

A National Data Summary of State Assistive Technology Programs

INTRODUCTION

State and Territory Assistive Technology programs (AT Programs), authorized under Sec. 4 of the Assistive Technology Act of 1998, most recently reauthorized in 2004, focus on improving the provision of AT through comprehensive, statewide programs that are consumer-responsive. The goal of these programs is to increase access to and acquisition of AT through state-level activities and state leadership activities. The AT Act provides formula grants for an AT Program in each state, as well as the District of Columbia, Puerto Rico, American Samoa, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands. These programs are administered by the U.S. Department of Education Rehabilitation Services Administration (RSA). This report provides a national summary of AT Program outcomes for Fiscal Year (FY) 2010.

The 2004 reauthorization of the AT Act required a common set of activities to be provided by all AT Programs (with some limited exceptions) to create consistency among grantees. Required state-level activities include state financing activities, device reutilization programs, device loan programs, and device demonstration programs. Required state leadership activities include training and technical assistance, public awareness and

information and assistance activities, and coordination and collaboration. All the state-level activities and the major state leadership activities will be described in greater detail later in this report.

on services provided via the required state-level and leadership activities (ATAP, 2011). These data, found in the Annual State Grant for AT Progress Report, are the primary source used in this report.

STATE-LEVEL ACTIVITIES

DEVICE DEMONSTRATION PROGRAMS

Device demonstrations compare the features and benefits of a particular AT device or category of devices for an individual or small group of individuals (U.S. Department of Education [DOE], 2011). Device demonstrations allow individuals and groups to make informed choices about an AT device prior to acquiring it. Along with providing demonstrations, AT Programs are required to provide comprehensive information about state and local assistive technology vendors, providers, and repair services.

During the most recent reporting period, FY 2010, 54 AT Programs conducted device demonstrations as part of their state-level activities. Computers and related technologies were the largest demonstration category, comprising 21% of all demonstrations. Most AT areas are well covered by device demonstrations, with six additional areas comprising between 9% and 15% of all demonstrations.

TABLE 1: NUMBER OF DEVICE DEMONSTRATIONS BY DEVICE TYPE

Type of AT Device	Number of Demos	%
Computers and related	7,755	21
Speech communication	5,561	15
Hearing	5,152	14
Daily living	4,694	13
Learning, cognition	4,210	11
Vision	4,028	11
Mobility, seating	3,253	9
Environmental adaptations	1,242	3
Recreation, sports, and leisure	1,098	3
Vehicle modification and transportation	110	<1
Other	110	<1
TOTAL	37,213	100%

What is Assistive Technology (AT)?

AT is any item, piece of equipment, or system, whether acquired commercially, modified, or customized, that is commonly used to increase, maintain, or improve functional capabilities of individuals with disabilities.

(Source: AT Act of 1998 as amended, 29 USC §3002)

information and assistance activities, and coordination and collaboration. All the state-level activities and the major state leadership activities will be described in greater detail later in this report.

AT Programs are required to serve people with all types of disabilities, of all ages, in all environments. Programs must also serve family members, service providers, educators, therapists, employers, health and rehabilitation professionals, AT vendors, procurement officials, and other interested parties throughout all versions of the law (Association of Assistive Technology Act Programs [ATAP], 2011). The AT Act requires specific data reporting

Looking at Table 2, we see that individuals with disabilities (44%) were the largest group participating in device demonstrations in FY 2010, followed by family members, guardians, and authorized representatives (25%) and representatives of education (13%).

TABLE 2: NUMBER OF INDIVIDUALS WHO PARTICIPATED IN DEVICE DEMONSTRATIONS

Type of Individual	Number of Participants	%
Individuals with disabilities	22,142	44
Family members, guardians, and authorized representatives	12,702	25
Representatives of education	6,339	13
Representatives of health, allied health, and rehabilitation	3,765	8
Representatives of community living	2,765	6
Representatives of employment	1,463	3
Representatives of technology	584	1
Others	177	<1
TOTAL	49,937	100%

Individuals who participated in device demonstrations were surveyed by AT Programs about the main purpose of the AT device for which they attended the demonstration. In FY 2010, community living was listed as the most common purpose (41%), followed by education (34%). Other purposes cited by participants were IT/telecommunications (15%) and employment (10%).

For AT Program purposes, education is defined as participating in any type of educational program. Community living includes carrying out daily activities, participating in community activities, using community services, or living independently. Employment means finding or keeping a job, getting a better job, or participating in an employment training program, vocational rehabilitation program, or other program related to employment. Lastly, IT/telecommunications is defined as using computers, software, websites, telephones, office equipment, and media.

DEVICE LOAN PROGRAMS

Device loan programs allow AT consumers and professionals who provide services to individuals with disabilities to borrow AT devices for use at home, school, and work, and in the community. These loans are short-term. Although the length varies by individual program policy, the average based on FY 2010 data was 35 calendar days. The purpose of a device loan may be to

Short-Term Device Loan

The Oklahoma AT Program provided the family of a non-verbal child an opportunity to borrow a variety of communication devices so that their child could communicate beyond using gestures. One particular device allowed the child to effectively interact with his family and clinicians. According to his mother, the child asks for the device every morning.



assist in decision-making; to fill a gap while the consumer is waiting for device repair or funding; to provide an accommodation on a short-term basis; to provide self-education by a consumer or professional; and to provide training (DOE, 2011).

During the most recent reporting period, 52 AT Programs reported providing short-term loans of AT devices to individuals or entities. Individuals with disabilities were the largest group to whom devices were loaned (35%), followed by representatives of education (23%). Please refer to Table 3 for a more detailed breakdown. Seventy percent (n=26,180) of device loans were made to individuals for the primary purpose of decision-making. Other reasons consumers cited for wanting a short-term device loan included accommodation (21%), need for a loan during repair/waiting for funding (6%), and other reasons (3%).

TABLE 3: NUMBER OF DEVICES BORROWED BY TYPE OF INDIVIDUAL

Type of Individual	Number of Device Borrowers	%
Individuals with disabilities	13,271	35
Representatives of education	8,682	23
Family members, guardians, and authorized representatives	6,147	16
Representatives of health, allied health, and rehabilitation	6,006	16
Representatives of community living	1,523	4
Representatives of technology	1,080	3
Representatives of employment	660	2
Others	67	<1
TOTAL	37,436	100%

Devices for learning and cognition (24%) were the most common AT devices loaned in FY 2010, followed by those for speech communication (22%), computers and related devices (12%), and mobility/seating devices (10%). Five additional device categories accounted for 5% to 9% each of the device loans made. Almost half of the surveyed consumers (46%) who received a device loan cited education as the primary purpose for which they needed an AT device. Community living was the second most common purpose (42%), followed by employment (8%) and IT/telecommunications (4%).

TABLE 4: DEVICES LOANED BY TYPE

Type of AT Device	Number Loaned	%
Learning, cognition	12,176	24
Speech communication	11,181	22
Computers and related	5,872	12
Mobility, seating	4,883	10
Daily living	4,464	9
Vision	3,431	7
Hearing	2,942	6
Recreation, sports, and leisure	2,703	5
Environmental adaptations	2,659	5
Other	83	<1
Vehicle modification and transportation	68	<1
Total # of Devices Loaned	50,462	100%

DEVICE REUTILIZATION PROGRAMS

AT reutilization involves transferring a used device from someone who no longer needs it to someone who does. There are two general categories of device reutilization: device exchange and device reassignment (which includes refurbishment, repair, and open-ended loans) (DOE, 2011).

In FY 2010, 27,610 consumers received a total of 35,844 reutilized devices from all 56 AT Programs. The most common device reutilization activity was reassignment (formerly recycling)/refurbishment/repair (RRR). Eighty-one percent of recipients fell into the RRR category, saving consumers over \$13 million.

Mobility/seating and daily-living assistive technologies were the two most common technologies to be reassigned/refurbished/repared (53% and 33% respectively). They also provided the greatest savings

Device Reuse

The Connecticut AT Program provided a father with a reutilized lift that is able to transfer his 10-year-old daughter from her wheelchair to a swimming pool. She had been unable to use the pool since becoming too large for her mother to do a manual transfer.



to consumers (\$10,223,617 and \$1,713,452 respectively) compared to other types of AT. Mobility/seating and daily-living technologies were also the most common types of devices to be exchanged (28% and 20% respectively), followed by speech devices (15%). Nevertheless, the technology contributing to the most savings (55% of savings for all AT types) under device exchange activities came from vehicle modifications, with a total savings of \$1,565,245 to consumers, even though modifications made up only 8% (n=111) of devices exchanged.

Overall, RRR activities provided the greatest savings to consumers out of the services provided through reutilization programs.

TABLE 5: NUMBER OF RECIPIENTS OF REUTILIZED DEVICES AND SAVINGS, BY DEVICE REUTILIZATION ACTIVITY

Activity	Number (%) of Device Recipients	Number (%) of Devices	Total Savings To Recipients	% of Savings to Recipients
Reassign/refurbish/repair (RRR)	22,501 (81%)	28,389 (79%)	\$13,355,432	74
Open-ended loans	3,816 (14%)	6,124 (17%)	\$1,795,618	10
Device exchange	1,293 (5%)	1,331 (4%)	\$2,826,996	16
TOTAL	27,610 (100%)	35,844 (100%)	\$17,978,046	100%

Customers participating in the device reutilization program were surveyed about the primary purpose for which AT was needed. Out of the 26,782 respondents, 86% gave community living as the primary purpose, followed by education (10%) and employment (4%).

STATE FINANCING

State financing activities assist individuals with disabilities to attain funding for AT devices and services. Funds authorized under the AT Act of 1998, as amended, cannot be used to purchase AT devices or services directly for consumers (DOE, 2011). There are three types of state financing activities that assist individuals who need AT: 1) financial loan programs that provide cash loans that consumers can then use to acquire AT, 2) activities that result in AT acquisition, and 3) activities that allow consumers to obtain assistive technology at a reduced cost.

Thirty-two AT Programs reported data on financial loan programs with 832 loans issued totaling \$7,899,327. The average annual income of loan recipients was \$41,696. Out of 832 loans issued, nearly half (48%) were given to applicants with annual incomes of \$35,001 or more. Twenty-eight percent of loans were made to individuals with annual incomes between \$15,001 and \$35,000, while 24% were made to individuals with annual incomes of \$15,000 or less. -

The overwhelming majority of total loan dollars issued (76%) was for 322 vehicle modification and transportation technologies, averaging \$18,534 a loan. Hearing AT followed closely with 309 devices financed, averaging \$3,678 a loan. For a more detailed breakdown of loans by device type, refer to Table 6.

TABLE 6: TYPES AND DOLLAR AMOUNTS OF ASSISTIVE TECHNOLOGY FINANCED

Type of AT	Number of Devices Financed	Device %	Dollar Value of Loans	Dollar %	Average Loan Amount
Vehicle modification and transportation	322	38	5,967,888	76	18,534
Hearing	309	36	1,136,355	14	3,678
Mobility, seating	67	8	268,743	3	4,011
Computers and related	64	8	35,026	<1	547
Environmental adaptations	34	4	269,400	3	7,924
Vision	31	4	97,803	1	3,155
Daily living	15	2	60,466	1	4,031
Recreation, sports, and leisure	7	1	38,333	<1	5,476
Speech communication	2	<1	21,613	<1	10,807
Learning, cognition	1	<1	3,700	<1	3,700
TOTAL	852	100%	7,899,327	100%	9,272

State Financing

The Puerto Rico AT Program fabricated a number of devices to allow a local TV and live presenter who uses a power wheelchair to continue with her speaking career. She received an adjustable wireless microphone system with adaptive controls, adaptations to her van, and building modifications. Acquisition of this AT has allowed her to continue speaking professionally.



Eighteen states reported data on other financing activities that resulted in the acquisition of AT devices and services. These programs typically provide AT directly through external funding provided to the AT Program by another agency. This external funding frequently limits the focus of the program to a particular AT area, such as adaptive telecommunications devices, or to a specific recipient group, such as individuals eligible under IDEA. In FY 2010, these programs served 2,023 individuals and provided 2,720 AT devices. Almost half (45%) of the total technologies funded were hearing devices.

Services Working Together

Comprehensive device demonstrations and trial loans are available through the Kansas AT Program. After using these services, a young man with a visual impairment decided that he would need a range of enlarging software and devices in order to be successful in college. The AT Program was able to provide some of these devices for the student from their reutilization program, and the rest were funded by other sources.



Environmental adaptations (also known as home modifications) made up only 19% of total devices funded, but constituted 51% (\$1,382,001) of the total value of AT provided (\$2,704,664).

Six states reported data on other state financing activities that allowed consumers to obtain assistive technology at a reduced cost. These programs included cooperative buying, rental/layaway, and device design and development. In FY 2010, these financing activities enabled states to serve 1,011 individuals and acquire 4,212 devices at a reduced cost. Out of all the AT categories, vision AT resulted in the highest savings to consumers (\$655.74 per device). Speech communication and learning/cognition devices combined made up two thirds of acquired devices (1,465 and 1,302 respectively). This resulted in moderate savings of \$28.68 (speech) and \$25.44 (learning) per device.

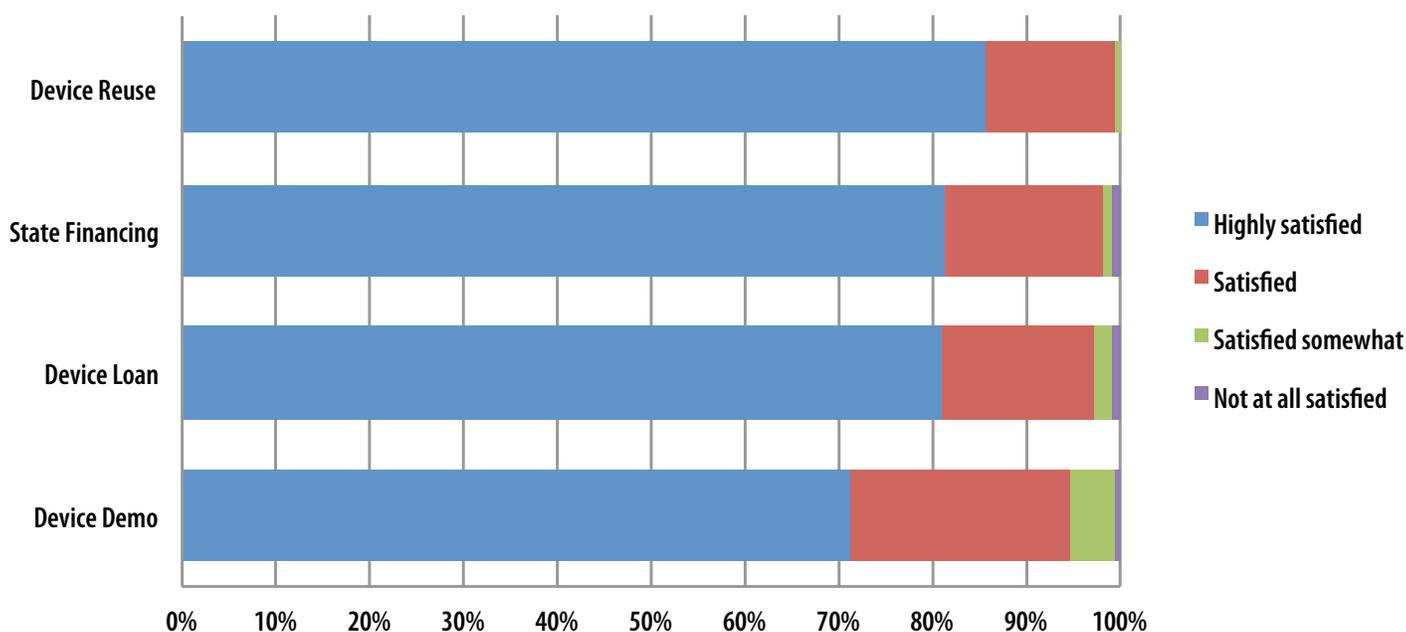
Customers who received services from state financing activities were contacted about the primary purpose for which AT was needed. Seventy-six percent of respondents cited community living as the primary purpose, followed by education (17%) and employment (7%).

CONSUMER SATISFACTION RATINGS OF STATE-LEVEL ACTIVITIES

Consumers of AT Program services were asked to report their satisfaction with the services they

received. Figure 1 shows the responses to consumer satisfaction questions for each of the state activities. As we can see by looking at Figure 1, the vast majority (>90%) of respondents were highly satisfied or satisfied with the services they received in each state activity. Device reutilization programs had the highest consumer satisfaction out of all state activities, with 99.5% of consumers highly satisfied or satisfied, followed by state financing programs (98%), device loan programs (97%), and device demonstration programs (95%).

FIGURE 1: CUSTOMER RATING OF SERVICES

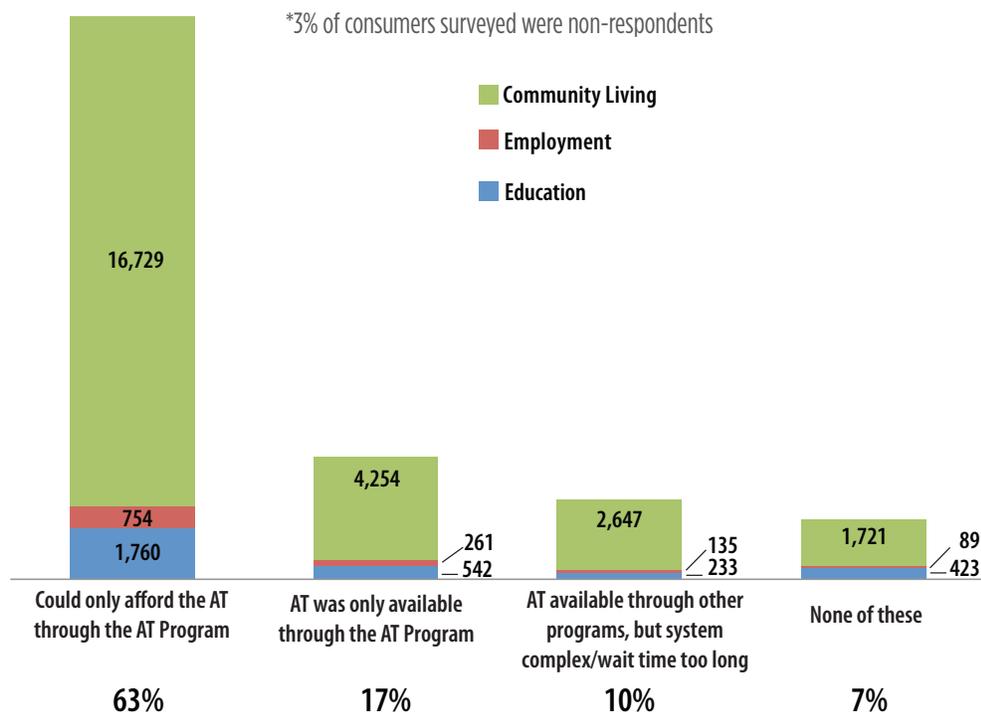


STATE ACTIVITIES PERFORMANCE MEASURES

ACQUISITION PERFORMANCE

Consumers were surveyed about the primary purpose of device acquisition and why they chose to participate in any of the following four programs: state financing services, device exchange, device reassignment, and open-ended loans. As many as 63% of consumers stated that they could only afford AT through these programs. Seventeen percent said that the AT needed was only available to them through these programs, and 10% responded that the AT was available to them through other programs, but the system was too complex or the wait time too long. Community living was by far the most common purpose for AT use (85%).

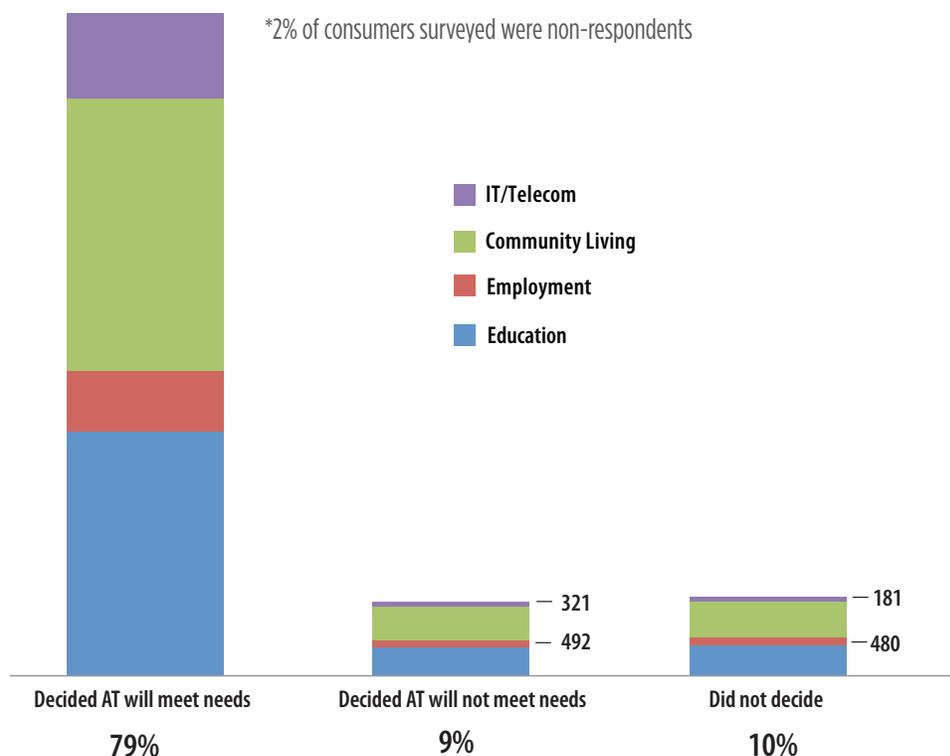
FIGURE 2: OVERALL ACQUISITION PERFORMANCE MEASURES



ACCESS PERFORMANCE

Consumers were surveyed about the kind of decisions they were able to make as the result of a device demonstration or device loan as well as the primary purpose for which these devices will be needed. As the chart below illustrates, these services have overwhelmingly contributed to individuals with disabilities or their representatives making an informed decision about AT. Seventy-nine percent of respondents stated that an AT device would meet their needs, or those of someone they represent. Nine percent of consumers stated that an AT device would not meet their needs. Only 10% did not make a decision. Community living (41%) and education (39%) were the most commonly reported purposes for AT use.

FIGURE 3: OVERALL ACCESS PERFORMANCE MEASURES



STATE LEADERSHIP ACTIVITIES

TRAINING

Training activities are instructional events, usually planned in advance for a specific purpose or audience. Examples of training include classes, workshops, and presentations that have a goal of increasing skills, knowledge, and competency, as opposed to training intended only to increase general awareness of AT (DOE, 2011).

In FY 2010, AT Programs trained a total of 88,388 participants. Twenty-nine percent of participants were education representatives, followed by individuals with disabilities (27%). Forty-four percent of participants attended trainings about AT products and services, which focused on increasing skills and competencies in using AT, and integrating AT into different settings. Thirty percent of participants attended trainings that were on a combination of any or all of the following topics: AT products/services, AT funding/policy/practice, and IT/telecommunication access. AT funding/policy/practice and IT/telecommunication access trainings were attended by less than 10% of training participants each. Trainings on transition were attended by 11% of participants.

PUBLIC AWARENESS AND INFORMATION AND ASSISTANCE

Public awareness activities are designed to reach large numbers of people. These activities include public service announcements, radio talk shows and news reports, newspaper stories and columns, newsletters, brochures, and public forums. Actual numbers of information recipients for these public awareness activities are often difficult to determine, and estimates must be reported (DOE, 2011).

In FY 2010, AT Programs reached an estimated 17,425,375 people through their awareness activities. Out of the estimated total reached, 43% of individuals were contacted through public service announcements on radio or television, 35% through the internet, and the remaining outreach activities were distributed among newsletters (5%), other print materials (6%), public forums (5%), listservs (2%), and other means (4%).

Information and assistance (I&A) activities are those in which AT Programs respond to requests for information and/or put individuals in contact with other entities. These other entities can provide individuals with needed information and intensive assistance on AT, AT funding, and related disability topics.

In FY 2010, 277,433 individuals were recipients of I&A. Out of the three I&A content areas, information about specific AT products/devices/services or selecting an AT product/device/service was the most common, with 62% of recipients receiving this type of information. Twenty-two percent received information on related disability topics, and 16% received assistance in obtaining funding for AT. The largest recipient group of I&A was individuals with disabilities (44%), followed by family members, guardians, authorized representatives (16%), representatives of education (12%), and representatives of community living (11%). The remaining recipient types were representatives of health, allied health, and rehabilitation (9%), representatives of technology (3%), representatives of employment (3%), and others (2%).

SUMMARY

State and Territory AT Programs have improved the ability of individuals with disabilities to participate fully and productively in education, community living, employment, and other facets of life. State-level and state leadership activities provide a continuum of services that reach a wide variety of individuals and provide access to a broad range of technologies.

The quality system of delivery that AT Programs provide enables individuals with disabilities, their representatives, and other stakeholders to make informed decisions about accessing and acquiring technologies. The streamlined process allows consumers to receive information about a device and become familiar with it through loan and demonstration programs prior to making a costly purchase. When consumers are ready to acquire a device, the reutilization and financing programs provide an affordable way to do that.

REFERENCES

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