



**National Assistive Technology Technical Assistance Partnership**

**Improving State Assistive Technology Programs  
Considerations for Effective Implementation**

**Mobile Device Demonstration Programs**

**October 2006**

# Improving State Assistive Technology Programs

## Considerations for Effective Implementation of a Mobile Device Demonstration Program

In accordance with the Assistive Technology Act, statewide Assistive Technology Programs (AT Programs) directly or in collaboration with public and private entities demonstrate a variety of assistive technology (AT) devices. Device demonstrations assist individuals to make informed choices about which are the most appropriate devices for them by providing opportunities to try out devices and to learn more about them with the help of personnel familiar with the devices and their applications. As part of a state's outreach to individuals and agencies in rural areas or those living a great distance from central or regional centers, mobile device demonstration programs can be an alternative to a center-based approach in providing services in remote and rural areas.

On March 25, 2006, four featured speakers participated in a conference call hosted by the National Assistive Technology Technical Assistance Partnership (NATTAP) to discuss the pros and cons of implementing a mobile device demonstration program. From the experience and advice they shared and the discussion that followed, the various considerations including the advantages and disadvantages of operating a mobile device demonstration unit are high-

lighted below to help states decide whether such a program is right for them.

Sharing their experiences with mobile device demonstrations were the following: William Darling, Director of Assistive Technology of Ohio; Sandra Root-Elledge, Project Director, Wyoming Institute for Disabilities Assistive Technology Resources; Mark Schultz, Director of the Nebraska Assistive Technology Partnership; and David Wilkie, Manager of Outreach Services, Minnesota Assistive Technology Outreach for Gillette Children's Specialty Healthcare.

### Mobile Device Demonstration Option

When setting up device demonstration programs and device loan programs, a state should first consider whether a centralized location or several regional centers would best meet its needs. Many states have considered using mobile device demonstration units to supplement their services or be used in place of regional centers to reach remote populations.

When considering using mobile device demonstration units, many factors must be considered if a program is to be viable and cost-effective.

Two factors are: First, the goals of the program must be defined. Second, a thorough cost analysis of the program must be performed over an extended period. More detailed information about these two factors follows.

### **Advantages of a Mobile Device Demonstration Program**

People within states that have successfully implemented a mobile device demonstration program feel that the program offers many benefits to their customers, especially because many of them would not otherwise receive any AT-related services. Mobile device demonstration programs offer other advantages.

1. Mobile device demonstration units provide increased access to AT devices and services to remote populations.

- a. Mobile device demonstration units serve rural and underserved areas that generally lack resources such as specialty clinics or healthcare professionals who are familiar with AT.
- b. Mobile device demonstration units serve families who live in remote areas and who often cannot afford a vehicle, the travel costs, or the time off from work that is necessary to seek assistance with devices at a permanent demonstration center.
- c. Mobile device demonstration units provide the latest devices and are staffed with professionals with a high level of technology experience and training.
- d. Mobile device demonstration units make multiple AT-related appointments possible at one time and provide for easier scheduling of follow-up for some needed services since the schedule of mobile services tend to be pre-set.
- e. Mobile device demonstration programs reach individuals with disabilities who might not otherwise be aware of AT nor consider using it to improve their lives.

2. Mobile device demonstration programs can provide greater educational opportunities and increased public awareness of AT devices and services.

- a. Staff members in mobile device demonstration programs are generally better trained than those in free-standing centers because of the varied services they may be asked to provide during device demonstrations.
- b. As staff members travel throughout the state, they build and nurture relationships with healthcare professionals and agencies serving those with disabilities.
- c. Mobile device demonstration units bring increased visibility and awareness of assistive technology to small communities, which assists with marketing efforts and getting the word out about AT in general.
- d. Community professionals gain knowledge that makes them more aware of the technology available, thus being better able to make referrals and provide training and follow up with customers in their communities.

3. Traveling in a mobile device demonstration unit can offer added benefits for staff members.

- a. Visiting customers in their homes and communities brings a greater awareness to staff members of the challenges their customers face in their everyday lives.
- b. Travel and overnight stays in various communities allow staff members a greater amount of time in each community to share their training, education, and experiences.

### **Disadvantages of Operating a Mobile Device Demonstration Program**

While there are many perceived benefits to implementing a mobile device demonstration program, a number of factors have caused

states to abandon their programs or to decide against starting one. Many of the negative aspects relate to the high cost of maintaining a mobile device demonstration program.

1. Purchasing one or more vans or trucks is costly, and the subsequent adaptation and maintenance of these vehicles substantially add to this initial cost.

- a. Adaptations such as lowering floors, installing wheelchair lifts, raising roofs, adding shelving or cabinets, or making storage for safe transport of AT devices can double the initial cost of the vehicle. Also, modifications made to adapt the van for use can cause damage to the van.
- b. Ongoing maintenance, repair, insurance, and gasoline costs must be considered over the life of the vehicle. Some mobile device demonstration programs estimate those costs at \$8,000 to \$10,000 annually.
- c. If vehicles are to be shared across regions, coordinating van availability can be a challenge. Overextending the vehicle(s) to accomplish too much may contribute to early stress of the vehicles.

2. There is limited space in a mobile device demonstration unit for carrying needed devices. It is not always possible to anticipate all needs or to transport all available devices needed.

- a. Choosing the appropriate devices to bring to mobile device demonstrations is important. Requests should be carefully screened by knowledgeable staff members to ensure that the right devices are included in the van for the trip.
- b. Choices must be made as to how many stops will be made in a single trip and as to whether the trip will focus on individuals with specific needs or whether it will address the varied needs of a more general audience.

- c. Trips should be planned carefully so that multiple stops can be made, if necessary. There can also be regularly scheduled stops on a monthly or quarterly basis to communities, centers, or agencies so that those needing services can schedule accordingly.

3. It is critical to determine how many staff members are needed to adequately cover large areas. Staff members must be willing to travel and, in many areas, stay overnight to cover long distances or to make multiple stops. Some programs offer financial incentives to staff members for overnight stays. A well-trained staff is essential because there may be no local personnel available to help with device demonstrations.

4. Until a mobile device demonstration program is well established, there might be a lack of demand. Therefore, the program may not initially be cost-effective.

5. No matter how well planned a trip is, a service cannot always be performed as thoroughly on the road as at a permanent demonstration center. The devices needed cannot always be anticipated until a face-to-face visit is made. It may also be difficult to conduct training or to follow up effectively or in a timely manner, especially if no other professionals in the community can assist the consumer.

### **Specific Considerations for Implementation**

For those who decide to further explore the use of mobile device demonstration units, there are several factors to consider when identifying goals of a program and performing a good cost analysis. Every state faces different challenges, and as a program evolves, states may decide to add or eliminate services, to purchase or lease more vehicles, or to establish more regional centers.

**1. Which areas will be covered?** Consider which areas are underserved and have a sizeable population. Will mobile device demonstration units travel to customers' homes or to a local agency or community center? Establishing ties with specific school systems, health care providers, and other agencies will help mobile device demonstration program personnel build a network for collaboration, future referrals, and training and education, and will ensure better follow-up.

**2. Which services will be offered?** The main intent of a mobile device demonstration program is to provide demonstrations that will help consumers make informed choices. The vehicles may also be used for training and follow-up, for education of local and in-house staff members, for increased public awareness and marketing of state AT programs, for fabrication or customization of equipment, for transport of equipment between regional centers, or for picking up donations.

**3. Which vehicles will be used?** Purchasing vehicles to implement a mobile device demonstration program involves a series of choices. The type of vehicle chosen will depend on the services offered by the program. The following vehicles have been considered by other programs:

- a. Minivans are the most popular choice, because they are large enough to transport most devices, have a moderate initial purchase cost (\$25,000–\$30,000), and are easier to drive than a cargo van or truck.
- b. A large cargo van provides more interior space for setting up workstations or shelving, or for transporting larger devices. It is about the same price as a minivan, but it may be harder to drive under certain weather conditions, especially wind hazards.

- c. Business-class trucks have been used because they provide a lot of space for carrying devices and tools. The initial purchase price is higher, running from \$50,000 for a small truck to \$75,000 for a larger one (without adaptations). If a business-class truck is to be used, it is best to stay under 26,000 pounds because of Department of Transportation licensure issues.
- d. Winnebagos have been considered by many programs but are generally decided against because of the higher costs of purchase, gas, and maintenance.
- e. Personal vehicles can serve as mini-mobile device demonstration units. Mileage can be paid to employees to cover the cost of gas and general maintenance. There is more limited space for transport of devices, and vehicle adaptations are not generally feasible.
- f. State agencies may also consider leasing vehicles rather than purchasing them. Arrangements can be made to modify leased vehicles. According to the number of miles driven annually, leasing may be more cost-effective than purchasing because of the savings on maintenance and repair costs.

**4. What types of modifications will need to be made to the vehicles?** This decision will, of course, depend on the services to be provided.

- a. Adaptations may include lowering floors; raising roofs; adding lifts or ramps, tie-down systems, shelving, and storage; and building workstations. Depending on the type of adaptations, the final cost of a vehicle may be double the initial purchase price.
- b. Another factor to be considered in determining how the vehicle needs to be modified is whether staff members will work from the vehicle when reaching their destination, or whether they will unload and set up for their intended

service at the site. If the area to be served experiences extreme temperatures throughout the year, it may not be feasible to work inside the vehicle. Communities might be asked to provide space, unload devices, and set up a temporary device demonstration center in their facility, or the interior of the vehicle might be set up so that the devices needed can be safely transported and easily unloaded at a private home.

**5. How will potential customers find out about a state’s mobile device demonstration program?** Advertising the services provided can be a great way to get the word out. It can also increase public awareness of AT devices and services in small communities. Some programs have explored having local organizations sponsor the mobile device demonstration unit and have advertised its sponsorship on the side of the vans. Other programs have looked at collaboration with state agencies such as vocational rehabilitation services. One important factor to consider is that any information that is about the services and is displayed on the outside of a vehicle may violate the confidentiality of individuals requesting the service when the vehicle is parked in front of their home.

**6. How many staff members will be needed, and how much travel will be required?** Every successful mobile device demonstration program requires well-trained staff members. The number of staff teams needed to service the state, as well as the amount and frequency of travel needed, will depend on the extent of a program’s outreach.

- a. Depending on the distances to be traveled and the number of stops planned, staff members may need to stay overnight to several days. States may wish to consider providing financial incentives (travel-duty pay) for staff members who travel overnight.

- b. Another challenge is coordinating staff training and schedules. Schedulers should be familiar with devices and services to appropriately assess the requests for service and to coordinate the time needed for the visits.
- c. Some programs have occupational therapists, physical therapists, rehabilitation engineers, or other professionals on staff. Other programs find that AT specialists or others with proper training can perform well on a day-to-day basis; those programs may contract with other professionals on an as-needed basis. They may also consider working with community health care professionals whenever possible. Those local providers often know the clients better; understand the environment; and can be a great source for future referrals, training, and follow-up if educational opportunities are provided for them.

**7. Will the program have other sources of funding?** State AT Act funds are authorized only for device demonstrations, loan, state financing, training, public awareness, coordination and collaboration, and device reuse; they are not intended for assessments and evaluations. Many states may contract for other services or may use other funds to provide those necessary services. States have been able to sustain mobile device demonstration services by obtaining partners or corporate sponsorships to help subsidize costs, by offering fee-for-service program, by charging area distributors to have devices onboard for specialized demonstrations, and by receiving donation or grant money.

### **Alternative Solutions and Recommendations for Rural Settings**

Other ways that device demonstrations and outreach related to AT can be provided in rural or distant settings include conducting dis-

tance training, creating resource centers around the state, using video conferencing, and setting up contracts with existing entities to develop AT access sites.

Again, a thorough cost analysis, clear identification of the goals of the mobile device demonstration program, and adaptability as needs or expectations change are key to the success of a program.

### **Mobile Demonstration Resources**

A text and audio transcript of the mobile demonstration conference call, as well as the report on Wyoming's survey of 29 states related to operating a mobile demonstration program, is available on the RESNA Web site at <http://www.resna.org/taproject/activities/demo.html>.

Additional resources regarding the implementation of mobile vans are available through the following sources:

**Gillette Mobile Outreach Clinic.** The program assists individuals in gaining access to AT services in areas where those services are not readily available.

200 University Avenue East, St. Paul, MN 55101; (651) 291-2848  
<http://www.gillettechildrens.org/default.cfm?PID=1.6.5>

**Cerebral Palsy of New Jersey Mobile Outreach.** CP of New Jersey is equipped to provide on-site evaluations, equipment modifications, custom fabrications, and training. The services can be provided in the home, school, or workplace. CP of New Jersey has provided over 20 years of mobile community-based services.

354 South Broad Street, Trenton, NJ 08608-2502; (609) 392-4004  
<http://www.cpfnj.org/services/rehab.htm>

### **University of Illinois at Chicago, Assistive Technology Unit Mobile Van Program.**

Seven mobile units bring evaluation and implementation services to the consumer in the individual's home, school, work, or recreation setting. The mobile unit enables users to try out the AT devices in the environment in which they will be used. This structure also enables participation of other individuals that the consumer feels are important such as family members and minimizes scheduling difficulties for the consumer.

Department of Disability and Human Development, Assistive Technology Unit, 1640 W. Roosevelt Road, MC 626, Chicago, IL 60608  
<http://www.uic.edu/orgs/idhd/atu.htm>

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