



# Missouri Assistive Technology 2009 Annual Report





The mission of Missouri Assistive Technology is to increase access to assistive technology for Missourians with disabilities.



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## Council Chair's Message



“Transition” ...it may be the most fitting word to describe the current period in our nation’s history. We are beginning to see some small signs of recovery from one of the most difficult economic times in decades. In our nation’s capitol, we see Congress debating what could be the most significant changes in healthcare since the advent of Medicaid and Medicare. We are also witnessing more emphasis on transition for persons with disabilities. We are seeing novel approaches to help students with disabilities transition from secondary school to employment or to higher education. More and more states are focusing efforts to transition individuals with disabilities from institutional settings to home and community-based environments.

It is exciting to watch how assistive technology is such a key cog in the transition engine. From devices as simple as adaptive eating utensils to those as complex as computerized augmentative communication devices, assistive technology is opening doors to independent living for more and more Missourians. I have watched as accessible instructional materials and other assistive technology elevate the hopes of students with disabilities wishing to go on to one of Missouri’s fine universities or employment. I have seen how getting the right wheelchair lift or other access modifications can enable individuals to remain in their homes and neighborhoods.

As the Chairperson of the Missouri Assistive Technology (MoAT) Council over the past year, I have been thrilled to see how MoAT has allowed thousands of Missourians with disabilities to get the assistive technology they need to turn possibilities into realities. MoAT continues to be a national leader in efforts to improve access to assistive technology devices and services. On behalf of all of the Council members, we invite you to look through these pages to learn about MoAT consumers and the programs and projects that assisted them. As MoAT transitions to a new decade, the Council and staff look forward to helping more people across Missouri enhance their independence through the use of assistive technology.

A handwritten signature in blue ink that reads "Raymond Hailey". The signature is written in a cursive, flowing style.

Raymond “Chip” Hailey  
Council Chairperson



## Collaboration and Partnerships

During the year, Missouri Assistive Technology (Missouri AT) had the opportunity to work in partnership with almost all State executive departments. Such initiatives included areas ranging from information technology, tax code policy, accessible instructional materials, healthcare, education, employment, independent living, and training. The wide spectrum of settings demonstrates how assistive technology reaches into every domain of life for persons with disabilities.

## Accessible Home Tax Credit

The 2008 tax year was the first time that a state tax credit could be utilized by persons who incurred expenses to make their homes more accessible. Missouri AT first proposed the legislation, and supported its passage in the 2007 session. The initiative provides a tax credit of up to \$2,500 for expenses incurred for items such as wheelchair ramps, modifying bathrooms to be accessible, widening doorways and hallways, installing stairway lifts, and other access expenses. During the 2009 session, supporters worked to make the credit available to more individuals with disabilities. It is hoped that the credit can be a key tool in Missouri's future to help persons with disabilities and seniors remain in their homes and communities.

## Missouri Disability Legislative Listserv

It is often difficult to keep up with state legislation related to assistive technology and other disability issues. Missouri AT provides a legislative listserv to provide Missourians with disabilities, family members and service providers with easy-to-understand summaries on disability-related bills. During the 2009 session, legislation on healthcare coverage of

durable medical equipment, special education, tax credits and other assistive technology/disability topics were among those that were tracked. Individuals are able to subscribe to the listserv at no cost. More than 400 individuals and groups used the listserv to track legislation in 2009.



# Training & Public Awareness

## Power Up 2009 Conference & Expo

The Power Up Conference and Expo has earned a reputation as one of the premier regional assistive technology conferences in the country. The 2009 event brought national presenters and exhibitors to Columbia, Missouri for 512 participants.

This year's conference provided the latest information on assistive technology related to autism, accessible instructional materials, information technology, transition, and a myriad of other topics. There were over 30 educational and interactive sessions including six half-day intensives to choose from at the conference, as well as 50 assistive technology vendors at the AT Expo.

## Training

The pace at which new assistive technology arrives on the market is dizzying to say the least. Hundreds of new or updated devices are introduced every year, and along with them come an array of new federal and state assistive technology laws and policies. Training is a must for Missourians with disabilities, educators, agency personnel and AT professionals who need up-to-date knowledge on assistive technology.

During the year, a total of 2,293 Missourians received training from MoAT staff (in addition to Power Up attendees); and 1,581 more received training by MoAT contract staff at 89 events. Public awareness about assistive technology was elevated as 3,742 persons were reached through expo booths at local events throughout the state. MoAT also provided assistance in obtaining devices, securing funding, furnishing disability policy information, and accessing MoAT programs. During the year, MoAT staff handled 11,026 inquiries and requests for information and assistance.



# Accessible Instructional Materials

Reading is fundamental to academic success. Students unable to use standard print materials because of their disability often need to access alternative formats. There are countless issues in converting materials to the proper format to be used with assistive technology appropriate for the student. Missouri Assistive Technology (MoAT) is part of a 15-state consortium through the federal Department of Education to help develop systems for identifying, acquiring, and using accessible instructional materials.

## National Instructional Materials Access Center (NIMAC)

MoAT was designated as the state contact for school districts that have students with disabilities needing alternative formats that are in NIMAC, the electronic textbook file repository set up under the Individuals with Disabilities Education Act. MoAT developed materials and provided hands-on training for 48 school district staff, and provided district grants to purchase assistive technology such as conversion software, Braille embossers, screen reading or enlargement software, portable text readers, etc. Schools indicated that these services allowed them to reduce the time it took to produce and provide accessible instructional materials from an average of 2-3 months to 3-4 weeks, with some districts even reporting 1-2 weeks for delivery of accessible materials.



## Text to Speech Pilots

MoAT is conducting pilot projects in collaboration with several Missouri school districts to assess the impact of Text to Speech (TtS) technology for students with print disabilities. In the initial pilot, MoAT, working with five districts, provided text-to-speech technology for students with learning disabilities in their junior year of high school. The text-to-speech technology was available to the student through out their school day and at home for completing school requirements.

Outcomes for the first pilot were extremely positive with successful transition outcomes for all students who participated (75% going to post-secondary settings). Data analysis of the participants revealed significant improvement in student understanding of course work, grades, overall enjoyment of reading, self-esteem, self-confidence, motivation and inclusion. The second pilot is now underway and has been expanded to additional districts.



# Equipment Technology Consortium (ETC)

## AT Success

“I would like to thank you for letting us borrow the VMax for one of our preschool age children. It was truly a blessing for her and her family. Her mother and I were a little hesitant about using such a large device with her however it was the right decision by far. She made huge gains in the short amount of time that we were able to work with her.

After only seeing her work on it for a week, Mom set up an appointment to get an Assistive Technology Evaluation completed so that they could order one for her. They have since then completed the evaluation and have placed the order to get her a hot pink one. We are patiently waiting for the device as it seems that we have lost her way to communicate with us. I'm sure as you can see in the picture that her face lights up when using the VMax. Again, we would like to thank you for letting us use the VMax and helping us to make the right decision for this little girl. “

Speech-Language Pathologist  
Belton School District



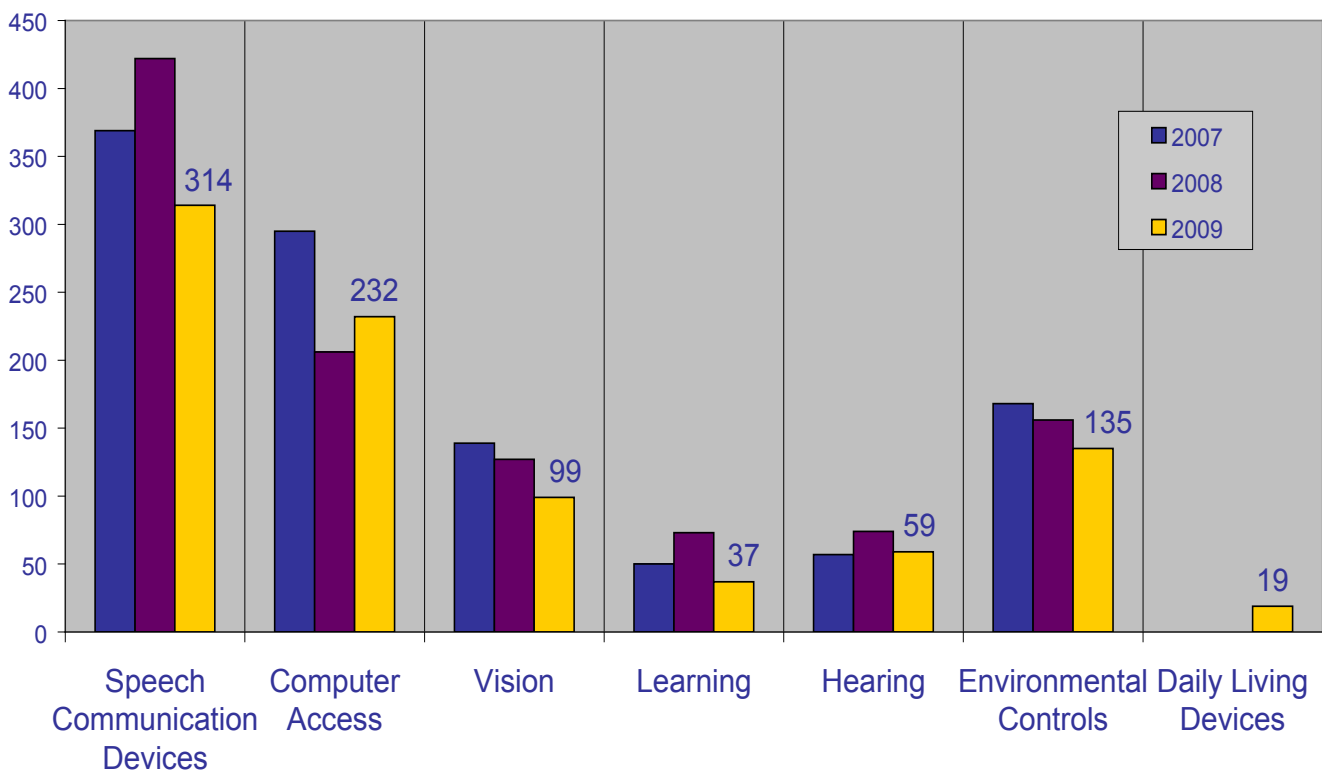
## ETC Program Info

“How do we know if a device recommended in a child’s IEP will work and that it will be used?” “Are there other options available?” “AT is constantly changing — is there anything new on the market?” These are just a few of the questions that are answered through Missouri Assistive Technology’s Equipment Technology Consortium (ETC) program.

ETC offers a short-term AT equipment loan program for school districts, vocational rehabilitation and other agencies and organizations in Missouri. The program offers users a chance to try out equipment before buying to preserve scarce purchasing dollars. Individuals can also borrow equipment while their own equipment is in for repairs, or to use as a temporary accommodation.

During the past year, ETC provided a total of 895 devices to borrowers from every area of the state. ETC has a wide range of equipment available including augmentative communication devices, adaptive keyboards, mice and software programs for computer access, magnification devices, portable text readers, Braille embossers and more. A user-friendly equipment catalog with product descriptions is provided on Missouri’s website to help identify solutions for persons needing assistive technology devices.

ETC Devices Loaned by Category: 3-Year Trend  
Total Devices in 2009



# Assistive Technology Reimbursement

## AT Success

Nole is an eighth grade student who has a learning disability, with reading being his most challenging area. In 2007, Nole took a Scholastic Reading Inventory (SRI) to measure his level of reading comprehension and received a low beginning reader score. Early in the 08-09 school year, Noel received a laptop computer with voice recognition and scan/read software through the AT Reimbursement Program. Nole received training on the software and has used it on many occasions to complete homework, including book reports. He is also writing stories for enjoyment, which he never did before receiving the laptop and adapted software. He was administered another SRI test and his score had increased by 387 points, which is an amazing jump in a short period of time. "I really feel that this is directly related to the laptop and software," Nole's teacher commented. "It is giving him more confidence to try to do more writing and reading. Thanks so much for giving Nole the tools he needed to be a successful learner."



Communication Device

Portable Text Reader



Personal Listening System



Magnification Device - CCTV

## Assistive Technology Reimbursement Program Info

MoAT again this year administered the assistive technology reimbursement program to help school districts obtain assistive technology needed by their students with disabilities. Program funding was provided through Department of Elementary and Secondary Education, Division of Special Education.

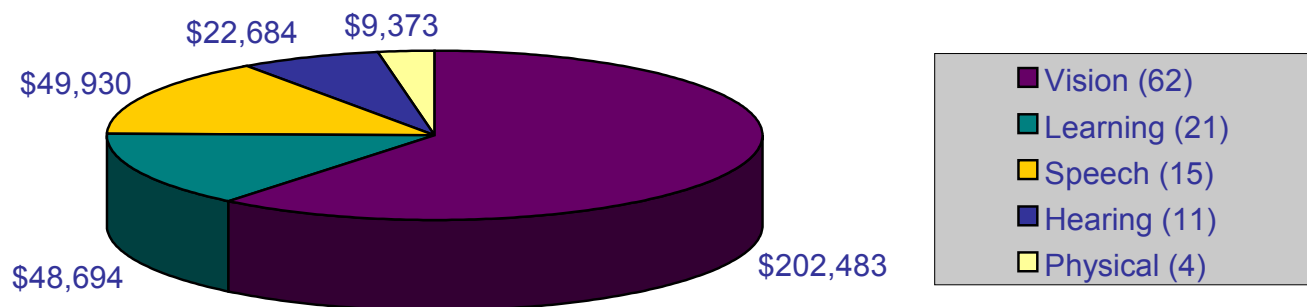
The program helps school districts meet the costs of assistive technology devices identified in students' Individualized Education Plans (IEP). Schools apply for reimbursement of AT purchases that range between \$1,000 and \$5,000 for each student identified. The program also helped districts with selection of AT when needed.

Examples of some of the more costly equipment obtained for students this past year include augmentative communication devices, assistive listening systems, electronic print enlargers, Braille embossers, and various systems to help access computers. A total of 54% of funded applications were for the acquisition of equipment for students with vision loss, 19% for learning disabilities, 13% for speech disabilities, 10% for hearing loss and 4% for physical disabilities.

Local school districts that received funding support reported a 97% satisfaction rate. School districts have noted how the AT reimbursement funds translated into an increase in students' participation in classroom activities.

ATR - Applications & Dollars by Disability Type

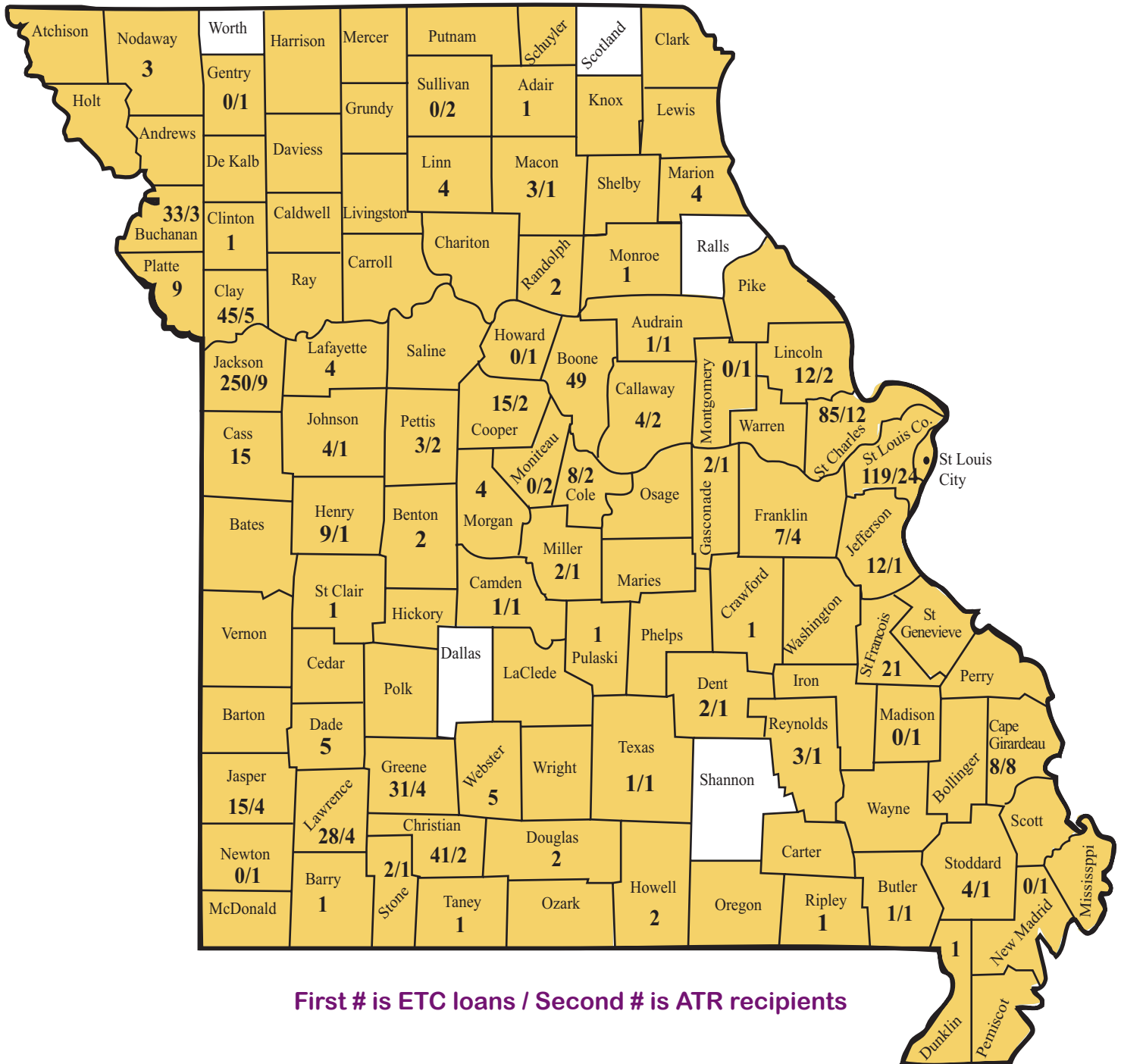
Total Dollars \$333,164





**Distribution by County**  
**7/1/08 - 6/30/09**

This map represents the number of ETC device loans and ATR recipients. Single numbers represent ETC loans only. Shaded counties have at least one entity signed up for ETC.



First # is ETC loans / Second # is ATR recipients



# Kids Assistive Technology (KAT)

## AT Successes

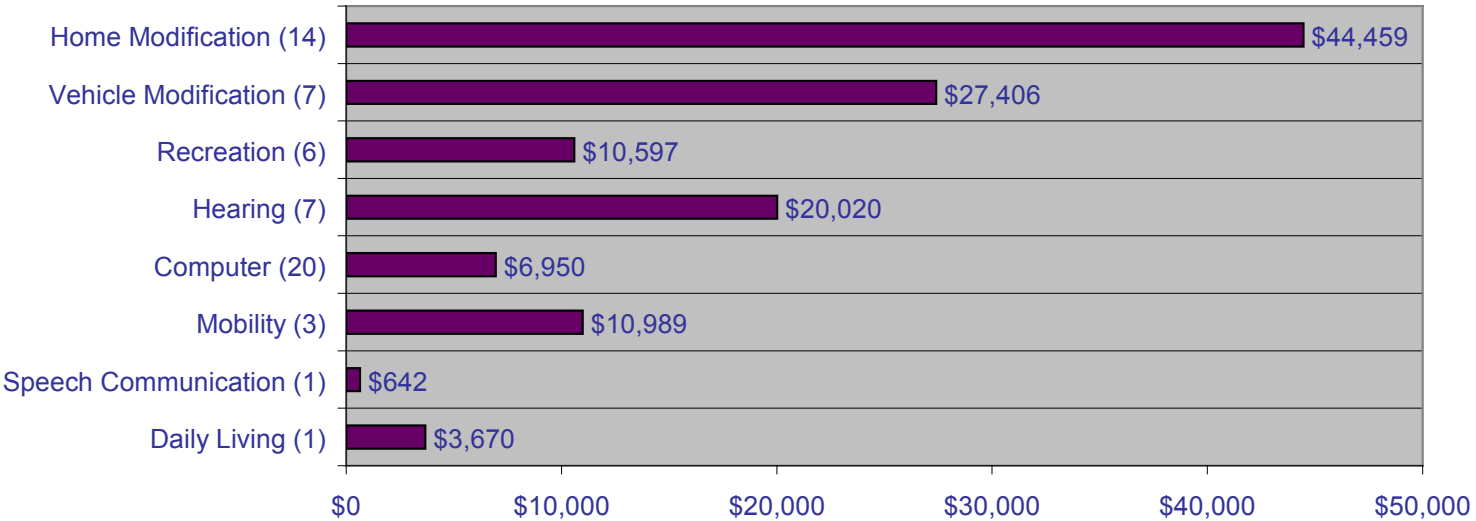
**A**nthony is a young boy with autism. Communication is limited but his teacher found a way to motivate him to participate in activities. She used a touch screen computer in the classroom that has a painting program. She says Anthony comes out of his world when he is painting on the computer. The family wanted to extend his ability to communicate at home with this technique. The Kids Assistive Technology (KAT) grant afforded the family funding to purchase a touch screen computer. Anthony’s mother expressed her appreciation saying “His touch screen computer helps Anthony focus on something for more than 10 minutes and really makes him come alive.”

**J**acob -- “Thank you so much for the bike that you [funded] for our son Jacob. It is wonderful and has made a tremendous change in his life! He absolutely loves it! He is making progress and gaining strength in his legs and back. He is now able to do two full rotations with his legs. He has made progress in other areas also and he is so proud of himself when he can get the bike to move. We can’t thank you enough! The smile on his face just makes you want to cry. Thank God for people like you!”

## KAT Program Info

Missouri families raising children with disabilities often face out-of-pocket expenses for assistive technology. Expenses for adaptive equipment related to mobility, hearing, vision, communication and other functional areas can reach thousands of dollars. KAT grant program is MoAT’s funding source for low-to-moderate-income families when no other resources are available. The Department of Health and Senior Services – Bureau of Special Health Care Needs, provides program funding. This year, families of 59 children with disabilities were helped with KAT funds totaling \$124,733. The table below shows the breakdown of AT funded through the KAT grant program.

KAT - Dollars Expended by Type of AT

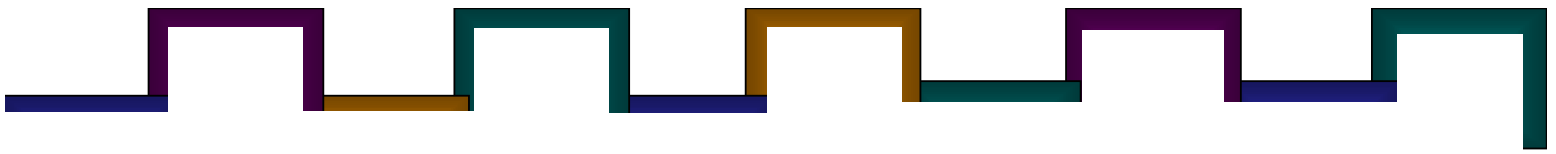


## AT Success

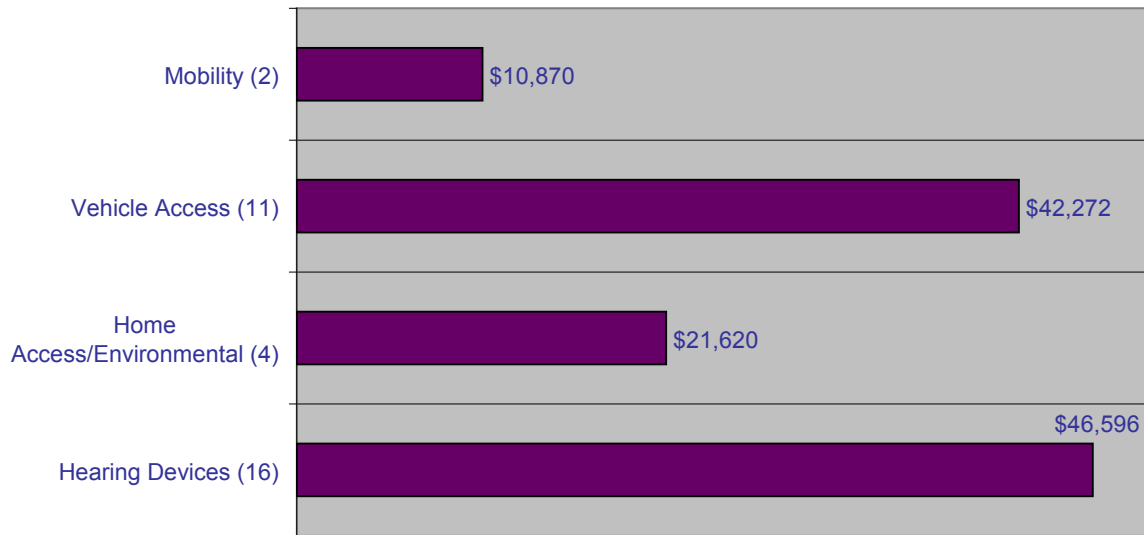
**D**arwin lives in Moberly, Missouri. He was involved in a vehicle accident which altered his life. Darwin has quadriplegia and uses a ventilator to breathe. He is active in speaking to schools and churches about living beyond disability. The Show Me Loans program assisted Darwin and his wife to obtain a modified van. One of the vehicle's first trips was to take Darwin fishing where he caught his first trout with his sip-and-puff rod and reel. Darwin and his wife expressed their appreciation for this program and the personal attention given to meeting their assistive technology financing needs.



**L**arry of Columbia, MO acquired a traumatic brain injury in 1984 when a vehicle hit the car he was in. As a result, he is paralyzed on his left side. When asked to share his story about taking out a loan, Larry said, "I could turn that story into a book as it has positively impacted EVERY aspect of my life!" The assistive technology device he obtained is a spinning cycle to increase the strength in his legs. He reports that after eight months of use, he is now regaining some of the strength and functioning that he had lost in the accident. When asked about the Show Me Loan program, his most prevalent comment was, "Thank you, Thank you, Thank you!"



### Show Me Loans - AT by Dollars Loaned



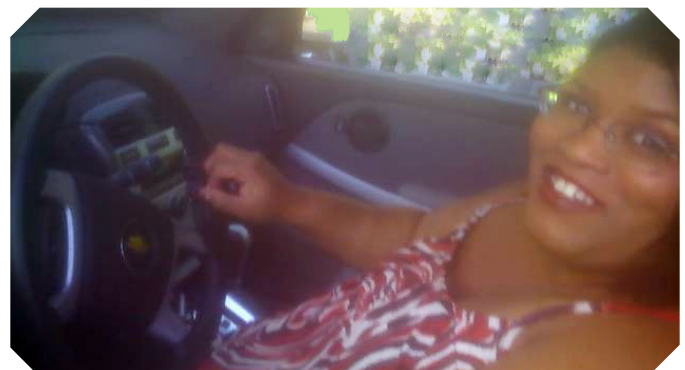
### Show Me Loan Program Info

The Show-Me Loan program provides financing for assistive technology for Missourians with disabilities. The program continues to provide low-interest loans of 2% to 4% for a truly affordable financing option for many families and individuals. Show-Me Loans can be a resource for almost any type of assistive technology or equipment.

Below are some of the program highlights since Show Me Loans was established:

- \$709,358 in total loans made to 201 borrowers.
- 84 borrowers have already repaid their loans for a total of \$ 499,330 in repaid loan dollars.
- Low default rate – less than 2% of total dollars loaned.

During this past year, Missourians with disabilities and their families borrowed \$121,358. The majority of the dollars were used to modify vehicles for wheelchair access; for home modifications such as stair lifts and ramps; and for devices such as hearing aids. One loan was provided to purchase an ATV to allow a rancher to continue working after an accident left her with a mobility impairment. Another was for driver hand controls. Over half of the approved borrowers had an annual income under \$30,000. The table above shows the breakdown of AT purchased through Show-Me-Loans.

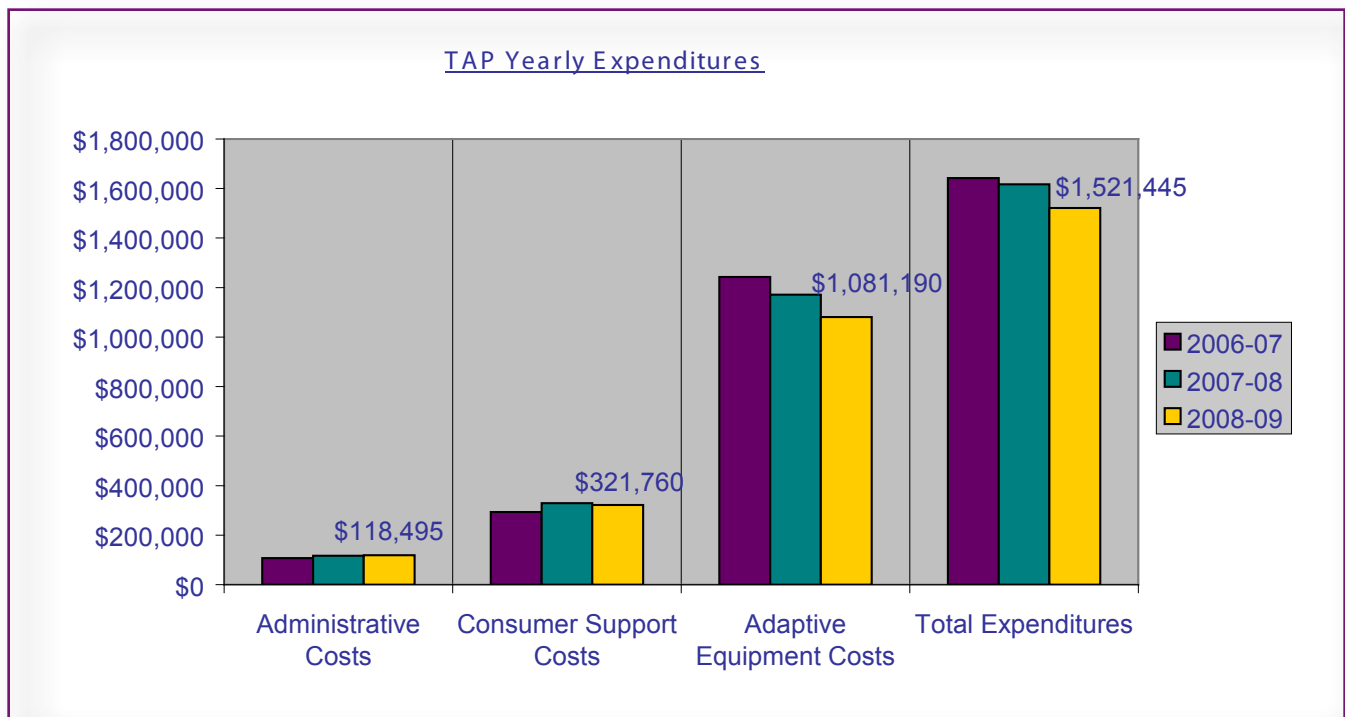


# Telecommunications Access Program (TAP)

Millions of times each day, Missourians use the telephone and the Internet in ways that are essential to everyday lives. Talking with family and friends, looking for work, researching their medical condition, purchasing goods and services...we sometimes forget how important access to telecommunications has become!

So many individuals find it difficult or impossible to use a traditional telephone or a computer because of a disability. Missouri's Telecommunications Access Program (TAP) is a national model for providing adaptive equipment to allow access to the telephone, e-mail and the Internet. A wide range of adaptive devices are available to be matched to an individual's specific functional abilities.

Consumer support services are a key component of the program's success, both to help individuals select the adaptive equipment most appropriate for their disability and to receive assistance in the installation and use of the devices and/or software. Adaptive equipment costs make up 71% of TAP expenditures, consumer support costs are 21%, and administrative costs remain very low at 8%. Consumer support contributes markedly to the cost-effectiveness of the program. The following pages describe the two components of the program – TAP for Internet and TAP for Telephone.







# TAP for Internet

## AT Success

Sue is so excited to have ZoomText, a screen magnification program. She is a self-described “news junky” who reads news sources like the Washington Post and New York times online, although she is disappointed by the lack of “political news”.

Because she has lost vision that effects how she is able to do many activities, she uses ZoomText to research information to help her stay independent. She has found many tips to make

her independent in daily activities such as cooking, dressing, etc. It has also allowed her to continue to help her grandchildren use their computers. With all of the above, Sue feels the greatest benefit is that ZoomText allows her to continue to use the computer for social contacts, which was her biggest concern when her vision started to “fade”.

Missourians with vision loss represent about 66% of the people who use the TAP-I program. Sue, like most of us, has found access to the Internet and email almost indispensable and with her adaptive computer equipment she is able to maintain that access.



## TAP for Internet - Type of Equipment Total Pieces Distributed - 1031



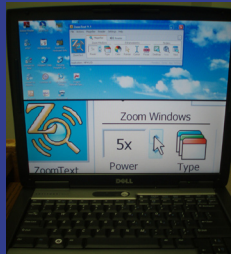
Alternative  
Keyboards

216



Alternative  
Pointing Devices

108



Enlargement  
Software

341



Speech Output &  
Braille Display

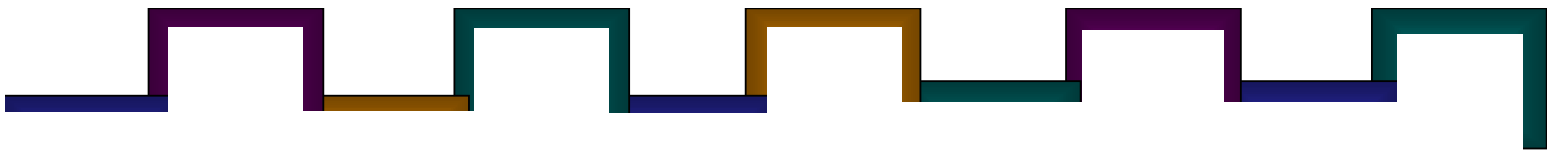
274



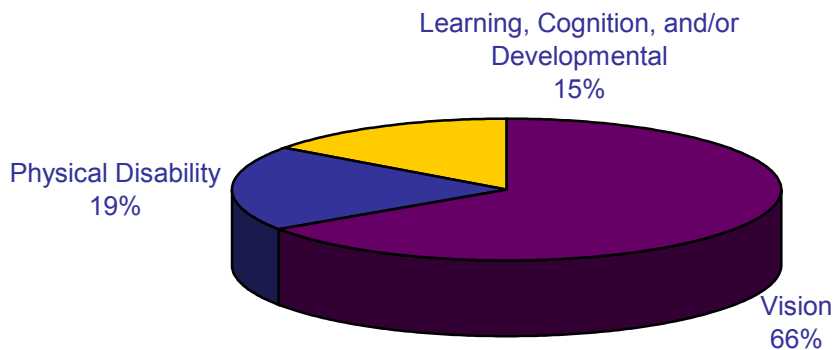
AT Accessories

92





## TAP for Internet - Disability of Recipients



## TAP for Internet Program Info

The importance of the Internet to individuals in everyday life cannot be overstated. For persons with disabilities, the Internet can be even more necessary -- to bank or shop on-line, take college courses, research medical information, learn more about public services, and so many other activities. Missouri continues to be the only state in the nation to provide persons with disabilities the adaptive computer equipment they need to access the Internet and email.

TAP for Internet provided 1,031 computer adaptations this year. Over the life of the program, consumers from every county in Missouri have received adaptive equipment. TAP for Internet (TAP-I) provides adaptive computer adaptations such as screen readers and magnification software, adaptive keyboards and pointing devices to allow for basic Internet and email access. Advances in technology, the introduction of new computer operating systems and other complexities make consumer support in the selection, installation, and use of the adaptive hardware or software especially important to consumers of the TAP-I program.

There are no age limits for the TAP program. The youngest person to receive TAP-I equipment was two years old , while the oldest was 94. People with vision disabilities continue to be among the most prolific users of the program with 66% of the equipment provided being screen readers, Braille output and enlargement software. Users of the program with learning, cognition and/or developmental disabilities increased from last year to 15% of applicants, while 19% had physical disabilities.



# TAP for Telephone

## AT Success

Edith has had a vision loss from birth that is progressively getting worse because of cataracts. She has utilized the TAP-T program for a phone with talking caller ID and the TAP-I program for enlarging software and a larger monitor. She can now navigate the Internet much easier as well as knowing who is calling her on her phone. Like many users of the programs, she realized how much she was missing out on before getting the adaptive equipment from Missouri Assistive Technology. Edith says she really likes and depends on her adaptive phone.



## TAP for Telephone Program Info

The Telecommunication Access Program for Telephone (TAP-T) provides adaptive telephones and signaling devices for Missourians with disabilities who cannot access traditional telephones. Persons with hearing loss account for more than 75% of individuals accessing this program, while 19% report vision loss and 3% physical access/mobility loss. The remaining 3% have multiple disabilities that affect their ability to utilize standard telephones.

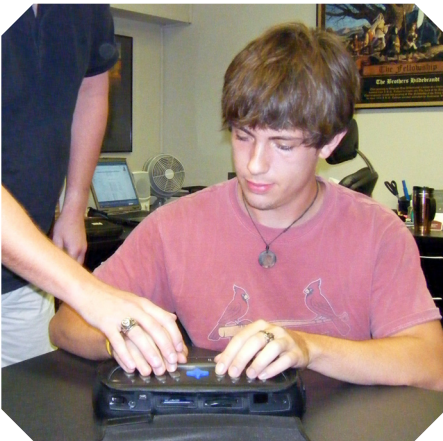
A network of 29 Independent Living Centers across Missouri provides consumer support to ensure that the appropriate equipment is matched to the consumer's disability and functional abilities through device demonstrations.

This program provided 4,648 pieces of telephone equipment this year to 4,178 persons unable to use traditional phones. Follow-up data from program participants indicate that 61% had used their adaptive telephone to make an emergency call and 50% said that the adaptive telephone helped them to remain living in their own home, and 88% used their phones for daily communication with family and friends.



# Device Demonstrations

## AT Success



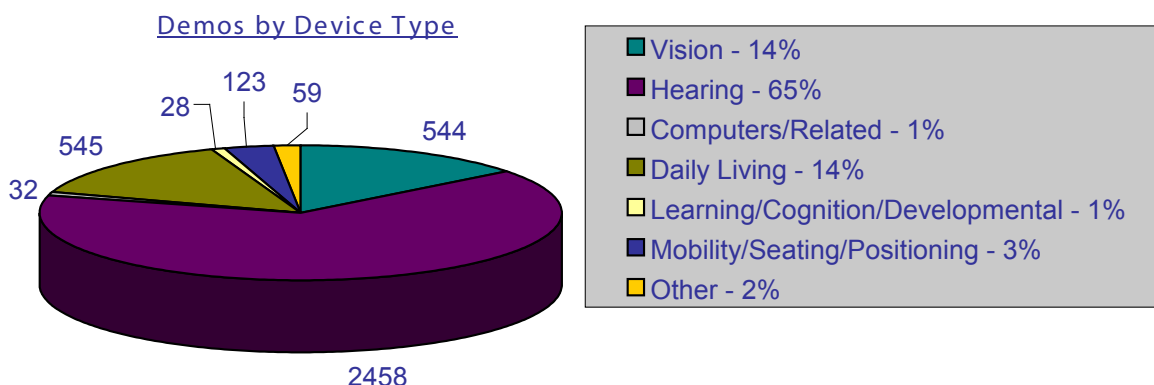
Michael is a college student who is blind. He needed some type of assistive technology to allow him to read textbooks and reference materials, but wasn't sure what he needed. Several devices were demonstrated for Michael. The size, weight, portability, and number of keys vary from one Braille notetaker to another which makes having the chance to compare and contrast important before making a purchase. The PacMate has a refreshable Braille display on the bottom of the unit. It gives the user a choice of reading the Braille display, having voice turned on to read what is written, or both at the same time.

The device Michael chose was the PacMate BX (Braille keyboard). He is working on the transition from high school to college, so the weight and portability were important since he'll need to move from building to building. Being a typical college student, Michael also says he likes the PacMate BX because it looks neat and he can use it to surf the Internet!

## Device Demonstration Program Info

Device Demonstrations allow individuals with disabilities, caregivers, and others the chance to have a hands-on exploration of assistive technology. The demos provide the opportunity to compare the features and benefits of a particular device, or category of devices, to help individuals make informed decisions about whether a device would meet their needs.

Missouri AT provided funding to regional assistive technology demonstration programs statewide, in addition to contracted service providers for the Telecommunications Access Program (TAP). This year 3,789 device demonstrations were provided to 4,258 individuals through demonstration centers located in Columbia, Kansas City, Springfield, Cape Girardeau, Farmington, and by TAP staff and service providers. About 93% of consumers were able to make a decision after a demonstration as to whether a device would meet their needs, where only 7% required additional time or information to make a decision.



# Re-utilization Programs

## Missouri Re-utilization Programs

Missouri AT offers two programs that assist in providing low-cost assistive technology to individuals with disabilities. The program includes an equipment exchange service, and a statewide durable medical equipment recycling network. The re-utilization programs enabled the recycling of 688 pieces of equipment that may have otherwise ended up in area landfills. In addition, savings totaled over \$563,590 for Missourians buying pre-owned versus new devices.



The web-based **Swap 'n Shop** equipment listing allows consumers to list or view assistive devices or adaptive vehicles for sale. They find the category of equipment they're seeking, and are able to read the device or vehicle descriptions, pricing information and contact phone numbers to allow potential buyers to contact sellers directly.

Missouri AT also administers the statewide **Equipment Recycling** effort by funding four regional community organizations to collect, refurbish, and redistribute used assistive technology. Items typically include manual and power wheelchairs, walkers, canes, commodes, shower chairs and pediatric positioning equipment. Occasional items available for redistribution include stair lifts, vehicle lifts, low vision aids and communication aids. A total of 666 pieces of equipment were redistributed through this network of providers, at a total savings of \$418,755.

### Re-utilization -- Savings by Device Type (top 5 Categories)

Total Devices Re-utilized - 688

Total Savings - \$563,590



Mobility/Seating/  
Positioning

422 Devices  
\$420,725



Vehicle Access

11 Devices  
\$74,065



Daily Living

221 Devices  
\$46,918



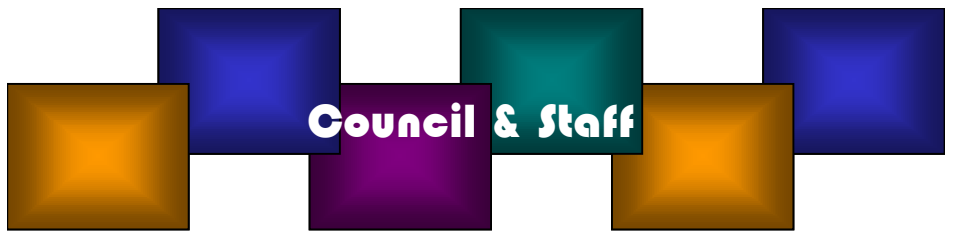
Environmental  
Adaptations

15 Devices  
\$14,581



Learning/Cognition/  
Developmental

8 Devices  
\$1,945



**Agency Representatives**

- Gary Harbison - Health & Senior Services
- Neil Harms - Vocational Rehabilitation
- Leone Herring - Special Education
- Aaron Luna - Independent Living Centers
- Margy Repp - Rehabilitation Services for the Blind
- Robin Rust - Mental Health
- Dolores Sparks (Chair Elect) - DD Planning Council
- Molly White - Insurance
- Vacant - Medical Services
- Kristin Funk - Workforce Development (Ad hoc)

**Consumer Representatives**

- Chip Hailey (Chair)
- Sharon LaRoussa (Past Chair)
- Pam Arbeiter
- Michael Goad
- Rita Lynch
- Kerri Morgan
- Deana O'Brien
- Amy Parker
- Mary Secora
- Marjorie Yates

**Legislative Representatives**

- Senator Scott Rupp
- Representative Jeff Grisamore



**MoAT Staff**

- C. Marty Exline, Director
- Roselie Backer-Thompson, TAP for Internet Coordinator
- Eileen Belton, Program Coordinator
- Elaine Houtman Byron, Assistant Director
- Gay Jones, TAP for Telephone Coordinator
- Tracy LaFollette, Program Assistant
- Kristine Roof, Administrative Assistant
- Brenda Whitlock, Training Coordinator



**In State FY 2009 MoAT delivered 6,572 assistive devices and provided support services to 22,682 Missourians with disabilities.**



**Missouri Assistive Technology**  
1501 NW Jefferson  
Blue Springs, MO 64015  
<http://at.mo.gov>