

# Roadmaps II

## for Enhancing Employment of Persons with Disabilities through Accessible Technology

Developed by Participants in the Assistive Technology (AT) Collaborative. Prepared by the National Disability Rights Network (NDRN).

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# Introduction

“... citizens of all ages have come to rely increasingly on technology in every aspect of life: home, work, play, and community. [F]or people with disabilities, technology changes the most ordinary of daily activities from impossible to possible. In an ideal climate, no person with a disability should be denied the opportunity to obtain AT and transfer its inherent potential into viable, life-fulfilling endeavor.” - National Council on Disability, *Federal Policy Barriers to AT*, pg. 13.<sup>1</sup>

As American society solidifies the use of technology in everyday life, and as technology in and out of the workplace becomes ever more sophisticated, the use of assistive technology (AT)<sup>2</sup> to increase and enhance employment opportunities for individuals with disabilities must be an important aspect of United States disability policy. This report presents the work of the Assistive Technology (AT) Collaborative, a group of national organizations that were funded by the U.S. Department of Labor (DOL) Office of Disability Employment Policy (ODEP) to address AT issues and provide policy recommendations related to the employment of individuals with disabilities. The AT Collaborative consisted of eight national organizations and four state partners that were selected due to their experience and expertise in AT. The U.S. Department of Education (ED), Rehabilitation Services Administration (RSA) in the Office of Special Education and Rehabilitative Services (OSERS) also participated in this effort.

The eight Collaborative participants included:

- ➔ **Association of Assistive Technology Act Programs (ATAP)**
- ➔ **Assistive Technology Industry Association (ATIA)<sup>3</sup>**
- ➔ **Council of State Administrators of Vocational Rehabilitation (CSAVR)**

- ➔ **The Employer Assistance and Recruiting Network (EARN)**
- ➔ **Job Accommodation Network (JAN)**
- ➔ **National Assistive Technology Technical Assistance Partnership (NATTAP) at the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA)**
- ➔ **National Disability Rights Network (NDRN)**
- ➔ **National Assistive Technology Advocacy Project at Neighborhood Legal Services (NLS)**

## FOOTNOTES

- <sup>1</sup> National Council on Disability (NCD). *Federal Policy Barriers to AT*. (May 31, 2000)
- <sup>2</sup> Assistive technology is technology used by individuals with disabilities in order to perform functions that might otherwise be difficult or impossible. Assistive technology can include mobility devices such as walkers and wheelchairs, as well as hardware, software, and peripherals that assist people with disabilities in accessing computers or other information technologies. See <http://www.washington.edu/accessit/articles?109>.
- <sup>3</sup> ATIA was included in the AT Collaborative to especially consult on the work of the Business Dialogue *Roadmap* process discussed later in this report.

For years, the employment rate of individuals with disabilities has lagged significantly behind the employment rate of individuals without disabilities. Based on data from the United States Census 2006 American Community Survey, 37.7% of non-institutionalized individuals with disabilities ages 21 to 64 were employed at least part-time, whereas 79.7% of individuals in the same age group who did not report a disability were employed at least part-time<sup>4</sup> – an employment rate gap of 42%. Though direct comparison with prior years is not possible due to American Community Survey changes, similar gaps between the employment rates have been reported in prior years.<sup>5</sup>

In addition to the disparity in the employment rate, in 2006 the median annual income for an employed individual with a disability was \$7,000 less than an individual without a disability – \$30,000 as compared to \$37,000.<sup>6</sup> Non-working individuals with disabilities between ages 21 and 64 were also less likely to be seeking employment, with only 8.7% actively seeking work compared with 20.2% for those without a disability. A multitude of factors contribute to these gaps in employment rates including the inability of individuals with disabilities, their advocates and service providers, and employers to learn about, acquire, and properly use AT.

Considering the “disability employment gap,” the discussions of the Collaborative focused on the awareness, acquisition, and use of AT. The Collaborative’s efforts complement the work of the Business Dialogue on Accessible Technology and Disability Employment (the “Business Dialogue”) organized by ATIA and the US Business Leadership Network (USBLN).

The Business Dialogue provided the business community with the opportunity to “identify the needs of businesses,” and to develop “consensus roadmaps to enhance the hiring, retention, and advancement of persons with disabilities and others through AT.”<sup>7</sup> To supplement the Business Dialogue, the Collaborative considered the issue of AT and employment from the perspective of AT service providers and disability advocates who work directly to assist individuals with disabilities.

The Collaborative initially met in October 2007 and continued to work through September 2008 via conference calls and three face-to-face meetings. During the first meeting, the Collaborative determined that it was critical to understand the “hands on” experience by involving at least several state programs funded under the Assistive Technology Act of 1998, as amended (Assistive Technology Act). These included the state grants for AT program and the Protection and Advocacy for Assistive Technology (PAAT) program. The Collaborative created a short-term grant to fund state collaborative projects on AT and employment to obtain greater insight into

current barriers, as well as identify effective practices. The collaboration funded our state projects, involving collaborations between P&A and statewide AT programs. Details on these projects are contained in an addendum entitled *Breaking through Barriers: Work of Four State Projects on AT and Employment*.

Given the diverse nature of the Collaborative participants and the two major efforts undertaken for this project, this report is divided into four sections:

- ➡ Introduction
- ➡ Overview of Federally Funded AT Programs and Creation of the AT Collaborative
- ➡ Barriers Impacting the Use of AT by Individuals with Disabilities Regarding Employment
- ➡ Recommendations to Increase and Enhance the Employment of Individuals with Disabilities through AT (including a response to the Business Dialogue *Roadmaps*)

## FOOTNOTES

- <sup>4</sup> Rehabilitation Research and Training Center on Disability Demographics and Statistics. *2006 Disability Status Report*. (2007). Ithaca, N.Y.: Cornell University.
- <sup>5</sup> See Rehabilitation Research and Training Center on Disability Demographics and Statistics. *2005 Disability Status Report*. (2005). Ithaca, N.Y.: Cornell University. Rehabilitation Research and Training Center on Disability Demographics and Statistics. *2004 Disability Status Report*. (2005). Ithaca, N.Y.: Cornell University.
- <sup>6</sup> See *2006 Disability Status Report*, at note 1.
- <sup>7</sup> AT Industry Association and the U.S. Business Leadership Network. *Roadmaps for Enhancing Employment of Persons with Disabilities through Accessible Technology*. (2007). Pg. 9.

# Overview of Federally Funded AT Programs and Creation of the AT Collaborative

Several federal programs exist to fund state efforts involving AT<sup>8</sup> and individuals with disabilities. Through the Assistive Technology Act, Congress authorized funds for state-level activities to increase access to and acquisition of AT. Under these statewide Assistive Technology Act programs (“statewide AT programs”), states support short-term loans of AT devices, demonstrations of AT devices, financing for the purchase of devices, and reuse of devices through exchange and recycling. The FY 2007 budget appropriated over \$25 million for these programs.



From 2000 to 2006, the federal government funded alternative financing programs (AFPs) to provide “low-interest loan funds; interest buy-down programs; revolving loan funds; loan guarantee or insurance programs,” or other similar financing programs or mechanisms to allow individuals with disabilities to acquire AT devices or services.<sup>9</sup> In 2003, ED also established an Access to Telework Program under the special demonstrations authority provided in the Rehabilitation Act of 1973, as amended.<sup>10</sup> Telework programs “provide loans to individuals with disabilities to purchase computers and other equipment to work as an employee or contractor or to become self-employed on a full-time or part-time basis from home or other remote sites.”<sup>11</sup> These loans are provided through various alternative financing mechanisms.

Congress also created the PAAT program through the Assistive Technology Act.<sup>12</sup> Funded at \$4.3 million in fiscal year 2007 and housed within the fifty-seven state and territory Protection and Advocacy (P&A) agencies, the PAAT program allows advocates to “assist in the acquisition, utilization, or maintenance of AT devices or ... services for individuals with disabilities.”<sup>13</sup> PAAT is one of seven federally funded P&A programs which, along with the Client Assistance Program (CAP), provide legally based advocacy services to eligible individuals with disabilities.<sup>14</sup> The state PAAT programs have primarily been involved in obtaining funding for AT through negotiation, mediation, administrative hearings, and litigation efforts.

The AT Collaborative was originally conceived as an effort to increase the effectiveness of these federally funded programs related to AT in regards to the employment of individuals with disabilities. The goal was to identify barriers and recommendations to increase the use of AT in employment. The AT Collaborative brought participants together as experts in the area of AT and issues related to the employment of individuals with disabilities to provide recommendations for AT policy related to employment (see page 3 and Appendix II for the list of Collaborative participants).

## FOOTNOTES

<sup>8</sup> 29 U.S.C. § 3003.

<sup>9</sup> U.S. Department of Education, Rehabilitation Services Administration. *Ensuring the appropriateness of loans to individuals with disabilities through Alternative Financing Programs (AFPs)*. Technical Assistance Circular 06-02 (2006).

<sup>10</sup> 29 U.S.C. § 773(b).

<sup>11</sup> U.S. Department of Education, Rehabilitation Services Administration. *Ensuring the appropriateness of loans to individuals with disabilities through the Access to Telework Program*. Technical Assistance Circular 07-011 (2007).

<sup>12</sup> 29 U.S.C. § 3004.

<sup>13</sup> 29 U.S.C. § 3004(a)(1).

<sup>14</sup> For more information on the P&A and CAP system, including PAAT, see [www.ndrn.org/aboutus/PA\\_CAPext.htm](http://www.ndrn.org/aboutus/PA_CAPext.htm).

Given the short timeframe for the Collaborative to complete its work, the participants decided to ask a limited number of states to submit an application for small grants for short-term projects. In order to select the states to approach, the Collaborative devised two separate non-scientific assessments for the statewide AT programs and for the P&A/CAP system to gauge the work of the states in regards to AT and employment.<sup>15</sup> Based on the responses to these online assessments, and the personal experience of the Collaborative participants with the states, eleven states were invited to apply.

One of the primary aims of the state grants was to increase collaboration between the statewide AT Act programs, an Alternative Financing and/or Teleworks program (if one existed in the state), and the P&A/CAP system (including the PAAT program). All state applications were required to include the following:

- ➡ A description of collaboration among these programs.
- ➡ Proposed activities to address or overcome barriers to the use of AT to increase the employment of individuals with disabilities.
- ➡ An explanation of how their application related to the Business Dialogue *Roadmaps*.

Eight of the eleven states submitted a response to the request for a proposal. The

state projects selected by the Collaborative were from Delaware, Florida, Illinois, and Pennsylvania. The specific projects and outcomes to date are described in an addendum entitled, *Breaking through Barriers: Work of Four State Projects on AT and Employment*.<sup>16</sup>

After completion of the state proposal selection process, the Collaborative turned its attention back to the discussion of the issues and barriers impacting the use of AT by individuals with disabilities in regards to employment, and to formulating recommendations on how to address some of these barriers. Section III addresses the issues and barriers identified and Section IV provides the recommendations of the Collaborative, including a response to the Business Dialogue *Roadmaps*.

## FOOTNOTES

<sup>15</sup> For information from the assessments, please contact the National Disability Rights Network.

<sup>16</sup> See addendum, *Breaking Through Barriers: Work of Four State Projects on AT and Employment* at [http://www.earnworks.com/docs/Addendum1\\_BTBTCollab.doc](http://www.earnworks.com/docs/Addendum1_BTBTCollab.doc).



# Barriers Impacting the Use of AT by Individuals with Disabilities Regarding Employment

Many existing issues and barriers impact the use of AT by individuals with disabilities in terms of employment. Many of these barriers are directly related to the workplace, such as the inability to obtain proper computer adaptive equipment (specialized electronic and information technology (IT) software) or an appropriately designed office space. Other AT issues involve workforce readiness and access which, though not directly tied to the workplace, can significantly impact the ability of an individual with a disability to obtain or keep a job. Barriers to AT involving workforce readiness and access include problematic school-to-work transition policies, the cost to modify a vehicle to commute to work, or obtaining a personal AT device such as a hearing aid that is essential for work but which an employer may not be legally required to provide.

The AT Collaborative discussed a variety of issues and barriers which, based on their subject matter expertise, hinder the acquisition and use of AT as it relates to employment. These barriers were used to guide some of the later recommendations in this report. A list of these barriers is provided below and **is not intended to be all-inclusive or comprehensive nor is it based on in-depth research**. More research into these barriers is necessary, and because of the purpose and limited time and resources for this project, the Collaborative did not undertake a research program. The Collaborative believes, however, that the following are important barriers to AT and employment which

policy makers, employers, and the federally funded programs related to AT should be aware.

## AT-Related Barriers in the Workplace

AT-related barriers in the workplace can occur throughout the employment process (e.g., hiring, retention, advancement, etc.) Some barriers are relevant only to one of these stages, while other AT barriers can occur at any time in the process.

### HIRING

- ➔ **Incompatible or inaccessible electronic application systems.** Many employers require job applicants to apply for vacant positions via online systems. These systems, when inaccessible, can present several problems for individuals with disabilities. For example, such a system may not include all of the needed design elements and/or markup to correctly function with AT used by individuals who are blind or considered low-vision. As another example, the system may “time-out” if the user does not enter data on the application form after a set period of time, causing difficulties for individuals with cognitive disabilities.
- ➔ **Concern about the cost of AT.** Employers may believe that purchasing or upgrading AT software or devices is too costly to hire an employee with a disability who requires AT.

➡ **Concern about the complexity of AT.** Employers may fear that purchasing or allowing the use of AT software or devices is too complex for efficient management or will interfere with IT operations.

➡ **Fear of liability.** Employers want to minimize potential liability and may be concerned about potential litigation if they hire an individual with a disability who requires the use of AT on the job.

➡ **Creation of standardized office spaces.** Some employers are establishing uniform office spaces and buildings with standardized pre-built cubicles. Once ordered and delivered, these pre-built cubicles may be expensive to modify to accommodate individuals with disabilities using AT, making the employer reluctant to hire the individual or preventing the individual from accepting a position.

➡ **Failure to provide proper training on the use of AT.** Employers may not consider training on an AT product to be a part of the required accommodation, and such training may not be provided by a public agency such as the state vocational rehabilitation (VR) agency or public school system. Without training on the proper use of an AT product, many individuals abandon use of the product, thus hindering the retention or advancement of the individual.

➡ **Use of standard office equipment can present difficulties for individuals with disabilities.** Standard office equipment such as copiers, telephones, fax machines, and other hardware can be difficult for individuals with disabilities simply due to where the equipment is located or configured within an office. Standard office equipment can also be inaccessible for users with vision and cognitive disabilities because of their design.

## RETENTION AND ADVANCEMENT

➡ **Inaccessible online training systems provided by employers.** Employers are increasingly providing training in an online format, using multidimensional user environments. These online training systems and environments may not function properly with screen readers for individuals with visual impairments and, if audio is a component of the training, inaccessible to individuals with hearing impairments.

## ISSUES OCCURRING ANYTIME DURING THE EMPLOYMENT PROCESS

➡ **Underutilization and lack of awareness of the federal Work Opportunity and Small Business tax credits.** These tax credits are designed to assist employers in hiring and retaining individuals with disabilities, but many employers perceive the cost of the paperwork for such incentives as too high compared with the benefits. Many small employers may not have the opportunity or resources to learn

about the requirements and process to use when applying for these tax credits.

- ➔ **Procurement procedures and workplace policies may hinder the acquisition and use of AT.** Employer procurement and/or human resource departments may be reluctant to change office policies or baselines to accommodate the purchase and/or use of AT in the workplace for a new employee with a disability, or an employee with a recently acquired disability. In addition, these departments may also cause a delay in the approval process to purchase and/or use AT on a jobsite as many employers require such request(s) to go through multiple departments for approval. If the AT is necessary for proper job performance, such delays may prevent an individual with a disability from accepting, retaining, or advancing in employment.
- ➔ **Lack of awareness of what individuals with disabilities can do on the job with AT.** Many employers may lack sufficient knowledge about the scope of AT devices available to assist individuals with disabilities, and therefore may not understand how the individual can perform the job. This can occur in both recruiting qualified employees and retaining those who have become injured.

➔ **Reluctance to install accessible software because of interoperability problems with electronic and information technology (EIT) devices.<sup>17</sup>** Software necessary for an individual with a disability to perform in a position can be rendered useless in a work-setting because the AT software is incompatible with other technology or because the existing system does not have the features needed to operate that AT. Examples of these interoperability problems include:

- AT software may be incompatible with the security systems designed to protect various EIT devices.
- Automatic software updates and restarts of EIT devices can result in AT software being rendered useless.
- Employees who are required to travel to various offices may

## FOOTNOTES

<sup>17</sup> “Interoperability means that the system is compatible with other technologies and has features supporting the integration of AT. Without interoperability, it may be very difficult and time consuming to make changes, increase accessibility, or integrate AT.” Loy, Beth, and Linda Carter Batiste. *Improving the Workplace One Accommodation at a Time, Universal Design and AT as Workplace Accommodations: An Exploratory White Paper on Implementation and Outcomes*. (May 2007).

encounter interoperability problems with EIT devices in the “visited office” that do not exist in their “home office.” This may occur more frequently for employees required to travel on a moment’s notice.

- ➔ **Licensing of AT software may prevent installation of the software on more than one computer or device.** License agreements for AT software, such as screen readers or dictation programs, are often only for one computer or EIT device; employers may be unwilling to pay for additional licenses to place on a second or third device.
- ➔ **Difficulty with acquiring equipment and assuring interoperability to allow for telework.** Obtaining proper equipment and assuring that internet security barriers and other interoperability problems are eliminated may be challenges for employers and individuals with disabilities interested in becoming employed through telework.

➔ **Isolation of individuals with disabilities when they become employed through telework.** Even when individuals with disabilities are able to overcome technical issues involving telework, isolation from managers and co-workers can result in the individual leaving the position, especially when periodic meetings at an office are not possible.

➔ **Changing and advancing technology which outpaces the ability for new AT to respond.** Industry continues to quickly update, change, and create more complex software, EIT devices, equipment, and other products. This rapid pace of development and upgrades does not provide sufficient time for AT developers to adapt to these changes, hindering the ability of individuals with disabilities to work with the new software, devices, and equipment.

## **AT-Related Barriers to Workforce Readiness and Access**

In addition to workplace barriers to AT, the Collaborative discussed many barriers concerning the acquisition, financing, and awareness of AT required to prepare individuals with disabilities for employment. Though not directly concerning the workplace, these barriers can influence the decision of individuals with disabilities to seek employment or impact their ability to prepare for the workforce.



## ACQUISITION AND FINANCING OF AT

The ability of an individual with a disability to acquire an AT device or service, either directly or through a public agency, is often the first step necessary to prepare for the workforce. The following barriers were identified by the Collaborative in terms of the acquisition and financing of AT when preparing for the workforce:

- ➔ **Overly complex public financing system for AT.** For some individuals with disabilities, the acquisition of AT requires the use of “mixed” financing to fund all the technology necessary for the individual to gain or retain employment. For example, an individual may need to learn about how the following can be used to acquire various AT: Medicaid/Medicare; the state VR agency; a public school system, public college, or university; a state alternative finance or AT loan programs; and/or Social Security work incentives (such as the Plan for Achieving Self-Support (PASS) or impairment-related work expenses). In some cases, when denied by one public agency, an individual needs to try other routes, thus delaying the acquisition of AT products and services.
- ➔ **Existence of state VR policies which hamper the acquisition of AT necessary for job training and employment.** P&A/CAP advocates and statewide AT program staff have observed that certain low AT fee structures, the misapplication or

misunderstanding of the requirements of the Rehabilitation Act regarding AT, and the process for contracting with vendors can represent barriers to obtaining AT through the VR system.

- ➔ **Lack of funding by state VR agencies for AT.** VR agencies in some cases are unable, for a variety of reasons, to pay for the upkeep and maintenance of AT.
- ➔ **Inability of programs funded under the Assistive Technology Act to purchase AT for individuals with disabilities.** The Assistive Technology Act specifically prevents statewide AT programs from purchasing equipment for individuals, leaving no “payer of last resort” if an individual is denied or does not qualify for other public programs or loans. Many individuals also do not have the financial ability to repay a personal loan to purchase AT.

## TRANSPORTATION AND AT

Transportation has long been known as one of the greatest barriers to individuals with disabilities seeking and maintaining employment. Some of the barriers identified by the Collaborative surrounding transportation and AT include:

- ➔ **Inability to purchase vehicle modifications or obtain public financing for such modifications.** Depending on the needs of the individual, current technology can be extremely expensive to modify a vehicle.

➡ **Inoperable, unsuitable, or inappropriate AT equipment on public transportation systems.** Though public transportation systems have adopted state-of-the-art equipment such as kneeling buses, light-rail cars with lowered floors, and automatic stop announcements, many public transportation systems still face problems. These include inoperable equipment, poor lift accessible para-transit service, and lifts that cannot carry the size or weight of newer, heavier motorized wheelchairs.

## EDUCATION AND AT

Barriers to AT in the context of education can occur at the secondary and post-secondary levels, especially in the transition phase from secondary education to either employment or further education. The Collaborative notes some of the primary barriers:

➡ **Conflicts between university/college disability services offices and professors in allowing the use of AT in the classroom.** For example, a disability service office may allow a student with a disability to electronically record classes, but a professor may refuse to allow an exception to his or her policy prohibiting any electronic recording of classes. This can be difficult for individuals with various disabilities who rely on reviewing recordings to assist them with their studies.

➡ **Failure of public school special education staff, including transition coordinators, to assist students and families in developing plans for needed AT as they transition to work, college, or other training programs.** The failure to plan may include the failure to: identify all the AT that will be needed following the end of public school services; identify funding sources to ensure that AT is obtained; and to plan for the transfer of ownership of school-funded AT from the school to the student or another entity, such as a state VR program. Often, these failures occur because the school staff lacks knowledge/expertise of AT and AT funding sources.

➡ **Failure of disability services staff at colleges and universities to help students plan for the acquisition of AT necessary to succeed in post-secondary education.** Disability services staff at colleges and universities appear unaware of the wide range of AT that is available to assist students with disabilities or the numerous options for funding it.

## LACK OF AWARENESS OF AT DEVICES AND SERVICES

Disability service providers, advocates, individuals with disabilities and the community at large are often unaware of available AT devices and services. The Collaborative raises the following issues around the awareness of AT in regards to employment:

- ➔ **Lack of awareness of AT devices and the services available to obtain information on them.** Individuals with disabilities, service providers, staff within the P&A network, and others oftentimes are unaware of the variety of AT devices available, or the information and resources available to find out about them.
- ➔ **Lack of awareness of what individuals with disabilities can do on the job with AT.** Disability service providers, advocates, and the community at large are often unaware of how AT enhances the ability of an individual with a disability to perform a wide range of job functions. This lack of awareness can reinforce misperceptions about the ability of individuals with disabilities to become or remain employed.

- ➔ **Lack of knowledge of the many available AT funding sources by staff working under the Work Incentives Planning and Assistance (WIPA) programs funded by the Social Security Administration (SSA).** WIPA staff primarily focus on helping Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI) beneficiaries manage their SSDI/SSI cash benefits and health insurance under Medicaid and Medicare, and to take advantage of work incentives under these programs. In some cases WIPA staff do not recognize that SSDI/SSI work incentives like the Plan for Achieving Self Support (PASS), impairment-related work expenses, or blind work expenses are potential funding sources for AT. Few WIPA staff appear aware of the wide range of other federal and state funding sources to enable beneficiaries to obtain needed AT.

# Strategies to Increase and Enhance the Employment of Individuals with Disabilities through AT

“Changes in society, technology, and the economy have increased opportunities for individuals with disabilities to more fully participate in the workforce. At the same time, the growth in the size and costs of major federal programs not only contributes to the federal government’s long-term structural deficit but creates a strong business case for reexamining current federal disability programs and identifying workable solutions to leverage change.” - Government Accountability Office (GAO), *Highlights of a GAO Forum: Modernizing Federal Disability Policy*, pg. 16.<sup>18</sup>

As articulated in Section III, the AT Collaborative participants identified many barriers to learning about, acquiring, and using AT faced by individuals with disabilities, employers, public agencies, and some service providers as related to employment. As recognized during a GAO forum of disability experts in the context of broader federal disability policy, “the articulation of clear and coordinated policies, the development of strong and meaningful partnerships between all stakeholders, the use of incentives to achieve desired results, and a reliance upon appropriately defined outcomes” are challenges facing federal disability policy, especially those involving individuals with severe disabilities.<sup>19</sup> Based on the expertise of its participants, the Collaborative agrees with this general assessment, but also believes in the context of AT and employment that additional focus in certain areas will positively impact employment opportunities for individuals with disabilities. The Collaborative therefore offers the following recommendations to increase and enhance the employment opportunities for individuals with disabilities through AT.

Numerous players need to be involved in order to increase and enhance the employment opportunities for individuals with disabilities through AT. Therefore, the Collaborative directs recommendations towards three separate groups comprising these necessary players. The three groups include: 1) organizations implementing federally funded programs related to AT, 2) the federal government,

and 3) employers and the business community. Since the business community has completed its initial recommendations through the Business Dialogue process, the Collaborative was also in a unique position to respond to recommendations contained in the *Roadmaps for Enhancing Employment of Persons with Disabilities through Accessible Technology*. These responses are included as part of the recommendations to employers and the business community.

## Roadmap for Federally Funded Programs Related to AT

The AT Collaborative makes the following recommendations to the statewide AT Act programs, AFPs, Teleworks Programs, and state P&A/CAP system. These programs are referred to collectively as the “federally funded programs related to AT.” In order to be carried out, some of these recommendations may require additional funding.

- 1 Raise awareness among both the federally funded programs related to AT and employers about federal and state tax credit programs which can lessen the cost of purchasing AT.

## FOOTNOTES

<sup>18</sup> Government Accountability Office, Highlights of a Forum: Modernizing Federal Disability Policy. (August 2007) (GAO-07-934SP). Pg. 16.

<sup>19</sup> Id.

2 Establish an ongoing collaborative outreach effort among the federally funded programs related to AT that is targeted towards employers. The work of the Pennsylvania AT Collaborative, which was funded under the short-term state projects on AT and employment<sup>20</sup>, can serve as a model for how to coordinate the programs, develop an outreach effort directed towards business organizations, and create training materials and programs.

- 3 Develop partnerships with employers to overcome the concerns, myths, and lack of awareness about AT in the workplace. For example:
- a. Replicate the efforts of the Florida short-term state project on AT and employment by working jointly with an employer to create materials, trainings, videos, or outreach projects on AT and employment.<sup>21</sup> Such efforts could be directed towards a specific large employer in the state, or geared towards a specific industry.
  - b. Create educational materials jointly with employers, or representative organizations within the state, which focus on the cost and use of AT in the workplace as a way to address employer concerns and misperceptions.

4 Develop partnerships with existing federal- and state-funded disability programs, and/or employer, professional, and industry associations to create joint outreach efforts and training programs addressing the concerns, myths, and lack of awareness about AT in the workplace. Examples of such activities might include:

- a. Partner with organizations and associations such as: the Disability and Business Technical Assistance Centers (DBTACs); state VR agencies and state rehabilitation councils; JAN; state and local chapters of the Society for Human Resource Management (SHRM), Business Leadership Networks (BLNs) or Chambers of Commerce; DOL, Office of Federal Contract Compliance Programs (OFCCP); and the National Industry Liaison Group (NILG).
- b. Develop webcast training programs that focus on the availability of AT services within the state and the cost-effectiveness of AT in the workplace. Collaborate with JAN in the production and hosting of such web-based training programs.
- c. Suggest that the use of training programs developed through these partnerships be incorporated into settlement agreements when negotiating with employers about violations of federal or state anti-

discrimination laws based on disability.

- d. Work with the organizations mentioned, or other similar organizations, to get the message out to the employment community about the cost and use of AT.
- e. Invite the organizations mentioned and other business community members to conferences and meetings.

5 Publicize success stories about the use of AT in regards to employment. Obtain the right to release contact information of the employers, individuals with disabilities, and the state education system representatives involved so others can gain better insight into these successes.

6 Identify and engage specific federally funded state programs related to AT that have been actively involved in both AT and employment issues, as well as those state programs which have not been active. The national associations of these federally funded state programs on AT should undertake such efforts in an attempt to determine the reasons some state programs have become involved and/or been successful in addressing these issues, and why other states have not.

7 Include sessions about the successful work of state collaborative efforts on AT and employment at the conferences of national organizations, including the ATAP, the AT conference organized by the NLS, the annual Training and Advocacy Support Center (TASC) conference of the NDRN, and the CSAVR conference. Include or invite the business community to such events.

8 Review, update, or refine existing resources or booklets about the various funding options and strategies for acquiring AT and make them available to employers, job seekers, and federal technical assistance centers. Possible ways to update and improve such resources include:

- a. Create a template with boiler information, which may then be tailored for a specific audience.
- b. Identify existing resources and effective marketing methods that have been successful in changing employer policies and practices, and model such resources and marketing methods when updating and revising information about AT.

## FOOTNOTES

<sup>20</sup> See note 16.

<sup>21</sup> See note 16.

c. Include information in materials about the interplay between various tax rules and public programs/benefits available to fund the acquisition of AT.

- 9 Use business language when dealing with employers, especially when producing or conducting training and outreach activities, or advocating or negotiating on behalf of an individual with a disability.
- 10 Create resources for individuals with disabilities, particularly students transitioning from secondary or post-secondary institutions to employment, concerning what the individual should do when they need AT for applying for or when on the job.
- 11 Work with federal agencies and business organizations to develop resources for employers on the practical steps to increase the likelihood that successful, AT-related accommodations will be provided. In addition to employer and business organizations, possible partners might include any of the eight national organization members of the AT Collaborative, the U.S. Equal Employment Opportunity Commission (EEOC), ODEP, and the U.S. Department of Justice (DOJ).

## Roadmap for the Federal Government

The AT Collaborative makes the following recommendations to the federal government for enhancing federal policy in terms of AT and employment.

- 1 Encourage and support for federally funded programs related to AT to develop outreach and training programs specifically targeting employers on AT matters.
- 2 Research interoperability<sup>22</sup> problems that restrict or negatively impact the use of AT on EIT devices by individuals with disabilities. Develop appropriate awareness and technical assistance tools on interoperability based on the results of this research.
- 3 Encourage and support developing small business mentor programs with expertise in both AT and small business matters to assist individuals with disabilities in pursuing business opportunities. The Illinois SECS initiative funded under the short-term state projects on AT and employment<sup>23</sup> could be an appropriate model.
- 4 Identify effective practices that can promote and increase the use of federal Small Business and Work Opportunity tax credits as a way to purchase AT for use in the workplace for individuals with disabilities.



- 5 Encourage the Interagency Committee on Disability Research (ICDR) to analyze how federal agencies and federally funded programs report and measure the interaction between AT and employment in order to determine how such measurements can be developed or improved to better capture this interaction.
- 6 Improve implementation of the requirements of the Individuals with Disabilities Act (IDEA) and Title I of Rehabilitation Act of 1973, as amended, in regards to the transition of individuals with disabilities from the secondary education system to employment or post-secondary education in order to ensure such individuals have the AT devices and training necessary to prepare to enter the workforce.
  - a. Use clear language in policy and practice documents produced by ED indicating that AT devices and services are an essential part of transition.
  - b. Require that language in all transition plans (the Individualized Education Plan and the Individualized Plan for Employment) regarding AT consider foreseeable needs and clearly state how equipment and training will be paid or acquired.
    - c. Strengthen agreements between state VR agencies and school systems regarding how AT will be provided. RSA could develop a sub-regulatory guidance document to address this issue and more rigorously enforce the requirements in the Rehabilitation Act regulations for such formal agreements.
- 7 Encourage better training and the dissemination of information to public school personnel on how AT supports the preparation for, and employment of, individuals with disabilities.
- 8 Promote better use of Social Security work incentive programs such as the PASS, blind-related expenses, impairment-related work expenses, and the Ticket to Work program as funding sources for AT related to employment. Examples for promoting these programs include:
  - a. Educate individuals with disabilities, service providers, disability advocates, staff of Work Incentive Planning and Assistance, and One-Stop disability navigators about the potential use of these programs to fund the acquisition of AT.

## FOOTNOTES

<sup>22</sup> See note 17.

<sup>23</sup> See note 16.

- b. Train SSA staff, including the Area Work Incentive Coordinators and Work Incentive Liaisons, on how the Social Security work incentives are a possible source to fund AT.
- c. Through the recruitment and training of Employment Networks (ENs), Ticket to Work Program Managers should discuss the importance of AT in the successful employment of many individuals with disabilities.

9 Inventory, organize, and disseminate the federal resources available on AT and employment, including information available at [disability.gov](http://disability.gov), so that the information is easier to locate and use by both employers and the federally funded programs related to AT. For example:

- a. Federal agencies involved in AT and/or the employment of individuals with disabilities should proactively send information to stakeholders to increase their awareness of what is available on their websites. Possible agencies to be involved in these efforts include ED, RSA; DOL, ODEP; the Computer-Electronic Accommodations Program (CAP) at the Department of Defense (DoD); and the Department of Veterans Affairs (VA), Vocational Rehabilitation and Employment Program (VR&E).

- b. Agencies should periodically remind all interested stakeholders of the information on AT and employment that exists.
- c. Federal websites should be organized by topic and not by agency to allow for easier location of information on AT and other topics.

10 Develop documents targeted to employers and the federally funded programs related to AT on the following areas (also disseminate them in the most effective manner, including placing the information on relevant websites):

- a. Promising practices and similar resources that dispel and address the concerns, myths, and lack of awareness of employers about AT. This could include information to address the concerns of employers that hiring individuals with disabilities and/or providing AT could create a greater risk of litigation.
- b. Changes in legislation, regulations, and policy that impact the acquisition or use of AT in the preparation for, or employment of, individuals with disabilities.

- 11 Encourage and/or partner with the federally funded programs regarding AT, disability, and employment to develop resources for employers on practical steps to take to provide or allow AT as a reasonable accommodation. Potential partners in this effort could include: EEOC; ODEP; DOJ; JAN; the P&A/CAP system; NDRN; the statewide AT programs; and the USBLN.
- 12 Create an AT funding source as a “payer of last resort” to address the inability of the Assistive Technology Act programs to purchase AT devices for individuals with disabilities. This would allow individuals with disabilities and/or employers to acquire the AT devices and services necessary to prepare for, access, obtain, or retain employment.<sup>24</sup> The establishment of such a last resort program can meet the needs of individuals who cannot benefit from other existing loan programs.
- 13 Research the feasibility of establishing a centralized AT accommodation fund within public and private sector employers to allow for the acquisition of AT.

## Roadmap for Employers and Businesses and Response to the Business Dialogue’s *Roadmaps*

The AT Collaborative makes the following recommendations to employers and the business community for eliminating barriers that hinder the acquisition and use of AT in the workplace. The Collaborative also provides several responses to the recommendations contained in the *Business Dialogue Roadmaps for Enhancing Employment of Persons with Disabilities through Accessible Technology*.

- 1 Educate IT staff about interoperability issues, such as restrictive security and backup policies, and their impact on the usage of AT software. Take steps to avoid interfering or reducing the utility of AT software either by accident or because of security, maintenance, or other similar issues.
- 2 Purchase or allow the use of portable AT, especially AT software or EIT AT devices, which can be brought by an individual to standardized offices or work spaces.

### FOOTNOTES

<sup>24</sup> Though nineteen states administer a telework program, and at least forty-six states operate an AT financial loan program funded through the Assistive Technology Act or state resources, a number of states indicate an increasing need to establish a “payer of last resort” program.

- 3 Allow flexibility in employer policies in regards to the purchase, installation, or training of AT. For example, employers should allow job coaches on the worksite to demonstrate the proper use of an AT device for an individual with a disability, and if necessary his or her supervisor, and assure AT purchases are approved as quickly as possible.
- 4 Encourage managers to seek out publicly available AT information and resources following a request for an AT accommodation by a job applicant or current employee before seeking legal counsel. It may be less costly to work to provide the accommodation than to pay the attorney's fees.
- 5 Think creatively, if necessary, about how to fund any requested AT. Before deciding how much to fund other budget items such as general IT, professional development, or an employee's career development account, establish a centralized accommodation account to pay for AT as well as other accommodations. The use of a professional development fund or career account to fund AT, however, should not negatively impact the ability of an individual with a disability from accessing these resources for other purposes to the same extent as an individual without a disability.
- 6 Develop, disseminate, or make available resources developed by others on AT that address the concerns, myths, and lack of awareness of employers. Such resources include those maintained by the U.S. Chamber of Commerce, SHRM, and the National Governors Association (NGA).
- 7 Take advantage of demonstration projects/programs and become more knowledgeable about the capacity of individuals with disabilities to use AT in the workplace.
- 8 Create and keep statistics on the use and productivity of employees with disabilities using AT in the workplace.
- 9 Provide alternate means, or assure the provision of other appropriate accommodations, for individuals with disabilities unable to use a kiosk or website to apply for a job on equal terms with other applicants.
- 10 Assure that appropriate AT or other accommodations are available for individuals with disabilities to participate in training if the individual is unable to access multidimensional user environments, internet-based trainings, or other similar electronic training programs.

In the Business Dialogue's *Roadmaps*, a variety of actionable steps were offered to the business community and the federal government; in an effort to begin a dialogue with the business community, the AT Collaborative offers below several ideas in response to some of the actionable steps:

- 1 The Business Dialogue recommends that businesses “support forums and other opportunities to spread the word with generic business organizations and associations.”

The Collaborative suggests that state programs funded under the Assistive Technology Act, their national associations, and other organizations can assist in providing information to these forums, including resources and contact information. The Collaborative also suggests that national associations of various executives be included to “spread the word,” and that the business community look to the Collaborative participants, especially JAN and the statewide AT programs, for success stories on how both individuals with disabilities and businesses have used AT.

- 2 The Business Dialogue recommends the “support [of] business organizations and associations whose mission includes enhancing employment of persons with disabilities.”

The Collaborative suggests that business organizations provide or support training on how such associations and organizations can approach and talk with businesses. The business community might also consider creating awards for success stories.

- 3 The Business Dialogue recommends the “establishment of a network of disability and accessibility managers working for businesses” and “the establishment of a network of professionals with disabilities.”

The Collaborative believes that it is important to include managers who do not know what business responsibilities are in terms of accessibility and AT within the managers' network, and supports the establishment of a network of individuals working in non-professional occupations. As recommended above, the Collaborative suggests that success stories be provided to these network(s).

- 4 The Business Dialogue recommends as an actionable step that the federal government “support efforts to educate/empower youth.”

The Collaborative strongly supports this recommendation, especially as it reinforces its recommendations to the federal government regarding transition from secondary education to post-secondary education and/or employment.

- 5 The Business Dialogue recommends that the federal government “strengthen enforcement of Section 508 of the Rehabilitation Act so vendors know that they must design information and communications technology that meet accessibility standards.”

The Collaborative further suggests that the federal government strengthen the enforcement of all disability-related laws, including Section 504 of the Rehabilitation Act and Title I of the Americans with Disabilities Act (ADA).

- 6 The Business Dialogue recommends that research initiatives be expanded on: the use of AT in the workplace; better ways businesses can employ individuals with disabilities; and how businesses of various sizes can utilize the technical assistance and information already available.

The Collaborative further suggests that any research should be conducted and reported so it is usable by different stakeholders and will have real-world applications.



# Appendix 1 – List of Acronyms

(For a list of Acronyms and Abbreviations for Organizations/Agencies, see Appendix 2)

AFPs	-	Alternative Financing Programs
AWICs	-	Area Work Incentives Coordinators
AT	-	Assistive Technology
CAP	-	Client Assistance Program
IDEA	-	Individuals with Disabilities Act
PAAT	-	Protection and Advocacy for Assistive Technology
PASS	-	Plan for Achieving Self-Support
P&A	-	Protection and Advocacy
SSDI	-	Social Security Disability Insurance
SSI	-	Supplemental Security Income
WIPA	-	Work Incentives Planning and Assistance



# Appendix 2 – Collaborative Participants

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**The National Disability Rights Network (NDRN)** is the nonprofit membership organization for the federally mandated Protection and Advocacy (P&A) Systems and Client Assistance Programs (CAP) for individuals with disabilities. Collectively, the P&A/CAP network is the largest provider of legally based advocacy services to people with disabilities in the United States.

Through training and technical assistance, legal support, and legislative advocacy, the National Disability Rights Network works to create a society in which people with disabilities are afforded equality of opportunity and are able to fully participate by exercising choice and self-determination.

The National Disability Rights Network serves a wide range of individuals with disabilities – including, but not limited to, those with cognitive, mental, sensory, and physical disabilities – by guarding against abuse; advocating for basic rights; and ensuring accountability in health care, education, employment, housing, transportation, and within the juvenile and criminal justice systems.