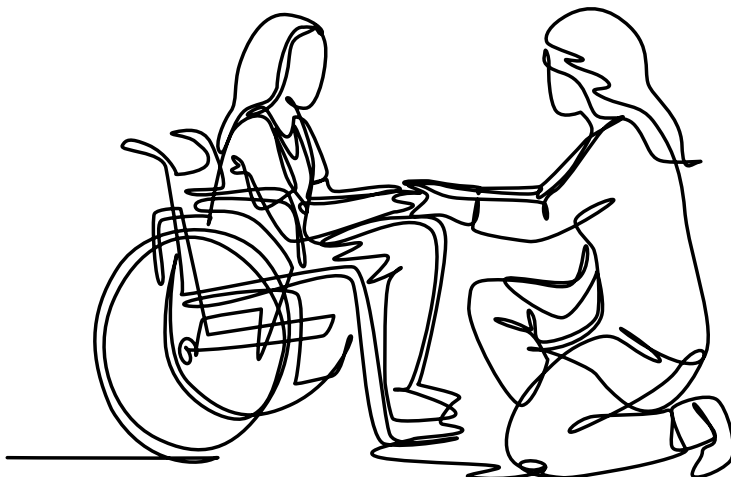
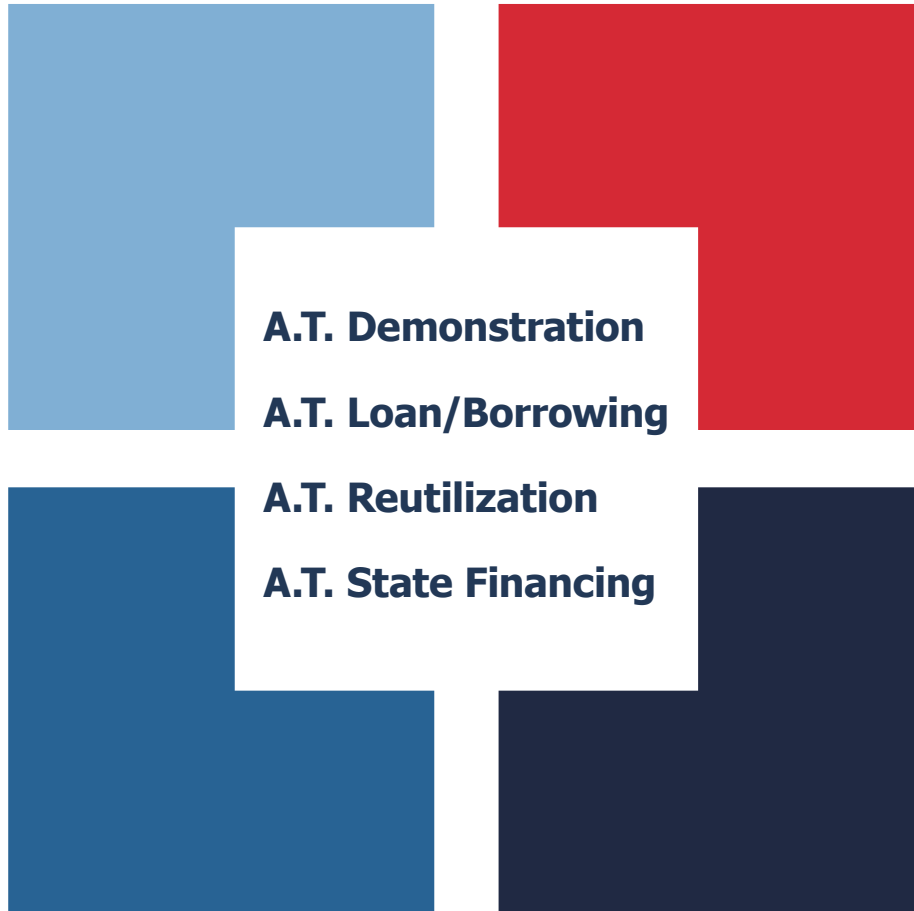




Association of Assistive Technology Act Programs

*FFY20: Small Federal Investment – Large Benefits in Return*

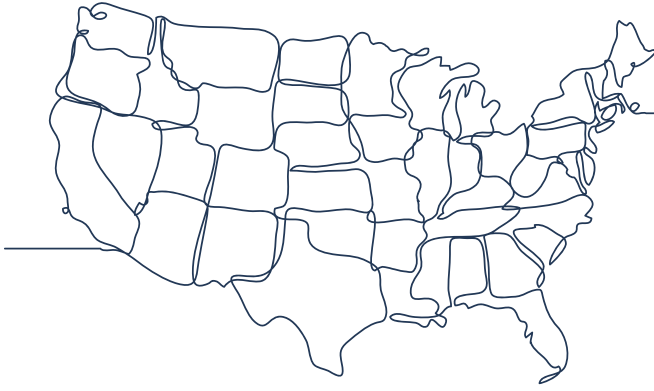


### **Mission**

To maintain and enhance a strong, effective, and efficient national network of Statewide Assistive Technology Programs, which enables individuals with disabilities, service providers and others to learn, access, and acquire assistive technology (A.T.) needed for education, employment, and community living.

## Association of Assistive Technology Act Programs

### *FFY20: Small Federal Investment – Large Benefits in Return*



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All 50 states, 4 US territories, the District of Columbia, and Puerto Rico receive formula grant funding under the Assistive Technology (A.T.) Act of 2004. These 56 grantees are required to carry out a continuum of specified state level and state leadership activities that promote the ability of people with disabilities to know about, have access to, and ultimately be better able to obtain A.T. These activities also deliver a large **return on investment** for the small federal appropriation for this program.

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#### **Definition of Assistive Technology (A.T.)**

*A.T. is any item, device, or piece of equipment used to maintain or improve the functionality of people with disabilities, allowing them to be more independent in education, employment, and community living activities.*

# A.T. Demonstration

**Assistive Technology Demonstration Programs** provide opportunities for people to learn about and become familiar with specific types of A.T. by comparing and contrasting the functions and features of devices through hands-on exploration. Instruction is provided by knowledgeable A.T. professionals in a product-neutral environment that does not favor one company or manufacturer.

*Device demonstrations result in informed decision-making about which A.T. will and will not meet an individual's disability needs and prevent wasted expenditures on "mismatched" A.T. For example, if an agency/individual explores two electronic magnification devices and decides that one costing \$2,000 is perfect – they have potentially saved another \$2,000 by knowing the other device they explored would not meet their needs (avoided purchasing to only find the device was not a good match.)*

In FFY20, **39,396** individuals participated in **21,533** device demonstrations conducted by State and Territory A.T. Act Programs. Projecting a modest \$100 savings realized by just half of the total demonstrations conducted, results in **national savings of \$1.08 million dollars.**

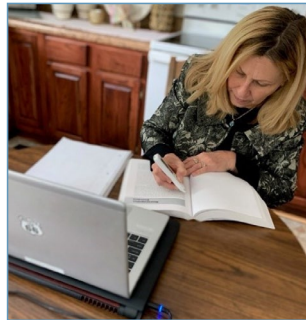
## North Dakota

A vocational rehabilitation counselor contacted the North Dakota Assistive Technology Act Program (ND Assistive) for training to use the KNFB scan-and-read app with a man who has a reading disability and needs support at work. During the training session (over Zoom because of COVID-19), it became clear this app was not appropriate for the man's needs because it could not read text on objects. The following week, ND Assistive guided the man and his mother through how to turn on his existing Android phone's free, built-in TalkBack features. Now he could read messages aloud from his workplace as well as other text. Next, staff demonstrated the Claro ScanPen app for Android. This free app takes pictures of text, reads it aloud, and works well on objects. It can even read some handwriting. By the end of the Zoom session, the man was walking around his apartment scanning text on objects and hearing it read aloud accurately. Afterward, ND Assistive heard from his mother: "Now he can read text messages and everything on his phone, his TV screen, store flyers, coupons, you name it. The advice we had had in the past was 'Go buy an iPhone.' We owe so much thanks to you. It was a phenomenal lesson."



## South Carolina

The South Carolina Assistive Technology Act Program (SCATP) has adapted to COVID-19 safety precautions by providing virtual “Techie Tuesday” device demonstrations focused on different kinds of assistive technology. For South Carolina resident Pam McIlvaine, these have opened up a world of devices she’d not known about prior to the pandemic because she lacks transportation. Pam has retinitis pigmentosa and was especially delighted to learn about the IrisVision smart headset, a kind of prosthetic eyeglasses. The headset maximizes the wearer’s existing vision and can dramatically improve the quality of life for its user. Following the Techie Tuesday demonstration, Pam tried out the IrisVision from the SCATP device loan program. “I need to use vision assistive technology for Church and to help my grandson with school, etc. [Trying out] these devices will aid me in being able to see people, entertainment, and sporting events with my family.”



## North Carolina

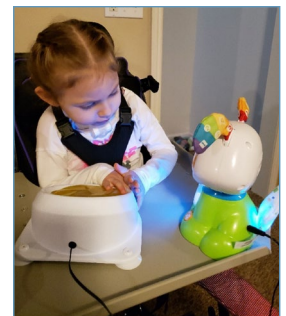
In 2006, Susan Stevens was in a car accident which left her with multiple physical disabilities. Over the next 12 years, she experienced chronic pain and had several corrective surgeries. Then in 2018, she tragically lost her daughter to an overdose. Pushing away despair, Susan founded a nonprofit that educates communities about the opioid epidemic and soon learned of Wake Forest University’s newest master’s program: Addiction Research and Clinical Health. The program was a perfect fit, but she did not know how she’d accomplish it with her chronic back pain, neck pain, and migraines.

That’s when her vocational rehabilitation counselor contacted the North Carolina Assistive Technology Act Program (NCATP). NCATP staff provided several device demonstrations, including a stand-up desk, rolling suitcase/backpack and an electronic reader. The Division of Vocational Rehabilitation obtained these devices for Susan, and currently she is in her third semester at Wake Forest earning a 3.8 grade-point average. She expects to graduate in May of 2021.

## Montana

Kinsley has global developmental delay, cortical visual impairment, and complex communication needs. Her mom, Melissa, learned about assistive technology and switch control while at a medical clinic in Denver. When the family returned home, Melissa says she remembers thinking, “I don’t even know where to start with this.”

Melissa reached out to the Montana Assistive Technology Act Program (MonTECH). MonTECH Billings Clinic Coordinator, Marlena Lanini, set her up with a demonstration of switch-activated toys and communication devices. Melissa borrowed a stander and a gait trainer for Kinsley, as well as communication devices and switch-adapted toys. The device loans have saved her time and resources; “A.T. is so expensive,” Melissa says. “We can’t just buy an \$80 switch that’s not going to work for her. [Through MonTECH] we’ve been able to try out toys. Some she wasn’t ready for. The ones that worked, we’ve ordered.” Melissa and Kinsley’s experience with MonTECH has had an unexpected benefit as well. Grandpa took an interest in switch adaptation and has now assumed the role of chief toymaker!



# A.T. Loan/Borrowing

**Assistive Technology Device Loan/Borrowing Programs** allow individuals to borrow devices for a limited time period to use at home, school, work, etc. Device loans allow borrowers to try out devices in their own environments to determine if a device will meet their needs before a purchase is made. Device loans can also provide loaner A.T. while a device is being repaired, while a consumer is waiting for funding approval, or to use for training or professional development purposes.

*Device loans result in informed and accurate A.T. purchasing decisions especially in unique contexts like a classroom or workplace. When a school or employer can borrow a device and make sure it will allow the individual with a disability to be successful, they save money by avoiding “incorrect” purchases. Device loans also allow individuals to remain functional while their device is being repaired, preventing costly loss of wages, lost school days, or the need for increased community living supports.*

In FFY20, **37,210** devices were borrowed from short-term device loan programs operated through State and Territory A.T. Act Programs. Assuming an average savings of **\$1,000 per device loan**, and keeping in mind multiple items are often borrowed to find a solution, we calculate a **national savings of \$12.76 million**. In addition, assuming a minimal \$10-per-day rental fee for the average device loan period, we project a **national savings of \$2.54 million** for devices borrowed to meet a short-term need (since these devices did not have to be rented).



Paul Goodrich is a doctor of physical therapy in Monticello who has begun partnering with the Utah Assistive Technology Act Program (UATP). Many of his clients have limited access to care, particularly those from the Navajo Nation. One client, a woman, lives alone on dirt roads out of town. “She’d walk with this old upright walker. It was really awkward, and it was the only thing she had.” When Paul met her, it had been years since her stroke (an unrelated problem brought her to the hospital where she was introduced to Paul). Living with limited mobility for so long, “She didn’t realize she could do it differently,” he says.

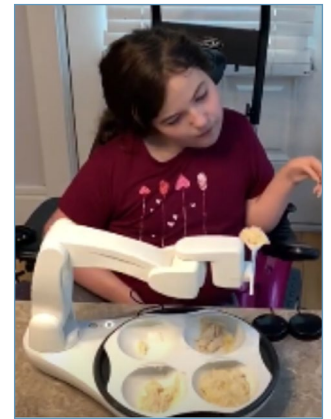
Paul turned to Cameron Cressall at UATP in the Uintah Basin for an equipment loan. “Cameron dug through storage and found this knee brace. It turned out to fit her perfectly.” They also found a better walker and shower seat, and her independence increased dramatically. Other clients have also benefited. Paul says, “[At first,] I told Cameron maybe I could count on [borrowing] one piece of equipment a month, but instead we’ve done one a week. I think it’s an awesome program and it’s needed. We’ve gotten a lot of good out of it.”



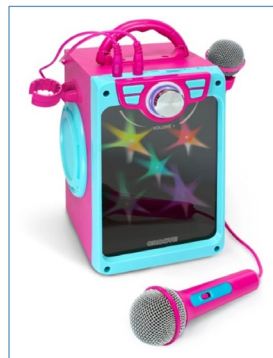


## Missouri

Natalie's support team at the Orchard Farms School District in St. Charles, Missouri, was looking for ways to support Natalie to keep up with her peers and participate in class. During an onsite consultation with the Missouri Assistive Technology Act Program (MoAT), the team concluded that Natalie's desire to be independent caused her difficulties completing tasks on schedule. The time that it took her to eat, for example, took her away from her classwork, particularly on those occasions when she would require a change of clothes after lunch. MoAT is housed under the state's Department of Elementary and Secondary Education. MoAT makes A.T. suggestions for students through device demonstrations and loans while helping districts extend their A.T. budgets with MoAT's innovative Assistive Technology Reimbursement (ATR) program. This is the program that made a big difference for Natalie.



MoAT recommended trying out the OBI Robotic Feeding System. The OBI's robotic arm could allow Natalie to eat without the help of an aide and get time with her peers yet stay on schedule to return (neatly) to class. Natalie was successful with the OBI, and ultimately, the school district was able to purchase one for her with help from MoAT, making a big difference for everyone!



## Minnesota

Assistive technology is not always what we expect it to be. In Minnesota, a mom of a 6-year-old boy who receives support for ADHD saw a unique role for a karaoke machine from the state's Assistive Technology Act Program device loan inventory. Her son loves anything to do with music and dancing. He can also struggle to regulate his emotions safely when he is upset. After borrowing the karaoke machine for a couple of weeks, his mom reported using it successfully in surprising ways. When her son is upset, talking or singing into the machine's microphone helps him express what he is feeling and manage his emotions more safely. It also allows her to know how he feels so she can better support him. Mom says, too, that during this time of distance learning, the karaoke machine has been a helpful tool for

practicing rote skills. Historically, he resists practicing skills, but he has been more willing to complete spelling and math tasks through the karaoke machine's microphone.

## Colorado

"Carson" wanted in on the action. He's the youngest in a large family that loves to spend time together gaming, especially during this time of COVID-19-related isolation. At just two years old, Carson enjoys watching, but declared he was ready for more. Since he was already learning to use two-step scanning skills with games on a computer, his parents asked his Early Intervention therapist if there were a way for him to play XBOX as well. An A.T. consultant for Early Intervention spied the XBOX adapted controller in the Colorado Assistive Technology Act Program's device loan library. Carson loved it! No longer just an observer, Carson could now practice switch skills as an active family member doing what they all enjoy together. After the loan period ended, Carson's family was able to purchase an XBOX adaptive controller with confidence because they knew it worked well for him. Carson has been gaming ever since.



# A.T. Reutilization

**Assistive Technology Device Reutilization Programs** support the reuse of assistive technology that is no longer needed or used by its original owner. Recipients usually obtain equipment at significantly lower cost or no cost. Reutilization efforts include refurbishment (previously owned devices are cleaned, repaired, and/or reconditioned and then provided to new owners) and device exchange (e.g. online classifieds). In some reutilization programs, a device is provided on an open-ended loan basis until the recipient no longer needs it.

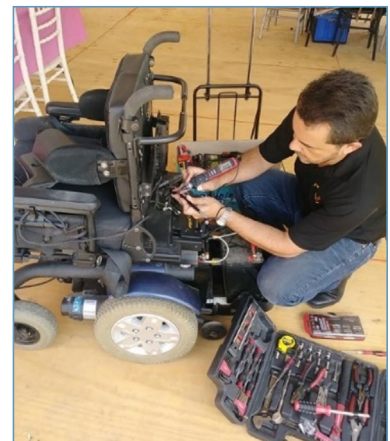
*Purchasing/obtaining reutilized devices saves agencies and individuals a significant amount of money when compared to buying new devices.*

In FFY20, **38,692 recipients acquired 65,638 reutilized devices** through State and Territory A.T. Act Programs. A total of **\$22.9 million was saved** by device recipients by purchasing/obtaining reutilized A.T. instead of new. In addition, 90% of the reutilized device recipients indicated that they would not have been able to afford the A.T. or obtain it from other sources if it were not for the reuse services of the State A.T. Act Program. The cost of those individuals being unable to work, learn or live in the community without the A.T. they need would be immeasurable.

## Puerto Rico

“Angela” is 23 years old and uses a power wheelchair. At the start of 2020, her home was damaged by the daily earthquakes that struck southern and southwestern areas of Puerto Rico over several months. Angela relocated to a shelter where she spent all her time in bed; her power wheelchair, which had been damaged during Hurricane María, had finally stopped working with the earthquakes. Angela’s family did not have the resources to repair or replace this \$7,000 piece of equipment.

After almost two months living in tents set on an open stadium, Angela’s family contacted PRATP, the Puerto Rico Assistive Technology Act Program. Amidst the frequent seismic events, PRATP assembled a mobile kit to evaluate and repair the chair and set up a small area to work on it under one of the tents. The chair had several mechanical and electronics issues that PRATP staff targeted one by one until they identified the primary problem to be in the joystick’s circuit board. It was a challenge to diagnose and repair complex parts in such an improvised space—particularly with the ground shaking at times—but Angela’s chair finally worked again, and Angela regained her mobility.





Staff at the Kansas Assistive Technology Act Program (ATK) received a request from a retired nurse who needed home modifications and assistive technology to continue to live independently during the pandemic. Due to a double knee replacement and rheumatoid arthritis, she could no longer access all areas of her home. ATK Reuse provided her with a Bruno stair glide so she could get to her basement and access her laundry and backyard. ATK Reuse also provided a refurbished four-wheel scooter for safe travel around her basement and outside. She says she uses the scooter to go outdoors, get her mail, and access her porch swing, where she enjoys the fresh air and waving at neighbors.



When the COVID-19 pandemic shut down schools in the spring of 2020, a mother found herself managing virtual schooling for her four kids. One of her children uses a wheelchair and was without the stander he has at school. Insurance denied this equipment for home use. The mother needed something that would make it easy for her to move her son in and out of standing during his “school day” at home. She reached out to the Children’s Assistive Technology Service (CATS), a contractor of the Virginia Assistive Technology Act Program (VATS). CATS was able to provide her with an Easy Stand Evolve. This gently-used device is now helping this mom and son participate in his educational program and be comfortable while learning from home.



Wally, a man in his 70s, was being treated at a rehab facility for a condition with an unclear diagnosis. He was informed he would remain there until he could access and be safe in his home. To do so, he would need several home modifications, including a way to get to his front door! To help regain his independence, friends contacted the FREED Center for Independent Living, a partner of the California Assistive Technology Act Program (Ability Tools).

The FREED Center loaned Wally a portable wheelchair ramp that would give him an accessible path from his parking area, up over his front steps, and to his porch and front door. The ramp is available to Wally for as long as he needs it. In addition, FREED referred Wally to their Reuse and Fix It programs. Wally was provided a floor-to-ceiling transfer pole to assist him getting in and out of bed, and a toilet aid for bathing and toileting. With these devices, Wally was able to return home to his wife and resume his independence (while avoiding significant healthcare costs from a longer stay in rehab).





# A.T. State Financing

**State Financing Activities** help individuals purchase/obtain A.T. through a variety of initiatives. Financial loan programs provide consumers with affordable, flexible borrowing options. Other programs provide A.T. directly to consumers at no cost using dollars from non-A.T. Act sources or save consumers money when purchasing A.T.

*Purchasing/obtaining devices through state financing activities saves agencies and individuals a significant amount of money and may be the only option available to them. Without the program they would go without the A.T. they need for work, school or community living.*

In FFY20, **795 borrowers obtained financial loans totaling \$6,373,091** to buy 987 devices. **5,194 recipients acquired 8,240 devices valued at \$4,758,816** from other state financing programs that directly provide A.T. using external funding sources. **392,231 recipients acquired 394,721 A.T. devices with a savings of \$3.97 million** from other state financing activities, such as cooperative buying programs. The vast majority (97%) of recipients indicated that if the state financing activity they used was not available they would not have been able to purchase/obtain the A.T. due to cost or availability, potentially resulting in individuals who are unable to successfully work, learn or live in the community.

## Washington

For years, Roxanne has not been able to travel easily. She has a spinal cord injury that impacts her ability to walk or stand and she uses a wheelchair. She drives, but her wheelchair did not fit in her sedan and so there was little point in going anywhere. Then her children saved up to buy her a van with good safety features. Still, she needed an expensive conversion kit to accommodate her equipment.

While researching these modifications, she learned of the Northwest Access Fund, the state financing partner for the Washington Assistive Technology Act Program (WATAP). With a loan from the Northwest Access Fund, she installed a VMI Northstar conversion with an in-floor ramp and tie-downs. Now she can visit her grandchildren and explore Washington state. Roxanne reports the modified van has exceeded her expectations, improved her mental health, and “will probably extend my life.”





Vicky, of Ponca City, needed hearing aids. She was having trouble hearing clients and co-workers and contacted the Oklahoma Assistive Technology Foundation, the state financing partner of Oklahoma's Assistive Technology Act Program for help financing the model she needed. Vicki purchased the hearing aids with an affordable loan and says, "My quality of life is so much better now." Not only can she hear people at work, she's not missing calls or text alerts because the hearing aids wirelessly connect with her cell phone. Best of all? "I can hear my sweet little grandkids without asking them continuously to repeat themselves."



Robert, a senior in Oregon, contacted Oregon's Assistive Technology Act Program (Oregon Access Technologies, Inc.), to talk about smartphones to consider for his next mobile device. Robert's phone had recently stopped working and his declining hearing and vision made keeping in touch with family and friends extremely challenging. Staff informed Robert that telecommunications devices are available to him at no cost through the National Deaf Blind Equipment Distribution Program. This is a program managed by Oregon Access Technologies. Robert received help with a quick application process and an assessment of his telecommunication and technology needs. Soon A.T. specialists delivered Robert his new phone. They adjusted the accessibility settings to enlarge the font and buttons and now everyone knows how Robert is doing. He talks with his two daughters daily and even sends text emojis!



Grody is a 3-year-old with multiple mobility challenges that make it difficult for him to get around. His physical therapist reached out to the Pennsylvania Assistive Technology Act Program (TechOWL PA) because he needed a wheelchair that rides low to the floor to enable him to play with his sister. Commercially available "floor wheelchairs" are very expensive and do not have the design elements Grody needs to play independently.

The program's assistive technology fabrication team made him one that incorporates the stability and supports suggested by his physical therapist. Typically, this type of wheelchair costs thousands of dollars. This project totaled approximately \$100. Now Grody can play with other children and explore his environment, essential developmental needs of all 3-year-olds!



**Leveraged Funding** is frequently secured by State and Territory A.T. Act Programs and used to expand and maximize services. **In FFY20, State and Territory A.T. Act Programs leveraged \$20.96 million** in funding from federal, state, local and private sources. These funds were used to support all of the State and Territory A.T. Act Programs authorized activities.

*Collectively, State and Territory A.T. Act Programs are an integral partner in federal, state and local A.T. activities. State and Territory A.T. Act Programs leverage a variety of funding including direct federal dollars for the National Deaf-Blind Equipment Distribution Program from the Federal Communications Commission along with funding from special education, vocational rehabilitation, health, senior services, and other state/territory agencies to provide A.T. services.*

## FFY20: Small Federal Investment – Large Benefits in Return

