and some of the other States are looking at, trying to find remedy through what is most often called the low-interest loan program. But again, the interest rate may or may not—given what period of time or what year you are talking about—be the critical thing. It is accessing loans for these kinds of equipment; asking banks to give people a chance.

Mr. BALLENGER. Mr. Winnegar, since you represent a State probably that is very small in population—I don't know exactly what the population of New Mexico is.

Mr. WINNEGAR. One and a half million.

Mr. BALLENGER. And it has been mentioned twice at least, maybe three times, that the funding situation for Delaware to have the same amount of money that New York has is unfair. I am not sure where New Mexico fits in this thing, but in reality if we were to change that funding in our new law, would you not want some sort of hold harmless, at least let us have as much as we used to have before we decided to give the big money to the big States?

Mr. WINNEGAR. Well, I think outreach efforts in urban areas and outreach in rural areas have some similar issues. We have some extreme service delivery issues in urban areas: you can't get access to a doctor, a therapist. The same issues exist in the far reaches of the Navaho Nation or even 60 miles from Santa Fe.

So although I see the population interest, I consider \$500,000 for a State like New Mexico too small an amount of money when you are dealing with all ages. I think that it would be difficult to do a population distribution allocation.

Mr. BALLENGER. That is what I thought but I wanted to give somebody the opportunity to say that.

Mr. WINNEGAR. Thank you.

Mr. BALLENGER. That is how it appeared to me. I recognize that Major here probably would love to see it go to larger populations, but I do think somewhere along the line you would have to protect, especially successful programs that if the funding is limited, as most everything is going to be this year, at least somehow we ought to protect that.

Mr. WINNEGAR. It would be nice to have a balance in outreach emphasis for urban and rural areas and also target underserved and minority. There is a lot more difficulty reaching American Indians, Hispanics—people that haven't traditionally been served—and those with more severe disabilities. It would be nice to somehow capture that in the bill, too.

Mr. BALLENGER. I am just curious, he mentioned American Indians and very few people know that North Carolina has a very high Indian population. Your two new offices—there's nothing in Asheville right now?

Ms. COOK. No. That is one of the locations we are looking at. This summer we should have a demonstration center there through totally separate funds—I think \$10,000 from our NIDRR grant for some equipment—but the community and the different agencies

and programs are pooling their resources. We are providing a lot of technical assistance for them to pull together, and one of the physical rehabilitation centers in Asheville is giving us space.

Mr. BALLENGER. It is a terribly long drive, a couple hundred miles from the Cherokee Nation to Winston-Salem, and the idea of moving it closer I think is a great idea.

Mr. Chairman, I turn it back to you.

Chairman OWENS. Thank you.

I have a son who is working in the community economic development project in Asheville, so he will be monitoring you.

Ms. COOK. We will be calling him.

Chairman OWENS. I also want to point out, Mr. Winnegar, that we were very impressed on our trip to New Mexico to look at the Indians which represent a portion of the underserved population of this country. Sally Lovejoy and Alan Lovesee, who were with us, came back and followed through with a bipartisan effort on provisions related to transportation and other provisions as a result of the observations we made. In fact, the transportation provision amendment was made by Mr. Goodling, who is the Ranking Member of the Education and Labor Committee. So it was one of those cases where we could report that the junket we took to New Mexico yielded some direct results that you can point to in legislation.

Mr. Sallee, I was interested in your moving from being a volunteer into becoming an employee. Dr. Smith mentioned that a large number of programs had difficulty starting up and mentioned that there were not qualified people out there. When he said that, I wondered, did the various States look in the community of people with disabilities right away?

His observation that large numbers of programs started up slowly or late leads to the question: should this be the last reauthorization? Have we really had enough time considering the slow startup and the fact that this reauthorization calls for five years?

I think, Ms. Cook, you said maybe 3 years is enough.

Ms. COOK. As a minimum, for North Carolina.

Chairman OWENS. Should this be the last reauthorization or should we look at this as being an opportunity for them to catch up and really meet the needs of consumers. Given the fact that you are a consumer as well as a person who is responsible in the area of employment in the program, I would like to hear your ideas.

Mr. SALLEE. You are asking then, do we think that we would need a continuing reauthorization?

Chairman OWENS. Is 10 years enough time, considering the slow startup?

Mr. SALLEE. I am sure it depends on the State. States that got in early and have more experience, I am sure wouldn't require as much time as those that are just entering that particular aspect of it. But I am hoping that the Congress will continue funding. I know that in addition to State funds we are looking for various companies and corporations that might help with some of the funding.

We talked about the loans, for example, that might help individuals with disabilities obtain some of this equipment. Sometimes the low-income people may have more chance of obtaining some of this equipment, and of course the high-income people have no problem

there, but sometimes the middle class get phased out because of requirements of a certain family income level.

Chairman OWENS. Means testing.

Mr. SALLEE. So that is a problem, because for some middle class families, it is a devastating thing when a disability occurs. They may need some extra help even though they are so-called middle income, especially when other expenses come along—in my case, I am sending a boy through college.

There are times a person might be able to work and times he might have to take off for a while because of secondary problems that come. But in terms of the overall funding, I would certainly hope that you will continue.

Chairman OWENS. Mr. Winnegar, when we were in New Mexico I remember our all-too-brief look at your computerized efforts to link the various agencies and maximize the amount of help that can be given for the project. I think somebody mentioned that maybe you were too efficient and were going to generate some hostility from certain quarters because you were showing people how they could get funding from social services for assistive technology.

Did you find that it generated more cooperation and finally appreciation, or did it lead to other kinds of problems?

Mr. WINNEGAR. Well, we went through a real scientific approach and did knowledge acquisitions with the actual people that approved medicaid and medicare for the vendors. We are not a vendor, and although vendors are prevented from telling patients how to write a doctor's prescription, we haven't been doing that.

We are also not prevented from telling people how to access the vocation rehabilitation agency, which we are a part of, or the special education access, which we are a part of. We are a part of the Department of Education in New Mexico.

Medicaid in New Mexico, of course, is way out of budget. Lots of things that need to be included in the medicaid program aren't.

In New Mexico, we have issues like American Indians with disabilities who have a sink, toilet and bathtub, but none of them are hooked up because they don't have indoor plumbing; or issues like a lot of people who live in small adobe houses or trailers and come home with their wheelchair or their crutches and can't get in the front door. Those are real important issues, and for some reason the other systems aren't paying for them.

How can you have a vocational goal when you just come back from the hospital, you are maybe 56 years old, and you just had a stroke? You are not going to be able to get into a vocational program; you are not covered by special education; and medicare is going to take 26 months to kick in. Those systems don't necessarily cover the ramp getting in the front door anyway. So you are supposed to go back to your community and do a fund raiser. Ridiculous.

We go out and build ramps. And ramp building is a systems change process. We want senior centers to build ramps and we are looking at that with the Older Americans Act. A lot of these issues are like bread and butter issues. They are not that distant.

So, the access with this computer system—and by the way, we are making it available to the other States—is what we should be doing with government. I like this transparent government idea,

you know, this smart card, where you have all your records on your bank card and you can get access to what we are trying to do. I know you guys are trying to do it, and I know you were amazed when you saw the complexity of what has happened after it leaves the Congress' hands. It would be nice to change that.

Some of that is advocacy but a lot of that is technology in action. How do you make this stuff work? You don't have to deal with all the paper; that is what our intent was, and I am sure if we got it commercialized and had the private sector involved in this process a little bit more, we could make it so people without means or people that are trying to be prosperous in the society can have a better chance. And I hope we can get that done in my lifetime.

Mr. SALLEE. In my lifetime.

Chairman OWENS. You mentioned advocacy. Ms. Cook, to what degree does your program pursue advocacy? Do you have any legal representation involved?

Ms. COOK. We do provide a bit of advocacy with our own staff. No, we don't have an attorney on staff with us. But we do a lot of cross referrals between our agency and they cross refer back to us from all the P&A agencies, such as in North Carolina GACPD—the Governors Advocacy Council for Persons with Disabilities—which is the lead P&A under developmental disabilities and services to the mentally ill. We have them on our advisory council and interact with them constantly.

Also, there is the exceptional children's assistance center for special education and children's issues. We work quite a bit with them. And we use their services and legal services and refer people as needed. They use us for technical assistance and information on technology. It is a real good exchange and a very cooperative relationship.

Chairman OWENS. Would you be able to say what percentage of your budget is spent for advocacy service?

Ms. COOK. I have not sat down to add it up. For example, it depends on how you define advocacy. We worked with the exceptional children's group to help us develop parent packets. We spent about \$2,000 with that contract to develop those materials.

If you consider that advocacy, that is one avenue. We have a staff person on board full-time—our funding specialist—who does quite a bit of day-to-day advocacy in helping individuals get through all the bureaucracy and all the networking you have to do to get funding from sources. So if you want to count her salary, that is totally out of our grant.

Chairman OWENS. We noted that the report suggested that most projects were spending between 5 and 10 percent on advocacy.

Ms. COOK. I would say easily.

Chairman OWENS. There were some extreme examples where almost nothing was provided for advocacy, so we provided for a 5 percent set-aside in the legislation. Do you think that it is unreasonable to insist that they spend at least 5 percent?

Ms. COOK. We easily spend 5 to 10 percent on advocacy. It doesn't necessarily mean it is contracted out, but we do.

As I mentioned earlier, we would rather not see any kind of set-aside for any activity, not because we are against advocacy—of course we are not; we are very supportive of it—but we would

rather not have the money divvied up in different pots or different activities.

Chairman OWENS. It would be very useful if you could send us some more information on those activities that you do consider to be advocacy activities.

Ms. COOK. I would be pleased to.

Chairman OWENS. I want to thank all three of you. We found it very useful. And if we have any further questions, we will contact you within the next 10 days. Likewise, if you have any further information you would like to submit, we would be happy to receive it during the next 10 days.

Thank you again.

Our final panel consists of Mr. Michael Morris, United Cerebral Palsy Association; Mr. Steven B. Mendelsohn, San Francisco, California; and Mr. Alistair MacKinnon, Legislative Director, New York State Department of Education. Please be seated. We will have to delay the start of your testimony.

We are going to take a 10-minute recess for a vote.

[Recess.]

Chairman OWENS. We apologize for the delay. There were two votes instead of one. We will begin with Mr. Michael Morris.

STATEMENTS OF MICHAEL MORRIS, UNITED CEREBRAL PALSY ASSOCIATION; STEVEN B. MENDELSON, SAN FRANCISCO, CALIFORNIA; AND ALISTAIR MACKINNON, LEGISLATIVE DIRECTOR, NEW YORK STATE DEPARTMENT OF EDUCATION

Mr. MORRIS. Thank you, Mr. Chairman.

I appreciate the opportunity to be invited to testify here, and I want to add my thank you to the others who have already been before you today on other panels. In terms of the work you have done in recent years, the ADA, IDEA, and the Rehabilitation Act, have made a significant difference in the lives of people with disabilities in all States across the country.

I am currently the Deputy Executive Director of the United Cerebral Palsy Association, and in my role with United Cerebral Palsy I have an opportunity to visit many States. I have an opportunity to talk to many individuals with disabilities and parents as well as professionals, manufacturers, and vendors in the field of technology.

I submit the full text of my testimony for the record. I want to just highlight some of the points that are included within it. But before I do that, I guess I want to respond a little bit to some of the comments that have been made earlier today.

There is perhaps one thing that I struggled with while listening to the other witnesses, and that has to do with the whole issue of access to technology. There are many individuals like Steve, fortunately more individuals than in previous years, who do gain access to technology. There are more parents who have become knowledgeable and begin to learn that there are hard challenges, not just in gaining information but fighting through the funding maze to gain access to technology.

I guess the issue for me, however, is that it isn't easy; that there is a lot of pain; there is a lot of struggle, and that this struggle is

really a part of a civil rights struggle; that access to assistive technology has in fact become a means to achieve civil rights. In fact, the work that was done in recent years with the Americans with Disabilities Act, the opportunity or equal opportunity, the possibilities in the workplace, the possibilities in a classroom, may only become available to a child or an adult with a disability if they gain access to assistive technology. And in that way it becomes a means to establishing the most fundamental rights of full citizenship.

If I can't have freedom of movement because I can't gain access to a wheelchair that I need, or seating positioning that I need, then I am going to be denied the most basic civil rights. If I can't have freedom of speech because I am nonverbal and can't gain access to a device that is going to give me speech because I can't get the funding secured for that device because I don't understand the 20 different public funding streams or I can't convince my private insurer of the need for such a device—that it is not a convenience, it is not a luxury, but a necessity for me to exercise my most fundamental civil rights—then I too am being shortchanged by the system.

I guess what I struggled with in listening to the other witnesses, is that there is tremendous pain in this country. There is a tremendous struggle that is going on in this country by parents and adults with disabilities, and those individuals who are not here today—those who exist in every State, in the inner cities, in the rural areas, and also in suburban areas—who need more than just information, another fancy pamphlet, another two days of training, but need access, need professional representation to have full access to the potential funding that you and many other Members of Congress have made available to them, but not easily.

I guess the issues for me come down to the following kinds of points. What do you do when a lead agency under the Assistive Technology Act is told by the State medicaid office or the education agency or the rehabilitation commissioner in that State: "I understand about access to technology but we have limited dollars so tone down your advocacy; don't push so hard; don't take up the struggle so strongly." What will happen next?

Assistive technology shouldn't be a matter of charity. It shouldn't be considered a luxury. It shouldn't be considered a convenience. It shouldn't be a matter of luck or timing or where one lives or the color of one's skin. What the Assistive Technology Act should be about is changing those scenarios which exist today that technology and access to technology is still atypical. When we have the people like Steve or the recent story that flashed across the front page and on television during the last few days about the Somoza family from New York City—Anastasia and her sister—where they win the right to access, to regular education placement, to a regular classroom placement, we are thrilled for her, we are thrilled for Mary and the parents, but what about the thousands of other children? Is there a sense of urgency about this? Are we going to fight over 5 or 10 percent? Are we going to fight over one's right to legal representation? I hope so, I hope so. I hope that is what this Act is about.

Access to assistive technology doesn't just happen. We have to increase the probability that people can gain access to funding. There are no self-enforcing rights to assistive technology. With all the good plans and intent of Congress in the IDEA law, in the Rehabilitation Act, in medicaid, in medicare, in our looking at health care, access too often has to be fought for. Even when armed with the best information or training, few individuals with disabilities or professionals are willing or prepared to pursue the full rights of appeal to win access.

To me, identifying funding sources for an individual through information or training may be no different than window shopping without any dollars in your pocket. You have taken me to see something that is going to change my life, but I still don't have the ability to do it. There is no credit card yet for people with disabilities, for parents or families with disabilities. Yet, we have created over 20 different Federal funding streams, but it is a maze. It is complicated; it takes a struggle; and there has to be a sense of urgency.

Ultimately, is this controversy about the approach to systems change, or about the definition of advocacy services? Certainly, that is a part of it. But right now professionals drive all the major funding sources. And it is time for us to look—as we have, I hope, with the draft that is being circulated—at several issues. This brings me to several key points.

Number one, I think it is time, after five years, to mandate certain State-funded activities on systems change, advocacy and consumer responsiveness. It doesn't mean we are telling a State exactly how they have to do that in all situations. There is a range of options. We are not saying how much money has to be spent in all situations, except in one case—the right to legal representation when needed so I can exercise my full rights if I am a parent of a child with a disability who is not getting access to a communication device through the public school program, or an adult with a disability who is not getting access to rehabilitation services because of being turned down for eligibility as too severely disabled. That is a right worth fighting for.

Second is that we improve accountability at the State and Federal levels.

Third, that we authorize funding support for low-interest loan programs and recycling and demonstration centers.

And fourth, that we enhance technical assistance at a national level to respond not just to the State projects, which is government funding government, but we also respond to individuals with disabilities and families and advocates who are willing to take up the struggle, who are not in a conflict of interest situation being told by another State agency: "Don't push this hard, stop the struggle, it is enough, we have got to work together." We do have to work together, but there are times when other measures are necessary.

In terms of mandated activities, it is important to realize that in 1990 the National Center for Health Statistics identified more than 2.5 million Americans with disabilities who said they need assistive technology devices but cannot afford them. I think that is just the tip of the iceberg. And again, I think it supports the position that there should be certain mandated services under this Act.

Improved accountability at the State and Federal levels: I think it is time, after 5 years, that we have a better picture, a better snapshot of where we are going and how much progress we have made. And I think that the staff draft begins to address those issues, with a minimum set of requirements developed by the Secretary and NIDRR to guide and assist States in assessing the impact and outcomes of required and authorized activities.

As a second means of greater accountability, the annual progress report for States should be expanded to require more detailed reporting on successful systems change activities, the degree of involvement of various State agencies, the degree of consumer satisfaction with funded activities and other documentation of expanded funding options.

And further, it is particularly important that States document their level of effort in informing individuals with disabilities of their rights that you have pioneered and pushed for under the IEP, under the IFSP, under parts B and H of IDEA, and at a minimum under Title I of the Rehabilitation Act. It would potentially impact several million children and adults with disabilities when they come to that point in time in their annual program when individualized program plans are being developed, but continue to remain unaware of their rights to assistive technology and who, through access, can improve dramatically their opportunity to education and employment.

There are some further accountabilities that can be achieved at the Federal level with a report to Congress and the interagency council, authorized under the Rehabilitation Act, beginning to address technology issues.

In terms of additional funding items, I think it is imperative that we move ahead with the successful concept of the alternative loan programs and demonstration and recycling centers. I wish that we could say that there is a credit card, that we wouldn't have to look at alternative funding options, but we are a long way from that. These types of innovative concepts have been proven in a few isolated cases but enough so that I think States need some additional incentive to secure funding for these types of alternatives.

I am very strongly in support of a State match—and the State match doesn't have to be State dollars; it could be private dollars. I think it is important that we share in a public-private sector collaborative mode and that the Federal Government not foot the complete bill for these kinds of innovative options. I think that States—if they can't come up with State dollars—working creatively with the private sector, can come up with the money to do these kinds of programs that are going to make a difference in the lives of individuals with disabilities.

I heard Ricki Cook, a prior witness, talk about people wanting one-stop shopping. So do people with disabilities. In fact, I think that national technical assistance shouldn't just be for the State projects. National technical assistance should directly address the needs of individuals with disabilities and parents and others who work on their behalf. I don't think Ricki Cook and I would disagree on that.

I think it is a question of not putting all our eggs in one basket. It is unlikely that all the expertise can be found in one group. In

fact, by looking at separating out several discrete areas of expertise, funding being one of them, we are more likely to get the effective type of assistance that people need.

Finally, I think it is important to realize that after five years we still have a lot to learn about how to access this funding maze. And I think it is important to communicate a sense of urgency every day.

We are nearing the end of a school year. This is a time of year many schools create new IEPs, looking at children for the following year. How many children—in New York City, in Macon, Georgia, in Cleveland, in Los Angeles—are even going to be told about their right to assistive technology if it responds to their needs for special education or related services? Even if they were told, how many parents would be able to articulate and advocate for that need so it could be put into the IEP? And how many of those parents would be able—if nothing were put in—to effectively articulate their rights and seek an appeal without some type of professional representation?

We have work incentive provisions that were passed through the Social Security Act which remain underutilized as a finance option for assistive technology. In over half the States, a pass plan has never been developed to access assistive technology. Each month individuals with significant speech disabilities are denied eligibility for rehabilitation services, unaware of their right to an assessment of their rehabilitation needs that must incorporate assistive technology.

In over a third of the States, individuals with significant speech disabilities are denied communication devices on the basis that they are a convenience. In over half the States, medicaid, medicare policy interpretations, or private insurance medical interpretations will deny an individual freedom of movement and access by determining that a powered mobility system or wheelchair is a luxury item.

During the next three years, the Assistive Technology Act offers an opportunity to turn individual funding decisions to precedent-setting policy change. Assistive technology is a necessity rather than a convenience. It is a critical means to enjoy full citizenship and will require a commitment to activism and a renewed sense of urgency.

The changes proposed—with some work in terms of a definition of advocacy services that I hope would include the absolute ability to pursue legal representation—can bring about a more accessible America.

Thank you.

[The prepared statement of Mr. Morris follows.]

MICHAEL W. MORRIS

My name is Michael Morris and I am the Deputy Executive Director for the United Cerebral Palsy Association (UCPA). There are more than 700,00 children and adults with cerebral palsy and similar disabilities in the United States. UCPA's 158 affiliates in forty three states expend more than \$400 million dollars annually in a variety of services to support such individuals in becoming full community members, including assistance in providing technology.

For the past eight years, I have been deeply involved in policy and program development at a local, state, and national level to ensure that assistive technology redefines what is possible for children and adults with disabilities. As project manager for the National Study on the Financing of Assistive Technology Devices and Services for Individuals with Disabilities mandated under Title II of the Technology Related Assistance Act, I spent nineteen months researching funding issues, and meeting and talking with providers, manufacturers, third party payors, individuals with disabilities, and their families. On behalf of the National Council on Disability, three regional hearings were conducted and over 100 individuals shared their diverse perspectives on barriers and possible solutions to improved access to assistive technology services and devices. Based on my activities with UCPA and the National Council on Disability, I wish to draw your attention today to challenges and opportunities presented by the reauthorization of the Technology-Related Assistance for Individuals with Disabilities Act of 1988.

In a post ADA environment, children, youth, and adults with disabilities and their families have an enhanced set of expectations about equality of opportunity, full participation, independent living, and economic self-sufficiency. In many situations, the solution to overcome the discriminatory effects of architectural, transportation, and communication barriers will be diverse applications of assistive technology. In the home, in the classroom, in the workplace, and in the community, assistive technology is the critical means to enable individuals with disabilities to become more independent, competitive, self-confident, productive, and included. Understanding the linkage between equal opportunity and access to assistive technology is becoming more apparent with each new successful experience of a technology user with a disability in diverse work settings and of students with disabilities who are technology users in regular classrooms interacting with their classmates who have no disabilities. In order for the full promises of the ADA to become realized, assistive technology must become better understood as a means to achieve reasonable accommodation as part of civil rights protections for Americans with disabilities.

In addition, as this subcommittee begins deliberations on this reauthorization, it is at a time of unprecedented new opportunities in technology research, development, and innovation. Five different federal departments and agencies are working together to stimulate the transition to a growing, integrated, national industrial capability which provides the most advanced affordable, military systems and the most competitive commercial products. In 1993, the Technology Reinvestment Project will expend in excess of 500 million dollars to stimulate applications of military or defense technology to dual use or commercial applications. We are also watching the reconfiguration of the telephone, cable TV, computer, satellite, and television industries in a race to explore new approaches to retailing and information services to be offered in interactive format into one's home. The stakes could not be higher in terms of the way all Americans purchase goods and services with the emergence of new industry leaders sharing billions of dollars in sales.

For persons with disabilities, the stakes could also not be any higher. Will technology reinvestment activities realize any new benefits for individuals with disabilities and their families? Will the new telecommunications infrastructure superhighways, products and services consider the unique needs of individuals with disabilities and their families? Can we establish a universal design standard? Will Congress recognize the importance of affordability and accessibility in a post ADA environment in its deliberations and oversight on these mega-technology initiatives and activities?

Although at present, the answers to these questions are unclear, it is important to realize that there should be a relationship between these major technology initiatives and the much smaller TECH Act reauthorization. This relationship should be one where there is flow of information from the state projects and the national technical assistance projects to initiatives in the larger technology development areas. Additionally, this relationship should be reciprocal with initiatives sponsored within the larger technology development projects reaching out to explore collaborative opportunities with the state programs and the national technical assistance projects. Each and every one of us involved in thinking about technology and individuals with disabilities and their families, need to think about the larger framework of a society that drives itself to technological excellence and a desire for world leadership in this area. Everyone involved has to start making the connection between the individual with the disability and their need for assistive technology and the relationship to other technology that is being envisioned, researched and developed. This critical connection must begin to be made or once again, individuals with disabilities will be left out, segregated and relegated to a second class position, unable to access or use a new

generation of technologies.

Thus, the potential power of the TECH Act far exceeds the current limited federal funding level of 34 million dollars. The reach and impact of TECH Act activities extends across environments, age, race, social class, gender, and abilities.

The TECH Act now has been in place for five years and 42 states have benefitted from funding. Based on the results of the study of the National Council on Disability, the evaluation conducted by RTI, and my first hand experience with ten states through work as a consultant with the Resna national technical assistance project, I feel strongly that with this reauthorization, Congress must strengthen the original intent for this Act: *TECH Act funded activities must focus on systems change.* the critical next steps are to:

1. mandate each state fund activities on systems change, advocacy, and consumer responsiveness;
2. improve accountability at the state and federal level;
3. authorize funding support for low interest loan programs and recycling centers; and
4. enhance technical assistance at a national level to respond to the needs of individuals with disabilities and their families.

I. MANDATED ACTIVITIES

Under current law, states have the opportunity to choose from a menu of authorized activities to plan and implement a statewide consumer responsive system of technology-related assistance. Because of the myriad of choices, it has been impossible to compare progress between states or to assure individuals with disabilities of a certain minimum level of effort or focus in a particular state. With limited federal dollars available, *it is imperative that after five years of experience, we move to a short list of mandated activities that focus on system change, consumer-responsiveness, and advocacy.* These three areas represent the essential core set of activities that should result in every state in outcomes of enhanced funding, access for assistive technology across public funding streams with a particular emphasis on special education, vocational rehabilitation, and medical assistance, improved interagency coordination between public agencies at a state level and public and private sectors, increased consumer participation, choice and control in development and operation of the statewide system of

assistance, and improved advocacy support resulting in more consistent funding decisions. The addition of definitions for these key terms of systems change activities, consumer responsiveness, consumer driven activities and advocacy services will help direct and focus states on the desired outcomes resulting from mandated activities.

All decisions about access to assistive technology relate to resource allocation. In data collected from the National Center for Health Statistics in 1990, more than 2.5 million Americans with disabilities said they need assistive technology devices that they do not have but could not afford them. Individuals with disabilities are heavily dependent on third party funding. Despite some 20 federal public funding options, most individuals with disabilities, providers, and parents remain unaware of congressionally authorized rights and benefits to assistive technology.

In addition, current experience indicates a lack of enforcement of existing public mandates to provide assistive technology services. Individuals with disabilities need more than information about funding options. They need advocacy assistance to access what Congress intended for them under special education, vocational rehabilitation, Medicaid statutes, and other third party payors. Direct service agencies often have a conflict of interest with systems change activities necessary to respond to the assistive technology needs of individuals with disabilities. Additionally, many state programs need encouragement in their efforts to implement systems change. The existence of an entity in an "outsider" role supports the efforts of the lead state agency as well as offer protection and advocacy services on an individual basis. I strongly urge consideration of a 10% set aside of each states Title I grant funds for the provision of advocacy services, to include legal representation when necessary. Such funding should be targeted to the Protection and Advocacy Agencies authorized in the Developmental Disabilities Act. The P & A is the only federally funded agency in existence in every state with a mandate to protect and advocate for persons with disabilities.

II. IMPROVED ACCOUNTABILITIES AT A STATE AND FEDERAL LEVEL

With limited federal expenditures, it is important that states demonstrate they are making significant progress toward the implementation of a comprehensive statewide program of technology-related assistance and that the program is consumer responsive with a major focus on system change and advocacy.

it is imperative the Secretary *develop a set of minimum requirements that guide and assist states to assess the impact and outcomes of required and authorized activities.* These minimum requirements subject to public comment will also

assist individuals with disabilities, their parents, and other interested parties in the states evaluate the level of progress their state is making in building the capacity and responsiveness of the system to meet the needs of current and future technology users with disabilities.

As a second means to achieve greater accountability, *the annual progress report requirements for states should be expanded to require more detailed reporting on successful systems change activities, the degree of involvement of various state agencies in implementation of the comprehensive state-wide program, the degree of consumer satisfaction with funded activities, and other documentation of expanded funding options.* It is particularly important that states document their level of effort to inform in writing individuals with disabilities and their family members or representatives of federal requirements of access to assistive technology devices and services as part of the IEP and IFSP under parts B - H of IDEA and Titles I of the Rehabilitation Act. Such a written notice would potentially positively impact several million children and adults with disabilities who may remain unaware of their rights to assistive technology and who through access improve dramatically their opportunity to education and employment.

As a third approach to greater accountability, *a public hearing should be required as part of the current site visits by NIDRR to provide individuals with disabilities, parents, and interested organizations an opportunity to comment about strengths and weaknesses of current state efforts.* Strong language needs to be added to the Act that also provides for procedures to be followed for a Governor and if necessary NIDRR to redesignate a lead agency when there has been a lack of progress with either consumer responsive or systems change activities.

Finally, it is equally important that Congress and other interested parties receive more information about federal and state activities and initiatives that improve access of Americans with disabilities to assistive technology. *A mandated annual report to Congress from NIDRR should address at a minimum such important issues as demonstrated successes at a federal and state level with enhanced funding options, effective program outreach targeted to rural and inner city areas and minority populations, and positive collaborative agency activities at a federal level focused on training, demonstration, and research.* Such an annual report could be facilitated by requiring the Interagency Disability Coordinating Council established under the Rehabilitation Act to add to its agenda access to assistive technology funding and training issues. These activities at a federal level can only lead to improved leadership, policies, and oversight to enhance assistive technology access at state and local levels.

III. AUTHORIZE FUNDING FOR LOAN PROGRAMS AND RECYCLING CENTERS

States should set up alternate funding mechanisms to ensure that individuals with disabilities get the assistive technology they need. Demand is very high and the institutional barriers that provide access to funds are falling very slowly. In the interim, to meet the service delivery gap, and to supplement the efforts made by the state technology programs, states should be able to compete for financial assistance for two program options.

- (1) *The first is a Low-Interest Income Contingent Loan Program to enable individuals with disabilities to secure devices and services in an expeditious, timely manner. Such a program should be awarded on a competitive basis each year. It would allow for five million dollars of federal funds to be made available to ten states who would submit proposals that emphasize and expand consumer choice and control. Each application would show a dollar for dollar match, with public funds or with funds matched from a private source. Each successful applicant would begin activities with a base funding of 1 million dollars.*

Such a state match could be as a result of a bond or new or other reallocated funds. The private source could be a private sector entity involved in developing assistive technology, or a technology R&D or manufacturing company with an interest in subsidizing the market.

The entity responsible for making the loans must involve to a large degree, individuals with disabilities and their family members in the application and review process and in the structuring of the loan program itself. Additionally, expertise from the banking or consumer loan industry would be necessary. The loan programs in the ten states should devise ways to make themselves permanent so that such an alternative financing mechanism will always exist for individuals with disabilities. The successful experience in Maine and a growing number of states has proven the benefits of this type of program responding in a timely way with minimum red tape to the technology needs of individuals with disabilities.

- (2) *The second program option is a Recycling Center for Assistive Technology Devices to enable individuals with disabilities to try out devices, or services, before purchase and to share resources such as unused equipment. Congress should authorize \$2.5 million to stimulate the development of these centers with funds awarded on a competitive basis. Each proposal would be required to match dollar for dollar federal funds. Annually, ten*

states would receive awards with a combined state-federal allocation of \$500,000 each.

Too much equipment is abandoned by persons with disabilities who had no opportunity prior to purchase to try it out or see it demonstrated. Research conducted by the National Rehabilitation Hospital (funded by NIDRR) confirms public testimony on this issue. Such centers would make the most of limited funding in an environment that emphasizes both consumer choice and direction and efficient distribution of public resources.

These centers should be located at community-based groups that are consumer directed and controlled. Such centers would enable individuals with disabilities across the age spectrum to be at exchange and market locations that will be directly linked to the evolving assistive technology service delivery system.

Technology manufacturers may have a significant interest in donating equipment and demonstrating products at such centers in order to expand, meet and work with their markets. Such marketplaces could aid in reducing prices of items and services for individuals with disabilities and their families. Development of technology-related devices and services would be advanced by instituting this mechanism which builds in consumer input. Purveyors of equipment and public payers of such products would hear, first-hand, at the recycling centers what are the needs and concerns of consumers as they borrow, try out and return items.

It is imperative that neither the loan program or recycling center approach be viewed as an absolute and total answer to assistive technology access. However, both programs could be significant parts of a comprehensive system of support.

IV. NATIONAL TECHNICAL ASSISTANCE TO FOCUS ON INDIVIDUALS WITH DISABILITIES

Current law requires one percent of funds appropriated or \$500,000, whichever is greater for the purpose of providing states information and technical assistance. By the end of this fiscal year, it is expected that all 50 states will be receiving Title I dollars. The demands from states for assistance continue to expand and their needs have become more diverse covering a range of issues including effective approaches to planning and evaluation, outreach, and information and referral, facilitating service delivery capacity building, and assistance in development of training, public awareness and data collection materials. The current national

technical assistance effort does not serve or respond to individuals with disabilities directly. The state lead agency is the only direct recipient of services.

The needs of individuals with disabilities and their family members or representatives for information and technical assistance on funding access would be greatly enhanced by an additional national technical assistance project staffed by experts on assistive technology systems change, public funding policies, and advocacy services. The activities of such a project would include identifying, collecting, analyzing, and disseminating on a national basis funding decisions made as a result of policies, practices, and procedures, or through administrative hearings or legal action, providing technical assistance on advocacy services and systems change activities, and promoting state-federal solutions to identified funding issues. Such a project's efforts should complement the work of the states, lead to more consistent funding decision-making at a local and state level, and to provide a badly needed new resource to be responsive to individuals with disabilities and their families. The activities of such a project should also stimulate greater federal agency oversight and monitoring.

I urge you to consider increasing the authorization for national information and technical assistance to a level of two million dollars with a minimum of \$750,000 reserved for the technical assistance project focused on state lead agency support and an equal dollar amount reserved for the national information and technical assistance project focused on the needs of individuals with disabilities and their family members or representatives.

V. CONCLUSION

The passage of the TECH Act was a response by Congress to the widespread lack of collaboration and cooperation between and within various funding agencies. Despite five years of TECH Act activities, confusion and frustration for individuals with disabilities and their families continues daily. Awareness, understanding, and access to assistive technology devices and services is still too often a result of where you live, your economic class, and your racial heritage. There is still a paucity of expertise among advocates, attorneys, persons with disabilities, family members, and professionals across disciplines who can effectively weave their way through the complex web of federal regulations regarding eligibility and technology funding.

Congress has passed laws that mandate a right to assistive technology as a part of a free appropriate public education for students with disabilities. Is it a right exercised yet for an inner city child in New York City, Cleveland, Ohio, or Macon,

Georgia?

Work incentive provisions through the Social Security Act remain underutilized as a finance option for assistive technology. In over half the states a PASS plan has never been developed to access assistive technology. Each month individuals with significant speech disabilities and other multiple challenging disabilities are denied eligibility for rehabilitation services unaware of their right to an assessment of their rehabilitation needs to incorporate assistive technology. In over one third of the states, individuals with significant speech disabilities are denied communication devices on the basis that they are a "convenience." In over half the states, medical and medicaid policy interpretations will deny an individual freedom of movement and access by determining that a powered mobility system or wheelchair is a luxury item.

During the next three years, the TECH Act offers an opportunity to turn individual funding decisions to precedent setting policy change. Assistive technology as a necessity rather than a convenience, as a critical means to enjoyment of full citizenship, will require a commitment to activism and a renewed sense of urgency. The changes proposed will direct and focus resources to allow us all to work together on a more accessible America.

MICHAEL W. MORRIS

Mr. Morris is the Deputy Executive Director of the United Cerebral Palsy Associations, Inc., in Washington, D.C. He has been active at a state and national level in developmental disabilities, policy and program development, for the past 15 years. Prior to moving to Washington, D.C., he served as Executive Director of the Georgia ARC for five years. Prior to beginning his work with UCPA, he was on the staff of Senator Lowell Weicker, and served as legal counsel to the United States Senate Subcommittee on the Handicapped. His efforts, in Washington, D.C., led the way to the Amendments to the Rehabilitation Act of 1986 that placed new emphasis on access and availability of rehabilitation technology. He has also been directly involved in the development of P.L. 100-407, the Technology-Related Assistance Act, that calls for the planning and establishment of consumer-responsive statewide systems of technology support and is a consultant to RESNA (Rehabilitation Engineers Society of North America) on their contract designed to provide technical assistance to the states funded under the technology initiative through P.L. 100-407. As Director of the Community Services Division of UCPA, Inc. at the national level, Mr. Morris oversees three departments--Governmental Activities; Program Training and Demonstrations and Affiliate Relations.

Mr. Morris has a juris doctor degree from Emory University School of Law. He was, in 1980, the first recipient of the Joseph Kennedy Foundation fellowship on Public Policy. In 1989, he was presented by RESNA the Everest and Jennings distinguished lecture award for outstanding contributions to the field of rehabilitation technology. Most recently Mr. Morris served as the project director for the Study on the Financing of Assistive Technology Devices and Services for Individuals with Disabilities. This study was presented to the President and Congress on March 4, 1993.

Chairman OWENS. Thank you.

The bell has sounded again. I am going to have to ask for another recess.

[Recess.]

Chairman OWENS. Thank you for waiting. We had a couple of unexpected motions to adjourn that delayed us.

Mr. Mendelsohn.

Mr. MENDELSON. Chairman Owens, members of the subcommittee, thank you very much for the opportunity of being here today, as well, needless to say, as for all your work and efforts over the years.

As someone who might best be described as an exceedingly ordinary citizen, it is with a special sense of almost awe and deep feeling that I participate in the experience of democracy in this way, by literally having the opportunity to speak to the formulation of our laws.

The Assistive Technology Act represented a unique event in the history of public policy in the area of disabilities in this country. It represented the first time that assistive technology was recognized as a subject in its own right, needful of and worthy of attention in public policy and Federal law, and represented, probably for the first time, that a program designed to assist people with disabilities was enacted on a non-categorical basis. That is to say it didn't deal with education specifically; it didn't deal with rehabilitation specifically; it didn't deal with medical assistance specifically; yet, it dealt with all those things.

It dealt with people with all disabilities at all phases of the life cycle and in every context. And indeed, as we face this revision now, there are things that we are all agreed upon surely. We are all agreed upon the basic premise that assistive technology is inordinately valuable and meaningful. It is a predicate for accomplishment in many sectors; it is indispensable to most ADA accommodations; it is costly; it is scarce insofar as the expertise required to bring it to fruition is concerned; and continues to need our support in a variety of ways.

We gather here today to review the excellent draft of the committee. We obviously have disputes on certain points, but there are a number of critical issues that I would like to bring up and suggest the choices we make with respect to them will go a long way toward determining our success.

It has been suggested that the success of the projects embodied in the Assistive Technology Act will depend upon the degree to which, in the long term, individuals are empowered and States are enabled to go forward with technology-related assistance programs of various kinds.

Whether we reenact the Assistive Technology Act once or more than once, apropos Representative Ballenger's question before, this question will still remain: what is it that we have at the end and what is it that we need to bring about?

Obviously, we know that however they are defined, advocacy and systems change are at the essence of success. We want to develop an assistive technology service program which is, on the one hand, strong and accountable and effective, yet we also know that ulti-

mately the impact and the efficacy of assistive technology programming will depend on the degree to which society is changed.

One of the key measures for that is the extent to which the other institutions that mediate the interaction between society and people with disabilities—as indeed they mediate the interaction between all people and society, education, the vocational sphere, the medical sphere, the recreational sphere, et cetera—can incorporate and make use of assistive technology, i.e., the degree to which we can bring about systems change, will be the measure to a very large degree of our success.

It is not appropriate, nor is there enough time here for me to suggest my views exactly on how systems change can be most effectively done, but the key point is it ought to be done. Another reason why it ought to be done is that we obviously care very deeply that our Federal expenditures be highly leveraged, that is to say, that there is no real benefit to people and institutional change, unless the States, through accommodation of public and private funds have the ability to maintain these efforts after the Federal program is completed.

In order for that to happen, systems change is also required. Only if the other institutional sources of ongoing programming and funding are able fully to incorporate technology into their own activities will the resources at State level for institutionalization be found.

This is especially so in a tight economic situation. But there are some fundamental issues which go even beyond these relatively bureaucratic ones. If we are to incorporate people with disability into society fully, make the maximum use of the medium of technology, we must understand that ultimately there can be no fundamental distinction between assistive technology and mainstream technology.

And in a certain sense, to the degree that we continue to think of them separately, to the degree that we continue to maintain different funding sources, different expectations of availability, different eligibility criteria, our problem will never really be solved.

I came here this morning on an airplane and I drove here in an automobile. There is no question about eligibility to ride in the automobile. I do not have to approach a vocational rehabilitation agency or special education program or a medical assistance program. At the very least, I suppose I have to talk to the seatbelt maker at times, but there is no question of eligibility. Yet, if I had wanted to make that automobile accessible by adding hand controls or a van lift, then it becomes a special issue, a matter of programs, a matter of special concerns, a matter, as I say, of eligibility, of jurisdiction; let's face it, to a certain degree almost still of noblesse oblige. It ought not to be that way and it need not be that way.

To the extent that the need for retrofitting, for separate funding streams can be reduced and eliminated, the need for assistive technology will disappear because all technology will be designed and available to maximize its usefulness to the largest number of our citizens.

Now, how can this be done? The key issues here, I believe—and I will give one or two examples of how they would apply—are the issues of universal access and universal design. Again, there is

some variance in terminology, there is some differential in nomenclature about what these terms mean, but I think all of us at least for purposes of this discussion have a good enough working understanding of what they mean to proceed. They mean that products and services should be designed so far as possible to be accessible to and usable by all people.

Now, what can the Assistive Technology Act do to help bring about universal design? Well, the Act, as we recall from its first embodiment, was a very good vehicle for trying to locate coordination among diverse and far-flung entities and programs within and without government. It was also an important vehicle for bringing about some much-needed research.

I am sure that all of us have seen the excellent studies—such as the one that my preceding speaker's organization just published several months ago on technology financing resources—which have done a great deal to clarify and illuminate some of the public policy and economic choices that we have. So, it might be possible under the Assistive Technology Act in its second generation, as it were, to use a very small amount of our resources for similar purposes and hopefully with good results.

For example, there is being formatted in our country right now a national information infrastructure. We are poised to begin a journey upon what we are told is a great information super highway. What I want to know is, will people with disabilities have a place in the fast lane? This is a very serious question.

I am not aware—although I understand there has been a fair amount of research money made available throughout various agencies of the government and throughout the private sector in connection with this project—that any systematic attention has been paid to the issues of people with disabilities; at the ground level stage, at the design phase—when retrofitting isn't necessary, when costly go-backs and stop-gap measures are not yet needed—at the very early and appropriate stages, whether the issues are being systematically addressed and are being incorporated into its planning and execution. If not, perhaps Title II of the Assistive Technology Act might do well to commission some oversight in this area.

The Office of Technology Assessment, your own congressional OTA, has a very good record in this area. And other possible commissions and bodies could be brought in to do it.

In a similar vein, there are throughout the realm of economics and society, dramatic changes that are occurring which, if undertaken and conducted mindful of the interest and aspirations of people with disabilities, can at little or no cost bring about enormous savings down the road, enormous opportunities for productivity and inclusion that would never be possible from the standpoint of retrofitting.

I will give another example along those lines. Section 508 of our Federal Rehabilitation Act specifies that the purchase by the Federal Government for any procurement of electronic office equipment for its own purposes, be accessible. Leaving aside for the moment exactly what accessibility means and how well or poorly the statute has been understood and enforced, there still remains the question of how and whether the States and private entities

who would be interested in doing so are receiving technical assistance in understanding and implementing that policy.

The requirements of section 508 are to some degree enjoined upon those States that participate in the Assistive Technology Act, at least when they seek their fourth and fifth year continuation grants under the present law. I believe, however, that the impression of almost everyone who has looked into it, is that the States haven't got a clue—even assuming good faith and even assuming a recognition of non-force being the benefit—and some probably can't be expected to have a clue on exactly how to implement these requirements.

So it might be a very useful idea in the context of the technical assistance that will be provided under the Assistive Technology Act to emphasize the provision of technical assistance in accomplishing the goals of section 508.

But beyond that, what about accessibility of information? It is possible today to generate almost all data in multiple forms. In fact, the very concept of the information super highway is predicated upon just that notion. But given that it is possible to generate all data in multiple forms simultaneously and transparently, and given that almost every print document of any sort that is produced today is generated from a disk, why should we any longer have a situation where there is anyone denied access to information because of a print disability or hearing disability?

I should emphasize, since it may not be obvious to many people, that blind people and people with visual impairments are perhaps the most directly concerned in this matter, but they are by no means the only disability sub-group concerned in this matter. There are various other situations involving numerous people where this is an issue.

We could, with relatively little cost, and arguably with some savings in many cases, provide dual output information in almost every context where we create information. We could make certain very easily that information of record, which individuals may need in their own personal dealings with government to secure their rights and interest, is made available in ways that are accessible to them.

Again, perhaps using the model handed down to us from Title II of the Assistive Technology Act, a setting involving certain specified organizations of government and certain private-sector entities to determine what would be involved in bringing this about on a societywide basis would be in order. The publishing industry is poised to do this. They are held back now by certain concerns about copyright law, by certain attitudinal assumptions, and by certain other technical economic problems which, if properly addressed, could pretty well be resolved. Technology is there in force and longing to proceed.

Now, another area where technical assistance may be appropriate and in order for individuals is in the area of exploiting a number of existing funding sources that are not categorical, that are not based on eligibility for a particular program or service. One of these, that I guess you might say I am a little obsessive about, and I spent a long time working on and studying, is our tax code.

We have in our Internal Revenue Code enormous possibilities of benefit to what we call the middle class, benefit to small business, and benefit to all business in both the employment and public accommodation settings. There are enormous opportunities to use the current tax law to help subsidize the cost of assistive technology in ways that can be handed down enormously to the benefit of individuals and firms who must pay their own technology costs in whole or in part by reducing those costs.

We need to incorporate into our technical assistance ways that our advocacy programs can let people—who don't qualify for current programs—know about these opportunities.

We also need, very frankly—and again Title II might be the mechanism for doing this—to look at it systematically because the words it uses on its face pretty much conceal or obscure the content of the rulings and cases and decisions. We need to examine it as much as we've done with the Rehabilitation Act from time to time or the Social Security Act or the Education Act, and make sure that we are not, as I fear to a great extent is the case now, unwittingly perpetuating the use of terminology which obscures what the real opportunities are and which keeps individuals and even financial advisory professionals from really understanding what the opportunities are, let alone focusing on what might be needed changes.

I know my time is short and these were just a few examples. If I could leave you here today with one point, it would be this. We have to think of global and structural concerns. Yes, it is very important whether we have loan programs, but it is probably less important whether they be recycling centers or whether they be direct loan programs of equipment or direct monetary loans.

Probably the key point is that States should be allowed a maximum degree of flexibility in establishing those. We do need loan programs. That is a structural issue, a very important structural issue. And it is in connection with these structural issues that I hope we will direct our attention. While we may all differ on little details—should there be a match; if so, should it be 5 percent or 10 percent or 50 percent; I myself happen to think there should not be a match for various reasons—the point is there should be loan programs. And should there be this kind of ongoing research and attempt to harness and understand the major institutions and engines of our society in ways that can bring about systemic change? The answer is yes.

I thank you for the opportunity of discussing some of my ideas with you. I feel profoundly moved and grateful in the knowledge that these aspirations are shared and will be pursued.

Thank you.

[The prepared statement of Mr. Mendelsohn follows:]

STATEMENT OF STEVEN MENDELSON

Introduction

The Technology-Related Assistance for Individuals with Disabilities Act of 1988 [Public Law 100-407] was unique in several key respects. Among these are its recognition of assistive technology services and devices as an area of public concern in their own right; its incorporation of findings warranting the establishment of a Federal-State program to address this area of concern; its vesting of considerable discretion in States to develop comprehensive, consumer-responsive, statewide programs

to address technology-related issues, and its commissioning of important research aimed at clarifying the issues and goals in technology access and utilization by people with disabilities.

Consistent with the flexibility accorded to them under the Act, the 42 States thus far receiving Title I Technology Act grants have demonstrated considerable diversity in the emphases, methods and organizational structures they have adopted. While many observers have expressed disappointment with the apparent lack of concrete results, it seems indisputable that from the standpoint of leverage, the relatively modest sums appropriated and expended over the Technology Act's first five years have engendered considerable amounts of creativity, effort and experimentation, as well as yielding significant results in a number of settings and contexts.

As we approach consideration of Technology Act reauthorization, evaluation of our experience to date and of proposals for change may benefit from recognition of one fundamental dichotomy. Although assistive technology is a subject warranting attention and program development in its own right, the potential of this technology cannot be fulfilled unless it is incorporated into a variety of existing service systems and institutions ranging from vocational rehabilitation and independent living, to special education, medical assistance and a number of others. The challenge is thus to design assistive technology program models that are effective, creative and accountable in their own right, but that at the same time can be effectively coordinated with and used to enliven and innovate much larger, categorical programs. The subcommittee's draft bill makes a good start in this direction.

Recommendation 1: The National Information Infrastructure

Our Nation stands poised to embark upon a momentous journey along a new "information superhighway," but will people with disabilities be allowed a place in the fast lane? In research, planning and implementation of the NII, early and systematic attention to the incorporation of technology users with disabilities represents one of the most effective investments our society can make. Today, efforts to elaborate the standards for hardware, software and documentation that will comprise such a system, though in their embryonic stages, do not appear to have incorporated the issues of concern to people with disabilities into the basic fabric and structure of the effort. Consistent with the objectives of section 508 of the Rehabilitation Act of 1973 as amended, measures should be undertaken to ensure that the access needs and goals of persons with a broad spectrum of disabilities—sensory, motor and information processing—are taken into account in the design of the system and the elaboration of operational and design standards. Specifically, the subcommittee should request the Office of Technology Assessment, which has a long and admirable history in this area stretching back over a decade, to investigate the extent to which universal access has been taken into account in research and planning to date, and to identify the costs and benefits that would be involved in full incorporation of these concerns. The reauthorized Technology Act should provide that OTA's findings be implemented in all related legislation and in the appropriation of funds.

Recommendation 2: Coordination between the Technology Act and the Internal Revenue Code

In its Title II, Programs of National Significance, the legislation of Draft Bill Section 201[d] proposes coordination with the Internal Revenue Service for the purpose of developing procedures for "certifying devices and services as assistive technology." Because of the importance of such an effort, this provision should be expanded and exploited further. Some background may be useful in clarifying its potentially monumental role in enhancing the availability of assistive technology, particularly for those individuals and families who do not qualify for any form of direct Federal or State financial assistance, or who, though eligible for such assistance, prefer to use their own funds to meet their assistive technology needs.

In my recent book "Tax Options and Strategies for People with Disabilities" [New York: Demos Publications] statutory interpretations and language, Internal Revenue Service rulings and Tax Court decisions are marshalled. Taken together, this body of authority shows that many, probably the majority of assistive technology devices, are already tax deductible or otherwise eligible for favorable tax treatment under a variety of provisions including medical expense and impairment-related work expense deductions, the disabled access [ADA compliance] credit, and numerous other provisions of the Internal Revenue Code. Knowledge of these established provisions and interpretations of the law appears to be limited, both in the disability and financial-advice communities, due in large part to the fact that the Internal Revenue Code does not use the language or terminology of assistive technology, while advocates and consumers in the technology field are unfamiliar with the nomenclature of income taxation.

To the degree that the content and implications of current law could be clarified and made accessible to the assistive technology community, considerable subsidization for private purchase of assistive technology could be generated without any substantive changes in current law.

Much like the studies conducted pursuant to Title II of the original Technology Act, the reauthorization legislation should provide for a comprehensive study designed to determine: the extent to which existing laws and authoritative administrative and judicial interpretations already afford tax advantages to assistive technology devices and services; the extent to which clarification and rationalization of Internal Revenue Code terminology could clarify the law and simplify the tax administration and enforcement processes; and the degree to which substantive changes in current law might serve or disserve the Nation's interests of technology encouragement and revenue enhancement.

Such a study should be conducted under the auspices of the National Council on Disability, the newly created interagency council [Rehabilitation Act Section 507], a contractor selected pursuant to RHP, or such other appropriate entity as Congress may determine. It should include representatives of the Internal Revenue Service and the Department of the Treasury, of the Senate Finance and the House Ways and Means Committee, of this subcommittee and its Senate counterpart, of the accounting and tax advisement professions, of the tax research and scholarship communities, of groups and organizations representing and composed of people with disabilities, and of consumers and users of assistive technology who have experience or interest in this area.

Recommendation 3: Accessible Information

Section 508 of the Rehabilitation Act has been held by the Education Department to be applicable to continuation grants to States under Title I of the Technology Act. In the implementation of section 508 at both Federal and State levels, many problems have been encountered. For section 508 to be fully effective, provision should be made, within the framework of the reauthorization bill's technical assistance provisions, for Title I States (including States receiving recycling center or loan program grants) to assist them in implementing accessibility in the electronic equipment and software that they purchase.

Beyond the goal of accessible electronic equipment, a broader issue exists, relating to the accessibility of information to all people, regardless of disability. Technology now exists for the publication and production of information in a variety of media, including not only normal print but also electronic media such as diskettes or telephone-based voice or data transmission. For people with sensory disabilities of vision or hearing, for people with certain motor or other physical disabilities, and for people with other reading or information processing disabilities of various sorts, the availability of information in appropriate, alternative media and formats can often represent the difference between participation and exclusion in our information society and age. For people who need to obtain critical, time-sensitive information from governmental entities or other sources, such access may also make the difference between ability and inability to obtain basic services or benefit from clear legal rights.

While technology now exists to facilitate the routine production and dissemination of government documents, published books, periodicals and newspapers and a host of other materials in a variety of accessible media, significant legal, economic and attitudinal barriers remain. Through Title II of the Technology Act Congress should authorize a comprehensive study of the extent and nature of these barriers and of the ways in which they could be overcome. Including representatives of the General Services Administration, the U.S. Copyright Office, the Federal Communications Commission, the appropriate congressional committees, the Library of Congress, the publishing, newspaper, telecommunications and television industries, as well as individuals with disabilities, this study should evaluate the technology for providing information in various media, the means by which privacy, property interests and other rights and values could be protected and promoted, and a variety of related issues.

The study should have as its objective the development of recommendations and methods whereby government documents could be made fully available to the citizenry, beginning with personal documents of record and extending in due course to documents prepared and issued for the use of the public. In addition, the study should identify means by which private entities could be encouraged, without compulsion or coercion of any kind, to voluntarily undertake such measures.

This study could be undertaken as a part of the research described in Recommendation 1 above, but to the extent that it involves issues which will exist whether or

not the NII is implemented, clarity and focus suggest that a discrete and targeted effort be mounted in this area. The issues raised in Recommendations 1 and 3 are addressed in sections 2[a][5], 2[b][4][B], 101[c][8][A], 102[e][22], 103[d][8], and 106[a][3][C] of the new draft.

Recommendation 4: State Title I Activities

The reference [draft bill section 101[b][1][C]] to agencies that should be involved in coordination efforts should be expanded by adding: "and such other State and local agencies as may be deemed appropriate, including State or local disability committees or councils, State worker compensation, human rights, insurance regulation, protection and advocacy, offices on aging or on children and youth, or other appropriate agencies and public entities." To like effect, the list of organizations intended to benefit from demonstration projects [Para. [c][4][A]] should be expanded to include employers and providers of public accommodations.

Recommendation 5: Interstate Initiatives

As an extension of the cooperative and coordinated efforts that the draft bill appropriately promotes, authorization for, and encouragement of suitable interstate and regional initiatives [draft bill section 102[c][1][C][iii]] should be emphasized. The statute should make clear that joint funding of activities by two or more States represents an appropriate strategy in appropriate cases. Interstate efforts can facilitate activities and the development of expertise that might otherwise be beyond the resources of any one State. Such efforts can also contribute to the avoidance of duplication of effort. [Compare draft bill section 102[e][20]].

Recommendation 6: Monetary and Equipment Loan Programs

The legislation [draft bill section 104] authorizes the establishment of "low interest, income contingent loan funds" and "recycling centers." These programs, though operated under the auspices of Title I, would differ from the main body of the State grants program in that States would compete separately for funds in each of these areas, and in that States would be required to contribute a dollar for dollar match.

A number of State Technology Act programs have established loan funds under Title I during the first five years of the Act. To the extent that the proposed reauthorization would create an alternative funding mechanism for loan programs, uncertainty may exist whether use of funds from the basic State grants for these purposes would continue to be permissible. Moreover, the proposed language raises a number of issues regarding the kinds of loan funds that State Title I programs would be allowed to establish.

States should be accorded considerable flexibility in the design of both monetary loan funds and equipment loan funds of the kind contemplated by the recycling centers. Several excellent models exist, and none should be inadvertently foreclosed. In the area of monetary loan programs, both direct-loan and loan-guarantee models show promise. Loan guarantee models, wherein public funds are not used directly for loans but to secure loans made by private or nonprofit lenders, have the advantage of being highly leveraged, in that they facilitate the lending of funds that greatly exceed the amount of public money required, and typically do so at far lower rates of interest to the consumer than could be possible with a direct loan fund. Properly structured through partnerships with the lenders, loan guarantee, as well as direct loan programs, also offer the opportunity, as revolving funds, to build resources which can be used both to increase the number of loans made and to serve as an element in the assumption of program costs by the States in the years to come.

For people with no expectation of loan repayment, loans of equipment represent an important parallel mechanism. An outstanding example of a direct loan of equipment program exists in the Pennsylvania education system, while viable models of monetary loan programs exist in other settings. Given the Act's mandate to operate programs of assistive technology that benefit all people with disabilities, and given the fact that each model will benefit certain sectors of the population, States should be accorded the opportunity and flexibility to develop loan programs that are maximally responsive to the needs of consumers with disabilities.

Chairman OWENS. Thank you.

Mr. MacKinnon.

Mr. MacKinnon. Thank you, Congressman Owens, for the opportunity to come and speak with you today. I shall be brief.

My focus in going through and dealing with assistive technology shall be mostly with regard to education training and opportuni-

ties. The underlying issue I think that is facing us is the question of will.

Three decades ago we decided it was important to place and allow persons to function in a hostile environment. There was a major R&D effort that was underway to allow persons to be able to be mobile, perform tasks and communicate. At that time we placed individuals on the moon, a very hostile environment, but we were allowing them to function. I think the R&D effort in general with technology is important. As you pointed out in your bill, H.R. 856, the need for R&D in technology, I think, has got to be an underlying base.

The bill talks about use of the Federal Laboratory Consortium. I think this has great promise, but I would suggest it should be of sufficient size and scope and it is not clear to me that it should be a demonstration. The Federal Laboratory Consortium can take what appear to be very esoteric issues and come up with answers. What is needed is someone with their capabilities to in fact identify, define, and make available knowledge of what system technology is available, or technology that could be adapted.

There are other programs that could assist in this. For example, in the White House Reinvestment Project with regard to dual-use technology, you can go through the RFP from front to back and nowhere do they talk about anything that would deal with assistive technology for the disabled, a multi-million-dollar program.

I think technology transfer, particularly as it comes from DOD, can be very important and has major investments in the area. The job skills investment program which you are familiar with, and operates in an adult high school in White Plains, is going to be the beginning of a new era in that.

Loral Learning Systems has announced that they are developing the commercial version of that under license from the Department of the Army so that it will now be available on a larger basis.

Technology transfer is important and coordinated Federal resources are very important if things are going to incur. We need incentives. You have been forceful in moving out to other jurisdictions and letting them know of needs.

There is another area in tax policy—the R&D investment tax credit. Congressman Ballenger talked about the chip and the computer. Our tax policy says you may get an investment credit for the development of the computer chip, but you may not get an investment credit for figuring out how that computer chip may help persons learn. There is a prohibition in using the investment credit in the areas of social science, arts or humanities, areas which are important in assistive technology.

The last item in the draft bill—I am sure it is not there because it was less important—but probably the most important item is the question of in-service training, in training across systems—the systems for young children, the systems for children, the systems for adults. Generally the infusion of technology has been inhibited by the lack of technology training of teachers. The special education teachers say they don't understand what assistive technology could be important to the child. In general education, most teachers are not aware of technology as it may be used to improve or enhance the instruction and the educational program for children.

I recommend training across systems because it is going to be important that assistive devices have as long a value as possible, that they not be thrown into the closet as one moves from one system to another. We may be able to talk with the Federal Laboratory Consortium about applicable assistive technology, as we do a computer. As you upgrade your computer to meet different needs for multimedia, you plug in different components, but you still have your basic investment there.

Assistive technology is very important as you change from the education training system to employment. If you need to change your assistive device, again you are set back. The loan program, the access, the availability of moneys, I think is going to be very important. The Senate technology bill is proposing to use the Connie Lee program, Title VII of the Higher Education Act, as a method of financing technology in the elementary and secondary education area. This is a loan insurance program.

I think that that program or Sallie Mae, with its warehousing of debts, could be used as a possibility in developing a loan program across the States. It is important, though, to make sure that it does not become a cash cow for many vendors. And that is why I say in-service training is important to help persons identify what assistive technology will be important to them, particularly in education, training, or in an economic opportunity environment.

Lastly, and just quickly, the question I have a real concern about is the limitation being placed on indirect cost in the bill. The bill must be paid. We have heard that the indirect cost in North Carolina is at 3 percent; at New York State, 13 percent. That varies based upon what you put in the cost containment pool or what you have as a direct charge. That is set by the Office of Management and Budget as well as by the Department of Education and by our State comptroller, so what we are putting in there is the same rate that we use for operating State programs.

Indirect cost has a bad name because of the hiring community and Stanford University showed us that let's say the structure of whether you are nonprofit or profit is only an imaginary thing. Nonprofit, the institution owns the—

Chairman OWENS. It wasn't just Stanford, it was a whole host of Ivy League colleges.

Mr. MACKINNON. That was the one that was the most prominent. In the private sector, the owner owns it. But to get to this area of putting a limit on indirect costs, I think that should be left to audit functions.

Thank you very much for the opportunity, and I will be available to work with you and staff at a later time as you wish.

[The prepared statement of Mr. MacKinnon follows:]

STATEMENT OF P. ALISTAIR MACKINNON, FEDERAL EDUCATION LEGISLATION
COORDINATOR, NEW YORK STATE EDUCATION DEPARTMENT

Introduction

Mr. Chairman and members of the subcommittee, thank you for the opportunity to speak with you. Today's topic is assistive technologies for people with disabilities. We assert, however, that the problem goes beyond that narrow frame of reference to the low Federal investment in technology for educating purposes [at least outside the Department of Defense [DoD]]. What we seek exceeds the scope of the Technology-Related Assistance Act, and our discussion and recommendations reflect that

broader view. The H.R. 856 Title III amendment of 405B(1) responds to this concern by requiring a technology research and development [R&D program] "to educate more effectively at-risk students and other students with special needs."

We must address the broader issue of providing technology for all education and training purposes, technology with features that facilitate use by all people, including those with disabilities—technology designed and built so that everyone can use it right from the start. Initial design and building, however, is the problem.

Take a quick look at practically any education periodical and the attendant volume of recent literature on the benefits of technology-based instruction, particularly for students who are most at risk of dropping out. Then think about the lack of large-scale employment of technology in education as in other sectors of the economy. Then think about Nintendo.

There are several matters to address if investment is to be raised and the potential of education technology fully realized. We certainly need a firm Federal locus of support and funding. Pockets of activity exist in the DoD, the Office for Education Research and Improvement [OERI], and other agencies but no center of coordination has emerged.

We also need more R&D. A 1988 U.S. Office of Technology Assessment study found that education has the lowest investment in technology of any major industry, about \$1,000 per employee. The U.S. average is about \$50,000, with some high-tech industries investing upward of \$300,000. Some more labor-intensive "service" businesses devote \$7,000-\$20,000 per employee. The ratio for education is worsened if the student is considered as an "employee." And this is a rapidly changing environment with new innovations daily.

While progress has been made since the 1988 congressional assessment, there is room for improvement. The Congress must continue to play a key role in facilitating the use of technology in education. It can do so relatively simply by:

- Fostering a stronger Federal education technology R&D program;
- Motivating public and private investment, primarily through technology legislation;
- Aiding the transfer of existing technologies and related information; and
- Refocusing the Technology-Related Assistance Act.

We Need a Stronger Education R&D Effort Featuring Technology

For several years, we have advocated adoption of a project-oriented R&D approach that ensures investigation into salient education issues, including technology, and dissemination of cogent results to those that need them.

We are pleased to see that both Houses' OERI reauthorization proposals head in this direction. As mentioned, we are particularly interested in Title III of H.R. 856 for the U.S. Department of Education to "undertake a comprehensive, coordinated program of research and development in the area of the uses and applications of technology in education . . ."

The prominence of information and dissemination functions in both bills is laudable. They should prove a palliative for the knowledge base problem described later. The House proposal is a little more emphatic in support of technology R&D through grants for projects that use new technologies and establishment and maintenance of electronic networking between and among educational institutions. We heartily support these moves and also believe that the extension service proposed in H.R. 856 could help ensure dissemination of technology information, hardware, and software.

An interesting adjunct to current and proposed OERI activities lies in the recently spawned White House Technology Reinvestment Project. Their efforts to apply defense and commercial resources to the development of dual-use technologies must be extended to technology that is jointly developed with the civilian education community. The written materials describing the Project skirt around the fringes of this issue and should be more direct about it. This appears to be an ideal opportunity to ensure an incentive for creating technology for both military and civilian purposes.

We Need Incentives for Public and Private Investment in Technology

The House and Senate are currently crafting the Technology for Education Act of 1993, which would give development and implementation of instructional technology a higher profile and more dollars. Both bills would advance national technology leadership; promote planning, research, development, and use; and target resources to poorer locations to help bring them into the technological mainstream. We strongly endorse their efforts and hope legislation is enacted with adequate funding.

In addition, two tax provisions could help spur the private investment needed to put education technology R&D on a firm footing. One exists but needs fine tuning. The other is a new proposal.

Since 1981, the research and experimentation credit has given a 20 percent allowance [over a base amount] against Federal income taxes for the amount a business spends on qualified R&D. The credit is used to motivate private research that is economically and socially beneficial, but might not get done without the credit. Without tax support, firms may be unwilling to commit resources or unable to entice outside investors.

Current law, however, does not allow the credit for any research in "the social sciences, arts, or humanities," thereby excluding education and training projects.

We urge permanent extension of the research and experimentation credit. At the same time, it is important to expand the definition of "qualified research" to include education and related fields.

We also would like to see a new Targeted Education and Training Equipment Tax Credit to spur private investment. Under such a provision, a business would get a credit for a portion of technology and equipment purchases that are made available for use by public schools in approved programs, while also used for the company's purposes. The primary goal would be to encourage private concerns and education institutions to jointly plan and implement programs that would serve both current and prospective employees. Purchases should meet several criteria before credit is given:

- Only newly purchased equipment used for a specific purpose in partnership with an education institution would count, not existing inventories or equipment that has been, or planned to be, discontinued.
- Only equipment available for programs that directly serve at-risk and special needs students would be eligible, including adult education or vocational program enrollees in a public school system or institution of higher education, in an organized education program approved by the State education agency [SEA] or State accrediting body.
- The equipment could be located at the business site or in the school or institution, as long as the location is convenient and accessible to both parties.
- The program must be guaranteed to operate for at least three years after purchase of the equipment and use of the credit.

With the great need for research in many problem areas and the hesitation of business to participate much in education-related activities, these tax law changes seems minimal yet critical. Nintendo for the mind seems a worthy goal but needs a push.

For the disabled, using the same technology during education and training that they would use during employment should be a tremendous boost in their quest for independence.

We Need to Better Use Existing Resources through Technology and Information Transfer

Federal agencies like the Energy Department, NASA, and the Office of Personnel Management are prime targets for locating existing technology that can be adapted to civilian use. Perhaps the most fertile ground for such efforts is one of the largest education and training entities in the world, the DoD.

As we all probably know, education has been a vital part of our national defense system since 1777 when direct Federal administration of educational programs began with the instruction of military personnel. A significant portion of current Federal R&D dollars are spent by the DoD and its contractors in developing computer-related technology for improving academic competencies.

Even with continuing cutbacks, the magnitude of the armed forces and their training needs requires that we provide instruction in general skills such as reading, writing, and foreign languages *and* military jobs, such as motor vehicle maintenance and health occupations, which are similar to civilian work.

These demographics and job demands mean that the DoD must mount a significant education and training program. To streamline instruction, it seeks to develop and use the latest technology to ensure that people are prepared for service and can maintain or refresh skills. Consequently, hundreds of millions of dollars are spent annually doing just that.

As a result of this investment, many technological innovations and instructional techniques have been perfected by the military. Dating particularly from World War II research, these have included the overhead projector, simulation exercises, foreign language laboratory training programs, and computers. More recently, applications of microcomputers and interactive media have been emphasized, ranging from Army programs using hypertext for language learning to hand-held tutors in mathematics and other subjects.

These and other projects have the potential to be adapted for effective use in our schools. And remember—this is only a single Federal agency—there are others that must train their employees and offer transfer possibilities.

A Success Story. A prime example of the potential in transferring military technology is the Job Skills Education Program [JSEP]. Developed by Florida State University and the Ford Aerospace Corporation for the Army Research Institute, JSEP was designed as a prototype, computer-assisted educational program to instruct soldiers in the academic competencies needed for their service work assignments.

Because of the positive results from the military application and the general comparability of many military occupations to civilian counterparts, a JSEP pilot test was completed under the sponsorship of the New York State Education Department and the White Plains [NY] Board of Education at the Continuing Education Center of the White Plains City School District.

The majority of the pilot participants were minority group members and in their 20s. Most were Job Training Partnership program enrollees or public assistance recipients using JSEP as part of an Adult Basic Education, General Education Diploma, or English as a Second Language program.

Testing before and after the JSEP intervention found students making an average scoring gain of over 30 percent. An informal survey of the few dropouts found that all had left the program to accept employment. And participant satisfaction surveys showed that students were very pleased with the program and their own performance.

The conclusion (or maybe it's really a beginning) of the story comes today when the commercial production of JSEP by Loral Learning Systems is formally announced. So the potential is there. How can we facilitate transfer?

The Legislative Structure for Transfer. Federal legislation is evolving in the right direction with the Stevenson-Wydler Technology Innovation Act; strengthened patent law and policy reforms [particularly through the Bayh-Dole Act of 1980]; and the Federal Technology Transfer Act of 1986. These actions all enhanced transfer possibilities.

The key elements for our purposes, however, came through the 1988 Omnibus Trade and Competitiveness Act. This law authorized an Office of Training Technology Transfer in the U.S. Department of Education as a clearinghouse for federally developed education and training knowledge and technology available for transfer to SEAs and local education agencies [LEAs], among other entities. It also authorized regional technology transfer centers to be operated by a college or university, or a consortium of schools, to enhance transfer relevant to that region.

The Office of Technology Transfer, in particular, could provide a valuable service by being a coordinated agency and clearinghouse. It could expand and formalize the technology transfer process and specifically define the education community's participation. The coordination of dual-use activities with the DoD illustrates the kind of useful function the Office could fulfill.

In concert with the regional transfer centers, the Office could ensure that the education community is not left far behind other sectors of the economy in tapping technology resources. Both activities must be put into operation with adequate funding. This has yet to happen.

National Knowledge Base. Transfer should not be limited to hardware and software. The military and its contractors and other Federal agencies frequently produce reports on topics relevant to civilian education. However, transfer of simple information such as bibliographic citations from sector to sector has significant gaps.

For example, the Manpower Research and Training Research Information Systems [MATRIS] maintains a data base of abstracts of education and social science research being conducted by the DoD. The Education Research Information Center [ERIC] performs a similar bibliographic and abstracting service for the education community. Relevant education citations can routinely be found in one and not the other. While this situation has improved, the need to expedite creation of a comprehensive, consolidated data base of knowledge is critical for research, evaluation, and other purposes.

The Department of Education should help develop this base. The 1988 Omnibus Trade Act mandated the Department, through the Office of Technology Transfer, to "maintain a current and comprehensive clearinghouse of all knowledge and education and training software developed or scheduled for development by or under the supervision of Federal agencies."

A key part of implementing this task should be to lead unification of the ERIC, MATRIS, the National Technical Information Service [NTIS], and other existing in-

formation sources. While information clearinghouses exist for specific applications, the lack of a unified base hampers identification and monitoring of research.

We Need to Better Target the Resources of the Technology-Related Assistance Act

To ensure that people with disabilities are properly and fully served, there are several changes we would like to see in either existing or proposed reauthorization language.

First, neither current nor proposed language gives clear criteria for designating a lead agency to administer a State's participation. In some cases, this has resulted in selection of an entity without direct involvement in the delivery of services to clients. When combined with provisions that require coordination with other State agencies and various councils and advocacy groups, we submit that increased costs result. The more coordination that is required the higher the administrative dollars and the lower the amount devoted to service. The legislation should designate the lead agency to be a body in a State that actually provides services to people for independent living and job training.

The proposal to limit indirect costs should be reconsidered. The additional expense and technically complex administrative moves required to use a capped indirect cost rate seems overly burdensome. To operate a program, the cost of doing business must be met. We believe adequate safeguards exist through audit and oversight procedures to make the limitation unnecessary.

The proposal for a low-interest contingent loan program to allow people with disabilities or their families to purchase assistive technology has merit. However, sufficient legal authority appears to exist already in the Higher Education Act to support aid to State financing agencies for this purpose either through the provision of loan insurance [as in section 752—College Construction Loan Insurance Association] or the warehousing of debt obligations [similar to section 431—Student Loan Marketing Association]. While we realize this proposal can be criticized as beyond the responsibility of the subcommittee, it is within the purview of the Committee on Education and Labor and therefore a plausible suggestion for your consideration.

It also may be instructive to note that the New York State Department of Social Services sponsors a loan program for people to purchase assistive equipment. Defaults are a significant problem. Care must be taken in designing a program to ensure that it does not become a cash cow for businesses that can justify many unnecessary devices as requirements. Loans can easily become grants if their parameters are not arduously and carefully defined. Again, administration by a direct service organization can be a plus.

Finally, the latter sections of the reauthorization proposal refer to possible changes regarding training in the use of assistive technologies in other legislation such as the Rehabilitation Act and the Individuals with Disabilities Education Act. These statutes may already contain the necessary requirements and should not be replicated.

Summary of Recommendations

1. The OERI reauthorization should be completed with an emphasis on creating technology that meets the educational needs of *all* students, particularly through adoption of the proposed section 405B(1) in H.R. 856.

2. The White House Technology Reinvestment Project should specifically address the application of defense and commercial resources to the development of dual-use instructional technologies for both military and civilian purposes.

3. A Technology for Education Act should be enacted that financially supports State and local technology planning, research, development, and use.

4. The research and experimentation tax credit should be permanently extended, with an expanded definition of "qualified research" to include research in education, training, and related fields.

5. A Targeted Education and Training Equipment Tax Credit should be enacted to provide more incentive for private investment in education and training technology.

6. Technology transfer provisions in the Omnibus Trade and Competitiveness Act of 1988 must be fully implemented with adequate funding. The activation of the Office of Technology Transfer is particularly important as we seek to make effective use of dual-use technologies.

7. The Technology-Related Assistance Act reauthorization should designate the lead agency to be the entity in a State that directly serves people for independent living and job training. Any limitation on indirect costs is unnecessary given the expense and time consumption involved in rate setting and existing audit and oversight procedures. We also recommend that existing debt consolidation or insurance methods available in the Higher Education Act be used in lieu of the proposed low-interest contingent loan program for purchase of assistive technology devices and

services. Finally, existing legislation such as the Rehabilitation Act and IDEA may sufficiently address the training issues referred to the last sections of the reauthorization proposals.

Chairman OWENS. Thank you.

Mr. Morris, our draft bill largely incorporates your four primary recommendations already, including the State agency redesignation mechanism and the establishment of low-interest loan programs.

In regard to setting up loan programs, do you think that what Mr. MacKinnon suggested, utilizing Connie Lee, college construction insurance loan, or Sallie Mae, Student Loan Marketing Association, will be more appropriate than the language drafted?

Mr. MORRIS. I wish I had the extensive knowledge of either of those programs to be able to comment. I would like to look into those two possibilities.

There may be a model there that would certainly infuse a lot more dollars and bring about the kinds of moneys into this program to make a more significant effort in all States. Unfortunately, I don't have the knowledge base to answer.

Chairman OWENS. Could you elaborate a little bit, Mr. MacKinnon, on how Connie Lee would work?

Mr. MACKINNON. Connie Lee could work with a State authority and act as an insuring agent with regard to bonds or indebtedness. Connie Lee is established, in its current form, to help very high-credit-risk postsecondary institutions gain academic facilities, equipment, and those kinds of things. By their insurance, they change what might be a Triple B rating, which is down at the bottom, into a Triple A rating, and therefore have a very favorable interest rate with regard to the money that is loaned. So that they are in the reinsurance or insurance business. We could use their experience and start working it through other programs, as the Senate is proposing with regard to the Assistive Technology Act, to get technology in the elementary and secondary schools.

Depending upon how you want to structure it, you might want to use Sallie Mae as a debt warehouse where banks that do make loans will have an opportunity to sell those loans to someone like Sallie Mae, and then have the cash back again for making additional loans in the area.

Chairman OWENS. I am sure Sallie Mae would like to improve its image.

Mr. MACKINNON. Yes, this could help them.

Chairman OWENS. Mr. Morris, why do you recommend that the set-aside for advocacy services go to the protection advocacy agency authorized by the Development Disability Act? Are there other programs, such as the client assistance program, which would also act on behalf of people who need assistive devices?

Mr. MORRIS. I think the critical issue is the ability of the designated agency to be able to act independently, without fear of retribution, without fear of loss of funds.

In the P&A program under the Rehabilitation Act as put together last year, those agencies are designated by the governor but have an independent funding source which comes directly from the Congress. As we have seen under the Assistive Technology Act, in some States an individual wants to bring an appeal because they can't get a device; medicaid has turned them down. They may be

willing to go forward to a certain degree, take that to administrative appeal. They take it to an administrative appeal and at that point the original decision is reversed and the individual is told they are entitled to a device. At that point the State indicates that they are going to appeal that decision; the Assistive Technology Act agency says at this point, "we have got to step back."

I think the issue is a conflict of interest. The issue is, in terms of the designation of this particular type of agency, is its independence. Going back now in excess of 15 years and providing protection and advocacy to individuals with disabilities, clearly they must not be limited to just people under the DD definition; certainly within your peer definition, all individuals would be covered.

I am concerned about any agency, directly under the control of the State rehabilitation agency, having independence of action to enable individuals to pursue their full rights of appeal. I happen to be an attorney. It doesn't mean that all cases have to go into court. But people, individuals, need their effective representation, which in most cases is going to be very difficult given the complex maze of regulations and benefits and eligibility criteria that have been established.

Chairman OWENS. Thank you.

Mr. Mendelsohn, both you and Mr. MacKinnon expressed interest in ensuring access for individuals with disabilities to the developing national information infrastructure. I have to agree with you. Several weeks ago I submitted recommendations to Congressman Boucher to amend his bill, H.R. 1757, the High Performance Computing and High Speed Networking Applications Act of 1993, that lays the foundation for the national information network. Congressman Boucher has accepted many of my recommendations that they will serve to guarantee that the needs of individuals with willful and functional limitations are met.

Could you give us some specific examples, Mr. Mendelsohn, of tax deductions which are currently visible for assistive devices on the Internal Revenue Code that you mentioned?

Mr. MENDELSON. Yes, Mr. Chairman.

First let me thank you for those measures on behalf of the NAI and say that it is exceedingly good news from the standpoint of the community.

Examples would include, first of all, the great extent, as demonstrated by the cases and the rulings over the years, to which what we call assistive technology qualifies for the medical expense deduction.

Assistive technology and health care are very different kinds of terminology, so one has to understand and be pretty careful to see where they relate. But there is a whole range of very straightforward assistive technology devices, TDDs, close captioned decoders, adaptive hand controls for motor vehicles, braille devices, et cetera, which are routinely understood to be tax deductible as intensions, and by analogy the logic of those decisions extends well to the range of other and new devices that are coming online every day. But accountants don't know about this and obviously advocates don't know about it.

This is applicable to special education as well. Technology and assistive technology services in some cases in the special education context, likewise qualify.

We have in the employment and business setting, of course, impairment-related work expenses, which are an important subcategory of miscellaneous itemized deductions. We have the disabled access credit which Congress enacted on behalf of small businesses shortly after the enactment of the Americans With Disabilities Act. We have the architectural transition Barry-Ruhl induction.

We have some important provisions which fall into another sphere, provisions, for example, that in the case of early retirement by reason of disability for people covered by pension plans allow premature withdrawal of retirement funds without premature penalties in many cases. And very often the reason for these withdrawals is to buy assistive technologies.

So there are many provisions along those lines, and their interaction and use potentially represents a source of vast subsidization, as I said before.

If I may also mention just by way of the question of what kinds of specific measures would represent an adequate response to the National Information Infrastructure, the prototype measure that I guess Congress has never taken in this regard will be something like the Television Decoder Circuitry Act, which specified, I believe under circumstances that were agreeable to the industry, as well as to representatives and consumers, the incorporation of decoder technology in most TVs manufactured in this country after a certain date. Sort of renders the issue of having to go out and buy a closed captioned decoder moot after a certain point.

And this is, as I say, a prototype case and it represents the methodology that we need to adopt, not always by legislation, sometimes by voluntary means, sometimes by—

Chairman OWENS. That was by legislation. I sponsored that.

Mr. MENDELSON. I should have known. I am from Brooklyn as well, I have always been very proud. I wish I had been in your district. Unfortunately I was not.

But an excellent piece of legislation, Mr. Chairman, and as I say, a prototype of the kind of direction in which we need to go. And think of how much money is saved online. Think of how much more effective it is. How much less expensive for everyone to do it at that stage, rather than to try to go back and retrofit later.

Chairman OWENS. Thank you.

Mr. MacKinnon, in the draft bill we have placed a 10 percent cap on administrative costs which you disagreed with. We did that because some States have spent as much as 40 percent from the front end for their costs. So it was a situation that we felt had to be brought under control.

Are you saying that your 13 percent from New York State should be the model? Did I hear you say 13 percent?

Mr. MACKINNON. I am not saying it should be the model. I don't know. I know we have been looking at indirect costs with respect to program integrity in the States. Most of the States tend to be low.

The issue on indirect costs is what you set up as direct versus what you put on an indirect pool and develop its relationship.

I would be surprised about a State agency that would have a 40 percent indirect cost. Most of the ones I am familiar with range from the single digit maybe into the high teens or something like that. But that is all a function of what you put in the pool and what you do—

Chairman OWENS. But New York State would be comfortable with 13 percent?

Mr. MACKINNON. We come in at about 13 percent.

Chairman OWENS. You mentioned how Sallie Mae and Connie Lee could work, but I am not clear on how consumers could be involved in that. Would consumers lose any control?

Mr. MACKINNON. No, the issue for the consumer is the device, the technology. Once it is decided that the device is appropriate, financing it then becomes the issue. The financing can be with a bank, as suggested in North Carolina, and as that bank has an opportunity to warehouse that loan, they might be much more open to providing loans as we have in the Guaranteed Student Loan program.

Banks are very interested in doing the guaranteed student loan because they know that is traffic; it is helpful; it is paper that they can warehouse so they can get more money back in to make additional loans in the same area and that there is a guarantee that goes along with it so that they can calculate their costs.

Chairman OWENS. You don't think they would impose certain interest rates and certain terms of payment? There is a lot of flexibility in most successful loan programs. Would that be taken away?

Mr. MACKINNON. That would have to be specified with respect to the legislation. In the guaranteed student loan program, the interest rates are specified at a certain level.

An individual going in and just getting a personal loan would have to be extremely creditworthy to be able to come up with an interest rate that you can get when it is used for a student loan for postsecondary education. I am saying that having the government program there will make larger amounts of moneys more readily available.

You don't have to go setting up new structures because you have a structure there and you just try to access that structure so that there can be moneys available to assist the clients in acquiring the technology when they need it.

Chairman OWENS. You feel there would be advantages that certainly would offset any disadvantages in flexibility?

Mr. MACKINNON. That would be my sense. The question always comes down to, is the money available to purchase? By using these insurance or warehousing possibilities, it assures that that money will be available.

Chairman OWENS. Thank you very much.

The kind of funding mechanism that you just mentioned with respect to Sallie Mae and Connie Lee and the approach Mr. Mendelsohn mentioned would be applicable across the board to all States. It's something that we should explore. We should be certain that the information is available even if we don't have to go into great detail in the legislation.

But we would like to take a close look at it.

Thank you very much. You have been very patient. We certainly appreciate your appearance.

I would like to say for the record that the staffs of the subcommittee members will continue to work together to refine this draft bill. The results will be a stronger and improved Assistive Technology Act. We will be happy to receive any further comments from you within the next 10 days.

The subcommittee is adjourned.

[Whereupon, at 1:30 p.m., the subcommittee was adjourned.]

STATEMENT OF LEWIS GOLINKER, Esq., THE ELECTRONIC INDUSTRIES ASSOCIATION
CONSUMER ELECTRONICS GROUP

The Electronic Industries Association Consumer Electronics Group [EIA/CEG] wishes to congratulate Chairman Owens for his efforts on behalf of our disabled citizens in proposing the reauthorization of the Technology-Related Assistance for Individuals with Disabilities Act of 1988. The programs and grants set forth in the Act are a vital part of a necessary outreach to meet the needs of that very important part of our citizenry. The development of technology has been critical to the productive capacity of the U.S. economy, and to the lives of our people. Technology today also plays an integral part in assisting individuals with disabilities to reach their potential and realize a more productive and fulfilling life. Furthermore, with a technology-based world just around the corner, it is vital that all Americans have reasonable access to that technology.

EIA/CEG has supported the passage and implementation of the Technology-Related Assistance for Individuals with Disabilities Act, and we support its reauthorization. The proposed reauthorization would make some changes to the Act. We wish to comment on some of the proposed changes.

First, the subcommittee should be aware that there are substantial voluntary efforts underway either directly or sponsored by manufacturers to reach the disabled and provide assistance, education, and increased accessibility. These efforts are in addition to the programs of State and Federal governments and private associations.

One example is the work conducted by the Electronic Industries Foundation [EIF], the not-for-profit foundation of the Electronics Industry Association. Established in 1975, EIF was started by industry leaders who recognized that the innovative thinking of the electronics industry could do more for America and its people than simply meet desires for new and better electronics products. These forward-thinking leaders believed that there was an opportunity to achieve good works through the corporate membership of EIA. Experience has taught that the energy, talents, and leadership of EIA member companies can be mobilized and coordinated in communities and on a national basis for good purposes. With the support of a Board of Trustees that reflects the diverse electronics corporate world, EIA is able to pursue a wide range of goals as it carries forward its mission.

Many of EIF's efforts over the years have focused on cooperative ventures with electronic companies that advance the independence and productivity of people with disabilities. EIF has pioneered methods of linking qualified persons with disabilities to job opportunities through an innovative national program called Project With Industry. EIF's program has been recognized as one of the outstanding industry-based models in the country. As part of all these efforts, EIF works to ensure that appropriate and accurate information is disseminated on issues related to the Americans with Disabilities Act and that mechanisms are in place to aid our industry and others in meeting employment obligations and accommodations and accessibility needs of individuals with disabilities.

The close affiliation of EIF with EIA's Assistive Devices Division provides unique opportunities to involve industry in collaborative efforts to identify the special needs of people with disabilities, innovative technology that can be used by these individuals, and ways to make assistive technology more accessible to them. Recognizing the benefits of technology to aid persons with disabilities on the job and at home, EIF has successfully promoted the production and marketing of electronic assistive devices that provide these individuals with remarkable capabilities for augmenting communication, opening access to printed material, and increasing independence so that they can share in the social and economic rewards of society. Efforts are also being undertaken to examine the concept of "universal" design in which products, buildings, and services are accessible to all Americans.

In addition to EIF's efforts, EIA's Consumer Electronics Group works to increase awareness of the availability of assistive technology. On behalf of its Assistive Devices Division, comprised of manufacturers of electronic assistive devices, EIA/CEG has published a 28-page pamphlet which serves as a general introduction to assistive devices. The pamphlet is believed to be the only publication of its kind to address assistive devices for every disability category and made by many different manufacturers. To date, EIA estimates the pamphlet has reached close to 400,000 Americans.

EIA/CEG's Assistive Devices Division is also beginning work to develop a "Seal of Accessibility" to identify mainstream consumer electronics that are usable by and useful for consumers with disabilities. Once developed, the Seal would serve as a marketing tool that could be used on product packaging, in ads, and other promotional materials to give consumers an easy way of identifying those products with

features that make them especially appropriate for users with disabilities. The Seal will be developed by representatives from the electronics industry, disability experts, and consumers with disabilities.

We make these points to encourage the Chairman and his colleagues to remember the private sector and manufacturers as you reauthorize the Act. In particular, we would urge in Part A, section 201. National Classification and Certification System that such a classification system be developed by the industry in conjunction with disability experts and disabled individuals as a voluntary industry standard. Note the above-mentioned "Seal of Accessibility" standard now being promulgated by EIA's Assistive Devices Division will then be implemented widely on a voluntary basis. With an inherent incentive to participate in the Seal of Accessibility program, EIA/CEG expects broad support for this effort.

In section 224. Technology Transfer, the reauthorization legislation provides for a grant to the Federal Lab Consortium to conduct a demonstration project for technology transfer to the disability arena. We suggest that the NTTC should be included in the process as a matter of procedure and perhaps even as a potential grantee thus allowing the Secretary to determine which avenue would be best for conducting the demonstration project.

Finally, in section 2[a]5] under "Findings and Purpose" the reauthorization legislation refers to "The inadvertent failure of . . . hardware manufacturers . . . to account for the specific access needs of individuals with disabilities . . . We would point out, however, that the consumer electronics industry is making great strides toward accessibility in design and function in a myriad of products. Note the heretofore mentioned programs being implemented. Perhaps if meeting the needs of our disabled population is a priority—and it is—there should be more incentives provided for research, development, and especially commercialization of technologies to assist the disabled and to provide greater accessibility for all.

Again, we wish to thank the Chairman for moving forward with this important proposal to reauthorize legislation which has helped and will help countless disabled individuals receive the assistance they require.

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TESTIMONY OF LEWIS GOLINKER, ESQ.
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BEFORE THE HOUSE COMMITTEE ON EDUCATION & LABOR
SUBCOMMITTEE ON SELECT EDUCATION & CIVIL RIGHTS

IN SUPPORT OF
REAUTHORIZATION OF THE TECHNOLOGY
RELATED ASSISTANCE TO
INDIVIDUALS WITH DISABILITIES ACT

JUNE 15, 1993

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Thank you for the opportunity to present testimony before the Subcommittee in support of reauthorization of the Technology Related Assistance To Individuals with Disabilities Act of 1988, Public Law 100-407 (hereafter, the "Tech Act").

I am an attorney with 12 years experience providing client directed legal services to children and adults with disabilities who use assistive technology.¹ For the past 3 years, I have been one of the principal consultants on funding and assistive technology access to the RESNA Technical Assistance Project and to the state assistive technology projects, which are both funded under Title I of the Tech Act.²

¹ I was one of the original staff attorneys hired by the New York State Protection & Advocacy Program for Persons with Developmental Disabilities ("P&A"). I continued in that role for 10 years, from 1981-1991. Since October 1990, I have been the funding coordinator for Project Mentor, a national demonstration grant funded by Title II of the Tech Act and administered by the United Cerebral Palsy Associations. Since March 1990, I also have served as a consultant on assistive technology funding to the RESNA Technical Assistance Project, and to 10 state assistive technology projects funded under Title I of the Tech Act.

My testimony is submitted as an individual, not as a representative of UCPA or of any state Assistive Technology Project.

A description of the scope of my assistive technology funding experience is attached to my testimony.

² My services to the RESNA T/A Project include being the co-author of M. Morris & L. Golinker, Assistive Technology: A Funding Workbook (Washington, D.C.: RESNA PRESS) (Jan. 1991), which remains the only reference work to review and explain how the federal laws and rules for the Medicaid program, for special education and vocational rehabilitation services serve as the principal resources for assistive technology funding. At present, the T/A Project has contracted with me to update and expand the discussion of the legal foundation for funding.

Since March 1990, I also have conducted 5 workshops on

The testimony that follows addresses the need for the Tech Act to direct greater attention to, and to require a different method to solve the barriers of technology funding and access. Within the vocabulary of the House draft reauthorization proposal (hereafter "House draft bill"), my testimony is offered to strengthen the definition and scope of the phrase "advocacy services."

1. **Client Directed Legal Representation
Must Be Part of Every State's Assistive
Technology Services Delivery System**

For the past 12 years, I have aggressively pursued the Due Process procedures that Congress created within each of the principal benefits and services programs for people with disabilities: namely, Medicaid, the Individuals with Disabilities Education Act ("IDEA"), and the Rehabilitation Act. My activities have been at the request of children and adults with disabilities who sought to use those laws and rules to gain funding for and access to assistive technology devices and services.

In addition, I have assisted both disability rights

assistive technology funding and systems change activities that were sponsored by the T/A project.

Also since March 1990, I have served as a paid consultant to 11 state assistive technology projects. In addition, I have provided assistance without charge to 21 state projects. I have assisted with the writing of the initial grant application, led workshops, prepared manuals and training materials, assisted funding coordinators, engaged in negotiations with one state Medicaid program, and provided client directed representation in both administrative and judicial forums. See statement of experience attached to this testimony.

organizations and state assistive technology projects to work within their state governments to develop and/or change state policies to improve technology funding and access.

The outcome of my representation has been the award of devices and services for dozens of individuals on a one-by-one basis, and the development of funding criteria that will be uniformly applied to all subsequent program participants who seek similar devices and services.³

My experience teaches that **both** approaches: client directed legal services, and inter-agency negotiation compliment each other and when coordinated, will yield the desired outcome: improved access and use of technology by people with disabilities. But my experience also teaches that of the two means to reach this common goal, the establishment of systems of Due Process procedures in each of these benefits and services programs reflects congressional brilliance: there is no more direct, effective or timely solution to technology funding and access barriers.

Of greatest importance, this goal is realized **by** people with disabilities -- both as individuals on a one-by-one basis, and on behalf of all people with disabilities throughout the country -- when legal services professionals have been made available to

³ These policy reform efforts have been particularly successful in regard to Medicaid funding for augmentative communication devices and services. Client directed legal representation led to the development of AAC funding criteria in Indiana, Iowa, Maine, Minnesota, New York, and Oregon. Current Medicaid AAC funding policy reform efforts are being directed **by** people with disabilities in both Mississippi and Ohio.

assist them. By contrast, despite the best efforts of the state assistive technology projects, nothing they have done or are likely ever to accomplish can compare to the speed or effectiveness of client directed legal services in ensuring that devices and services are delivered to, used by, and benefit people with disabilities. Indeed, there is no other services delivery model that has demonstrated similar success, or offers similar potential to ensure that people with disabilities actually acquire and have the opportunity to use and benefit from assistive technology.

People with disabilities have no need to await action by any source -- neither by the Congress to amend the statutes governing these programs,⁴ nor by the state assistive technology projects to convince program administrators to be more responsive to the needs of people with disabilities for assistive technology -- before they can gain access to needed devices and services. Clearly, both Congress and the state assistive technology projects can effect changes in law and policy for people with disabilities that will make technology funding and access easier.

But people with disabilities can get those devices and services today, and by their own actions. Indeed, people with disabilities were getting devices and services more than half a

⁴ Congress already has enacted sufficient statutory and regulatory authority for each of these programs to be a resource for assistive technology funding and access. See M. Morris & L. Golinker, Assistive Technology: A Funding Workbook (Washington, D.C.: RESNA PRESS)(Jan. 1991). In addition, funding and access barriers are neither required nor excused by alleged inadequacies in funding levels for these programs.

decade before there was a Tech Act, when they were able to access skilled rehabilitation services and legal services professionals. Because there is no legal justification for funding and access barriers, legal services professionals being directed by people with disabilities used the Due Process appeal procedures to secure augmentative communication devices, seating, positioning and mobility devices, home and workplace modifications, and a wide array of other devices and services that have since been coined "assistive technology."

The experience of people with disabilities in the past 12 years, both before and since the Tech Act was enacted, should make it clear that the principal cause of assistive technology funding and access barriers is not gaps in existing law or policy, but "learned helplessness," which translates into "it won't work, so why try."⁵ Learned helplessness is a direct

⁵ Learned helplessness is the most serious of all assistive technology funding barriers. See L. Golinker, "Funding Assistive Technology," 5 Rehabilitation Management 129-133 (August/September 1992). This concept has the following characteristics:

① It acts like an aggressive virus, attacking the professional confidence of rehabilitation services providers who are a necessary participant in all public and private assistive technology benefits and funding programs.

② It destroys the willingness of these professionals even to apply for funding from these programs or to pursue applications beyond the initial decision level, despite their professional expertise and judgment that the person with a disability truly needs an assistive technology device or service.

③ Its effects are "fatal:" because it acts as a complete deterrent to applications for funding, it is an absolute barrier, to which there are no appeals.

result of the arbitrary and inconsistent application of these laws and rules, and the inadequate supply of rehabilitation and legal services professionals capable of forcing administrators to make decisions consistent with their program mandates.⁶

To combat "learned helplessness;" to deliver assistive technology devices and services in a direct, effective and timely manner; and for people with disabilities to accomplish these goals by their own efforts as opposed to as a result of the efforts of others for people with disabilities, requires that client directed legal services be considered part of every state's system of assistive technology services delivery.

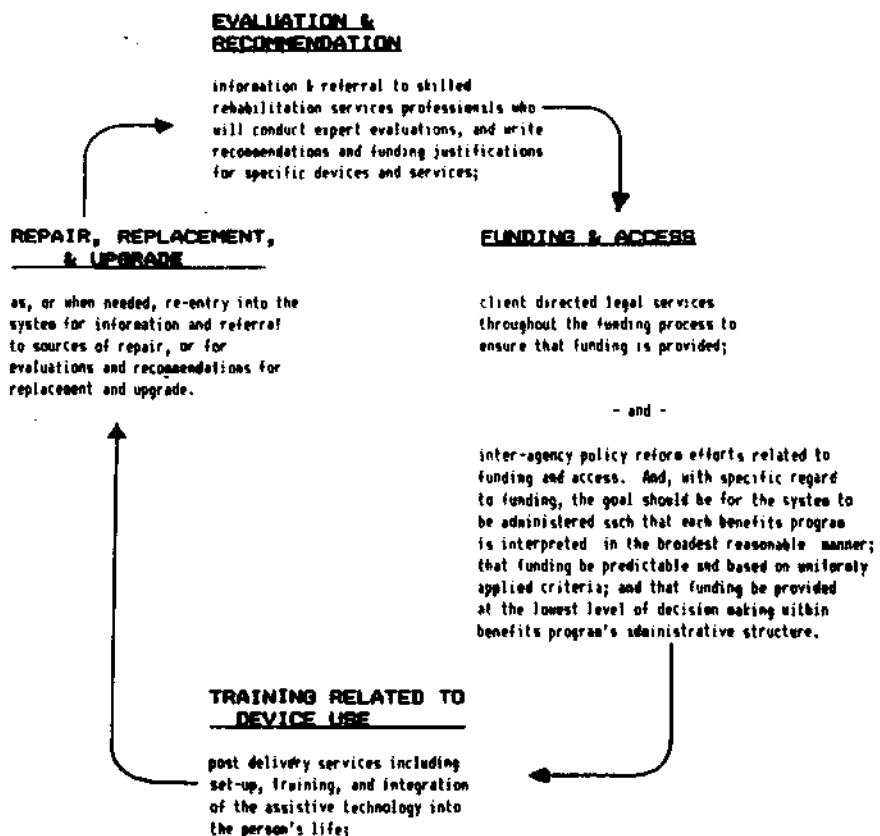
* Another horrific effect of learned helplessness is the ease with which "exposure" may occur: it can be caused by no more than a simple telephone call to a funding program to ask whether a particular device or service is covered, to which a negative reply is given. Or, it can result from an initial request for funding that never is decided, or to which the response is that the device or service is "not necessary," "a convenience," "not treatment," or "too expensive."

* And, finally, learned helplessness is spread throughout a community of professionals with great speed: after one professional is infected, word of mouth knowledge that particular devices or services will all but eliminate further applications for that technology within weeks or months.

⁶ This statement is consistent with the findings of the National Council on Disability, among others. See e.g., National Council on Disability, Study on Financing of Assistive Technology Devices & Services for Individuals with Disabilities 28 (Finding # 3) (Report to Congress March 1993) (hereafter, "NCD Report to Congress"); National Institute on Disability & Rehabilitation Research, Consensus Statement: Augmentative & Alternative Communication 3, 9-12 (March 1992); Testimony of Lewis Golinker, Esq., before the National Council on Disability, Regional Public Forum (Portland, Maine) (July 1991).

**2. Elements of A Permanent, Seamless,
State Wide System of Assistive
Technology Services Delivery**

The House draft bill states that one of its goals is for the states to create a permanent, state-wide, consumer responsive and consumer driven system of assistive technology services. To be effective, such a system must include five program elements:



CAPACITY BUILDING

pre-service & in-service training for
rehabilitation services and legal services
professionals to be capable of providing
technology related assistance

Since 1982, I have been providing legal services related to assistive technology funding and access and working to see this services delivery model put into place and implemented. This model can be created and implemented successfully, and it is wholly consistent with the goals of the Tech Act. See L. Golinker, "Freedom of Speech: Finding AAC Device Funding," 4 Issue Rehab Report 24-29 (March/April 1993).⁷

⁷ My efforts to create such a model have included three inter-related activities:

First, to ensure that people with disabilities received funding needed for access to devices and services. To accomplish this goal, I have provided client directed representation to dozens of children and adults with disabilities who sought technology from Medicaid, special education, vocational rehabilitation and private insurance sources.

Second, to ensure that people with disabilities had a high degree of predictability regarding their applications for technology funding, i.e., that their requests would be reviewed according to clearly stated and uniformly applied funding criteria. To accomplish this goal, UCPA has authorized me to pursue client directed representation and/or to conduct negotiations with the Medicaid programs in every state to secure nationwide coverage of augmentative communication devices. To date, I have participated in the development of AAC funding criteria by the Medicaid programs in New York, Maine, and Indiana, and I currently am working to have such criteria developed in Ohio, Mississippi and Vermont.

Third, to ensure that people with disabilities had rehabilitation services professionals unafraid to participate in the funding process and skilled to write funding justifications consistent with funding program

This services delivery model is premised on 2 straightforward principles: to refuse to tolerate "learned helplessness," and, to refuse to take "no" as a final answer to a request for assistive technology funding. Stated most simply, the philosophy of this services delivery model is to "just do it!" to place the burden on the benefits or funding source to prove the people with disabilities are not entitled to the devices and services they are seeking.

In the vocabulary of the House draft bill, this model offers people with disabilities "consumer responsive, consumer driven" legal services.⁸ It is clear that the legal services component constitutes efforts made by people with disabilities, who are the

eligibility criteria, and legal services professionals willing and skilled to pursue client directed appeals when necessary to obtain needed devices and services. To accomplish this goal, I have conducted 54 assistive technology funding workshops and teleconferences for Project Mentor and for 23 state, national and international organizations. This total includes 5 workshops conducted for the RESNA Technical Assistance Project and 18 workshops conducted for 6 state assistive technology projects funded under Title I of the Tech Act. I have assisted legal services professionals in 25 states with their client directed representation. And, I have authored 11 publications related to assistive technology funding which have been distributed nationwide to people with disabilities and their families, rehabilitation services and legal services professionals, and to state assistive technology project staff.

⁸ As I explain further below, however, it is difficult to impossible to find the words that describe these client directed services within the reauthorization's proposed definition of "advocacy services."

sole intended beneficiaries of the Tech Act.⁹

In addition, this services delivery model recognizes that there must be a significant expansion of the numbers of rehabilitation services as well as legal services professionals who are skilled to assist people with disabilities to secure technology funding and access. Medicaid, vocational rehabilitation, special education and private health insurance programs are all driven by professional evaluations and statements of need consistent with program criteria. In

⁹ As an attorney working on behalf of particular adults or children with disabilities, my sole responsibility is to respond to their needs -- to see that their individual needs are met. Moreover, to achieve that goal, my clients have driven the vehicle provided expressly for them by the Congress -- the exercise of their appeal rights in public benefits programs such as Medicaid, special education, and vocational rehabilitation, and private sources, such as health insurance policies.

The development of Medicaid augmentative communication funding criteria also are efforts made by people with disabilities. Medicaid AAC device funding criteria acknowledge the joint interests of the Medicaid program, which demands accountability before public funds are expended, and of people with severe communication disabilities, their families, and rehabilitation services professionals, who demand that the Medicaid rules, policies and practices in their states be changed to make a "yes" to funding requests more predictable and more timely. The implementation of these criteria in New York and Maine has led to the "routine funding" of AAC devices. See L. Bolinker, "Freedom of Speech: Finding AAC Device Funding," 4 Issue Rehab Report 24-29 (March/April 1993).

In every state, my participation is preceded by the direct request of a person with a severe communication disability or a family member, a disability rights organization, or an organization of rehabilitation services professionals. As a private attorney, I have no inherent authority to advance an opinion to state Medicaid officials and equally true, state Medicaid officials have no other reason to meet or to listen to my suggestions.

addition, all of these programs are under continuous and extreme fiscal pressures to limit access to services to the greatest degree possible.

To ensure that these programs do not reject assistive technology funding requests because insufficient or inappropriate information was supplied, or based on cost containment policies that are not consistent with program mandates, there must be skilled services providers to conduct evaluations, prepare assistive technology recommendations and to provide post-delivery training and follow-up services. And there must be skilled legal services professionals able to provide client directed appeals.¹⁰

I am aware of no other services delivery model that will ensure that people with disabilities actually acquire and have the opportunity to use and benefit from assistive technology.

3. Impact of the Tech Act on Assistive Technology Funding & Access

The initial 5 years of the Tech Act has had only a small positive impact on assistive technology funding and access. The enormous potential of the Tech Act to broaden technology funding and access remains unrealized throughout the country. One of the

¹⁰ This is the essence of the NCD Report to Congress. See pp. 8 (Finding # 3: "Awareness & Enforcement of Existing Rights & Entitlements"), 11 Recommendation # 11 (authorize by statute the establishment of a National Center on Assistive Technology Legal Advocacy to specialize in funding issues), 36, 89-91 (discussion of current "paucity" of current funding and access enforcement capacity and efforts).

principal flaws of the current implementation of the Tech Act has been the failure by the overwhelming majority of state assistive technology projects to include client directed legal services within the scope of their services delivery systems.

The potential of the Tech Act is clearly stated in its text. Its findings and purposes are well stated, particularly those that recognize the barrier to technology access caused by technology funding. See e.g. Section 2(a)(6); (a)(8); (b)(1)(C); (b)(2)(B); (b)(2)(C). In addition, the plain language of the Act empowers people with disabilities to overcome those barriers through activities such as client directed legal services. Those activities are within the scope of "assistive technology services," Section 3(2)(B), and are within the authorized activities of the state assistive technology projects. See e.g. Section 101(b)(3).¹¹

¹¹ Subsection (b)(3) expressly authorizes state assistive technology projects to provide assistive technology services, which, as noted in the text, includes client directed representation. The NIDRR regulations governing the scope of activities authorized by the Act also make this point clear. The rules expressly authorize the state assistive technology projects to provide client directed representation services:

The provision of counselors, including peer counselors, to assist individuals with disabilities and their families to obtain assistive technology devices and services.

³⁴ CFR Section 345.11(a)(2). Nothing in the law or rules suggests that "counselors" excludes legal services providers, and indeed, at least 6 states have contracted with legal services professionals to provide client directed representation services. (E.g., Mississippi, Ohio, Minnesota, Colorado).

Thus, the Act enables state assistive technology projects, if they chose, to aggressively pursue technology funding and access through client directed legal services as one of its activities.

The states also have been given repeated reminders of the importance of including client directed legal services within the scope of their activities.

§ This message has been restated on an ongoing basis by Carol Cohen, who serves as the NIDRR staff member overseeing the state projects, and who also was my mentor on assistive technology funding while she served at ENABLE, the Syracuse, New York affiliate of the United Cerebral Palsy Association.¹²

§ It is incorporated in the Assistive Technology Funding Workbook (1991), which the RESNA T/A project funded and distributed to every state project.

§ And it is an ongoing message I provide to states in the 5 RESNA T/A project sponsored workshops I

¹² Carol has told the states repeatedly of the services delivery model we developed: "a funding and access team," consisting of an assistive technology professional and a legal services professional, with joint responsibilities to ensure that people with disabilities received expert evaluations and recommendations for assistive technology devices and services, and most importantly, that the team would aggressively pursue every avenue of appeal provided by a benefits or funding program, such as NY Medicaid, until the device or service was approved. After dozens of hearings and 3 court appeals over a span of 4 years, we had a 100 percent success rate in the delivery of augmentative communication devices and services to adults with severe communication disabilities in New York. We were able to all but "guarantee" people who came to ENABLE for an evaluation that any device or service that was determined to be necessary, would in fact be provided. Our efforts also forced the NY Medicaid program to convene a committee of speech language pathologists to write new AAC device funding criteria, which now provide routine funding for AAC devices.

conducted in March and June 1990, in June 1991,¹³ and in August and November 1992, and at almost every other opportunity I have to speak to state project staff.

However, as the state assistive technology projects became organized during the past 5 years, very few have supported individual program applications and appeals. Unfortunately, funding and access related activities conducted by people with disabilities are not an activity to which most of the states direct any support. And, it appears clear that this is not an activity that many of the states ever will support. For this reason, the states simply do not now, and may not ever effectively implement the Act's goals in regard to technology access, i.e., whether a person with a disability actually gets a needed device or service.

More needs to be done, in many areas, and clearly the Tech Act should be re-authorized. But when looking specifically to technology funding and access, something different needs to be done than what most of the states have done to date, or are likely to do in the future.

¹³ At the 1991 workshop, for example, I provided the states with a 21 page strategy memorandum outlining the specific activities they could follow to achieve funding reforms. The states were given 10 specific goals they could accomplish, or make significant progress toward within one year, as well as longer term initiatives. The memo also outlined a means to measure the success of their operations. Supporting client directed legal services was one of the elements of the strategy, as was the creation of a "clearinghouse" for decisions. This latter suggestion also was embraced by the NCD Report at 33, 89, and is included in the reauthorization proposal at Section 107(b)(1)(B)(iii).

I offer five examples to support my assertion that something different must be done for the Tech Act to reach its potential regarding expanding technology funding, access and use. Each example identifies a state's unwillingness to consider client directed legal services as part of their state services delivery system:

* In Maryland, one of the original nine states funded by the Tech Act, Governor Schaefer has directed state government employees, which includes the assistive technology project, not to communicate with the Protection & Advocacy program because of past litigation it brought against the state. Since 1990, there has been no direct and ongoing linkage established between the state assistive technology project and legal services professionals in Maryland.

* In the spring of 1992, I was called by a parent in Illinois whose child had been denied assistive technology services by her school district. The parent's report made it clear that further discussion with the school would not be fruitful. My suggestion was that she consider exercising her Due Process rights. The parent was aware of those rights, and had called both the local legal services office and the state's Protection & Advocacy program. Her family was "over income" for legal services, and due to limited resources, the P&A applied the same poverty guidelines to restrict its intake.

I called the Illinois assistive technology project for assistance. Like Maryland, Illinois is one of the first nine funded states. I asked whether it had ever formed an advisory committee of legal services providers, or ever developed a referral list for parents such as this one. The answer to both questions was "no." The Illinois project also had never contacted the Illinois state bar association to learn whether it had a mental and physical disability committee, or an effective *pro bono* referral program. All they could suggest was for the parent to call the P&A or legal services, although they had no information

whether the referral would be effective.¹⁴

Despite this experience, as of late February 1993, and more than 4 years after the Illinois project began receiving Tech Act funding, the Illinois project still had not created any of the linkages necessary to offer a meaningful information and referral program for people with disabilities in Illinois to legal services professionals.

* In late 1992, within weeks of its initial approval as a Title I grantee, the Ohio project requested and obtained NIDRR approval for an amendment to its grant. The change was to permit funding for an advocacy initiative to reform the state Medicaid program's inconsistent funding of AAC devices.

The assistive technology project agreed to pay my out of pocket expenses to come to Ohio to represent program participants in appeals of their funding denials. When the project began, I developed a seven step advocacy strategy, one of which was to use of every appeal avenue available through the Medicaid program. However, the assistive technology project has pursued none of the steps of the advocacy strategy that were its responsibility. And, when the first clients exhausted their administrative remedies and needed to move to judicial review, the assistive technology project ended the initiative in its entirety.

* In November 1992, at the RESNA Technical Assistance Project's conference for state assistive technology project funding coordinators, I asked all the state representatives to inquire of their state Medicaid programs whether they could get copies of past Medicaid decisions related to assistive technology.¹⁵ Access to these decisions is required by federal regulation. 42 CFR Section 431.244(g). The funding coordinator from the South Carolina assistive technology project stated that he would be unable to make that inquiry. He stated that even to ask about those decisions would be seen as "adversarial."

¹⁴ Ultimately, I prevailed upon a friendship with the deputy director of the Chicago Legal Assistance Foundation who found a pro bono attorney for this family.

¹⁵ This is one of the activities the National Council on Disability Report to Congress identified as important, see p. 90, and which is included in the reauthorization proposal in Section 107(b)(1)(B)(iii).

§ On January 4, 1993, I received a letter from Fran Berko, the NYS Advocate for the Disabled, whose office houses the NY assistive technology project. She wrote to explain her office's "focus and choices toward the development of the systems change envisioned by the Tech Act." She wrote that the NY project will not include or significantly support client directed activities, such as individual appeals, to achieve technology funding or access reform. The letter states that even though her office had the authority to litigate on behalf of people with disabilities, it would not do so because she believed it most appropriate that her office's "visibility on a given issue be minimized," and that "any public display of militancy be avoided." Rather than support efforts by people with disabilities to secure funding and access technology through their own efforts, as had been successfully demonstrated by Carol Cohen and myself for a decade, the NY project would provide no similar support. Instead, the people with disabilities would simply have to rely on the efforts of the AT project for them. The letter stated that technology funding and access reforms would occur, if ever, only when the following occurred:

"As the other state agencies responsible for the direct provision of assistive technology services and devices are influenced to imbue their programs and policies with these attitudes and consumer values [regarding the importance of technology] the move to effect ongoing systems change will be realized."

Letter dated January 4, 1993, from Fran Berko, NYS Advocate for the Disabled, to Lewis Golinker.

These are a very few of the examples of which I am aware, and of course, there are some exceptions as I mentioned. But these examples are merely symptoms of a very severe, self imposed, inappropriate and harmful limitation on the state assistive technology projects: that the Tech Act funds the state assistive technology projects to accomplish tasks for people with disabilities, but does not require the projects to also provide meaningful support to those activities that can best be accomplished directly by people with disabilities.

4. The State Projects Mis-Use the Terms "Advocacy" and "Systems Change"

Unfortunately, the limited scope of the state assistive technology projects activities in regard to funding and access is masked by the state's claims of extensive activities in regard to "advocacy" and "systems change."

Throughout the past 5 years, it has become clear that the state projects grossly mis- and over-characterize their "advocacy" and "systems change" activities, particularly in regard to technology funding and access. Most often, a more detailed inquiry about those activities will reveal their scope to be limited to:

information and referral

operation of toll free numbers

summary brochures and pamphlets describing funding programs and the so-called "right" to assistive technology

funding "studies" and

funding "conferences."

"Self-help" trainings and workshops for both people with disabilities and rehabilitation services personnel also are within the "advocacy" and "systems change" umbrella. Some states also report meetings or attempts at negotiation with state Medicaid and special education administrators as "systems change."

While I do not dispute the appropriateness of these activities, PER SE, they do not, in the overwhelming majority of cases, have a direct connection to technology access. And while

they compliment client directed activities, they cannot substitute for client directed legal services.¹⁶

¹⁶ A clear example of the differences between client directed activities and assistive technology project activities relates to the NY Medicaid AAC device funding criteria.

Starting in 1980, 8 years before the Tech Act was passed, and wholly independent of the NYS Office of the Advocate for the Disabled, which is now the parent organization for the assistive technology project, dozens of people with severe communication disabilities were evaluated by speech language pathologists and requested Medicaid funding for AAC devices and services. Three attorneys in the NY Protection & Advocacy program: Jim Sheldon (Buffalo), Ellen Saideman (New York City), and I (first in New York City and later in Syracuse), worked to provide legal services to as close to 100 percent of the program participants whose funding requests were denied. We tried to take every case to a hearing, and if that was unsuccessful, to court.

And there was good reason to follow this one-by-one-by-one strategy. It was uniformly successful: people got the devices recommended for them. By 1988, NY Medicaid administrators realized the system needed to be reformed, and convened a committee of community based AAC professionals to write new AAC funding criteria. I served as counsel to that committee. Again, the OAD had no role.

In November 1991, the new funding criteria were put into effect, and within the first 6 months, more than 100 devices were approved at the initial level of decision making; the need for hearings was all but extinguished.

People with disabilities, by themselves, and largely before the NY assistive technology project ever came into existence, forced the NY Medicaid program to fund their devices on an individual basis, and make the system far more fair for all others. See generally, L. Golinker, Freedom of Speech: Finding AAC Device Funding," 4 Team Rehab Report 24-29 (March/April 1993).

At present, after all the foregoing occurred through the actions of others, the NY assistive technology project asserts that it is actively engaged in both "advocacy" and "systems change" in regard to Medicaid AAC funding. In fact, it is performing an essential function: to familiarize AAC professionals about the new criteria. But sponsoring training activities is vastly different in concept, execution and outcome from what New Yorkers with disabilities had accomplished by their own efforts, with the assistance of legal services professionals.

Almost exclusively, the state's technology funding and access activities are little more than "awareness and information." But even Congress recognized that awareness activities and trainings are distinct from increasing the availability of and funding for assistive technology. The Tech Act identifies them as unique purposes for the Act. ~~Compare~~ Tech Act, Section 2(b)(1)(A)(increase awareness of technology needs) and (1)(B)(increase awareness of policies) with (1)(C)(increase availability of and funding for technology). Nonetheless, the states have not implemented the Tech Act in this manner, and based on the examples cited above, it is unlikely they ever will.

This is not just a matter of differences of opinion regarding program design. After 5 years of implementing the Act without support for client directed legal services, the states cannot demonstrate their program design has worked. None can point to any model of services delivery based on awareness, information and training activities that has expanded technology funding and access to a large number of individuals with disabilities in their state.

And the reasons are clear: Funding for technology is not simply a matter of "information." There are no "magic words or phrases" to include in initial funding applications that will result in their approval. The factors impacting those decisions

The trainings increase awareness and provide information. But it is only because the new policy is written in such a pro-funding manner that the proper use of this information will result directly in the award of devices for people with disabilities.

are too complex to be solved simply by using the right words. While information is important, an equally important component is attitude: that funding must occur, and that "no" will not be tolerated as an acceptable answer. To give life to that attitude, people must be empowered to pursue benefits and funding program appeals processes. The NCD Report to Congress clearly stated the importance of these activities:

There has been a very limited effort at federal and state levels to monitor and enforce the right to or requirements for expanding assistive technology access for children and adults with disabilities. The inconsistent interpretations of federal requirements in the same agency and between agencies in different states has left individuals with disabilities confused and angry. There is a paucity of expertise in applying rights protections to secure an individual's right to assistive technology across public funding streams. There is no single center or clearinghouse of information to offer assistance to individuals, agencies, and organizations trying to work their way through the funding maze.

* * * * *

The appeals process is an important protection for citizens using public programs. For example, Medicare beneficiaries win a large percentage of appeals against Medicare carriers. . . . However, the number of appeals is a fraction of the total number of denials. The program is that most people do not have the knowledge or resources to make an appeal, and therefore do not receive a favorable judgment. . . .

NCD Report to Congress at pp. 89-90.

In addition, neither brochures, conferences or manuals will overcome "learned helplessness." None of the materials I have seen produced by the state projects, including those I have written for the state projects, are intended as self-help guides to the application and appeal processes for benefits and funding

programs. And only a person who never participated in a Medicaid or an IDEA administrative hearing can believe a parent or person with a disability can achieve success without a skilled and experienced representative. It simply is not realistic and it definitely is not necessary.

Further, regardless whether these informal brochures and guides state that assistive technology funding is "a right," they are not the type of authoritative statements that can be cited or produced as persuasive evidence in a technology funding request, or at a subsequent hearing or appeal.

In short, in most states, even 5 years after the Tech Act began funding state projects, and based on the positions expressed by a number of state project staff regarding their future activities, people with disabilities have been, and will continue to be provided no effective or meaningful assistance to act by themselves to secure assistive technology funding or access.

This must change. Client directed appeals and other legal services must be among the required activities of every state assistive technology project, and it is equally clear that the state projects cannot accomplish this task in-house. There must also be a mandate for existing legal services professionals who provide services to people with disabilities to be funded to provide services in regard to technology funding and access.

5. The House Draft Bill States A Critically Flawed Definition of "Advocacy Services"

The House Draft bill correctly changes the focus of the Tech Act to be directed more toward funding and access. For example, the simple change of Section 2(b)(1)(C) (increasing funding for AT) to (A), makes funding first "purpose" of the Title I program. The more direct indicia include the advocacy provisions, which I discuss further below, and the funding technical assistance project. Section 107.

The House Draft bill also improves the Act by dividing the required activities of the state assistive technology projects into 3 categories: systems change, consumer responsive, consumer driven activities, and advocacy services. As I see the Act, each of these activities should be coordinated, yet distinct, directed to different audiences, and in the case of advocacy services, provided by a separate entity.

Systems change activities should be seen as those activities undertaken by the state projects in their role as the Governors' designees, to examine laws, rules and practices for technology funding barriers, and to coordinate internal government policy review and reform to eliminate those barriers and expand assistive technology funding and access.

Consumer responsive and consumer driven activities should be seen as increasing awareness, training, demonstration, evaluation, etc. directly for people with disabilities: to aid their ability to make informed decisions regarding the selection

of technology.

And the advocacy services activities should be directed solely and exclusively to the last step in the technology funding and access process: the actual funding and delivery of devices and services. This activity can be accomplished only by client directed legal services and cannot be provided directly by the assistive technology projects.

The House Draft bill's description of systems change and consumer responsive, consumer driven activities do not cause serious concern. By contrast, the definition and other provisions related to "advocacy services" are critically flawed.

The definition of advocacy services is stated in Section 3(6). It states:

The term advocacy services means assistance to individuals with disabilities and their family members or representatives to access assistive technology devices and services to which they are entitled under existing public laws and regulations. These services could include dissemination of information, individual case management, and training individuals how to locate funding sources. The entity or entities providing advocacy services must have the authority to pursue legal, administrative and other appropriate remedies.

The scope of advocacy services is further explained in Section 101(b)(3), and Section 102(e)(17). Section 101(b)(3) states:

(1) these services shall supplement, not supplant similar advocacy services which have been provided pursuant to other federal or state laws.

(2) the provider of these services shall make annual reports to the Secretary on how their services have been coordinated with advocacy services funded through other sources.

(3) these services shall be provided with particular attention to advocacy services related to education and school-to-work transition activities.

Section 102(a)(17) requires states to provide:

An assurance that the state will provide at least 5 percent of its grant fund, either from the annual grant amount or another source of funds, in support of advocacy services to assist individuals with disabilities to receive appropriate assistive technology devices and services. The state must assure that the advocacy services will meet the criteria set out in Section 101(c)(3).

However, nothing in the language of these various provisions requires the state assistive technology projects to do anything different from the way in which they are operating today. Not a single dollar must be devoted to client directed legal services according to the House Draft bill as now drafted. For this reason, the likely result in the majority of states will be another 5 years in which people with disabilities are asked to be patient while suffering without needed devices and services, and to be dependent on the state assistive technology projects to try to negotiate policy changes on their behalf.¹⁷

¹⁷ The flaws in the advocacy services provisions, particularly their failure to complement the assistive technology projects' systems change activities, are clearly illustrated by the current situation in Ohio. The Ohio assistive technology project made an initial inquiry with the state Medicaid program to reform inconsistencies regarding AAC device funding. In response, the Medicaid program stated clearly and forcefully that it is not interested in voluntary change. As a result, systems change efforts by the Ohio project stopped.

Because of the Medicaid position, it is now universally recognized that any policy reform that will occur will be the sole and direct result of individual appeals by Ohio Medicaid recipients. Yet the reauthorization proposal does not require the Ohio project to support any client directed legal services, and it has canceled the one effort it previously initiated. The

The flaws in the proposal are many.

1. The Section 3(6) definition of advocacy services identifies only "public laws and regulations" as sources of funding. Health insurance policies are an important potential source of funding and access, but are not based on public laws and regulations. The advocacy services definition should not exclude efforts to ensure insurance coverage for assistive technology.

2. Section 102(e)(17) will commit the states to spend not less than approximately \$ 25,000 - 40,000 per year on advocacy services. Assuming a state provided this sum to a legal services provider; this will not equal even one full time staff person in the most offices.

When setting a percentage set-aside, whatever the final figure, there will be some degree of arbitrariness involved. But what is the basis for the 5 % figure? The question before Congress is how many people with disabilities in the United States should be able to access, use and benefit from assistive technology? How many people in each congressional district should be served? And will 5 % supply the number of people that is sufficient? I do not believe the answer is "yes."

This sum of money is not sufficient to make much of a real difference. Congress should require that the states expend a sum sufficient to create not less than one full time assistive technology funding position in a legal services provider's office. It is likely the costs of such a professional would be not less than \$ 50,000, or approximately 10 % of the base state grant.

In addition, based on the small sum that Congress is mandating be devoted to technology funding and access, it is essential that the definition and scope of "advocacy services" be as strong and directory as possible. Unfortunately, as described below, the House Draft bill does not do this.

3. Section 3(6) defines "advocacy services" in vague terms that also are redundant with "consumer responsive, consumer driven" activities. No reason exists for these two activities to list identical tasks. They should compliment each other and be coordinated, but include distinct activities. As presently worded, they will not. Compare Section 101(b)(2) with Section 3(6):

reauthorization proposal contains no "advocacy" mandate to do anything more.

<u>Consumer Responsive Consumer Driven Activities</u>	<u>Advocacy Services</u>
Section 101(b)(2)	Section 3(6)
(A) training ... regarding their rights to assistive technology	training
(B) increasing choice related to technology selection (information)	dissemination of information
(C) outreach to [groups] ... to coordinate efforts to obtain technology funding and access	dissemination of information
(E) outreach to minorities ... activities to increase services access	dissemination of information

4. Section 3(6) uses the phrase "could include." This must be changed. As presently drafted, the definition of advocacy services does not state an expectation by Congress that any specific activity be considered advocacy. As currently drafted, a state can satisfy this definition by engaging in all 3 listed activities, or conduct only information dissemination and training, or do none of the three.

What does Congress want? At a minimum, Congress should define advocacy services in a meaningful way.

5. Section 3(6) states that advocacy services could include "dissemination of information." This is an inappropriate use of the very limited funding Congress is mandating for advocacy services. As described above, advocacy services should be directed to unique activities, meaning those related to the end point of the funding process: the steps required to secure funding and access, i.e., client directed legal services. To secure devices and services requires far more than "dissemination of information." Brochures, funding studies and conferences will not achieve this result. This is not advocacy.

Indeed, brochures, studies and conferences can have the opposite effect of the one that is intended. These materials have the potential to sow the seeds of "learned helplessness." They may succeed in raising the expectations of people with disabilities in regard to technology, but they do not provide a sufficient means for them to secure that technology. If applications are filed and denied, and no meaningful assistance is available for an appeal, people with disabilities may simply abandon their claims, and never secure the devices and services

they need.¹⁸

Consider the following: a person at age 60, with a less than high school education, suffers a stroke and needs a communication device. The person also has weakness in her hands. She has no income or resources and becomes SSI and Medicaid eligible upon her discharge from the hospital. She requests an AAC device from Medicaid but is denied on "coverage" grounds. The notice tells the person of her appeal rights and of the opportunity to call legal services or the Protection & Advocacy program for assistance with an appeal. The person also is told of the state assistance technology project by her speech therapist.

A family member calls the assistive technology project first. The operator for its toll free line reports that a conference is upcoming, and sends her a "medicaid" brochure, listing the P&A and LSC. She even is offered a scholarship to attend the conference, and the AT project pays for her transportation, attendant services, and room and board. While at the conference, she cannot ask any questions due to her communication disability. She cannot take notes because she has weakness in her hands following the stroke. She takes all the materials, but she cannot figure out how to apply what they say. Some of the information is too general to be of much help; the rest is far too "legal" to be understandable.

The family member next calls the P&A for help but she is ineligible for P&A services because she is not DD. Also, its priorities are limited to IDEA B issues or institutional conditions. The family member then calls LSC and is told their services are limited to MA applications; because she is already on MA, they do not have the resources to help her.

¹⁸ In addition, some of the information in the brochures is not even unique: benefits program recipients who have been denied services are entitled, either by statute (e.g. IDEA B) or rule, to be informed as part of the benefits denial notices, of sources of free legal services to pursue appeals. But neither the denial notices nor the assistive technology project brochures addresses the greatest need: the assurance that there will be a legal services professional available to pursue the appeal of a benefits or services program denial. That clearly is not the responsibility of the benefits or services programs. But it should be the responsibility of the state assistive technology projects. The assistive technology projects should assure people with disabilities of predictability of representation.

At this point, the person has exhausted all the information that has been provided. The assistive technology project may have expended thousands of dollars directly on her, and indirectly in regard to the conference and brochure. But has any of this helped? I say "no." At most, it increased her expectations about technology, but it did not provide the most important tool needed to get a device: a legal services professional. Is this what the Tech Act should consider a success?

None of these activities makes it one iota easier for a person with a disability to access AT.

6. Section 3(6) states that advocacy services could include "individual case management," a term that is not defined in the Act. Case management, or case coordination, as applied in IDEA Part H and Medicaid terms, is a role that will be difficult for the assistive technology projects to provide with their own staff. But because Section 3(6) uses "could include," the state projects simply can ignore this task and still comply with their advocacy services mandates.

The phrase "individual case management" should be replaced. What is needed is client directed legal services in benefits and services program appeals. That service should be stated clearly as the definition of advocacy.

7. Section 3(6) states that advocacy services could include "Training Individuals How To Locate Funding Sources." This activity is the same as information dissemination. Or, to the extent that it suggests that advocacy can be directed to "self-help" activities by people with disabilities, it is even worse. People with disabilities severe enough to need assistive technology are unlikely to be able to advance their interests through "self help." The similar reference in the "consumer responsive, consumer directed activities" has the same flaw.¹⁹

People with disabilities do not need "advocacy" to help them locate funding sources. They need assistance to pry the funding from those sources once they are located. "Training individuals" is not going to be of any significant help in achieving that goal.

¹⁹ See also Section 101(b)(2)(C) (consumer responsive/consumer driven activities include outreach to groups for coordination of self help.... Why is this included? People should be directed to professionals advocates for assistance, not supported in their self help efforts that have a slim to none chance of success.)

8. Section 3(6) states that the entity providing advocacy services must have the "authority" to pursue legal, administrative and other appropriate remedies." But see comment above that the NY assistive technology project asserts the "authority" to litigate, yet never will do so. Or, the position of the Ohio assistive technology project that it cannot support people with disabilities pursuing judicial review of adverse funding decisions because to do so would harm its relationship with other state agencies.

The key point is not to ensure the entity has the authority, but uses that authority on behalf of people with disabilities. Moreover, because the second sentence of the definition is worded so conditionally, a state would never have to offer any client directed legal services regardless whether it had the authority to pursue these remedies.

This is language points out a conflict regarding who are the intended beneficiaries of the Act: is it the AT projects or people with disabilities? The House Draft bill directs, mandates that the state assistive technology projects engage in funding related systems change activities "for" people with disabilities, but when it comes to activities to achieve the same goal "by" people with disabilities, Congress provides no meaningful benefits. The state projects can provide nothing more than training on how to search for funding. The paternalism that results from the House Draft bill could not be more clear:

'either let us do it for you, people with disabilities, or you are on your own. We won't help you if you insist on being "pushy." Although we tell you there are rights to assistive technology, you will have no meaningful help from us if you try to assert those rights.'

No purpose is served by this result, yet the House Draft bill will permit it.

9. Section 102(b)(3) states that advocacy services will be provided with particular attention paid to education and school to work transition activities.

This is unnecessary. First, these are not the programs for which the greatest need exists. There are far more people in every state eligible for Medicaid than special education or school to work transition. They cover a broader range of ages, a broader range of technology needs and disabilities, and face a far more difficult burden accessing technology.

Second, school services issues is likely to be an area in which there are existing resources. The Protection & Advocacy systems in states like New York, for example, direct a sizable

percentage of their resources to education issues. But because so few financial resources need to be directed to advocacy in any form, to add an additional quarter, third, or half time staff person to educational advocacy, may "supplement," rather than "supplant" existing funds (see subsection (1)), but they will not make much of a difference. Indeed, even if the funding for advocacy services doubled, the need for education assistance could absorb all of those resources. The result is likely to be that there will be no expansion in the class of people being served by organizations such as the P&A.²⁹

10. Section 101(b)(3) states that the advocacy services provider shall report to the Secretary on how their services have been coordinated with other sources.

This is unnecessary. The key point is not whether the advocacy services are coordinated, but how many devices are provided, how have adverse funding policies been positively impacted.

The key measure of success for advocacy services is whether they deliver assistive technology devices and services. Advocacy services should be considered "an investment." The funds directed for this purpose should be measured against the total value of the devices and services that are delivered to people with disabilities as a result of these activities. Many states, e.g., Minnesota, Connecticut and New York, already make direct payments to legal services providers to address Supplemental Security Income and Medicare appeals. The states

²⁹ From February through May, 1993, I was unable to find any publicly funded legal services organization willing to assist a 78 year old Ohio Medicaid recipient who was ready to request judicial review of denials of her request for an AAC device. The local Legal Services program did not have the resources to initiate federal court litigation at that time; the state Legal Services support center was otherwise occupied; the state P&A stated the woman was ineligible for its services because she did not meet the definition of "developmental disability." Ultimately, a private attorney, acting in a *pro bono* capacity was recruited to assist her.

However, if the advocacy services definition and scope were amended to provide for client directed legal services and was not tied to education, the Ohio P&A could easily have assisted her, and the litigation she will require to secure access to an AAC device already could have been filed. At age 78, she clearly deserved legal services assistance sooner than has been provided. Because she has been silenced by the stroke, Congress will never hear her cry for help. But it can learn from her pain, and ensure that it does not happen to others.

have provided that these payments generate far greater savings in state welfare and Medicaid payments.

Advocacy services for assistive technology should be a similar challenge. The entities receiving these funds should be required to prove that they are able to get more devices through advocacy than could the state if it simply purchased devices with the same money.

11. Section 102(e)(17) requires states applying for development grants to assure that not less than 5 % of their grants will be directed to advocacy services. But it is not at all clear from the House Draft bill to which states this provision will apply, or when. There now are 42 states that already have development grants. Their experiences have proved the need for severed and separately funded advocacy services. But what provision ties their access to continued funding to the 5 % assurance?

The amount of the set-aside for advocacy services would make more sense if placed in Section 101 (b), which identifies the required activities of Title I projects.

6. Recommendation To Strengthen the
Definition & Scope of "Advocacy Services"

To address the comments supplied above, the advocacy services definition in Section 3(6) should be amended to read as follows:

The term "advocacy services" means assistance to individuals with disabilities and their family members or representatives to access assistive technology devices and services to which they are entitled under existing public laws and regulations and other benefits and funding sources. (These services could include dissemination of information, individual case management, and training individuals how to locate funding sources.) The primary goal of advocacy services shall be the direct enforcement of the rights of individuals with disabilities to access assistive technology devices and services under existing public laws and regulations and other benefits and funding programs. The entity or entities providing advocacy services must (have the authority to) pursue legal, administrative and other appropriate remedies on behalf of people with disabilities who seek funding for and access to assistive technology devices and services.

(new material underlined)(deleted material in parentheses)

In addition, the reference to education and school to work transition should be deleted in Section 101(B)(3).

And, there should be an increase in the amount of mandated set aside so that in every state there will be a full time technology funding and access professional within an existing organization providing legal services to people with disabilities, such as the Protection & Advocacy Systems for persons with developmental disabilities.²¹

If these changes are made, the Tech Act will be able to realize far more of its potential to significantly benefit people with severe disabilities in this country. If these changes are not made, the impact of the Tech Act on technology funding and access will continue to be minimal. The choice is clear: but only one choice is true to the congressional goals of the Tech Act.

Thank you.

Henry Golich

²¹ The P&As are the most appropriate place for advocacy services to be delivered throughout the country. A high percentage already have some AT experience. I have personally assisted 23 state P&As since I began work on Project Mentor.

NY	KY	MA	ID
MN	MD	CO	WI
FLA	UT	MS	AR
AZ	VT	OH	
MI	TX	AL	
LA	ME	CA	

Many of these contacts have been ongoing, for more than one client.

