May 20, 2015

Rosemary Chiavetta, Secretary  
Pennsylvania Public Utility Commission  
P.O. Box 3265  
Harrisburg, PA 17105-3265

RE: Telecommunication Device Distribution Program (TDDP)  
Proposal for Pilot Project - Wireless Expansion Initiative

Dear Ms. Chiavetta:

OVR has received the projected Budget and Budget Justification Narrative from Temple University for a proposed Pilot re: TDDP entitled, “Wireless Expansion Initiative”. The draft work plan with budget and corresponding budget narrative are attached for your reference.

OVR is submitting this proposal to PUC for review and consideration re: funding.

If you have any questions, please do not hesitate to contact Kimberly Means at kimeans@pa.gov or 717-787-8504.

Sincerely,

David DeNotaris, Executive Director  
Office of Vocational Rehabilitation

cc: Eric Jeschke, PUC  
Sharon Behun, ODHH  
Jill Moriconi, HGAC  
Kim Means, BCO  
Harry Rimmer, BCO  
Joyce Wilson, BBVS  
Temple University TDDP File - Year 2 (Document # 4000016900)
Wireless Expansion Initiative:

Promoting Telecommunications Equity for People with Disabilities in Pennsylvania

Proposal submitted to the Office of Vocational Rehabilitation, Pennsylvania Department of Labor and Industry

Introduction

Pennsylvania's Telecommunication Device Distribution Program (TDDP) provides specialized telecommunication equipment, at no cost, to eligible Pennsylvanians who have disabilities which impede them from having independent access to telephone services or equivalent communication capabilities. People with disabilities includes people who are deaf, hard of hearing, speech impaired, blind or have visual problems, have physical disabilities or intellectual disabilities. Created through PA ACT 34-1995, the TDDP is implemented by Pennsylvania’s Initiative on Assistive Technology (PIAT), a program of the Institute on Disabilities at Temple University, in conjunction with the Pennsylvania Office of Vocational Rehabilitation (OVR), Pennsylvania Department of Labor and Industry (L&I), and the Pennsylvania Public Utility Commission (PUC). At this juncture, a large segment of the population depends on wireless technologies: Wired (landline) communication devices are obsolete in most individuals' lives, including the lives of people with disabilities.

Mobile phones are no longer a luxury item but rather are an integral part of daily life. In the past decade, mobile phones have become the primary mode of telecommunication. They have made payphones and pagers obsolete, with landlines not far behind. The number of households who do not have landlines and only use mobile phones increases yearly. As of 2012, 26% of Pennsylvania residents lived in a household that did not even have a landline because they only used their mobile phones.

People with disabilities prefer generic technologies to specialized equipment. Generic technologies are usually lower cost and the ability to obtain devices and services (e.g. repair, tech support) is considerably easier. Generic technologies have features that have made them so appealing to the public, including portability, durability, and multiple functionalities. As telecommunications device designers and manufacturers appreciate both the legal obligation and the “business sense” that it makes to embed access features in their design, smart phones and wireless tablets with telecommunications “apps” are increasingly preferred by people with disabilities. For example, people who are Deaf have all but abandoned “traditional” TTYs in favor of video communication and texting (where they can afford those technologies).
Wireless devices allow individuals with disabilities to:

- Customize devices in a way best suited to their specific communication and access needs;
- Increase communication options, such as facilitating face-to-face communication by translating text to Braille, placing video-based relay calls from any location, and increasing the number of individuals with whom one is able to communicate;
- Use standard wireless telecommunication features such as video chat, instant messaging, and email;
- Take advantage of the numerous features and specialized applications of wireless devices created to assist individuals with disabilities; and
- Receive emergency notifications in “real time”.

Many states have already recognized that wireless devices are an essential element of communications and now offer Internet-based and wireless device options through their telecommunication device distribution programs for people with disabilities. As of 2014, states offering wireless options for qualified applicants include Arkansas, California, Colorado, Kansas, Kentucky, Maryland, Minnesota, Missouri, New Mexico, Texas, and Wyoming.

On June 6, 2014, Temple University’s Institute on Disabilities convened a stakeholder meeting to discuss expansion of the TDDP to provide equity in access to current technologies. While there would need to be further discussion regarding the scope and funding of a permanent program, attending representatives from the PUC indicated that there are sufficient monies available through the Pennsylvania Relay Service Telecommunication Device Distribution Fund to support a pilot program involving wireless devices.

This proposal outlines the rationale, purpose, proposed methods and projected budget the Institute on Disabilities will use to develop and implement a pilot program to provide equal access for eligible Pennsylvanians with disabilities to 21st Century telecommunication, specifically wireless devices. Based on its role as designated implementing entity for the Telecommunication Device Distribution Program (TDDP) since 2007, the lead agency for the Assistive Technology Act since 1992, and its capacity as Pennsylvania’s University Center of Excellence in Disabilities Education, Research and Service for more than 40 years, the Institute is well-suited to implement this initiative to explore the expansion of telecommunications access for Pennsylvanians with disabilities.
Rationale

The TDDP as currently implemented has concentrated on the distribution of wireline devices including those that are Internet Protocol or IP-enabled.\(^1\) As a result, lower demand by people with certain disabilities and individuals of certain ages has been noted. Act 34 of 1995 originated because a Deaf constituent who couldn’t afford a text telephone (TTY) approached his state representative for assistance: Ironically, the TDDP has distributed fewer and fewer TTYs in recent years. For example, in the 2007-2008 program year, about 10% of the devices distributed were TTYs (82 TTYs/778 total number of devices), but by 2012-2013, only a little more than 2% of the devices distributed were TTYs (15/617). Additionally, it has been noted that very few, if any, individuals in their 20s or younger are applying to the program.

In accordance with the statute, Pennsylvania’s TDDP already provides specialized landline telephone equipment to income-eligible Pennsylvanians with disabilities (200% of poverty or poorer). Consequently, most TDDP applicants would not be able to afford the purchase of today’s wireless devices. In addition, although discounted wireless phones may be available with two-year contracts, low-income individuals may not have the credit needed to be approved for these plans.

In order to determine the feasibility of an expansion of the TDDP, it is important to ascertain the following:

(a) Will the availability of wireless technologies increase utilization of the program by younger Pennsylvanians?
(b) Will people with disabilities accept the devices “only”, recognizing that providing wireless telecommunication access services to commercial wireless networks may be beyond the scope of the existing legislation?
(c) Will people with disabilities accept “locked” wireless technologies (e.g. with restricted access to telecommunications “apps”)?
(d) Which wireless telecommunications devices and which apps are preferred for telecommunications access and by Pennsylvanians with which disability characteristics?
(e) How will access to these wireless technologies improve access to telecommunications? How frequently and for what purposes will the wireless devices be used?
(f) How much training will people need to use 21st Century wireless technologies?
(g) Are there differences in the usefulness of the program that varies by age? By type of disability?
(h) How much will an expanded program cost (1) on a temporary trial pilot basis; and, (2) on a permanent basis with a wider distribution scope?

\(^1\) See generally PUC Advisory Letter to OVR-L&I, TDDP – Distribution of Wireline Internet Protocol Enabled Devices through OVR, July 9, 2014.
Research and Methodology

The pilot will be comprised of two years of study. The first 12 months or "Phase One" of the program will focus on wireless technologies suitable for applicants who are Deaf, hard of hearing, who have vision impairments or who have intellectual/cognitive disabilities. In the second year of the pilot ("Phase Two"), the groups of participants will include individuals with additional and diverse disabilities and an expanded array of technologies, e.g. accessible mobile telephones to meet their needs. In the interest of controlling the implementation of the pilot, participants will be limited to those willing/able to travel, at their own expense, to Temple University's main campus in Philadelphia. Should there be a permanent program, such a program would be implemented statewide.

Phase One

Recruitment
Recruitment for participants will occur during an eight-week period via electronic means, including blogs, listservs, other social media and direct email outreach to disability organizations. This includes but is not limited to state agencies serving people with disabilities (e.g. Bureau of Blindness and Vision Services); consumer organizations (e.g. Pennsylvania Society for the Advancement of the Deaf; Hearing Loss Association of American – Pennsylvania chapters; and A.G. Bell); and entities serving as "volunteer centers" for the TDDP in southeastern Pennsylvania.

Selection
All application processes currently implemented by the TDDP will be followed in determining eligibility. Thirty (30) participants who qualify for TDDP by virtue of their certified disability, income, and need for telecommunications access will be selected from the pool of applicants for this pilot. In addition, in accordance with TDDP eligibility criteria, applicants must not have received equipment from the TDDP within the previous three years (unless they have had a change in disability that requires different equipment) and must not have similar equipment in working condition. Individuals will need to describe how they will access wi-fi service (in their home or in the community e.g. public library) and understand that the program will not pay for such wireless access services. The only other qualification is selected participants’ ability/willingness to travel to Temple’s north Philadelphia campus for in-person sessions, as required.

From the pool of eligible applicants, the first 10 individuals who identify as Deaf, the first 10 individuals who are hard-of-hearing, the first 5 individuals with vision loss (visually impaired or blind), and the first 5 individuals who have intellectual disabilities or other cognitive impairment will be selected. They will be notified within four weeks of their selection. Other applicants will be held in "waiting list" status, in case selected individuals decline to participate. Individuals who are on the waiting list will have priority for participating in Phase Two.
**Equipment**

Equipment selected for Phase One includes the Apple iPad Air, Apple iPad mini, and Apple iPod Touch, all with wireless-only capability. One device will be provided to each participant, along with a protective case and appropriate "app(s)" for telecommunication. Each device will be etched with the message, "Provided by the PA Telecommunication Device Distribution Program; Not for Resale". Devices will be provided "locked", that is, during the pilot year unapproved apps will not be able to be added by the user. All administrative functions (e.g. system updates) will be managed remotely through the equipment administrator (Teltex). Devices are also provided with a maintenance agreement. Frequency and duration of device usage as well as device location can be tracked; the Institute on Disabilities can then follow up if it is clear the device is not being used or if the device leaves Pennsylvania. After the successful completion of the Phase One pilot, ownership of the device will transfer to each consumer who has complied with all terms and conditions (e.g. attended all required sessions; completed surveys) of the program.

**Matching Meeting**

Participants will be required to attend one of three sessions conducted by assistive technology professionals during which they will receive a demonstration of available equipment and apps, in order to identify the device and app(s) that best meets their telecommunications needs. Terms of the program will be reviewed, and participants will sign relevant releases and agreements. They will also complete the pre-program survey (Survey #1). Note all surveys employed in this pilot will utilize Survey Monkey™, a Section 508-compliant online survey tool; care will also be taken to assure the language used is accessible to individuals who are native ASL speakers. All face-to-face meetings with participants will include any accommodations required for communication access (e.g. CART; ASL interpreters).

**Trainings and Focus Groups**

Participants will be required to attend a "getting started" training session during which they will receive the device (schedule depending upon timeline for procurement/delivery of the devices). Individualized instruction will be provided, as needed, to assure participants' ability to use the device and communication app, as well as to review procedures for use and maintenance of the device. Terms of the program will be reviewed, once again.

Focus groups will be conducted during Months 1, 3, 6 and 11 of Phase One of the project, to have an open dialogue regarding successes and challenges of the devices, the applications and to examine the user experience. The social and cooperative atmosphere of the focus groups will allow for participants to interact with peers, share information and as needed, teach each other how to navigate functions of their devices.

**Surveys**

Surveys will allow for ongoing data collection that can be changed over time to address any specific concerns that may come up during the pilot. Surveys will provide a longitudinal tool to identify needs and trends that surface during each pilot year.
Participants will receive a survey four months and seven months into the program. In the last month of the pilot for this cohort, participants will be interviewed via their telecommunication device as to their satisfaction with the program, their device, and their app. The Phase One cohort will also receive a follow-up survey midway through the second phase, to assess the longer term use and impact of devices distributed in Phase One. Samples of draft surveys are attached.

Case Studies

Individual case studies will be completed for approximately 12 participants, representing a range of disabilities. These case studies will include one-on-one interviews (including an entrance and exit interview) and participant observation. The case studies will allow for individual exploration, narrative feedback on the unique device and applications they used for telecommunications. The case studies will allow for further, more vivid and genuine, information on the individual’s specific disability, its impact on telecommunications, and an examination of their use of the provided wireless device and app.

Preliminary Analyses

Preliminary reviews of surveys and interviews will be used to fine-tune the methods and questions used in Phase One, in preparation for Phase Two.

Phase Two

Recruitment

Recruitment for participants will occur during an eight-week period (beginning concurrently with Month 11 of Phase One) via electronic means, including blogs, listservs, other social media and direct email outreach to disability organizations. This includes but is not limited to state agencies serving people with disabilities (e.g. Bureau of Blindness and Vision Services); consumer organizations (e.g. Pennsylvania Society for the Advancement of the Deaf; Hearing Loss Association of American – Pennsylvania chapters; and A.G. Bell); and entities serving as “volunteer centers” for the TDDP in southeastern Pennsylvania. Phase Two outreach may include organizations specific to individuals who use augmentative and alternative communication technologies (e.g. SHOUT) and other groups that may serve or include people with physical and multiple disabilities (e.g. MS Society).

Selection

All application processes currently implemented by the TDDP will be followed in determining eligibility. Thirty (30) participants who qualify for TDDP by virtue of their certified disability, income, and need for telecommunications access will be selected from the pool of applicants for this pilot. In addition, in accordance with TDDP eligibility criteria, applicants must not have received equipment from the TDDP within the previous three years (unless they have had a change in disability that requires different
equipment) and must not have similar equipment in working condition. Individuals will need to describe how they will access wi-fi service (in their home or in the community e.g. public library) and understand that the program will not pay for such wireless access services. The only other qualification is selected participants’ ability/willingness to travel to Temple’s north Philadelphia campus for in-person sessions, as required.

From the pool of eligible applicants, the first 8 individuals who identify as Deaf, the first 8 individuals who are hard-of-hearing, the first 8 individuals with vision disabilities, and the first 6 individuals representing a variety of other disabilities (including physical and speech disabilities) will be selected. Eligible applicants from the Phase One waiting list will have priority and will be contacted to see if they still wish to participate. Individuals accepted into the Phase Two pilot will be notified within four weeks of their selection.

**Equipment**

Equipment selected for Phase Two includes the Apple iPad Air, Apple iPad mini, and Apple iPod Touch, all with wireless capability in addition to “generic” smart phones (variable platforms) and specially designed phones (e.g. ODIN for people with vision disabilities; Jitterbug [Great Call] for seniors/individuals who can benefit from a simplified or operator-assisted interface). This phase of the pilot will also provide additional peripheral devices (e.g. switches, mounts) necessary for individuals with physical disabilities to access the telecommunication device. Individuals selecting cellular technologies will need to select a wireless provider (if they don’t already have one); individuals selecting Wi-Fi devices will need to describe how they will obtain Wi-Fi services. For Wi-Fi devices: One device will be provided to each participant, along with a protective case and appropriate “app(s)” for telecommunication. Each device will be etched with the message, “Provided by the PA Telecommunication Device Distribution Program; Not for Resale”. Devices will be provided “locked”, that is, during the pilot year unapproved apps will not be able to be added by the user. All administrative functions (e.g. system updates) will be managed remotely through the equipment administrator (Teltex). All devices are also provided with a maintenance agreement. After the successful completion of the Phase Two pilot, ownership of the device and any peripherals will transfer to each consumer who has complied with all terms and conditions (e.g. attended all required sessions; completed surveys) of the pilot program.

**Matching Meeting**

Participants will be required to attend one of three sessions conducted by assistive technology professionals during which they will receive a demonstration of available equipment and apps, in order to identify the device, other related equipment, and app(s) that best meets their telecommunications needs. Terms of the program will be reviewed, and participants will sign relevant releases and agreements. They will also complete the pre-program survey (Survey #1). Note all surveys employed in this pilot will utilize Survey Monkey™, a Section 508-compliant online survey tool; care will also be taken to assure the language used is accessible to individuals who are native ASL
speakers. All face-to-face meetings with participants will include any accommodations required for communication access (e.g. CART; ASL interpreters).

Trainings and Focus Groups
Participants will be required to attend a "getting started" training session during which they will receive the device (schedule depending upon timeline for procurement/delivery of the devices). Individualized instruction will be provided, as needed, to assure participants' ability to use the device and communication app, as well as to review procedures for use and maintenance of the device. Terms of the program will be reviewed, once again.

Focus groups will be conducted during Months 1, 3, 6 and 11 of Phase Two of the project, to have an open dialogue regarding successes and challenges of the devices, the applications and to examine the user experience. The social and cooperative atmosphere of the focus groups will allow for participants to interact with peers, share information and as needed, teach each other how to navigate functions of their devices.

Surveys
Surveys will allow for ongoing data collection that can be changed over time to address any specific concerns that may come up during the pilot. Surveys will provide a longitudinal tool to identify needs and trends that surface during the pilot year. Participants will receive a survey four months and seven months into the program. In the last month of the pilot for this cohort, participants will be interviewed via their telecommunication device as to their satisfaction with the program, their device, and their app.

Interpreting Results and the Development of Findings
Results from interviews and surveys conducted during the course of the project will be analyzed as findings in relationship to the prescribed questions to be answered by this pilot:

(a) Will the availability of wireless technologies increase utilization of the program by younger Pennsylvanians?
(b) Will people with disabilities accept the devices "only", recognizing that providing wireless telecommunication access services to commercial wireless networks may be beyond the scope of the existing legislation?
(c) Will people with disabilities accept "locked" wireless technologies (e.g. with restricted access to telecommunications "apps")?
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(e) How will access to these wireless technologies improve access to telecommunications? How frequently and for what purposes will the wireless devices be used?
(f) How much training will people need to use 21st Century wireless technologies?
(g) Are there differences in the usefulness of the program that varies by age? By type of disability?
(h) How much will an expanded program cost (1) on a temporary trial pilot basis; and, (2) on a permanent basis with a wider distribution scope?

Results will be analyzed using a mixed methods approach to include both the qualitative and qualitative measures. Elements of the pilot program (both Phase One and Phase Two) which should be retained, eliminated, or otherwise modified in a permanent program will be identified.

Preliminary recommendations for a permanent program will be reviewed by the Assistive Technology Advisory Council (advisory to the TDDP) and the Telephone Relay Service Advisory Committee prior to submission of a final report to the Office of Vocational Rehabilitation and the Pennsylvania Public Utility Commission.
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<td>Graphic Designer @ 29.2% benefit rate</td>
<td>Fringe benefits have been calculated at the university's standard approved rate of 29.2% for all full-time personnel and 8.4% for part-time personnel. Fringe benefits include: FICA, retirement, life insurance, tuition remission, dental/vision/prescription, welfare fund, workers' compensation, unemployment insurance, post-employment benefits and health insurance.</td>
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