

AT Act Data Brief

USING AT ACT DATA TO UNDERSTAND, PLAN, AND IMPROVE PROGRAMS



A National Data Summary of State Assistive Technology Programs: Fiscal Year 2022

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EXECUTIVE SUMMARY

Section 4 of the Assistive Technology Act of 1998, as amended (AT Act) authorizes grants to support programs that increase knowledge about, access to, and acquisition of assistive technology (AT) devices and services for individuals with disabilities and older Americans. These programs include 56 statewide AT programs that provide device demonstrations, device loans, device reutilization, training, technical assistance, public awareness, and assistance with obtaining funding for AT.

Statewide AT programs are required by law to collect data on their activities and provide annual progress reports to the Administration on Community Living in the US Department of Health and Human Services. This report is a compilation of data from these programs for FY 2022 and contains information about the activities of the statewide AT programs.

INTRODUCTION

State and Territory Assistive Technology Programs (AT Programs), authorized under Section 4 of the Assistive Technology Act of 1998, 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 an integrated set of state-level activities and state leadership activities.

Section 4 of the AT Act provides 56 formula grants, administered by the Administration on Community Living, to support 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.

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 and device reutilization that support acquisition of AT, and short-term device loans and device demonstrations that support access to AT. Required state leadership activities also support access to AT. This includes training, technical assistance, public awareness, information and assistance, and coordination and collaboration activities. All the state-level activities and the major state leadership activities will be described in greater detail later in this brief.

AT Programs are required to serve people with all types of disabilities, of all ages, in all environments, and to provide a wide array of activities to meet AT needs. 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. Section 4 of the AT Act requires specific data reporting on services provided via the required state-level and leadership activities (U.S. Department of Health and Human Services, 2020). These data, found in the Annual State Grant for AT Progress Report submitted by all 56 grantees, are the source used in this brief.

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)

ASSISTIVE TECHNOLOGY SERVICES FLOW: How Consumers Access Information About and Acquire AT Devices

The AT Act authorizes state leadership and state level activities designed to provide an integrated continuum of AT services for people with disabilities and older adults. The service flow begins with the individual learning about AT through public awareness, training and information and assistance; then exploring AT through device demonstration and/or borrowing AT to try-out and make informed decisions about what AT will work best. When the individual has made an informed decision, the individual can acquire AT for little or no cost through reuse programs or, if eligible, through financial loan programs or other financing options available. Each activity within the continuum provides critical access or acquisition to AT.



Device Demonstrations

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 [ED], 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 offer comprehensive information about state and local AT vendors, providers, and repair services.

During the FY 2022 reporting period, 56 AT Programs conducted device demonstrations as part of their state-level activities. State AT Programs classify device demonstrations into 10 device categories. There were 25,720 device demonstrations in FY 2022. Speech communication was the largest category, comprising 24% of all demonstrations. Nine additional device categories comprised between 4% and 16% of all demonstrations (see Table 1).

Table 1: Number of Device Demonstrations by Device Type

Type of AT Device	Number of Demos	Percent
Speech communication	6,173	24%
Vision	4,128	16%
Daily living	3,426	13%
Mobility, seating	2,918	11%
Computers and related	2,582	10%
Learning, Cognition	2,019	8%
Vehicle modification and transportation	1,294	5%
Hearing	1,095	4%
Recreation, sports, and leisure	1,081	4%
Environmental adaptations	1,004	4%
TOTAL	25,720	100%

Gearing up for Gaming (California)



Markus, who has limited control of his fingers, hands, and arms, is a consumer of one of California’s Device Lending and Demonstration Centers (DLDC). Markus, an avid gamer, was able to receive a demonstration of a variety of adaptive gaming controllers, switch kits, joysticks, and mounts that would allow him to control the game through supported head and arm movements. After playing several video games at the DLDC, Markus identified the perfect combination of adaptive gaming technology (Evil Controller Thumbstick, the Xbox Adaptive Controller, and the Logitech Adaptive Switch Kit) that would allow him to get back into gaming.



As illustrated in Table 2, individuals with disabilities (50%) comprised half of those participating in device demonstrations in FY 2022, followed by family members, guardians, and authorized representatives (26%). AT demonstrated to consumers was primarily used for community living (64%), education (28%), and employment (7%).

Table 2: Number of Individuals Who Participated in Device Demonstrations

Type of Individual	Number of Participants	Percent
Individuals with disabilities	22,166	50%
Family members, guardians, and authorized representatives	11,749	26%
Representatives of health, allied health, and rehabilitation	4,788	11%
Representatives of education	3,655	8%
Representatives of community living	1,451	3%
Representatives of employment	577	1%
Representatives of technology	533	1%
TOTAL	44,919	100%

Noteworthy Technology (South Carolina)

Sarah called the South Carolina AT Program (SCATP) to find out if there were any notetaking apps to help her do her college class work. Sarahus has cerebral palsy and knew she would need help to be successful at college. Staff at SCATP joined Sarahus' team and, through AT demonstrations, helped her decide which was the best fit. They helped her add AT apps and extensions to her laptop to make it easier for her to navigate classwork. To help with online university services, SCATP worked with her tutor, the admissions office, and the office of disability services to get her accommodations for her classwork. Sarahus' case manager, SCATP staff, and other assistive technology professionals helped set up her power wheelchair, including demoing her joystick wheelchair driver control. Now she can move the mouse on her computer screen independently. Sarahus is working very hard to reach her goals, and there is never a doubt that she will get there!



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Device Loans

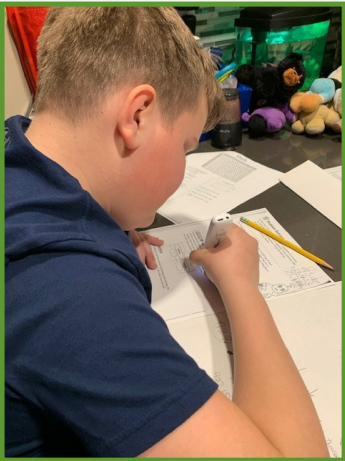
Device loan programs allow AT consumers and professionals who provide services to individuals with disabilities to borrow AT devices for use at home, at school, at work, and in the community. The purpose of a device loan may be to assist in decision-making, to fill a gap while the consumer is waiting for device repair or funding, to provide a short-term accommodation, to facilitate self-education by a consumer or professional, or to provide other training (ED, 2011).

During FY 2022, 56 AT Programs reported providing 26,589 short-term loans of 43,347 AT devices to individuals or entities. Forty-two percent of borrowers were individuals with disabilities, the largest group to whom devices were loaned, followed by representatives of education (19%), and family members, guardians, and authorized representatives (18%). Table 3 shows a more detailed breakdown.

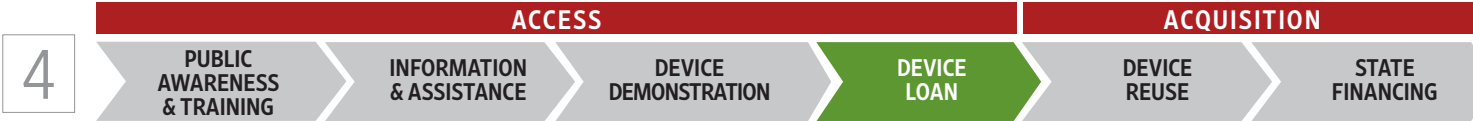
Table 3: Number of Device Loans by Type of Borrower

Type of Borrower	Number of Device Borrowers	Percent
Individuals with disabilities	11,218	42%
Representatives of education	4,973	19%
Family members, guardians, and authorized representatives	4,870	18%
Representatives of health, allied health, and rehabilitation	3,621	14%
Representatives of community living	839	3%
Representatives of technology	535	2%
Representatives of employment	533	2%
TOTAL	26,589	100%

Small Changes, Big Difference (Pennsylvania)



Chris, a student with autism, dyslexia, and auditory processing difficulty, was struggling with reading and comprehension. His teacher borrowed a C-Pen Reader from our program, and the teacher reported that this device helped him attain higher reading skills and understand more of what he is reading. He uses the C-Pen Reader to read directions and define words as well as see and hear them on screen. It also makes it much easier to stay on the line that he is reading. As a result of this device trial, he has become more independent in class, needing fewer prompts from his aide. His teacher states that these small things will make a tremendous difference over time. As a result of Chris’s success with the C-Pen, the school purchased one for use at school and his family purchased one for him to use at home.



Devices for speech and communication (23%) and computers and related (18%) were the most common types of AT devices loaned in FY 2022, followed by mobility and seating (14%) and devices for daily living (13%). Six additional device categories accounted for the remaining 32% of the device loans made (see Table 4). Approximately 72% of device loans (n=19,063) were made to individuals to assist with decision-making. Other reasons borrowers cited for wanting a short-term device loan included for accommodation (18%), for use as a loaner during repair/waiting for funding (5%), and for training/personnel development (5%).

AT acquired through device loan programs was primarily used for community living (49%), education (45%), and employment (6%).

Table 4: Number of Devices Loaned by Type

Type of AT Device	Number Loaned	Percent
Speech communication	10,122	23%
Computers and related	7,852	18%
Mobility, seating	5,988	14%
Daily living	5,572	13%
Learning, cognition	4,345	10%
Vision	3,363	8%
Environmental adaptations	2,569	6%
Recreation, sports, and leisure	1,898	4%
Hearing	1,538	4%
Vehicle modification and transportation	100	<1%
TOTAL	43,347	100%

Improving Communication (Colorado)

Henry is a 24-year-old young man with severe autism. He has profound speech and language disorders with very limited means of communication with the people around him, causing frustration and frequent and frightening self-injurious behaviors. A caged hockey helmet, arm protection, and mitts kept Henry safe from hurting himself. Working with one of the speech language pathologists from Colorado's AT partners, Henry was able to borrow a TouchChat communication device and trial it at home. His family and caregivers learned how to use the device and to work with him daily in a natural setting. Henry was able to learn how to use the device without prompting and revealed his ability to use a dynamic display, locate preferred foods, drinks, people, and activities, and comment on his emotions. Because of the loan of the TouchChat device and the ability to trial the device to ensure it was the best solution before purchase, Henry's parents are now better able to enjoy him, and he no longer depends on his hockey helmet to keep himself safe as he is able to communicate his wants and needs to those around him.



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Device Reutilization Programs

Device reutilization involves transferring a previously owned device from someone who no longer needs it to someone who does. Device reuse falls into two activity categories. The first one, device exchange, usually occurs through an online forum where sellers and buyers can connect. Recycling, refurbishment, and repair (RRR) and/or open-ended loan is the second category. In RRR, devices are typically obtained from individuals who no longer need them, are refurbished, and then provided to new owners.

Open-ended loan programs use the same process as RRR, collecting previously used devices and refurbishing them as needed, and then loaning them to individuals who can use them as long as they are needed. The expectation is that the devices would be returned to the program at some point. For the purposes of this brief, the second category—RRR and/or open-ended loan—will be referred to as device refurbishment.

In FY 2022, 59,229 consumers received a total of 88,015 reutilized devices from 56 AT Programs, resulting in an overall savings of \$38.3 million. The most common device reutilization activity was device refurbishment (as described previously). Ninety-nine percent of recipients received devices through a device refurbishment program, saving almost \$38 million. Of the services provided through reutilization programs, device refurbishment activities provided the greatest savings to recipients (see Table 5). Daily living and mobility, seating AT comprised 86% of all devices provided through the two reutilization programs. Additionally, these two device types made up 90% of savings totaling over \$34 million (see Table 6).

AT acquired through device reutilization programs was primarily used for community living (95%), and was also used to support education (3%) and employment (2%).

On the Move (Kansas)



Ellie is a classic 9-year-old from western Kansas. She enjoys school and loves playing with her friends on the playground. When she was a baby, she was diagnosed with “shrunk cerebellum,” or cerebellar hypoplasia. As a result, Ellie has difficulty with her balance and coordination. Her physical therapist contacted Assistive Technology for Kansans (ATK) to borrow a reverse walker. After measurements were identified, ATK provided a loan of a reverse walker with swivel wheels and found one in the Kansas Reuse program inventory that fit Ellie. The walker allows her to participate with her classmates without the support of school staff for balance, and she can walk longer distances, improving her strength and endurance. School staff note that the reverse walker with swivel wheels allows her to participate in running races, playing games, and kickball, just like her peers. Ellie’s mother states: “The walker was the missing puzzle piece Ellie needed to be a kid — she can now run and play with her peers in and out of school. She has mastered the walker to the point of almost needing a speedometer to keep her from being Speedy Gonzales. With the walker, Ellie has the ability to learn, grow, and play as she makes her way into middle and high school.”



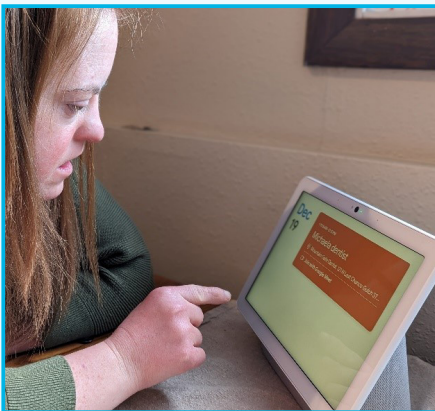
Table 5: Number of Recipients, Devices, and Savings by Type of Reutilization Activity

Activity	Number (Percent) of Device Recipients	Number (Percent) of Devices	Total Savings to Recipients	Percent of Savings to Recipients
Device refurbishment	58,456 (99%)	86,819 (99%)	\$37,840,442	99%
Device exchange	773 (1%)	1,196 (1%)	\$497,719	1%
TOTAL	59,229 (100%)	88,015 (100%)	\$38,338,161	100%

Table 6: Device Reutilization Summary by Device Type

Type of AT Device	Number of Devices	Percent of Devices	Total Savings	Percent of Savings
Mobility, seating	44,631	51%	\$26,489,295	69%
Daily living	30,886	35%	\$7,985,342	21%
Environmental adaptations	4,217	5%	\$996,778	2%
Speech	2,812	3%	\$1,111,329	3%
Computers and related	1,827	2%	\$589,133	2%
Vision	1,500	2%	\$625,586	1%
Hearing	798	1%	\$208,804	1%
Recreation, sports, and leisure	719	1%	\$122,292	<1%
Learning, cognition	410	<1%	\$81,220	<1%
Vehicle modification and transportation	215	<1%	\$128,382	<1%
TOTAL	88,015	100%	\$38,338,161	100%

Tech Support (Montana)



M. recently moved with her parents to Montana. The 32-year-old has Down syndrome and was well-supported in Massachusetts. Here? “It was a shocker,” Mom B. says. “Now M. is on a waitlist, likely for 7–10 years. What can she do during the day?” M. did qualify for supported employment services with Vocational Rehabilitation, and that connection brought the two women to MonTECH. “The road led to you guys,” B. recalls. “That was the path, and we took it.” Through MonTECH, M. borrowed an older iPad for a long-term loan. M. can use the iPad and the Work Autonomy app to remember routines and stay on task in her work at a bakery, particularly as supports are cut back.



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State Financing

State financing activities assist individuals with disabilities to acquire AT through 3 types of programs:

- 1) Financial loan programs that provide cash loans that borrowers can use to purchase AT
- 2) Other financing activities that directly provide AT
- 3) Additional financing activities that allow consumers to obtain AT for a reduced cost

Financial loan programs can include low-interest loan funds, interest buy-down programs, revolving loan funds, loan guarantees, or other cash borrowing options. Other programs use external funding provided to the AT Program by another agency, and directly provide that AT to eligible recipients. These programs are frequently limited in focus, only providing a particular type of AT (such as telecommunications), are restricted to individuals with a specific kind of disability, or require that individuals be eligible for a specific funding source (such as the Individuals with Disabilities Education Act, vocational rehabilitation, or Medicaid).

State financing activities that reduce the cost of AT include cooperative buying programs, equipment lease programs, and device design and fabrication programs. Funds authorized under the AT Act of 1998, as amended, cannot be used to purchase AT devices or services directly for individual consumers (ED, 2011).

CASH LOAN PROGRAMS

Thirty-four state AT Programs reported data on financial loans made. These programs issued 771 loans for AT devices, totaling \$7,391,629. The average annual income of loan recipients was \$47,004, and the national average interest rate was 4.2%. Out of 771 loans issued, 16% were made to applicants with annual incomes of less than \$15,000, and another 25% were made to applicants with annual incomes between \$15,001 and \$30,000. The overwhelming majority of total loan dollars issued (64%) was for vehicle modification and transportation, averaging \$21,939 per loan. Hearing AT ranked first in number of devices financed, averaging \$2,471 per loan. For a more detailed breakdown of loans by device type, see Table 7.

Table 7: Types and Dollar Amounts of AT Acquired with Financial Loans

Type of AT	Number of Devices Financed	Device Percent	Dollar Value of Loans	Dollar Percent	Avg. Loan Amount
Hearing	578	55%	\$1,428,500	19%	\$2,471
Vehicle modification and transportation	217	21%	\$4,760,852	64%	\$21,939
Daily living	71	7%	\$262,925	4%	\$3,703
Mobility, seating and positioning	78	7%	\$455,769	6%	\$5,843
Environmental adaptations	40	4%	\$307,286	4%	\$7,682
Vision	26	2%	\$73,364	1%	\$2,822
Computers and related	20	2%	\$26,252	<1%	\$1,313
Recreation, sports, and leisure	15	1%	\$73,027	1%	\$4,868
Speech communication	3	<1%	\$3,534	<1%	\$1,178
Learning, cognition, and developmental	1	<1%	\$120	<1%	\$120
TOTAL	1,049	100%	\$7,391,629	100%	\$7,046

OTHER STATE FINANCING PROGRAMS THAT DIRECTLY PROVIDE AT

Twenty-eight states reported data on other financing activities that resulted in the acquisition of AT devices and services. In FY 2022, these programs served 10,613 individuals and provided 22,253 AT devices. Computers and related devices, hearing, and speech communication devices comprised of 81% of the technologies funded. Computers and related devices made up 32% (\$2,450,120) of the total value of AT provided (\$7,7630,420), and 54% of total devices funded. For a more detailed breakdown, see Table 8.

Table 8: Types and Dollar Amounts of AT Funded

Type of AT	Number of Devices Funded	Device Percent	Dollar Value of AT Provided	Value Percent	Avg. Amount Per Device
Computers and related	12,011	54%	\$2,450,120	32%	\$204
Hearing	3,689	16%	\$886,465	12%	\$240
Speech communication	2,550	11%	\$885,592	12%	\$347
Vision	1,558	7%	\$1,168,406	15%	\$750
Daily living	1,234	6%	\$307,598	4%	\$249
Mobility, seating and positioning	456	2%	\$256,264	3%	\$562
Environmental adaptations	438	2%	\$1,103,083	14%	\$2,518
Recreation, sports, and leisure	137	<1%	\$36,399	<1%	\$266
Learning, cognition, and developmental	107	<1%	\$96,544	1%	\$902
Vehicle modification and transportation	73	<1%	\$439,949	6%	\$6,027
TOTAL	22,253	100%	\$7,630,420	100%	\$343

Not Slowing Down (Missouri)

The goal of downhill longboarding is speed — and nothing but speed. To call it extreme is an understatement. Nick, a resident of southwest Missouri, was hooked on the sport when he first tried it in 2011. Three years later, Nick experienced a spinal cord injury that left him with paralysis of the legs when he hydroplaned, missed a turn, and collided head-on with a truck. Undeterred, Nick set his mind to returning to the sport he loved. In need of an accessible vehicle to get to competitions, Nick was able to secure funding for an accessible vehicle through MoAT's financial loan program. The pinnacle of Nick's success thus far occurred this summer when he won first place in the adaptive longboard competition at Ekstremsportveko, Norway the largest action sports competition in the world.



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OTHER STATE FINANCING PROGRAMS THAT REDUCE THE COST OF AT

Thirteen states reported data on other state financing activities that allowed consumers to obtain AT at a reduced cost. In FY 2022, these other financing activities served 3,619 individuals, and 5,122 devices were acquired at a total savings of \$3,377,358.

Out of all the AT categories, learning, cognition, and developmental AT resulted in the highest savings to consumers (\$3,441 per device). Daily living (1,064 devices) and speech communication (826 devices) combined made up 37% of acquired devices. This resulted in moderate savings per device (\$37 for each daily living device, and \$33 for each speech device). For more information, see Table 9.

Table 9: Types and Dollar Amount of AT Devices Acquired

Type of AT	Number of Devices Acquired	Device Percent	Current Retail Price	Sale Price	Savings	Savings Percent	Avg. Amt. Saved Per Device
Daily living	1,064	21%	\$55,918	\$17,008	\$38,910	1%	\$37
Learning, cognition, and developmental	916	18%	\$3,614,137	\$462,064	\$3,152,073	93%	\$3,441
Speech communication	826	16%	\$111,219	\$84,277	\$26,942	1%	\$33
Vision	794	16%	\$602,004	\$530,705	\$71,299	2%	\$90
Recreation, sports, and leisure	573	11%	\$65,118	\$24,358	\$40,760	1%	\$71
Computers and related	510	10%	\$26,048	\$14,963	\$11,085	<1%	\$22
Environmental adaptations	196	4%	\$27,297	\$19,026	\$8,271	<1%	\$42
Mobility, seating and positioning	154	3%	\$51,439	\$24,705	\$26,734	1%	\$174
Vehicle modification and transportation	70	1%	\$350	\$0	\$350	<1%	\$5
Hearing	19	<1%	\$979	\$45	\$934	<1%	\$49
TOTAL	5,122	100%	\$4,554,509	\$1,177,151	\$3,377,358	100%	\$3,963

AT acquired through state financing activities was primarily used for community living (81%), education (11%), and employment (8%).

Fishing with Family (Oklahoma)

Bryan was severely injured in the line of duty as a police officer in Oklahoma during a police pursuit. The injuries left him paralyzed on his left side and unable to walk. His existing wheelchair was only able to function on solid hard ground, which limited him from doing activities he has always enjoyed such as fishing, hiking, and nature trails. He had heard about an Action Trackchair that has tracks instead of wheels to get him back outside doing what he enjoyed before his injury. The ABLE Tech low-interest financial loan program helped Bryan purchase the Action Trackchair. Bryan notes, "I was able to purchase this chair and I love it! I am now enjoying time with my kids and grandkids doing what we enjoy, which is fishing and camping. This chair has changed my life for the better. I never would have been able to go fishing again with my kids if I didn't have this chair."



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Special Feature: Trends and Growth of Other State Financing Activities

OTHER STATE FINANCING ACTIVITIES

In addition to cash loans, AT programs implement other state financing activities (SFAs) to directly provide AT or to lower the cost of AT devices for consumers. While not all programs engage in other SFAs, the number of state AT programs that report on other SFAs has increased noticeably over the last several years. In FY2017, only 17 grantees conducted other SFAs; by FY2022, that number had increased to 28 grantees: a 65% jump. This also coincided with a 144% increase in the number of individuals served through other SFA growing from 4,357 to 10,613 people.

Fiscal Year	Individuals Served by Other SFA	AT Programs Reporting
FY 22	10,613	28
FY 21	8,068	24
FY 20	5,194	21
FY 19	2,724	20
FY 18	3,359	18
FY 17	4,357	17

AT FABRICATION

A variety of activities can be conducted to reduce the cost of AT for consumers including cooperative buying, AT leasing, and AT fabrication. Of the three, AT fabrication has emerged as a growing trend and promising way to provide AT to users for low-cost or even no cost.

AT fabrication refers to the creation of customized AT for consumers based on their specific needs. Some AT programs have started using tools such as 3D-printers that enable them to design and create devices from scratch while others have created opportunities for people to learn how to make AT devices through “Maker” events and conferences.

In FY22, 9 programs—more than doubled from 4 programs in FY21—reported engaging in some sort of AT Fabrication activities. Specifically, Puerto Rico, Texas, Illinois, New York, Oklahoma, Pennsylvania, Utah, Wyoming and New Hampshire utilized internal resources, small government grants, collaboration opportunities, or other approaches in order to make and provide custom AT devices to clients. These grantees provided 2,834 fabricated devices at affordable or no cost saving consumers \$140,208 over buying such devices commercially.

A couple of examples of these programs’ AT Fabrication activities are highlighted below.

Puerto Rico Assistive Technology Program (PRATP)

The Puerto Rico Assistive Technology Program (PRATP) collaborated with University of Puerto Rico (UPR)’s Engineering Department as an expansion to their Low-Cost Device Design and Development (LD3) initiative. During this partnership, AT specialists from PRATP worked with engineering students, faculty, and individuals with disabilities to match the AT fabrication needs of clients with disabilities with capstone-level projects for mechanical engineering students at UPR. At the end of the capstone process, the AT devices that engineering students had created were either given to the client, or carried on to the next capstone course for further development and optimization. Through this collaboration, PRATP learned about social innovation as an effective way to encourage mechanical engineering students to apply their skills outside of their comfort zones. For future efforts, PRATP recommends meeting with the target user early on and incorporating them and other stakeholders into the design process. They also emphasize the importance of keeping the project budget to boost creativity in the development of replicable, low-cost technologies.

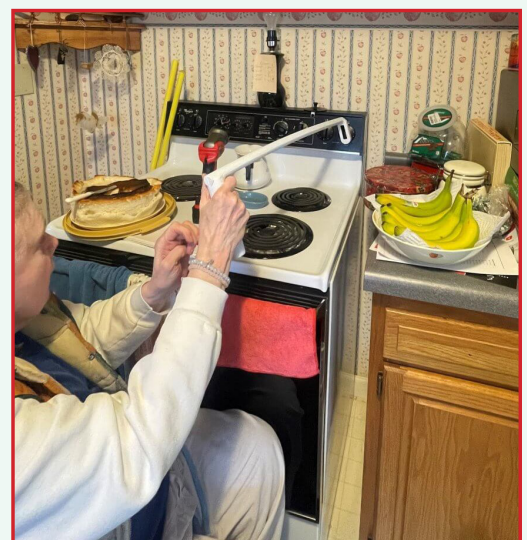
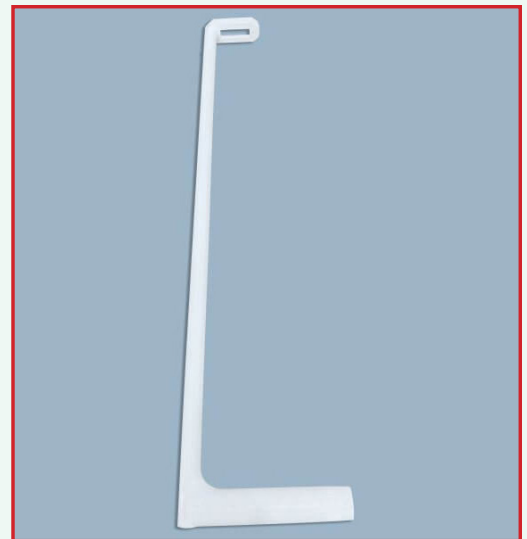
Oklahoma ABLE Tech

Oklahoma ABLE tech has developed a new low-tech AT initiative meant to provide low-cost or free AT through 3D-printing that can be used in all facets of daily life. Through a collaboration with Area Agencies on Aging (AAA), the Indian Nations Council of Governments (INCOG) learned about this initiative and connected with Oklahoma ABLE tech for more information. After receiving training on these devices and services, INCOG identified options to help clients through their programs. Three sets of 3D-printed items—signature bars, round pen holders, and adapted silverware holders – were given to field staff who demonstrated these items during in-home assessments and used the items for those who needed assistance with signing documents and forms during meetings. After each successful demonstration, INCOG AAA staff were then able to assist the clients in acquiring the no-cost solutions through ABLE Tech’s Low-Tech AT program.

The Illinois Assistive Technology Maker Program (IATP) designs and fabricates customized assistive technology for Illinois residents using 3D printing, pressure forming, laser cutting, and a variety of other readily available materials and hardware. The program also provides simple devices that are available through other product libraries. Examples of daily living devices were provided to all Illinois Area Agencies on Aging and have been used for training and outreach. To provide these devices at low or no-cost to consumers, the program has established a volunteer network of other Makers who generously print and donate to the inventory of available items. Examples of current customized designs being developed include a wheelchair mount, sewing machine guide, tactile bike trail map, a foot protection device, a medication applicator, a customized knife handle, an arm assist for a volleyball player, and specialized keyguards and writing guides.

Stovetop Safety (Illinois)

Penny is a wheelchair user who enjoys baking in her free time, but she would love to be more independent as well as bake safely. Before meeting with IATP, Penny was unsafely bending over from her wheelchair and reaching the stove knobs positioned on the back of her stove. Once they got a sense of Penny’s needs, IATP Makers designed and fabricated a 27” Stove Knob Reacher that was printed using their large 3D-printer which can print longer items and provided the length required for Penny to safely turn on her stove burners from a seated position. The Extended Reacher was fully printed in all layers in a strong, durable plastic material that can withstand heat up to 500 degrees Fahrenheit, making this AT acceptable for reaching the back of the stove.



State Level Activities Performance

ACQUISITION PERFORMANCE

After obtaining services from state AT programs, consumers are surveyed about the primary purpose for the device’s use and why they sought out state AT Program services. Consumers are surveyed after they participate in state financing activities, device reuse activities, and/or short-term device loan activities that are not for a decision-making purpose.

Key data highlights:

- 88% of device recipients would not have been able to afford or obtain AT they needed without the State AT Program.
- Community living was by far the most common purpose for AT, at 89%.

ACCESS PERFORMANCE

After participating in a device demonstration and/or short-term device loan for a decision-making purpose, consumers are asked about the kind of decisions they were able to make as a result of these programs, and about the primary purpose for these devices. These services have overwhelmingly contributed to individuals with disabilities or their representatives making an informed decision about AT.

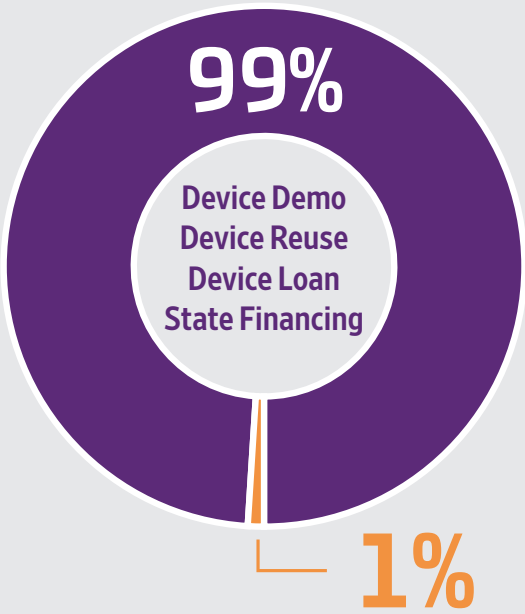
Key data highlights:

- 93% of respondents were able to make an informed decision about matching an AT device to their needs (and avoid purchasing inappropriate devices).
- 58% of consumers stated that community living was the main purpose for their AT use, while 35% said education

Consumer Satisfaction

AT Program consumers were asked to report their satisfaction with the services they received from four state-level activities. Device reuse, state financing, device loan, and device demonstration programs all received customer satisfaction ratings of 99 percent!

- Highly Satisfied or Satisfied
- Satisfied Somewhat or Not at all Satisfied



State Leadership Activities

TRAINING

Training activities are instructional events for a specific purpose or audience that are designed to increase participants’ knowledge, skills, and competencies around AT. Examples include large or small group classes, workshops, and presentations, and training can be delivered in person or via a variety of distance education mechanisms (ED, 2011).

Out of 90,201 trainees, 24% were representatives of education, followed by individuals with disabilities (19%), and representatives of health, allied health, and rehabilitation (14%). View Table 10 for the types of topics that were covered in trainings.

INFORMATION AND ASSISTANCE

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

In FY 2022, a total of 248,878 individuals received I&A. Out of those, 29% were individuals with disabilities, 18% were representatives of community living, follow by 16% representatives of education. Eighty-two percent of recipients requested information about specific AT products/devices/services.

TECHNICAL ASSISTANCE

Technical assistance (TA) is provided by state AT Programs to help public agencies and other organizations improve their, policies, programs and outcomes. As a result of TA and other activities, some AT Programs report improved outcomes with policy, practices, or procedures that resulted in increased access to and acquisition of AT in the state.

In FY 2022, the 56 grantees reported providing a majority of TA to community living agencies (32%) and education agencies (30%). The remaining agency types receiving TA include employment (13%), health, allied health, and rehabilitation (13%), and technology (12%).

Table 10: Percentage of Participants that Attended Trainings by Topic

Percentage of Participants that Attended Trainings by Topic	Definition of Training Topic
47% AT products and services	The focus is on increasing skills and competencies in using AT, and integrating AT into different settings.
37% Combination of topics	AT products/services, AT funding/policy/practice, and information technology/telecommunication access.
7% Information technology/telecommunication access trainings	Accessible information technology and telecommunications, including web access, software accessibility, and procurement of accessible IT.
6% Transition	Education transition (school to work or post-secondary education and IDEA Part C infant and toddler to Part B school aged), or community transition (institution to community living).
3% AT funding/policy/practice	Funding sources and related laws, policies, and procedures required to implement and deliver access to AT devices/services.



PUBLIC AWARENESS

Public awareness activities provide information on the availability, benefits, appropriateness, and costs of AT devices and services, including a statewide information and referral system. Public awareness activities can include public service announcements, internet outreach and social media, radio talk shows and news reports, newspaper stories and columns, newsletters, brochures, and public forums.

The exact number of people who receive information through these public awareness activities is large, but is often difficult to quantify, and estimates must be reported. Due to the difficulty of quantifying, data for public awareness activities were submitted as anecdotes. The following stories highlight some innovative outreach and awareness efforts conducted by AT programs during FY 2022:



The **INDIANA AT PROGRAM (INDATA)** produces a weekly TechTip YouTube video that provides awareness of the various assistive technology devices available today. Each video provides information on what the device is, how it works, and where it can be found. The INDATA YouTube channel has over 4,000 subscribers and a library of over 600 videos.



Between January 2022 and September 2022, CARE Chest launched an aggressive social media and traditional media campaign to highlight **NEVADA AT PROGRAM (NATC)** services across the state of Nevada. The campaign, while successful in high-density population centers like Reno and Las Vegas, was particularly successful reaching individuals living in rural Nevada communities across the state. More than 210,000 Nevadans were reached during this campaign.



PENNSYLVANIA AT PROGRAM'S social media team really hit its stride this past year, providing interesting and accessible social media posts to showcase AT and disability advocacy issues. They were most successful on TikTok, where they officially went “viral” and received a 2022 “Best of Philly” award for “Use of TikTok.”



On April 6, 2022, Puerto Rico and the United States celebrated “National Assistive Technology Awareness Day.” As part of this celebration, the **PUERTO RICO ASSISTIVE TECHNOLOGY PROGRAM (PRATP)** conducted a broad media campaign under the slogan “Living without Barriers” to promote the use of AT equipment and services among persons with disabilities. This campaign included television interviews on local channels Notiséis 360 and mi Gente, Facebook Live events, digital and printed newsletters, and outreach via email and social media. Additionally, an educational video about AT was recorded for the University of Puerto Rico's Medical Sciences Campus. It is estimated that this campaign reached over 100,000 people across the island.



The **SOUTH CAROLINA AT PROGRAM (SCATP)** hosted a Reuse Free 4 ALL event to increase public awareness of AT services and distribute excess durable medical equipment to individuals in need. Information about the event was shared across multiple forms of media, including two TV stations, a radio station, and a listserv of people in the SC disability community. These outreach efforts invited individuals with disabilities, family members, therapists, educators, veterans, and case workers to come to SCATP's office location to browse the available equipment, take what they need, and learn about other available services. The Reuse Free 4 ALL event provided 33 people with 169 pieces of equipment for a savings of \$26,894.



THE TEXAS AT PROGRAM (TTAP) exhibited accessible video gaming equipment and conducted a session at the annual Comicpalooza in Houston, Texas. Comicpalooza is the largest pop culture fan activity in Texas and has a huge video gaming component. This activity also fulfilled a Christopher and Dana Reeve Foundation High Impact grant obligation.

ACCESS

ACQUISITION

PUBLIC
AWARENESS
& TRAINING

INFORMATION
& ASSISTANCE

DEVICE
DEMONSTRATION

DEVICE
LOAN

DEVICE
REUSE

STATE
FINANCING



This year, the **UTAH AT PROGRAM (UATP)** received a boost in public awareness when its parent organization, the Institute for Disability Research, Policy & Practice (IDRPP), celebrated its 50th anniversary. The IDRPP's awareness campaign allowed UATP to play a part in a radio campaign, a print ad, and a bus ad that highlighted UATP's locations in Vernal, Salt Lake City, and Logan, respectively. These efforts were bolstered by Utah State University, which sent an official photographer who crafted a photo essay for the university's alumni magazine that highlighted the work of UATP in Logan and Salt Lake City. Taken together, these efforts reached more than 270,000 people.



Midstate Independent Living Choices (MILC), a subcontractor for **WISCONSIN'S AT PROGRAM (WISTECH)**, hosted an adapted ice skating event at a local ice arena in Stevens Point, Wisconsin. Participants had access to equipment such as adapted sleds, hockey sticks, walkers, and canes to try ice skating. The event included a significant amount of public awareness through conversations with people with disabilities, family members, and the community in general. MILC was able to increase awareness of their services and the WisTech short-term device loan and demonstration program. The local news channel was also available to provide media coverage.



The **WEST VIRGINIA AT PROGRAM (WVATS)** prepared a four-part video series on all major social media platforms featuring devices and technology that can be utilized to have an accessible kitchen. The series highlighted some of the equipment in the kitchen area of the WVATS break room. The videos reached over 500 people. WVATS also created a "Back to School" series, which utilized Canva and featured various infographics such as an adaptive backpack, adaptive shoes, adaptive clothing, and low-tech accessories such as pencil grips and highlighters. "Back to School" reached over 10,000 feeds, and over 5,000 people.

CONCLUSION

In FY 2022, the network of 56 state and territory assistive technology programs reached close to half a million recipients and participants through the continuum of state-level and state leadership activities providing acquisition of and access to critically needed assistive technology devices and services.

State and Territory Section 4 AT Act Programs have empowered individuals with disabilities of all ages to fully engage in education, employment, and community living, propelling their chances to advance socioeconomically and achieve optimal self-sufficiency. 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.

AT Programs enable individuals with disabilities, their representatives, and others working with them 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 reuse and state financing programs provide an affordable purchasing avenue.

REFERENCES

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RESOURCE INFORMATION

Contact and other information on each State AT Program can be found on the CATADA website under State Program Information. Go here: <https://catada.info/state.html>

View Key Summary Tables that provide data on major AT Act activities by state.

Go here: <https://catada.info/at/?report=summary>

Aggregate FY 2022 APR data on all State AT activities can be found here: <https://catada.info/aggregate-apr-data>

This publication is available in accessible digital format on ACL's website and on the CATADA website at <https://catada.info/catada-publications>