



June 4, 2018

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

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RE: **WEI petition Docket Number P-2015-2484229**
Amended 2017 two-year wireless Telecommunications Device
Distribution Program (TDDP) Pilot project

- Phase I and II wireless TDDP pilot project
- TDDP wireless pilot project attachments

Dear Ms. Chiavetta:

Attached is the amended information requested by the Pennsylvania Public Utility Commission (PUC) from the Office of Vocational Rehabilitation (OVR) for monetary support from the Telecommunications Relay Service (TRS) Fund for the two-year wireless TDDP Pilot project.

If you have any further questions, please do not hesitate to contact Mr. Howard Albrecht at (717) 783-3882 or halbrecht@pa.gov.

Sincerely,

David J. De Notaris, Executive Director
Office of Vocational Rehabilitation

JB

Attachments: Temple University wireless TDDP pilot project report and recommendations
Temple University wireless TDDP pilot project report attachments

cc: Kim Singleton, Temple University TDDP
Lisa Troy, Temple University TDDP
Eric Jeschke, PUC
Joseph Strechay, BBVS Director
Susan Neff, BBVS
Jennifer Wertz
Jill Moriconi, HGAC
Temple University TDDP File – Year 2 (Document #400019493)

PENNSYLVANIA'S
TELECOMMUNICATION DEVICE
DISTRIBUTION PROGRAM
WIRELESS EXPANSION INITIATIVE

FINAL REPORT
AND
RECOMMENDATIONS

PREPARED BY THE INSTITUTE ON DISABILITIES
AT TEMPLE UNIVERSITY

Kim Singleton
Sally Gould-Taylor
Sandra McNally

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EXECUTIVE SUMMARY

In 2016, the Institute on Disabilities at Temple University embarked on a pilot project to investigate the possibility of expanding Pennsylvania's current Telecommunication Device Distribution Program (TDDP). Pennsylvania's TDDP provides landline (wired) telephone equipment to Pennsylvanians with disabilities that impede their ability to communicate across distances. This expansion would include wireless technologies such as mobile phones and tablets to the traditional landline or wired equipment.

National landline telephone use is on a steady decline with consumer preference for wireless mobile technology. Wired (landline) communication devices are virtually obsolete in most people's lives, including the lives of people with disabilities. Mobile phones have become the primary mode of telecommunication, making payphones and pagers extinct, with landlines not far behind. Understanding that mobile phones are an essential part of daily life for most Americans, this project investigates the possibility of providing current, superior technology to Pennsylvanians with disabilities.

Since May, 2016 the wireless pilot program provided devices, training and technical assistance to selected Pennsylvanians with a wide range of disabilities that impede their access to distance communication. Participants included people who were deaf/hard of hearing, blind/low vision, intellectually disabled, physically impaired and/or presented with complex communication needs.

Unlike Pennsylvania's traditional TDDP, this wireless pilot project was important and useful for younger Pennsylvanians with disabilities. With access to wireless technology, the participants were independently able to contribute and connect with other people in their communities.

The wireless technology allowed people with disabilities to move freely in the community and still be able to access distance communication with modalities other than hearing. Wireless technologies also provided opportunities for people with disabilities other than hearing or speech challenges to access distance communication independently, sometimes for the first time in their lives.

We explored both group and individual trainings. Overall individual training was the most effective. For this reason, exploration of other learning support such as online and community resources should be considered.

This pilot project resulted in our recommendation that the TDDP expand to include wireless technologies with limited training and expansion of learning resources.

BACKGROUND

This project emerged from the notion that current wireless technology had powerful potential to make distance communication by Pennsylvanians with disabilities easier, economical and more efficient than landline equipment provided by our current program. The deaf community has all but abandoned “traditional” TTYs (i.e. TeleTYpewriter) in favor of video communication and texting.

Nationally, at least 17 states offer wireless options for qualified applicants include Arkansas, Colorado, Iowa, Kansas, Kentucky, Maryland, Minnesota, Mississippi, Missouri, Montana, New Mexico, Oregon, Rhode Island, South Dakota, Texas, and Washington, Wyoming. We anticipate that this number will continue to increase.

TELECOMMUNICATION DEVICE DISTRIBUTION PROGRAM

Pennsylvania's TDDP has provided specialized telecommunication equipment, at no cost, to eligible Pennsylvanians who have disabilities that impede them from having independent access to telephone services or equivalent communication capabilities since 1995. 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 and amended in 2002, Pennsylvania's TDDP has been implemented since 2007 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).

Currently, traditional TDDP offers captioned and amplified phones, TTYs, and signaling devices. Eligible applicants have the choice of selecting one phone, and one signaling device.

TDDP AND THE WIRELESS INITIATIVE

The Commonwealth of Pennsylvania initially created TDDP to address the lack of access to distance communication for the deaf, hard of hearing and speech impaired community. In 2002 the program was expanded to include all disabilities. However, landline usage has declined and the use of wireless technology for telecommunication has increased. Technological advances have continued to improve over the last 20 years, giving people with disabilities potentially better access to telecommunication. Over time, assistive telecommunication devices have evolved from amplified phones, captioned phones, and video relay services to

mobile devices with apps such as FaceTime and captioned telephone apps. With this access comes both increased opportunities for telecommunication in addition to a greater quality of telecommunication.

The wireless devices used during the pilot allowed people with disabilities to customize devices in a way best suited to their specific communication and access needs. Wireless devices 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 people with whom one is able to communicate. For example, participants of the wireless pilot were able to increase communication with family, friends, and professionals.

Participants were able to increase their communication using standard wireless telecommunication features such as video chat, instant messaging, and email.

Additionally, these wireless devices allowed people with disabilities to take advantage of the numerous features and specialized applications of wireless devices created to assist people with disabilities; and receive emergency notifications in “real time”.

THE QUESTIONS

We hoped that this pilot project would answer these questions.

- (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?

As the project progressed, other questions emerged.

(i) Was group training sufficient or was individual training necessary?

(j) Would equipment with Wi-Fi capabilities only (without data plans) suffice?

(k) What was the most efficient amount, type and content of training and technical assistance possible?

PLANNING TIMELINE

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. At this meeting it was determined by attending representatives from the PUC that sufficient monies could be made available through the TRS fund to support a pilot program involving wireless devices. On May 20, 2015, OVR submitted the wireless pilot proposal to the PUC for review and consideration. On May 21, 2015 at Doc. No. P-2015-2484229, OVR filed a Telecommunication Relay Service (TRS) petition with the PUC seeking approval to conduct a 2-year pilot project supported by the TRS fund. At the public meeting held on July 8, 2015, the PUC approved OVR request for the proposed wireless pilot. We received Institutional Review Board (IRB) approval from Temple University on January 11, 2016 and on May 3, 2016 the first eligible participants received their devices.

THE WIRELESS PILOT

WORKFORCE INVOLVED

While many people were involved in this project behind the scenes (administrative, clerical and outreach), there were a few key people. A Program Manager, a TDDP consumer educator, a Blind and Low Vision Specialist and an AAC (Alternative and Augmentative Communication) Specialist performed the work with participants. A research and evaluation coordinator collected and analyzed pilot project data.

STRUCTURE

This project included four distinct activities. First, we needed to recruit eligible participants; however, recruitment could not begin until after IRB approval. Because of the nature of the pilot, Temple University required us to obtain approval from Institutional Review Board (IRB). We received initial IRB approval January 11, 2016 and re-approval was received January 5, 2017. Once we identified eligible participants, we worked with them to determine the best technology to meet their individual needs. After they received their personalized equipment, we provided training and technical assistance. Along the way, we conducted interviews with the participants about their usage and satisfaction.

In order to learn the most from this pilot project, we conducted the activities in two phases. Each participant was in either Phase 1 or Phase 2. This allowed us to reflect on lessons learned in the first group, allowing for mid project adjustments for the second phase.

Each phase required a matching meeting, training, surveys and an interview.

Phase 1 started on May 3, 2016 and lasted six months. This phase consisted of six trainings and targeted eligible applicants who identified as Deaf, hard of hearing,

One participant, M, is a young man with cerebral palsy. He had always had to depend on caregivers to make phone calls and was frustrated because he was not able to make a private phone call. He was matched with a Sesame Connect phone and was immediately able to use the Google virtual voice assistant to make a phone call. With some practice, he was also able to answer calls using only his voice. Pilot staff then connected the phone to the Bluetooth joystick controller for his wheelchair. This connection meant that he could use the joystick to move a cursor on the phone's screen, allowing him to access apps, type, and perform other functions on the phone. For the first time he could place a video call to his friends and family.

low vision, blind, and intellectually or developmentally disabled (ID/DD). Participants received an iPad with Wi-Fi only capabilities.

Phase 2 began on February 22, 2017 and lasted four months. Phase 2 consisted of four trainings and targeted participants who identified as Deaf, hard of hearing, low vision, blind, intellectually disabled, and physically disabled. Participants received iPads, iPhones, and a Sesame Phone (touch free phone controlled by head movements and voice control). We allowed participants to add data plans during this phase.

While most participants were required to travel, at their own expense, to Temple University's main campus in Philadelphia to be eligible for the program, we were able to make a mid-project adjustment in Phase 2. During enrollment of participants for Phase 2, we established a partnership with a senior center. Three seniors enrolled in Phase 2 and we successfully conducted all services at the senior center.

VALUE TO PARTICIPANTS

Participants who completed all required meetings and trainings as well as completed all surveys and interviews permanently owned the equipment used during the pilot. Participants received training specifically tailored to their functional needs. The training also included learning about built-in system and accessibility features as well as training to use apps.

RECRUITMENT OF PARTICIPANTS

As stated earlier, recruitment could not begin until we received final IRB approval. Therefore, the recruitment period was much shorter than anticipated. Outreach to potential participants included fliers, emails, and mailings to various networks of providers, parents, and people with disabilities. We held information sessions at the Institute on Disabilities for each phase of the pilot. During the information sessions, potential participants learned about the pilot and the time commitment required.

INSIGHT ABOUT RECRUITMENT: For many potential participants, the significant time commitment and transportation were barriers. We had more difficulty enrolling participants than anticipated, due to the time commitment and the abbreviated recruitment period for Phase 1. We continued to recruit during Phase 1, which resulted in more participants for Phase 2.

PARTICIPANT REQUIREMENTS

All participants had to complete an application for the TDDP Wireless Pilot and meet the program's eligibility requirements. In accordance with IRB Human Subject standards, we notified all participants that they were able to choose to withdraw from the Pilot at any time. However, all participants completed all trainings during the wireless pilot program.

Participants completed all required surveys. Some participants struggled to get the survey completed in a timely manner. Other participants found it easier to complete the survey over the phone or in person. Participants completed a total of four surveys and one interview.

INSIGHTS ABOUT REQUIREMENTS: The extensive training requirements, while necessary for few participants, were excessive for others. In addition, the surveys were lengthy and exhaustive because of the research component of this project. If future surveys were shorter and simpler, voluntary completion would increase.

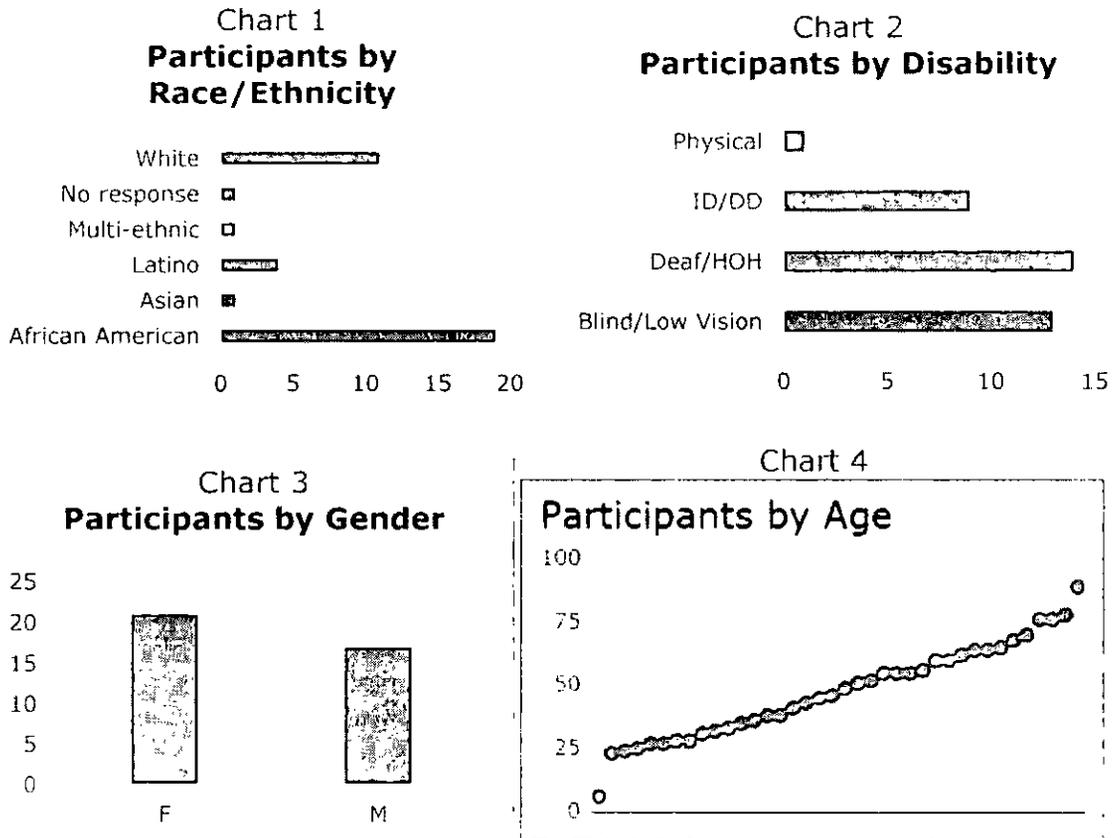
INELIGIBLE APPLICANTS

During phase 1, fifteen (15) applicants were determined to be ineligible. Nine applicants were ineligible because their location prohibited mandatory attendance. One applicant already owned a device being offered in the pilot. One applicant income exceeded the required income guidelines. One applicant had complex communication needs. Three applicants disability type did not meet disability requirements for phase one. Three applicants were withdrawn from the pilot. Two applicants were withdrawn from the pilot after failing to appear for their matching meeting or trainings. One applicant was withdrawn from pilot because she could no longer fulfill attendance obligation.

During phase 2, twelve (12) applicants were determined to be ineligible. Five applicants were ineligible because their location prohibited mandatory attendance. One applicant disability type did not meet disability requirements for phase 2. One applicant had complex communication needs. Two applicants applied after recruitment period. Three applicants never completed their application. Four applicants were withdrawn from the pilot. Two applicants were withdrawn from the pilot after failing to appear for their matching meeting or trainings. One applicant was withdrawn from pilot because she could no longer fulfill attendance obligation. One applicant was withdrawn because the applicant parent did not want to agree to terms of the pilot.

PARTICIPANT DEMOGRAPHICS – PHASE 1 AND 2

Ultimately, the pilot project served thirty-eight participants. The following charts show the age, gender, disability group and race/ethnicity for the all of the pilot participants (Phases 1 and 2)



***INSIGHT ABOUT DEMOGRAPHICS:** We were able to serve a diverse cross-section of participants. This diversity lends strength to the results of the project and shows the value of this technology to many different Pennsylvanians.*

EQUIPMENT

Each participant worked with a trainer to choose equipment individualized to his or her unique needs. All wireless devices had built-in accessibility features designed to give people with disabilities better access to the devices.

Hardware

Phase 1: Available equipment to choose from included iPad, iPad Mini and iPod touch. All devices offered were Wi-Fi only. Nineteen (19) devices (including accessories) were distributed in Phase 1, totaling \$13,010.00.

Phase 2: Available equipment was the same offered in Phase 1, with the additional choices of iPhone 7, iPhone 7+, Jitterbug Flip, Jitterbug Smart, Sesame phone, and Sesame tablet. We distributed forty-one (41) devices (including apps and accessories) in Phase 2, totaling \$35,359.96.

CHART 5: EQUIPMENT DISTRIBUTED				
PHASE 1				
Device	Disability Group	Cost Per Unit	Quantity	Total
iPad Air 2 (Wi-Fi)	Deaf/Hard of Hearing	\$ 1,150.00	4	\$ 4,600.00
iPad Air 2 (Wi-Fi)	Blind/Low Vision	\$ 1,170.00	4	\$ 4,680.00
iPad Air 2 (Wi-Fi)	ID/DD	\$ 1,150.00	3	\$ 3,450.00
Apple Ear Pods	(accessory)	\$ 35.00	8	\$ 280.00
TOTAL:			19	\$ 13,010.00
PHASE 2				
Device	Disability Group	Cost Per Unit	Quantity	Total
iPhone 7 Plus	Deaf/Hard of Hearing	\$ 1,520.00	1	\$ 1,520.00
iPhone 7 Plus	Blind/Low Vision	\$ 1,540.00	4	\$ 6,160.00
iPhone 7 Plus	ID/DD	\$ 1,520.00	1	\$ 1,520.00
iPhone 7	Blind/Low Vision	\$ 1,370.00	2	\$ 2,740.00
iPhone 7	Deaf/Hard of Hearing	\$ 1,350.00	1	\$ 1,350.00

iPad Mini 4 (Wi-Fi)	ID/DD	\$ 1,180.00	1	\$ 1,180.00
iPad Mini 4 (Wi-Fi)	Deaf/Hard of Hearing	\$ 1,050.00	1	\$ 1,050.00
iPad Mini 4 (Wi-Fi)	Blind/Low Vision	\$ 1,070.00	1	\$ 1,070.00
iPad Air 2 (Wi-Fi)	ID/DD	\$ 1,180.00	2	\$ 2,360.00
iPad Air 2 (Wi-Fi)	Blind/Low Vision	\$ 1,070.00	2	\$ 2,140.00
iPad Air 2 (4G)	Blind/Low Vision	\$ 1,200.00	1	\$ 1,200.00
iPad Air 2 (Wi-Fi)	Deaf/Hard of Hearing	\$ 1,050.00	3	\$ 3,150.00
iPad Air 2 (4G)	Deaf/Hard of Hearing	\$ 1,180.00	5	\$ 5,900.00
iPad Air 2 (Wi-Fi)	ID/DD	\$ 1,050.00	1	\$ 1,050.00
Google Nexus 5X	Physical	\$ 1,400.00	1	\$ 1,400.00
Mounting Kit	(accessory)	\$ 250.00	1	\$ 250.00
Apple EarPods	(accessory)	\$ 35.00	8	\$ 280.00
TouchChat HD with Word Power	App	\$ 299.99	3	\$ 899.97
Proloquo4Text	App	\$ 119.99	1	\$ 119.99
App charge*	Blind/Low Vision	\$ 20.00	1	\$ 20.00
TOTAL:			41	\$ 35,359.96
*App charge to change iPad to Blind/Low Vision group				

Software/Applications (Chart 6)

Teltex and the trainers, based on their knowledge of specific apps for different functional needs and disability types, recommended these apps.

APPLICATION or CAPABILITY	Hard of Hearing/ Deaf	Blind/Low Vision	Complex Comm. Needs	Intellectual or Dev. Disability	Physical Disability
ClearCaptions	Yes				
Convo	Yes				
FaceTime	Yes				
Glide Video Texting	Yes	Yes		Yes	
Google Account				Yes	

APPLICATION or CAPABILITY	Hard of Hearing/ Deaf	Blind/Low Vision	Complex Comm. Needs	Intellectual or Dev. Disability	Physical Disability
Google Chrome	Yes	Yes	Yes	Yes	Yes
Google Duo	Yes			Yes	
Google Hangouts	Yes	Yes		Yes	
Google Voice				Yes	
Hamilton CapTel	Yes				
iMessages	Yes		Yes	Yes	
imo Video Calls and Chat	Yes				
Marco Polo	Yes			Yes	
ooVoo	Yes			Yes	
Predictable			Yes		
Proloquo4text			Yes		
Purple P3 VRS	Yes				
ReadyPA	Yes	Yes	Yes	Yes	Yes
Sesame Connect					Yes
Skype	Yes	Yes		Yes	
Sorenson VRS	Yes				
Speak 2 See	Yes				
Speech Trans Ultimate	Yes				
Sprint IP Relay	Yes				
Talkatone	Yes	Yes		Yes	
TouchChat HD with Word Power			Yes		

APPLICATION or CAPABILITY	Hard of Hearing/ Deaf	Blind/Low Vision	Complex Comm. Needs	Intellectual or Dev. Disability	Physical Disability
Voice Over		Yes			
Weather app					
WiFi Finder	Yes	Yes	Yes	Yes	Yes
Youtube	Yes	Yes	Yes	Yes	Yes
Zoom Magnifier		Yes			
ZVRS Z5	Yes				

Data Plans

Data plans were available in PHASE 2 and varied for each participant. Participants selected their own data plan and were responsible for payment for the plan. They were however encouraged to select a plan with minutes, texting, and data.

Vendor - Teltex

The preferred vendor contracted to supply equipment to the Pennsylvania Telecommunication Device Distribution Program (TDDP) Wireless Expansion Initiative (WEI) and deliver the best overall value to the program pilot study based on the price, delivery capabilities, quality, past performance, training, financial stability and ease of ordering was Teltex, Incorporated. Located at 1081 West Innovation Drive, Kearney, MO 64060, Teltex, Inc. specializes in customer services and equipment management for state Telecommunications Equipment Distribution Programs (TEDPs). Teltex is an authorized Apple Government Contractor, and is the strategic partner for State & Local Government Disability Programs for Apple. Teltex offers the full line of Apple products, including all iOS® devices (iPad®, iPad® mini™, iPhone® & iPod® touch) and Mac devices (MacBook, Mac mini & iMac). The contract with Teltex is a result of a competitive Request for Proposal (RFP) issued in September 2010 by the Institute on Disabilities, with guidance from Temple University's Purchasing Department.

All equipment distributed included select disability apps, durable case, etching (on device and case), and 3 years of TeltexCare Plus service.

INSIGHTS ABOUT EQUIPMENT: The trainers needed to understand the various local data plans to recommend one that best met the participant. During the equipment selection process, phone service was necessary for demonstration equipment. Ordering equipment and tracking invoices required time and focused energy.

TRAINING

We had three trainers with different areas of expertise. While all participants received standard information on using a wireless device for telecommunication, we individualized the training to meet each participant's need. Below is the training summaries of each group by disability area.

We conducted all trainings in accessible locations with access to free Wi-Fi. In addition, we provided any accommodations needed to provide access to the training, such as ASL and Spanish interpreters.

Deaf / Hard of Hearing

Phase 1 - All trainings were at Temple University, Howard Gittis Student Center (Student Center), located at 1755 N. 13th Street Philadelphia PA, 19122. We held trainings in a second floor meeting space as well as at the Institute on Disabilities (IOD), located in Suite 411 South of the Student Center.

This group contained three participants. Two participants identified themselves as hard of hearing, and one identified themselves as Deaf. During this phase, each recipient received an iPad Air 2 (Wi-Fi only).

Three women from a senior center were all hard of hearing and had no prior experience with mobile technology. Because of their involvement in the Pilot, they have been able to stay in contact with family and friends by using the FaceTime, Messaging and Marco Polo apps. One of the women shared that although she would prefer phone calls, she now has more communication with her grandchildren because they prefer communicating by text message.

Training 1: Participants received their iPads. iPads came already in a case with a charger. Participants reviewed the features of the iPad, signed documents, and completed a survey. We briefly reviewed software and applications.

Training 2: Participants learned and reviewed how to use telecommunication apps. The apps learned were Purple VRS, Talkatone, FaceTime, and Google Hangouts. Participants set up accounts and practiced using the apps. We answered questions and concerns.

Training 3: During this training, all participants learned and reviewed how to use Glide, Skype, ooVoo, WiFi Finder, Google Hangouts, and FaceTime. They also received assistance with synchronizing contacts.

Training 4: Participants learned and reviewed how to use, Skype, ooVoo, Glide, and Google Hangouts.

Training 5: Participants reviewed how to synchronize emails and use Google Duo and imo apps. They also received assistance with set up and registration for Hamilton, Captel and Sprint IP apps.

Training 6: Participants learned about tools they can take with them beyond the pilot. Participants learned about social media safety, Wi-Fi safety, contacts, photos, recording, Notes, the Reminder app, and TeltexCare information.

Phase 2 – Trainings took place at two locations: Temple University, Institute on Disabilities (IOD, same address as above), and the Friendship Circle Senior Center (Friendship Circle), located at 1515 Lansdowne Avenue, Darby, PA 19023. Three participants who were hard of hearing and members of Friendship Circle received trainings at this location.

We trained seven participants who identified themselves as hard of hearing and four participants who identified as Deaf. During this phase, the eleven participants received either an iPad or an iPhone with Wi-Fi and/or data capabilities (4G),

Participants who received phones picked their devices up prior to first training so they could take their phone to their provider to get it activated.

Training 1: Participants received their devices. iPads and iPhones came already in a case with a charger. Participants set up their email, and Wi-Fi, Participants reviewed the features of the device, signed documents, and completed a survey. Participants learned and reviewed Marco Polo, FaceTime, iMessages, and Convo VRS.

Training 2: Participants learned and reviewed how to use Marco Polo, Talkatone, google duo, FaceTime, iMessages, and Sorenson VRS.

Training 3: Participants learned and reviewed how to use Marco Polo, ooVoo, Glide, and Skype. Participants also watched training videos to learn how to use apps for telecommunication.

Training 4: Participants and trainers discussed the following topics: restrictions being removed, accessibility settings, updates, email issued during pilot, surveys and interviews, Wi-Fi and social media safety, and TeltexCare information. Participants signed the transfer of ownership form, completed the in-person interview and third survey.

Intellectual and Developmental Disabilities (ID/DD)

Phase 1 – All trainings were at Temple University, Howard Gittis Student Center (Student Center), located at 1755 N. 13th Street, Philadelphia, PA 19122. We held trainings in a second floor meeting space as well as at the Institute on Disabilities (IOD), located in Suite 411 South of the Student Center.

We worked with 4 participants with intellectual and developmental disabilities. They ranged in age from 6 years to 28 years old. During this phase, each recipient received an iPad Air 2 (Wi-Fi only).

Training 1: Participants received their iPads and an introduction to the iPad. We provided charging instructions and assisted with setting up their email. Reviewed expectations of the pilot and gave a description of TeltexCare. Homework assignment: Bring list of contacts to add to the iPad.

Training 2: Participants learned how to add contacts to the iPad. Set up of Talkatone app. Instruction on use of email and FaceTime. Explanation and demo of Wi-Fi Finder app. Emphasis on the need to find wireless hotspots for communication.

Training 3: Trainer began with a Q&A session. Participants learned to use Google Hangouts for texting, voice calls, and video calls, and practiced using FaceTime.

Training 4: Participants continued practice on use of apps for video calls, and practiced finding and using Contacts list within apps. Participants learned use of ooVoo app. Training concluded with Q&A and troubleshooting session.

Training 5: Discussion of privacy and use of device to send personal information. Discussion of responsibilities for follow up after final session. Continued practice with apps. Training concluded with Q&A and troubleshooting session.

Training 6: Celebrated completion of onsite trainings. Reviewed requirements to complete follow up surveys. Explanation of how to add an Apple ID to the device and how to seek out repairs under warranty. Reiteration of need to protect personal data. Troubleshooting/questions answered.

Complex Communication Needs

Phase 1 – This disability group was not included in Phase 1.

Phase 2 – All trainings were at Temple University, Howard Gittis Student Center (Student Center), located at 1755 N. 13th Street, Philadelphia, PA 19122. We held trainings in a second floor

meeting space as well as at the Institute on Disabilities (IOD), located in Suite 411 South of the Student Center.

During this phase, the trainer worked with two groups: participants with ID/DD and participants with overlapping ID/DD and need for augmentative communication.

Another participant was a man who had physical and speech difficulties because of a stroke. The accessibility features on the phone and other apps allowed him to independently make calls and send emails. This gave his wife piece of mind when he traveled to Washington DC as an advocate for people with disabilities.

Training 1: Participants met with the group and received their first training on using an iPad with an Augmentative and Alternative Communication (AAC) app for telecommunication. Topics covered included basic device setup, how to make a call, how to charge the device, and how to send text messages. The bulk of troubleshooting had to do with initial setup of the AAC app. Two

participants out of three used symbol-based AAC apps and one used a text to speech app with symbol support.

Training 2: The training focused on continued skills acquisition with the new wireless device. Information covered included the use of FaceTime, Google Hangouts, and sending emails. We described voice dictation using Notes as a way to bypass the use of the keyboard for those who are not able to write easily.

Training 3: We showed several videos to help participants understand the use of telecommunication apps. These targeted improving skills with the apps Hangouts and Google Duo. Troubleshooting took place surrounding the updating of the device iOS. We also gave participants links to training videos on AAC modeling and Core Vocabulary. They watched these videos remotely and demonstrated participation and comprehension by answering questions regarding the content of the videos.

Training 4: Participants signed off on all paperwork to complete participation in the pilot. Reviewed requirements to complete follow up surveys. Explanation of how to add an Apple ID to the device and how to seek out repairs under TeltextCare. Reviewed the need to protect personal data. Training concluded with Q&A/troubleshooting session.

Physical Disabilities and Complex Access Needs

Phase 1 – This group was not included in Phase 1.

Phase 2 - All trainings were at Temple University, Howard Gittis Student Center (Student Center), located at 1755 N. 13th Street, Philadelphia, PA 19122. We held trainings in a second floor meeting space as well as at the Institute on Disabilities (IOD), located in Suite 411 South of the Student Center.

We placed this participant was placed in a “group of one” because he is a power wheelchair user and had specialized physical access needs. A Direct Service Professional and an Assistive Technology (AT) support person from an outside agency supported him at each training session. He was verbal, but relied on the use of a Bluetooth joystick to access the screen of the device. He was the single participant to receive a Sesame Connect phone and mounting system.

Training 1: The participant immediately had success using his voice to activate his Sesame Connect phone. He was not able to connect to a cursor on the screen via Bluetooth because his joystick was broken. His AT support person properly mounted his phone on his wheelchair.

Training 2: This session focused on troubleshooting the use of "Okay Google," the Android digital voice assistant, to answer his phone.

Training 3: This training was a distance training. The participant watched assigned videos and answered questions via email.

Training 4: We spent this session using Bluetooth to pair the participant's phone to his joystick. We received technical support from RAZ Mobility, the provider of the Sesame phone.

Blind and/or Low Vision

Phase 1 - All trainings were at Temple University, Howard Gittis Student Center (Student Center), located at 1755 N. 13th Street, Philadelphia, PA 19122. We held trainings in a second floor meeting space as well as at the Institute on Disabilities (IOD), located in Suite 411 South of the Student Center.

This group contained four participants. Three participants who identified as having low vision and one who identified as blind. During this phase, each recipient

One of the pilot participants was a mother with low vision. Her daughter who is Deaf also participated in the Pilot. They reported that they had been having difficulty communicating with each other because English is the mother's second language and ASL interpreters often had trouble understanding her because of her accent. This was often frustrating for everyone. After changing some of the visual accessibility settings on her iPad, the mother was able to use it to text her daughter. They are now able to have conversations with each other without needing an interpreter.

received an iPad Air 2 (Wi-Fi only). The trainer used their expertise to help the participants determine the most effective way for them to access the devices. Two participants used both bold font and Zoom magnification level of two time's standard size. One participant used bold font enhancement plus Zoom magnification at 3.5 X and held iPad at closer distance in order to locate icons and read text. The participant who identified as blind used the screen-reading feature VoiceOver as her means of access.

Summary of Phase 1 Training:
The trainer developed training content over 6 training sessions

to reflect enabling the accessibility features included on the iPad for vision impairment or blindness. We chose three apps for voice communication: Talkatone,

Skype and FaceTime, in addition to text messaging and email. The goal of these six training sessions was to provide an overview of the accessibility features for vision allowing for communication access over Wi-Fi. Given the composition of this group, we decided that a separate training would be more effective for the participant using Voice Over, as greater instruction time was required for greater competence in the gesture commands for screen reading compared to that used with the Zoom Magnifier. One of the four participants had little experience using computer technology needed more attention to explain email, Internet access and text messaging. The participant using Voice Over also had difficulty with the on-screen keyboard initially however using the stylus helped her with the repeated gesture commands. We gave independent work assignments to all participants to collect contact information from at least one other person in the group and others that they could practice text messaging, email and the voice communication apps of FaceTime, Skype and Talkatone. At the final training session, the trainer gave each participant information and links as reference and further training.

Phase 2 - All trainings were at Temple University, Howard Gittis Student Center (Student Center), located at 1755 N. 13th Street, Philadelphia, PA 19122. We held trainings in a second floor meeting space as well as at the Institute on Disabilities (IOD), located in Suite 411 South of the Student Center.

This group contained 10 participants. Four participants identified as blind and six participants identified themselves as low vision. Three participants received an iPhone 7, two received an iPhone 7 Plus, four received an iPad Air 2 and one received an iPad Mini 4. Seven participants used the screen reading accessibility of Voice Over, one used Zoom at 2X magnification, one participant used only font enhancements plus spoken reading of highlighted screen content and one participant used both Voice Over and Zoom magnification. Five participants also used the voice dictation assistant Siri, with one participant using Voice Over and Siri set to Spanish.

Summary of Phase 2 Training: This group included equal amount of iPhone users and iPad users. This means the training content added using the phone app in addition to text messaging and email. Each iPhone user received the phone in advance of training to enable with a wireless carrier without having the accessibility features turned on. All five participants then returned to our office for an individual appointment to enable the accessibility feature requested based on initial demonstration. This individual session allowed instruction on where to enable and adjust the accessibility feature as well as provide accessibility short cut to toggle on or off the feature. Enabling this short-cut allows for a user to have sighted assistance if need be to assist with a task that may require vision such as technical support.

The training sessions were staggered in Phase 2 as delays in finding a start date for some participants as well as equipment delivery delays made it difficult to have a group instruction. All participants using the iPad in this session required individual training, either as a result of equipment delivery or greater need for individual instruction. One participant required additional time as a Spanish interpreter was needed and additional time for English to Spanish and reverse between trainer and participant to provide instruction. All Participants in Phase 2 completed the following communication tasks; sent text message to trainer and family member, sent email to trainer and others, opened links for instructional videos sent by email from trainer.

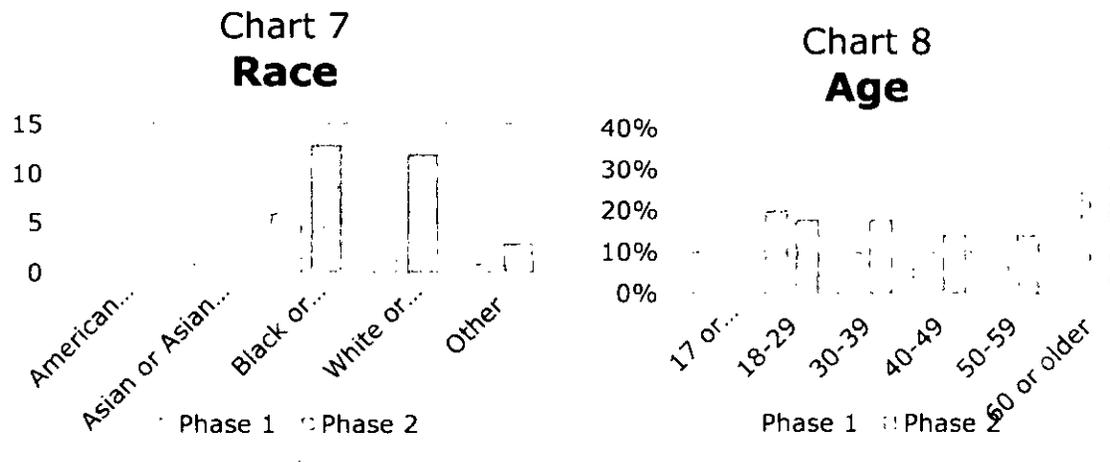
Insights about Training – If we had more information about the participants' previous experience with technology, literacy skills learning styles, etc., the group training would have been more productive and efficient. A more homogenous grouping on skill as well as accessibility may have provided group training that is more efficient. We discovered a need for individual instruction for some participants. This would require separate scheduling of training sessions for best outcomes. We should give further attention to the ultimate individual participant goals for the device; some will use the device for multiple communication access yet others will use the device to communicate in one access method. Expectations of both trainer and participant must be clear for best training outcomes.

In addition, group trainings were difficult to schedule and perhaps not as efficient as predicted. Individual training could be shorter in duration and frequency.

RESULTS

Surveys

Surveys allowed for ongoing data collection and provided a longitudinal tool to identify needs and trends that project staff could address throughout trainings or phases. All survey instruments were assembled utilizing Survey Monkey. Survey Monkey is an online survey application, compliant with U.S. Federal Section 508 of the Rehabilitation Act of 1973 certification guidelines. At the beginning of each phase, a pilot survey was disseminated to verify that participants could access and complete the surveys. Throughout each phase, the participants were issued four surveys to collect demographic data, assess their understanding of iTechnology, and the merits and limitations of the training sessions. The Phase I cohort participants received Survey 1 following their initial training session, Survey 2 following their third training session, Survey 3 after having their device for 6 months and Survey 4 after having their device for a year. The Phase 2 cohort participants received Survey 1 following their initial training session, Survey 2 following their third training session, Survey 3 after having their device for 6 months and Survey 4 after having their device for 9 months. Charts 7-12 detail Phase 1 and Phase 2 participants' demographics, including race, age, county of residence, and primary and secondary disabilities.



Four participants in Phase 1 and 3 participants in Phase 2 identified as Hispanic, Latino, or Spanish in origin. In Phase 1, seven participants identified as female and three as male. In Phase 2, 14 participants identified as female and 14 as male.

Chart 9
County (Phase 1)

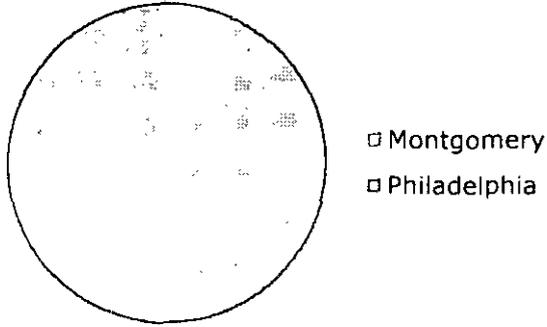


Chart 10
County (Phase 2)

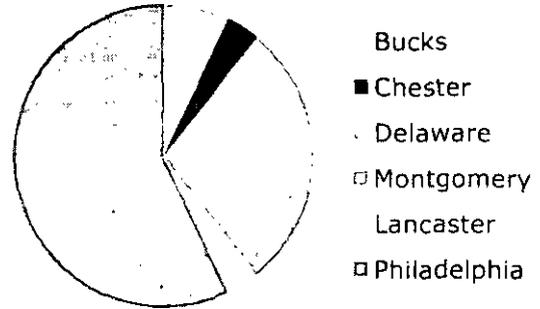


Chart 11
Primary Disability

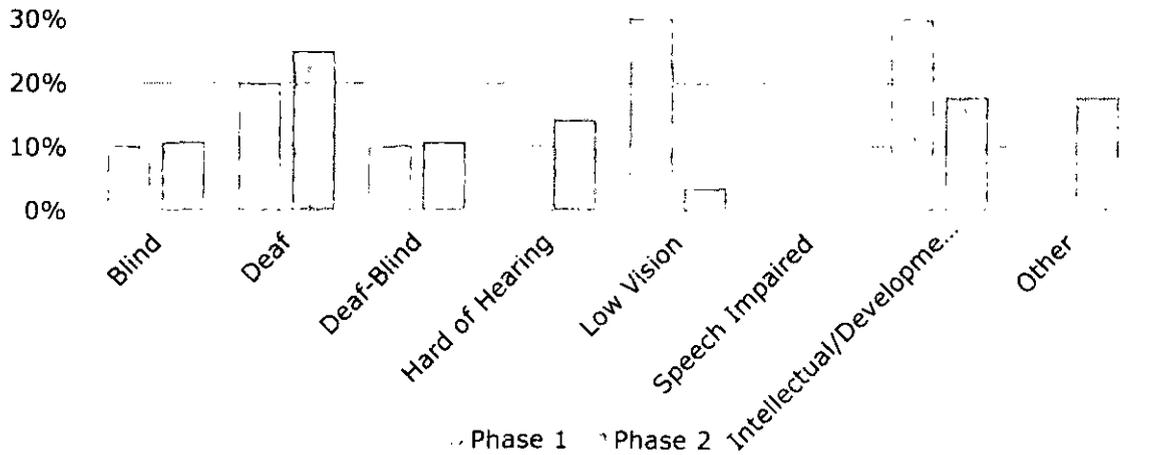
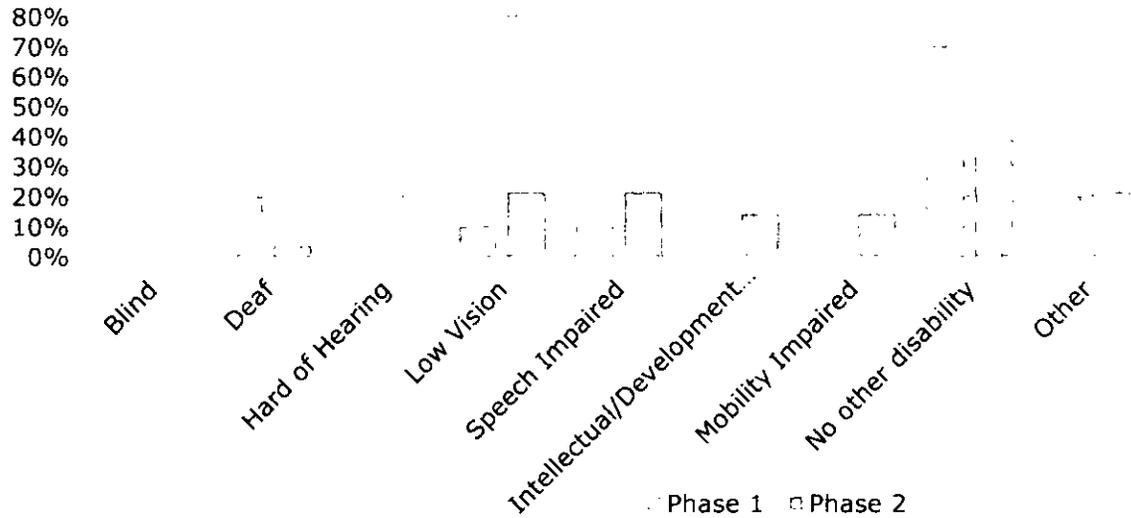


Chart 12
Additional Disabilities



Charts 13-15 depict Phase 1 and 2 participants' currently used devices, main forms of communication, and knowledge about using iTechnology.

Chart 13
Devices Currently Used

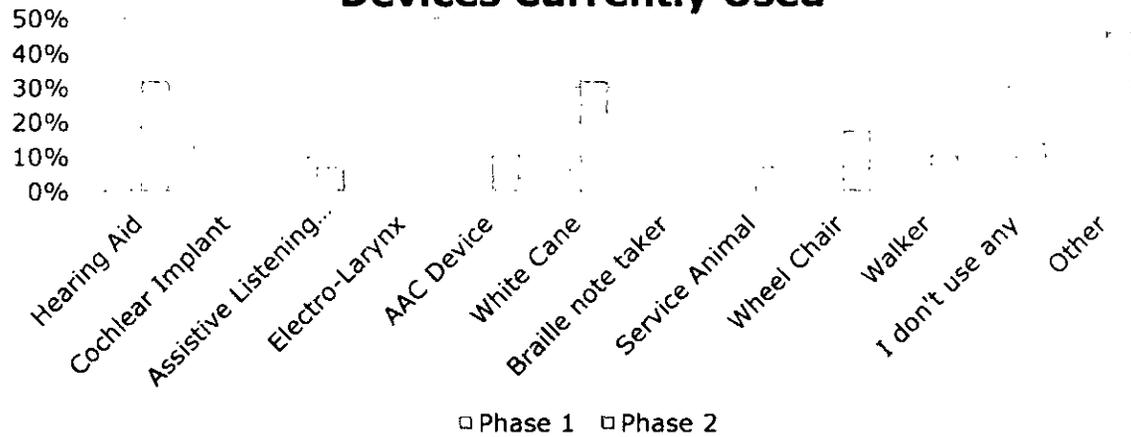


Chart 14
Main form of communication

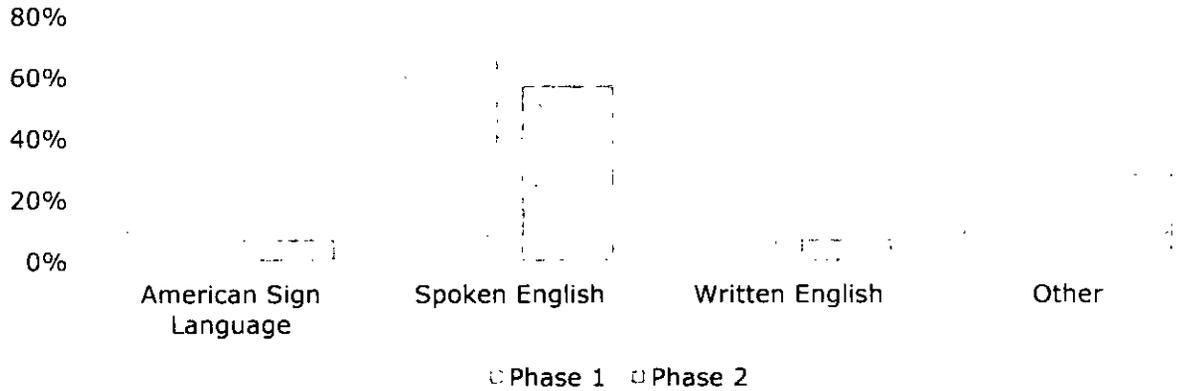
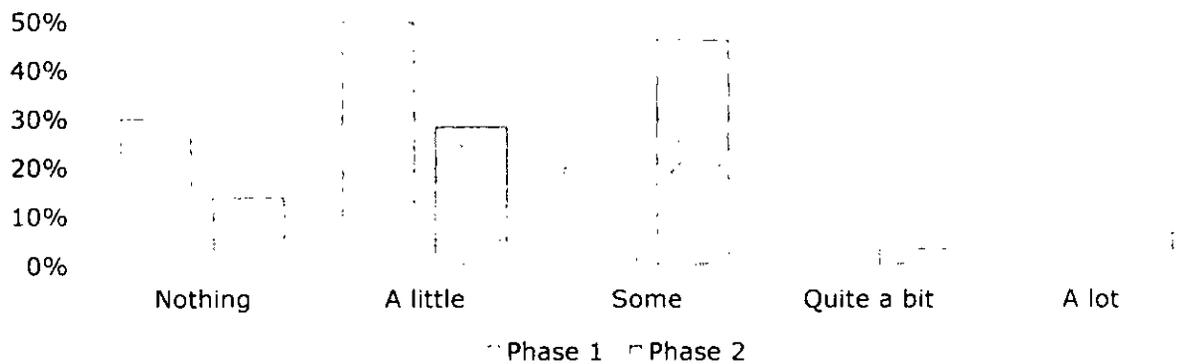


Chart 15
What I know about using iTechnology



According to survey data, the primary reason participants applied for this Wireless Study was to learn new technology (77.78% in Phase I and 89.29% in Phase 2), followed by interest in telecommunication from outside the home (77.78% in Phase 1 and 85.71% in Phase 2) and accessing a mainstream device (44.44% in Phase 1 and 85.71% in Phase 2).

During Phase 1, 25% of participants documented in Survey 2 that they used their iDevice every day and 25% used it twice per week. By Survey 4, 45% of participants used their iDevice everyday and 27% almost everyday. During Phase 2, 60% of participants documented in Survey 2 that they used their iDevice every day and in Survey 4, 53% used their iDevice every day. By Survey 4, 63% of participants in Phase 1 and 38% of participants in Phase 2 described their iDevice as their main tool for communication. Additionally, 55% of Phase 1 participants and 47% of Phase 2 participants tend to use their iDevice more than other telecommunications equipment. 100% of participants in Phase 1 and 83% of

participants in Phase 2 felt they were more connected to their community since receiving their iDevice. By the end of Phase 1, 70% of participants were very satisfied, 20% satisfied, and 10% neutral to their iDevice. By the end of Phase 2, 60% were very satisfied, 30% satisfied, and 10% neutral to their iDevice.

80% of Phase 1 participants and 86% of Phase 2 participants feel iDevices are accessible to people with disabilities. 100% of Phase 1 and 2 participants would recommend iDevices become part of the TDDP program. Additionally, a majority of participants (55.56% in Phase 1 and 71.43% in Phase 2) felt they could give valuable feedback to other people who may have similar telecommunication difficulties.

Interviews

During Phases 1 and 2, we conducted face-to-face interviews with the participants. Accessibility was accomplished through scheduling interviews directly preceding or following training sessions and with the support of an interpreter or companion when necessary. We kept interviews to approximately 10 minutes in length or less. Interview data corroborated and was validated by data collected via survey and participant observation. Eight participants from Phase 1 and 28 participants from Phase 2 were interviewed. Phase 2 participants had one of the following devices: iPad, iPad mini, iPad Air, and iPhone 7.

Participants expressed great joy for the device, exclaiming "I love it" and "It's been a blessing for us." Participants accessed communication tools like Hangouts, FaceTime, Skype, Glide, Oro Marco Polo, ooVoo, Sorenson, Purple Communications, Touch chat with Word Power, messages, and email. They also accessed the internet, Facebook, YouTube, ReadyPA, photos, maps, and the calendar, calculator, and clock. Participants employed features like Siri, V.O., Swype, contrast, and closed captioning. Participants used these apps and features most frequently to communicate effectively and efficiently with friends, family, and fellow participants; staff, doctors, and service providers; and school and business contacts regarding their needs, feelings, and wants. Participants felt the device had augmented their ability to communicate, through its convenience and ability to talk to type. They also used the device for business and leisure, including emails, keeping track of their goals, engaging in advocacy, exploring, learning, and reading.

Most participants expressed positive changes to their day-to-day life, stating the devices made them happier, safer, and more independent, and made their lives easier. One participant said the pilot program "has opened a door and made me come alive again after all the discrimination I have experienced for my handicap...For a blind person to see and enable me to read makes me skippy. This project makes a level playing field for people like me, makes the competition fair." Another described it as "a life changer. I am back into the broader community. I'm more confident, outgoing." Another summed it up with, "I love it. I can call people

by myself. I can do basically anything I want." Additionally, multiple participants stated they were learning many new things about modern technology. One participant expressed it had not changed their daily life much, but they appreciated being able to watch videos with closed captioning.

Participants found the devices helped with their disabilities in three specific ways. It facilitated communication, task completion, and remaining informed. Specifically, participants used voice over, video messaging, and captioning to help with hearing and the magnifier and flashlight to reduce eyestrain. One participant pointed out that the lightweight device makes it highly portable. Another stated that the device "enhances life for someone with ID." Accordingly, participants counted the ability to communicate in myriad ways, access information, maintain safety with no upfront cost among the greatest benefits of the device. The greatest limitations were learning how to use the device, paying for data and/or relying on Wi-Fi, using compatible apps to communicate with others, and when the technology does not work as expected. All participants plan to use the device once the project has ended.

Most participants did not experience an urgent or emergency situation wherein they required the device. However, a few pointed to the ability to access health information and urgent local news. One participant used it to contact the doctor when she woke up with symptoms. The doctor was able to quickly assess the patient and prescribe treatment. One used 911 without issues and found the flashlight very useful. One participant used VoiceOver with the Uber app to get an emergency ride. One participant had used the device twice for health emergencies. One participant was not aware about how to use the device for emergency communication.

Most participants did not use tech support. Three participants used Teltex for support setting up an app. One received assistance resetting the device when it would not turn on. One used Raz Mobility and another Associated Services for the Blind and Visually Impaired. Participants felt the project staff supported them well. They described the project staff as very patient, informative, wonderful teacher, experienced, available, and kind. One participant stated, "They are patient with me, give me time. I come to class relaxed, not tense. Able to find solutions in kind, dignified way." "You can teach "an old dog new tricks," stated another. Negative experiences with the device had to do with technical difficulties, "I'm really enjoying it but it's making me crazy. It's a lot to learn. I'm taking classes." At the end of the trainings, participants had remaining questions as to their device's capabilities. One participant suggested there be different trainings for people who are very new to this technology and those who are well informed while another suggested more one-on-one sessions.

ANALYSIS

Diverse participants, according to race, ethnicity, age, gender, and disability type, characterized phases 1 and 2. A majority of participants in both Phases reside in Philadelphia County, followed by Delaware and Montgomery Counties in Phase 2.

By the end of each phase, a majority of participants used their iDevice every day. A majority of participants was interested in the Wireless Pilot to engage in telecommunication from outside the home and by the end of the trainings, a majority of participants found the iDevices convenient to use and tended to use them more than other telecommunications equipment. Participants most frequently used the device to communicate with family, friends, service providers and colleagues regarding their needs, feelings, and wants. Most participants expressed positive changes to their day-to-day life, stating the devices made them happier, safer, and more independent and connected to their community. The devices helped with the participants with their disabilities by facilitating communication, task completion, and remaining informed. Participants cited the zero cost and mainstream aspect of the iDevice, along with its apps and features that helped participants communicate and save time, as the greatest aspects of the Wireless Pilot.

The greatest limitations were learning how to use the device, paying for data and/or relying on Wi-Fi, scheduling conflicts and technical difficulties. All participants plan to use the device once the project has ended.

While few participants had cause to use the device for an emergency, those that did were able to communicate easily their needs. Most participants did not use tech support and relied on project staff who they described as patient and informative. Negative experiences during the pilot centered on technical difficulties. A majority of participants felt iDevices were accessible to people with disabilities. All participants plan to use the device once the project has ended and recommended that iDevices become part of the TDDP program.

CONCLUSIONS

As we synthesize, understand and analyze the data we collected, we revisited our original questions.

- (a) Will the availability of wireless technologies increase utilization of the program by younger Pennsylvanians?

TDDP records show that 84% of the applications for traditional TDDP equipment are aged 65 and older. Participant ages for the wireless pilot ranged in age from 6 to 89. Based on ages of the participants, the average participant age was 48. This gives us an indication that if wireless devices were included in TDDP there would be an increase in applications among younger people.

Comparison by age of Wireless applicants and TDDP applicants from the project period (January 2016 – February 2017)

Ages	TDDP	Wireless	TDDP %	Wireless %
0-5	0	0	0.00%	0.00%
6-10	0	3	0.00%	4.62%
11-16	1	2	0.20%	3.08%
17-21	1	2	0.20%	3.08%
22-55	38	39	7.74%	60.00%
56-60	16	6	3.26%	9.23%
61-64	21	4	4.28%	6.15%
65+	411	9	83.71%	13.85%

As shown above, we experienced a significant increase in younger Pennsylvanians (under 65 years old) with disabilities applying for the wireless pilot. 86% of wireless applicants as compared to 16% of traditional TDDP applicants were under 65 years old.

- (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?

Data plans were only available to participants in Phase 2. The participants who selected devices that required data plans (iPhones and some iPads with 4G capability) were made aware that they would be responsible for the fees associated with the data plan, and this was acceptable to them.

- (c) Will people with disabilities accept “locked” wireless technologies (e.g. with restricted access to telecommunications “apps”)?

Most participants accepted locked wireless devices for the wireless pilot. One parent withdrew her child from the pilot because she wanted the child to have immediate access to all apps and features of the device, without waiting until the end of the pilot.

- (d) Which wireless telecommunications devices and which apps are preferred for telecommunications access and by Pennsylvanians with which disability characteristics?

IPads, iPad Minis, and iPhones were the devices preferred by participants. The Jitterbug Flip and Jitterbug Smartphone were listed as available equipment during Phase 2, but were not selected by any participants. Based on trainers' experiences and participant feedback, frequently used apps were Google Hangouts, Google Duo, FaceTime, Marco Polo, Talkatone, Text and Email.

- (e) How will access to these wireless technologies improve access to telecommunications? How frequently and for what purposes will the wireless devices be used?

Access to these wireless technologies helped participants remain connected to family, friends, and professionals. Usage statistics provided to us by Teltex showed that 83% to 95% of the devices were in use during the pilot. Participants were able to use their devices to increase and improve communication at home, at work and in the community.

- (f) How much training will people need to use 21st Century wireless technologies?

The training time needed varied based on an individual's prior experience with the technology, their disability, literacy level, and their access mode (e.g. Voice Over). Therefore, we are not recommending any training be provided for a permanent program. Instead, we would provide recipients with various online resources and videos for learning support, and suggest they seek support from friends, family and others in the community. In addition, we could also provide an option of a maximum of 2 hours of device support (as currently provided in the traditional program).

- (g) Are there differences in the usefulness of the program that varies by age? By type of disability?

Information gathered from the participant surveys and interviews shows that all participants reported that they benefited from the program. They reported that they were able to communicate with friends and family, and feel more connected overall. There was no significant difference in satisfaction or benefit of program reported based on age or disability type. Participants over the age

of 55 reported that they made greater strides in the learning (pre-knowledge level to post-knowledge level), however satisfaction and benefit has no variation with age. All disability types reported similar satisfaction and benefit of program, yet different disability types reported different benefits. Participants who were deaf or hard of hearing discussed their increased mobility with access to telecommunication devices that were not located solely in their homes. Participants who were blind or low-vision discussed the usefulness of the voice-over and screen reader functions of their devices.

- (h) How much will an expanded program cost (1) on a temporary trial pilot basis;

(1) Projected costs for Phase 1 were \$82,766.51. Actual costs for Phase 1 were \$28,092.92. Projected costs for Phase 2 were \$90,216.51. Actual costs for Phase 2 were \$69,409.17.

(2) on a permanent basis with a wider distribution scope?

Please see cost of expanded program section below.

- (i) Was group training sufficient or was individual training necessary?

This varied depending upon disability group, the participant's prior experience with the technology, literacy level and learning style. Most trainings began as a group, and some participants shared information with their peers in the group setting, but as time went on it was determined that some people needed individual training sessions.

- (j) Would equipment with Wi-Fi capabilities (without data plans) suffice?

Yes. In Phase 1, participants only received Wi-Fi only devices and it did not discourage participation. In Phase 2, when participants had the option to choose between Wi-Fi and a data plan, most chose to have Wi-Fi only.

- (k) What was the most efficient amount, type and content of training and technical assistance possible?

The most efficient method of training provided was one-on-one training. The participant could receive training in the method that best met their need without feeling that they were holding back the rest of the group. The trainer could also provide more individual assistance with any technical issues with devices, setup, and apps.

RECOMMENDATIONS

One of the reasons for proposing a wireless pilot was to bring telecommunications equity to people with disabilities, enabling them to remain connected to family, friends, providers, and employers, not just at home but while they are out in the community.

Traditional TDDP only provides landline equipment. As we have stated, use of landlines is declining, and newer digital phone service is often not compatible with specialized landline telephone equipment (e.g. TTYs). Providing equal access to wireless technologies will bring more participants to TDDP and also bring younger participants, who often don't have landline service.

Wireless devices are no longer a luxury; in today's society they are a necessity. In addition, accessibility features and apps allow people with disabilities to use wireless devices more easily and access distance communication in multiple ways according to their functional needs.

A great deal of training was provided during the wireless pilot. We wanted to see what type of training was most effective, and overall, individualized training seemed to be the most effective. However, implementing individualized trainings on a statewide level would be time and cost prohibitive.

We are recommending that a permanent wireless program would fund the purchase of wireless equipment and accessories necessary to use that equipment independently, but not include training. Instead of comprehensive training, we propose offering optional minimal device support along with the provision of other learning resources such as a help desk, online training and other natural supports in the community.

COST OF EXPANDED PROGRAM

Permanent expansion of the TDDP program to include wireless technology will provide more agile and effective distance communication devices to mobile, younger people with disabilities. It will also increase the cost of the traditional TDDP program. When calculating the potential increase in cost, we must consider

- (1) The increase in number of people accessing the program,
- (2) The increased costs of the actual devices,
- (3) The increase administrative costs associated with more consumers and devices,
- (4) The increase in demonstration and loaner equipment and,
- (5) The additional training/support needed for the recipients.

INCREASED NUMBER OF PEOPLE SERVED

If a wireless option was made permanent, we anticipate an increase in 30% of the total recipients served each year. This calculation was made from analysis of the programs in Colorado and Missouri. Of the new total number of recipients, we anticipate that 30% would request wireless devices. This increase in the number of recipients would result in an anticipated number of recipients of 402. Looking at other statewide programs, 28% of the applicants requested wireless devices. Because of our large urban centers, we anticipate that the average in Pennsylvania would be 30%.

INCREASED DEVICE COST

Wireless devices, particularly devices with support/service plans cost 90% more than traditional landline equipment. As indicated in the table below, Pennsylvania's TDDP program averages \$135 per participant in equipment cost. The wireless initiative averaged \$1,273 per participant in equipment costs. By providing equipment without service/support packages, we can reduce this average equipment cost to \$547 per recipient.

	Traditional 2015-2016	Traditional 2016-2017	Wireless Initiative	Projected without service package
# of Recipients	328	291	38	38
Total # of Equipment	430	375	60	60
Total Equipment Cost	\$ 44,346	\$ 39,276	\$ 48,370	\$ 20,774
Average Equipment Cost	\$ 135	\$ 135	\$ 1,273	\$ 547

In comparing two other states that have permanent TDDP Wireless programs, Colorado and Missouri, we can take a glimpse at how the development of a permanent TDDP Wireless program has changed the type of equipment requested/distributed through each specific program. Given the different requirements that each state uses as well as the different characteristics of each Wireless program it is hard project how the equipment change will occur in Pennsylvania if the Wireless program becomes permanent. We can assume that there will be a gradual increase in the demand for wireless equipment as was the case with both Colorado and Missouri; we would project wireless to make up at least 30% of the total program equipment.

Colorado	Traditional Equipment	Wireless Equipment	Wireless % of Total Program Equipment
FY16	118	26	22.0%
FY17	89	42	47.2%

Missouri	Traditional Equipment	Wireless Equipment	Wireless % of Total Program Equipment
FY16	1533	356	23.0%
FY17	1391	245	17.6%

INCREASED ADMINISTRATIVE COST

With an increase in number of participants and equipment options, administrative costs would also increase. For a statewide program to be successful, the regional assistive technology resource centers (ATRCs) would need additional funds to provide outreach and training for a permanent wireless program. Based on the ATRC's average allocation for the past 3 years, plus an estimated increase in recipients of 30%, we would estimate that the increase in allocation would be approximately \$13,000.

ATRCs would also need to receive training to become more familiar with various accessibility features and telecommunication apps. This would require additional

funding of \$8,450 annually for Pennsylvania's Initiative on Assistive Technology (PIAT) staff time to create, coordinate and implement such ongoing trainings for the ATRCs.

In anticipation of increased applications, PIAT would also require additional funding of \$16,016 annually from OVR to cover increased Administrative costs.

INCREASED DEMONSTRATION AND LOAN EQUIPMENT

Since the functionality of the iOS accessibility features and apps are similar to the iPhone, we would propose providing each ATRC with a demo iPad and demo Android based device, pre-loaded with suggested apps. These devices would be kept for demonstration purposes only. We would also propose adding iPads and Android devices to the ATLL Lending Library inventory. The cost of these devices would depend on whether or not they will be managed by Teltex or purchased directly from Apple and managed by AT Lending Library staff. We would also propose that ATRCs receive demo units for any signalers or accessories offered through the Wireless program, and that this equipment also be added to the AT Lending Library. Loan equipment needs to be updated at least every three years.

Initially each ATRC would need approximately \$5000 for self-managed devices and signaling equipment totally \$45,000. In addition, the statewide lending library would need \$25,000 for additional devices and signaling equipment. Demonstration equipment needs to be updated at least every three years.

Actual current price list for this equipment can be found in Attachment 7.

INCREASED TRAINING COST

Each person receiving equipment would be able to receive up to two hours of live training on use of the equipment. Individual training would be held at the appropriate regional center. Recipients would be encouraged but not mandated to identify a person known to them to be their equipment "support person" to help with building competence and confidence with the equipment.

In addition, recipients could receive support through phone call, video conference, email or text chat with a "help desk" during specified and consistent times. This cost-effective solution would need to be funded by the permanent program and would include 10 hours of PIAT staff time weekly as well as nominal technological framework. The annual cost for this "help desk" would be \$16,900 per year.

SUMMARY OF EXPANDED PROGRAM

In summary, the anticipated increase in cost to provide wireless devices in addition to traditional landline devices would be approximately \$114,000 per year if the equipment did not come with extended service and support. We would provide support via a "help desk" model and increased training to the ATRCs.

	One Time Start Up Expenses	Anticipated Annual Increase if Permanent	
Number of Recipients			30% increase
Cost of Equipment		\$ 62,390	149% increase
Education/Outreach - ATRCs		\$ 13,000	
Admin Costs - PIAT staff time		\$ 13,520	
Demo Equipment	\$ 45,000	\$ 15,000	
Loaner Equipment	\$ 25,000	\$ 8,333	
Help Desk Costs	\$ 750	\$ 16,900	
	\$ 70,750	\$129,143	

ATTACHMENTS

Attachment 1: Wireless Pilot-Description of Procedures and Controls

Attachment 2: IRB Initial Approval and Approval of Continuing Research

Attachment 3: Stamped Consents (3)

Attachment 4: Wireless Pilot Interview Protocol

Attachment 5: Wireless Phase 1 Test Survey and Surveys 1-4

Attachment 6: Wireless Phase 2 Test Survey and Surveys 1-4

Attachment 7: Equipment Price List

TDDP Wireless Pilot: Description of Procedures and Controls

Contract Awarding Processes for Program-related Equipment and Device Vendors - The 'preferred' vendor contracted to supply equipment to the Pennsylvania Telecommunication Device Distribution Program (TDDP) Wireless Expansion Initiative (WEI) and deliver the best overall value to the program pilot study based on the price, delivery capabilities, quality, past performance, training, financial stability and ease of ordering:

Preferred Equipment Vendor

Teltex, Inc
1081 West Innovation Drive
Kearney, MO 64060

The contract is a result of a competitive Request for Proposal (RFP) issued in September 2010 by the Institute on Disabilities, with guidance from Temple University's Purchasing Department.

Participants Eligibility - To be eligible for equipment through the Telecommunication Device Distribution Program (TDDP) Wireless Expansion Initiative pilot study participants must satisfy the following requirements:

1. Be a Pennsylvania resident with a disability that limits your access to mobile telecommunication;
2. Be six years of age or older;
3. Have individual gross income of 200% of the federal poverty level or less (low income);
4. Have access to Wi-Fi service or for wireless cell phone selection, must be able to acquire a data plan; and
5. Have the ability to learn how to use the requested device(s). Have an individual (not including family/household) gross income of 200% or less of the Federal Poverty level in effect at the time of the application.

Participant Requirements - An important part of the Wireless Expansion Initiative (WEI) pilot program is participant communication, training and feedback.

All participants are required to:

1. Attend a matching meeting to match a device to each participant;
2. Attend six matching meetings (phase-one) or four matching meetings (phase-two) at Temple University in Philadelphia (travel/parking expenses are the responsibility of the participant) or designed off-site location;
3. Attend two meetings virtually;
4. Respond to periodic surveys via email.

Individuals who currently have wireless telecommunication equipment that is in working order and meets their needs related to their disability are ineligible to receive equipment

from the TDDP Wireless Expansion Initiative. People can apply for equipment once every three years. The Wireless Program Coordinator checks the TDDP secure database to verify that an applicant is not requesting replacement equipment PRIOR to the expiration of the three-year period. An exception to the three-year period is granted if the applicant can document s/he had a change in disability resulting in the inability to use the equipment they previously received. Also, TDDP equipment lost due to theft, fire, flood, power outage, or similar emergency or disaster may be replaced if documentation is provided (e.g. police report).

Reviewing and Processing Application -When an application is received by the TDDP Wireless Pilot Coordinator, the applicant's information is entered in a secure database, which generates a unique application number. A file is created under the applicant's name and application number. Next, the application is reviewed against the eligibility requirements. If any information (i.e. necessary data not filled in, Certification of Disability not signed or signed by a person unauthorized to do so), or supporting documentation (proof of income, residency, access to Wi-Fi or data plan) is missing, the applicant is notified, either by phone or in writing, of the information needed to complete the application process. As soon as an application is complete, that is, all information and supporting documents are submitted, a determination of eligibility is made and eligible participants are notified in writing that they have been selected to participate in the pilot study. Eligible participants with missing documentation receive an incomplete letter with a checklist of what missing information is required.

Approval and Payment Process for Invoices Associated with TDDP Related Equipment and Devices - Invoices received from the equipment vendor (Teltex, Inc.) are reviewed by the TDDP Program Manager. The Program Manager checks the invoices to make sure they are accurate with equipment ordered and ensures that the price charged for the equipment corresponds with the current accepted bid price. The Program Manager verifies the signature delivery receipt for each item. The Program Manager then signs each invoice and submits the invoices, along with a transmittal letter, to the TDDP Fund Administrator at US Bank Institutional Trust & Custody.

Certification of Re-Approval for a Project Involving Human Subjects

Date: 05-Jan-2017

Protocol Number: 23261

PI: GOLDMAN, AMY

Review Type: EXPEDITED

Approved On: 03-Jan-2017

Approved From: 11-Jan-2017

Approved To: 10-Jan-2018

Committee: A1

School/College: INSTITUTE ON DISABILITIES (IOD) (1905)

Department: ED:INSTITUTE ON DISABILITIES (19930)

Sponsor: NO EXTERNALSPONSOR

Project Title: Wireless Expansion Initiative: Promoting Telecommunications Equity for
People with Disabilities in Pennsylvania

The IRB re-approved the protocol 23261.

If applicable to your study, you can access your IRB-approved, stamped consent document or consent script through eRA. **Open the Attachments tab and open the stamped documents by clicking the View icon next to each document.** The stamped documents are labeled as such.

Before an approval period ends, you must submit the Continuing Review form via the eRA module. Please note that though an item is submitted in eRA, it is not received in the IRB office until the principal investigator approves it. Consequently, please submit the Continuing Review form via the eRA module at least 60 days, and preferably 90 days, before the study's expiration date.

As a reminder, you are obligated to submit modification requests for all changes to any study; reportable new information using the Reportable New Information form; and renewal and closure forms. For the complete list of investigator responsibilities, please see the Policies and Procedures, the Investigator Manual, and other requirements found on the Temple University IRB website: <http://www.temple.edu/research/regaffairs/irb/index.html>

Please contact the IRB at (215) 707-3390 if you have any questions



Research Integrity & Compliance
Student Faculty Center
3340 N. Broad Street, Suite 304
Philadelphia PA 19140

Institutional Review Board
Phone: (215) 707-3390
Fax: (215) 707-9100
e-mail: irb@temple.edu

Certification of Approval for a Project Involving Human Subjects

Date: 11-Jan-2016

Protocol Number: 23261

PI: GOLDMAN, AMY

Review Type: EXPEDITED

Approved On: 11-Jan-2016

Approved From: 11-Jan-2016

Approved To: 10-Jan-2017

Committee: A1

School/College: INSTITUTE ON DISABILITIES (IOD) (1905)

Department: ED:INSTITUTE ON DISABILITIES (19930)

Sponsor: NO EXTERNAL SPONSOR

Project Title: Wireless Expansion Initiative: Promoting Telecommunications Equity for
People with Disabilities in Pennsylvania

The IRB approved the protocol 23261.

If the study was approved under expedited or full board review, the approval period can be found above. Otherwise, the study was deemed exempt and does not have an IRB approval period.

If applicable to your study, you can access your IRB-approved, stamped consent document or consent script through eRA. **Open the Attachments tab and open the stamped documents by clicking the View icon next to each document.** The stamped documents are labeled as such.

Before an approval period ends, you must submit the Continuing Review form via the eRA module. Please note that though an item is submitted in eRA, it is not received in the IRB office until the principal investigator approves it. Consequently, please submit the Continuing Review form via the eRA module at least 60 days, and preferably 90 days, before the study's expiration date.

Note that all applicable Institutional approvals must also be secured before study implementation. These approvals include, but are not limited to, Medical Radiation Committee ("MRC"); Radiation Safety Committee ("RSC"); Institutional Biosafety Committee ("IBC"); and Temple University Survey Coordinating Committee ("TUSCC"). Please visit these Committees' websites for further information.

Finally, in conducting this research, you are obligated to submit modification requests for all changes to any study; reportable new information using the Reportable New Information form; and renewal and closure forms. For the complete list of investigator responsibilities, please see the Policies and Procedures, the Investigator Manual, and other requirements found on the Temple University IRB website: <http://www.temple.edu/research/regaffairs/irb/index.html>

Please contact the IRB at (215) 707-3390 if you have any questions

Temple IRB Approved

01/11/2017

Title of the research study: Wireless Expansion Initiative: Promoting Telecommunications Equity for People with Disabilities in Pennsylvania

Name and Department of investigator: Amy Goldman, Co-Executive Director, Institute on Disabilities

We are asking for permission to include your child in our research study. In this form, "you" and "yours" refers to your child.

This study involves research. The purpose of the research is to see if using wireless devices will help make it easier or better for people with disabilities like yours to give and get information.

What you should know about a research study:

- Someone will explain this research study to you.
- You volunteer to be in a research study.
- Whether you take part is up to you.
- You can choose not to take part in the research study.
- You can agree to take part now and later change your mind.
- Whatever you decide, it will not be held against you.
- Feel free to ask all the questions you want before and after you decide.
- By signing this consent form, you are not waiving any of the legal rights that you otherwise would have as a participant in a research study.

You would be in this research study for up to a year and a half.

The study procedures consist of an in person session with the research team to determine the best device for you and to give you your device, a training session to learn how to use your device and the apps that come with it, focus groups that will include advanced training of the device and surveys. During your trainings and focus groups you may be asked to participate in one-on-one interviews either at the time of the trainings or at a time that is convenient to you using your device.

The study procedures specifically include:

1. The use of one of the following devices: Apple iPad, Apple iPad Air, Apple iPad Mini, Apple iPod Touch

2. The apps used in the study are commercially available and chosen for you based on your disability
3. You will be participating in:
 - Four focus groups lasting 1-2 hours at months 1,3,6, and 11 of the study
 - If chosen, 2 interviews that are 5-10 minutes long and a participant observation
4. In total there are 6 in-person meetings to attend
5. Participants are expected to complete 4 surveys to help identify needs and trends that the research will need to address. The surveys will be administered once you receive your device, after two of the focus groups and through email for a 18 month follow-up.

You will be responsible for transportation to Temple University during the study for 5 in person meetings over the course of 12 months. Times of the meetings will be held primarily on Saturday mornings.

This study has been posted publically, so if you join the research other people may know about it. We do not think that it would get you in trouble or cause problems with other people if others know that you are taking part in our research. We will also do our best to make sure that any identifying information we get from you is not shared with anyone outside our research team. You will also be responsible for finding and paying for transportation to come to Temple University for the visits. You will also be responsible for any costs to have and use Wi-Fi service.

Not participating or stopping participation in the research does not affect eligibility for the Telecommunication Device Distribution Program (TDDP).

There are two groups of people being included in the research and if you are not selected for the first group then you may be included in the second group, which is expected to begin in 12 months.

By taking part, it is possible that the wireless device may help make it easier to communicate, or it may not. If you complete the research study we will give you the wireless device to keep. Please contact the research team with questions, concerns, or complaints about the research and any research-related injuries by contacting Sally Gould-Taylor, Director of Research and Evaluation at the Institute on Disabilities:

Institute on Disabilities
1755 N. 13th Street
Student Center Suite 411S
Philadelphia, PA 19122
Phone: 215-204-5775
E-mail: sgould-taylor@temple.edu

This research has been reviewed and approved by the Temple University Institutional Review Board. Please contact them at (215) 707-3390 or e-mail them at: irb@temple.edu for any of the following: questions, concerns, or complaints about the research; questions about your rights; to obtain information; or to offer input.

Confidentiality: To the extent allowed by law, we limit the viewing of your personal information to people who have to review it. We cannot promise complete secrecy. The IRB, Temple University, the Telecommunications Relay Services Fund and regulatory agencies, such as the Food and Drug Administration and the Department of Health and Human Services may inspect and copy your information. If you stop being in this research, already collected data may not be removed from the research database. If you decide to leave this research, contact the research team so that the device can be returned to the research team.

Signature Block for Child Subject

Your signature documents your permission for the child named below to take part in this research.

Printed name of child

Signature of parent or individual legally authorized to consent to the child's general medical care

Date

Printed name of parent or individual legally authorized to consent to the child's general medical care

Signature of second parent

Date

Printed name of second parent

If signature of second parent not obtained, indicate why: (select one)

- The IRB determined that the permission of one parent is sufficient
- Second parent is deceased
- Second parent is unknown
- Second parent is incompetent
- Second parent is not reasonably available
- Only one parent has legal responsibility for the care and custody of the child

Signature of person obtaining consent

Date

Signature of person obtaining consent

• *[Add the following block if you will document assent of children using the consent document.]*

Assent

- Obtained
- Not obtained because the capability of the child is so limited that the child cannot reasonably be consulted.

Temple IRB Approved

01/11/2017

Title of the research study: Wireless Expansion Initiative: Promoting Telecommunications Equity for People with Disabilities in Pennsylvania

Name and Department of investigator: Amy Goldman, Co-Executive Director, Institute on Disabilities

This study involves research. The purpose of the research is to see if using wireless devices will help make it easier or better for people with disabilities like yours to give and get information.

What you should know about a research study:

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- You volunteer to be in a research study.
- Whether you take part is up to you.
- You can choose not to take part in the research study.
- You can agree to take part now and later change your mind.
- Whatever you decide, it will not be held against you.
- Feel free to ask all the questions you want before and after you decide.
- By signing this consent form, you are not waiving any of the legal rights that you otherwise would have as a participant in a research study.

You would be in this research study for up to a year and a half.

The study procedures consist of an in person session with the research team to determine the best device for you and to give you your device, a training session to learn how to use your device and the apps that come with it, focus groups that will include advanced training of the device and surveys. During your trainings and focus groups you may be asked to participate in one-on-one interviews either at the time of the trainings or at a time that is convenient to you using your device.

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Signature Block for Adult Subject Unable to Consent

Your signature documents your permission for the individual named below to take part in this research.

Printed name of subject

Signature of legally authorized representative

Date

Printed name of legally authorized representative

Signature of person obtaining consent

Date

Printed name of person obtaining consent

[Add the following block if you will document assent of the subject using the consent document.]

- Assent Obtained
 Not obtained because the capability of the subject is so limited that the subject cannot reasonably be consulted.

Temple IRB Approved

01/11/2017

Title of the research study: Wireless Expansion Initiative: Promoting Telecommunications Equity for People with Disabilities in Pennsylvania

Name and Department of investigator: Amy Goldman, Co-Executive Director, Institute on Disabilities

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You would be in this research study for up to a year and a half.

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Signature Block for Adult Subject Capable of Consent
Your signature documents your permission to take part in this research.

Signature of subject

Date

Printed name of subject

Signature of person obtaining consent

Date

Printed name of person obtaining consent

Attachment 4

Wireless Pilot Interview Protocol

Participant Name:

Interviewer Name:

Date:

1. Tell me about how you are enjoying using your device?
 - a. What apps/programs do you use most?
 - b. For what reasons?
2. What do you use the device for most often?
3. Who do you contact utilizing the device?
4. Have you used the device for any urgent or emergency communications?
5. How has having the device changed your day to day life?
6. How does the device help with your disability?
7. What has been the biggest benefit? The biggest limitation?
8. Have you used any technical support?
9. How can project staff better support you?
10. When the project is over, do you plan to continue to use the device?

Wireless Expansion Pilot: Phase 1: Survey 1 - May 3, 2016

Demographic Questions

1. Enter participant ID number.

2. How do you describe yourself?

- White or Caucasian
- Black or African American
- American Indian or Alaska Native
- Asian or Asian American
- Other (please specify)

3. I am of Hispanic, Latino, or Spanish origin:

- Yes
- No

4. Please tell us the county where you live:

- Bucks
- Chester
- Delaware
- Montgomery
- Philadelphia

5. Which category below includes your age?

- 17 or younger
- 18-29
- 30-39
- 40-49
- 50-59
- 60 or older

6. How do you describe yourself?

- Male
- Female
- Other
- Prefer not to answer

7. What is your main form of communication?

- American Sign Language
- Spoken English
- Written English
- Other (please specify)

8. Please check any devices that you currently use:

- Hearing Aid
- Cochlear Implant
- Assistive Listening Device
- Electro-Larynx
- Augmentative and Alternative Communication (AAC) Device
- White Cane
- Braille note taker
- Service Animal
- Wheel Chair
- Walker
- I don't use any
- Other (please specify)

9. This pilot is studying specific groups of individuals who find telecommunication access difficult. Based on the groups in this pilot, what do you consider to be your primary disability?

- Blind
- Deaf
- Deaf-Blind
- Hard of Hearing
- Low Vision
- Speech Impaired
- Intellectual/Developmental/Cognitive

10. In addition to the disability noted above, I also have the following disability (select all that apply):

- Blind
- Cognitive/Learning Disability
- Deaf
- Hard of Hearing
- Low Vision
- Mobility Impaired
- Speech Impaired
- No other disability
- Other (please specify)

Wireless Expansion Pilot, Phase 1, Survey 1 - May 3, 2016

Questions about Pilot

11. I am using my _____ for this survey:

- iPad
- iPad mini
- iPod touch
- Paper and Pen/Pencil

12. I am taking this survey at _____?

- Home
- at the library
- at school/college/university
- in a public location (examples: Starbucks, McDonalds, Taco Bell, Burger King, Gas Station, State Park, Community Center)
- At a neighbor's/friend's/other family member's home
- Other (please specify)

13. When it comes to understanding how to use iTechnology, I know_____.

- Nothing, I need a lot of help
- A little, I need some help
- Some, I may require some help
- Quite a bit, minimal help needed
- A lot, I might be able to help someone else

14. My goal in this Wireless Pilot is to be able to better perform the following tasks as they relate to Telecommunications:

- To access e-mail
- To make and receive calls
- To use communication apps (VRS, IP, Text to Speech, etc) that allow me to communicate over distance
- To access internet
- To text
- To get emergency information
- Other (please specify)

15. Do you think that you will use any of the following accessibility features on your iDevice?

- | | | |
|---|---|---|
| <input type="checkbox"/> Hearing aid compatibility | <input type="checkbox"/> Voice Over | <input type="checkbox"/> On/Off Lables |
| <input type="checkbox"/> Zoom | <input type="checkbox"/> LED Flash for Alerts | <input type="checkbox"/> Guided Access |
| <input type="checkbox"/> Larger type (font enlargement) | <input type="checkbox"/> Mono Audio | <input type="checkbox"/> Vibration for ring |
| <input type="checkbox"/> Invert Colors | <input type="checkbox"/> Switch Controls | <input type="checkbox"/> Increase Contrast |
| <input type="checkbox"/> Speak Selections | <input type="checkbox"/> Assistive Touch | <input type="checkbox"/> Reduce Motion |
| <input type="checkbox"/> Speak Auto Text | <input type="checkbox"/> Home Click Speed | <input type="checkbox"/> None |
| <input type="checkbox"/> Bold Text | <input type="checkbox"/> Reduce Motion | |
| <input type="checkbox"/> | <input type="checkbox"/> | |

16. Do you currently know how to use any of the following accessibility features?

- | | | |
|---|---|---|
| <input type="checkbox"/> Hearing aid compatibility | <input type="checkbox"/> Voice Over | <input type="checkbox"/> On/Off Lables |
| <input type="checkbox"/> Zoom | <input type="checkbox"/> LED Flash for Alerts | <input type="checkbox"/> Guided Access |
| <input type="checkbox"/> Larger type (font enlargement) | <input type="checkbox"/> Mono Audio | <input type="checkbox"/> Vibration for ring |
| <input type="checkbox"/> Invert Colors | <input type="checkbox"/> Switch Controls | <input type="checkbox"/> Increase Contrast |
| <input type="checkbox"/> Speak Selections | <input type="checkbox"/> Assistive Touch | <input type="checkbox"/> Reduce Motion |
| <input type="checkbox"/> Speak Auto Text | <input type="checkbox"/> Home Click Speed | <input type="checkbox"/> None |
| <input type="checkbox"/> Bold Text | <input type="checkbox"/> Reduce Motion | |

17. I think I will access the Wi-Fi for my device most often from _____.

- home
- within 1 mile of home
- within 5 miles of home
- within 10 miles of home
- more than 10 miles from home

18. The reason I applied for this Wireless Pilot study was (select all that apply):

- I want to learn new technology
- I like that this is a mainstream device
- I want to access telecommunication from outside of my home
- I feel I can give valuable feedback for other people who may have similar telecommunication difficulties
- Other (please specify)

Wireless Expansion Pilot, Phase 1, Survey 1 - May 3, 2016

Training Satisfaction Questions

19. Please mark your satisfaction with today's training.

	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
Overall, I am satisfied with the training I received.	<input type="radio"/>				
As a result of this training, my knowledge has increased.	<input type="radio"/>				
The information I learned will be useful to me.	<input type="radio"/>				
The trainer was helpful and effective.	<input type="radio"/>				
The trainer encouraged participation and questions.	<input type="radio"/>				

20. One of the new things I learned today was

21. Additional comments or questions about today's training

Demographic Questions

1. Enter participant ID number.

2. How do you describe yourself?

- White or Caucasian
- Black or African American
- American Indian or Alaska Native
- Asian or Asian American
- Other (please specify)

3. I am of Hispanic, Latino, or Spanish origin:

- Yes
- No

4. Please tell us the county where you live:

- Bucks
- Chester
- Delaware
- Montgomery
- Philadelphia

5. Which category below includes your age?

- 17 or younger
- 18-29
- 30-39
- 40-49
- 50-59
- 60 or older

6. How do you describe yourself?

- Male
- Female
- Other
- Prefer not to answer

7. What is your main form of communication?

- American Sign Language
- Spoken English
- Written English
- Other (please specify)

8. Please check any devices that you currently use:

- Hearing Aid
- Cochlear Implant
- Assistive Listening Device
- Electro-Larynx
- Augmentative and Alternative Communication (AAC) Device
- White Cane
- Braille notetaker
- Service Animal
- Wheelchair
- Walker
- I do not use any
- Other (please specify)

9. This pilot is studying specific groups of individuals who find telecommunication access difficult. Based on the groups in this pilot, what do you consider to be your primary disability?

- Blind
- Deaf
- Deaf-Blind
- Hard of Hearing
- Low Vision
- Speech Impaired
- Intellectual/Developmental/Cognitive

10. In addition to the disability noted above, I also have the following disability (Check all that apply):

- Blind
- Cognitive/Learning Disability
- Deaf
- Hard of Hearing
- Low Vision
- Mobility Impaired
- Speech Impaired
- No other disability
- Other (please specify)

Wireless Expansion Pilot, Phase 1, Survey 2 - June 13, 2016

Questions about Pilot

11. I am using my _____ to complete this survey.

- iPad
- iPad mini
- iPod touch

12. I am taking this survey at _____.

- Home
- The library
- School/college/university
- A public location (examples: Starbucks, McDonalds, Community Center)
- A neighbor's/friend's/other family members home
- Other (please specify)

13. When it comes to understanding how to use iTechnology,_____.

- I still need a lot of help
- I am getting better but I still need some help
- I am getting much better but still may require some help
- I have it down and need minimal help
- I got this and I might be able to help someone else

14. During the last meeting, did you share your contact information with others in your group?

- Yes. I shared my information.
- No, I didn't share my information this time but I might next meeting.
- No, I do not currently want to share my contact information.

15. On average, I use my iDevice_____.

- I have not used my device
- 1 day per week
- 2 days per week
- 3 days per week
- 4 days per week
- 5 days per week
- 6 days per week
- Everyday

16. The time I spend using my iDevice for telecommunication (including e-mail, texting, FaceTime or Skype, etc.) is:

- Less than 30 minutes per week
- 30 minutes to 1 hour per week
- 1 hour to 5 hours per week
- 5 hours to 10 hours per week
- 10 hours to 20 hours per week
- 20 hours to 30 hours per week
- 30 or more hours per week

17. Since I received my iDevice, I have used it for the following telecommunications tasks: (Check all that apply)

- To access e-mail
- To make and receive calls
- To use Video Relay, FaceTime, etc., for distance communication
- To search the internet
- To text
- Other (please specify)

18. How important is your iDevice for telecommunication?

- Most important
- As important as other technology I use
- Not important

19. I am now using the following types of accessibility features on my iDevice: (Check all that apply)

- | | | |
|---|---|---|
| <input type="checkbox"/> Hearing aid compatibility | <input type="checkbox"/> Voice Over | <input type="checkbox"/> On/Off Labels |
| <input type="checkbox"/> Zoom | <input type="checkbox"/> LED Flash for Alerts | <input type="checkbox"/> Guided Access |
| <input type="checkbox"/> Larger type (font enlargement) | <input type="checkbox"/> Mono Audio | <input type="checkbox"/> Vibration for ring |
| <input type="checkbox"/> Invert Colors | <input type="checkbox"/> Switch Controls | <input type="checkbox"/> Increase Contrast |
| <input type="checkbox"/> Speak Selections | <input type="checkbox"/> Assistive Touch | <input type="checkbox"/> Reduce Motion |
| <input type="checkbox"/> Speak Auto Text | <input type="checkbox"/> Home Click Speed | <input type="checkbox"/> None |
| <input type="checkbox"/> Bold Text | <input type="checkbox"/> Reduce Motion | <input type="checkbox"/> |
| | | <input type="checkbox"/> |

- Other (please specify)

20. I have accessed Wi-Fi in the following locations: (Check all that apply)

- Home
- Friend's or family member's home
- Work
- School/college/university
- Library
- Restaurants and coffee houses
- Shopping centers
- Other (please specify)

21. Have you contacted Teltex for service or repair of your iDevice?

- No
- Yes

If yes, please explain:

22. If you have contacted Teltex for customer service, was the staff friendly?

- Yes
- No
- Have not contacted Teltex for repair or service on iDevice

23. If you have contacted Teltex for customer service, was the problem resolved?

- Yes
- No
- Have not contacted Teltex for repair or service on iDevice

24. What has been the best thing about your iDevice?

25. How has your iDevice helped you with your telecommunication needs?

26. Are you satisfied with your iDevice?

Very Satisfied



Satisfied



Neutral



Unsatisfied



Very Unsatisfied



Wireless Expansion Pilot, Phase 1, Survey 2 - June 13, 2016

Training Satisfaction Questions

27. Please mark your satisfaction with the training you received on Monday, June 13, 2016.

	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
Overall, I am satisfied with the training I received.	<input type="radio"/>				
As a result of this training, my knowledge has increased.	<input type="radio"/>				
The information I learned will be useful to me.	<input type="radio"/>				
The trainer was helpful and effective.	<input type="radio"/>				
The trainer encouraged participation and questions.	<input type="radio"/>				

28. One of the new things I learned during the training on Monday, June 13, 2016 was:

29. Additional comments or questions about the training on Monday, June 13, 2016:

Wireless Expansion Pilot, Phase 1, Survey 3 - November 15, 2016

Demographics

1. Enter your participant ID number.

2. Please tell us the county where you live:

Bucks

Chester

Delaware

Montgomery

Philadelphia

3. Which category below includes your age?

17 or younger

18-29

30-39

40-49

50-59

60 or older

Wireless Expansion Pilot, Phase 1, Survey 3 - November 15, 2016

Questions about your iDevice

4. I am using my _____ to complete this survey:

iPad

iPad mini

iPod touch

5. I am taking this survey at _____.

- Home
- The library
- School/college/university
- A public location (examples: Starbucks, McDonalds, Community Center)
- A neighbor's/friend's/relative's home

6. When it comes to understanding how to use iDevice, I know _____.

- I still need a lot of help
- I am getting better but I still need some help
- I am getting much better but still may require some help
- I have it down and need minimal help
- I got this and I might be able to help someone else

7. Upon completion of this Wireless Pilot, I might be interested in sharing my knowledge with other consumers through peer support:

- Yes
- No
- Maybe, I would like to think about it.

8. On average, I use my iDevice how many days of the week?

- 0 days per week
- 1 day per week
- 2 days per week
- 3 days per week
- 4 days per week
- 5 days per week
- Almost everyday
- Everyday
-

9. The time I spend using my iDevice for telecommunication (including e-mail, texting, FaceTime or Skype, etc):

- Less than 30 minutes a week
- 30 minutes to 1 hour a week
- 1 hour to 5 hours a week
- 5 hours to 10 hours a week
- 10 hours to 20 hours a week
- 20 hours to 30 hours per week
- 30 or more hours per week

10. Since I received my iDevice, I have been using it to perform the following tasks as they relate to Telecommunications:

- To access e-mail
- To make and receive calls
- To use communication apps (VRS, IP, Text to Speech, etc) that allow me to communicate over distance
- To access internet
- To text
- To follow severe weather information
- Other (please specify)

11. Has your iDevice become your main tool for communication?

- Yes, I use my iDevice most of the time.
- I use my iDevice as much as I use other technology for phone and other communication.
- No, I do not use my iDevice for phone and other communication.

12. Since receiving my iDevice, I have found I use it as my primary telecommunications access:

- Yes, I tend to use my iDevice more than other telecommunications equipment.
- I use my iDevice equally to other telecommunications equipment.
- No, I use other more traditional devices (computer, telephone) for telecommunications.

13. I feel I am now connected to my community

- less than I was before receiving my iDevice
- more than I was before receiving my iDevice

14. I am now using the following types of accessibility features on my iDevice?

- | | | |
|---|---|---|
| <input type="checkbox"/> Hearing aid compatibility | <input type="checkbox"/> Voice Over | <input type="checkbox"/> On/Off Labels |
| <input type="checkbox"/> Zoom | <input type="checkbox"/> LED Flash for Alerts | <input type="checkbox"/> Guided Access |
| <input type="checkbox"/> Larger type (font enlargement) | <input type="checkbox"/> Mono Audio | <input type="checkbox"/> Vibration for ring |
| <input type="checkbox"/> Invert Colors | <input type="checkbox"/> Switch Controls | <input type="checkbox"/> Increase Contrast |
| <input type="checkbox"/> Speak Selections | <input type="checkbox"/> Assistive Touch | <input type="checkbox"/> Reduce Motion |
| <input type="checkbox"/> Speak Auto Text | <input type="checkbox"/> Home Click Speed | <input type="checkbox"/> None |
| <input type="checkbox"/> Bold Text | <input type="checkbox"/> Reduce Motion | |

Other (please specify)

15. Has your iDevice become your primary communication tool?

- Yes
- No

16. I have been accessing the Wi-Fi for my iDevice in the following types of locations:

- Home
- Friend's or relative's home
- Work
- School/college/university
- Library
- Restaurants and coffee houses
- Shopping centers
- Other (please specify)

iDevice support and apps

17. Have you contacted Teltex for service or repair of your iDevice?

- No
- Yes
- If yes, please explain:

18. If you have contacted Teltex for customer services, was the staff friendly?

- Yes
- No
- Have not contacted Teltex for repair or service on iDevice

19. If you have contacted Teltex for customer service, was the problem resolved?

- Yes
- No
- Have not contacted Teltex for repair or services on iDevice

20. What types of apps are you using regularly?

- FaceTime
- Google Hangouts
- Skype
- Oovoo
- Talkatone
- Other (please specify)

21. Emergency Apps: Have you used any of the following apps for information related to weather alerts?

NOAA - weather app

WeatherBug

The Weather Channel

FEMA

Red Cross

Nixle

Engage by Eview

Other (please specify)

Wireless Expansion Pilot, Phase 1, Survey 3 - November 15, 2016

Your feedback and recommendations

22. Are there any other apps that you think would be important to add to future devices? Why?

23. At this point, how satisfied are you with your iDevice?

Very Satisfied

Satisfied

Neutral

Unsatisfied

Very Unsatisfied



24. How has your iDevice helped with your telecommunication needs and experience?

25. How has your iDevice impacted your relationship with your community?

26. Do you feel the iDevice is accessible to individuals with disabilities?

Yes

No

Other (please specify)

27. Based on your experience, would you recommend that iDevices become part of the TDDP program?

Yes

No

28. Do you have any recommendations that would improve the Wireless Pilot?

29. Please mark your satisfaction with the training you received on *.

	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
Overall, I am satisfied with the training I received.	<input type="radio"/>				
As a result of this training, my knowledge <input type="radio"/> has increased.	<input type="radio"/>				
The information I learned will be useful to me.	<input type="radio"/>				
The trainer was helpful and effective.	<input type="radio"/>				
The trainer encouraged participation and questions.	<input type="radio"/>				

30. One of the new things I learned during the training on Tuesday, November 15, 2016 was:

31. Additional comments or questions about the training on Tuesday, November 15, 2016:

Wireless Expansion Pilot - Phase 1 - Survey 4 - May 15, 2017

1. Enter your tester number.

2. I am using my _____ for this survey:

- iPad
- iPad mini
- iPod touch

3. When it comes to understanding how to use my iDevice, I know _____.

- I still need a lot of help
- I am getting better but I still need some help
- I am getting much better but still may require some help
- I have it down and need minimal help
- I got this and I might be able to help someone else

4. I would be interested in sharing my knowledge with other consumers through peer support:

- Yes
- No

5. On average, I use my iDevice how many days of the week?

- 0 days per week
- 1 day per week
- 2 days per week
- 3 days per week
- 4 days per week
- 5 days per week
- Almost everyday
- Everyday
-

6. The time I spend using my iDevice for telecommunication (including e-mail, texting, FaceTime or Skype, etc):

- Less than 30 minutes a week
- 30 minutes to 1 hour a week
- 1 hour to 5 hours a week
- 5 hours to 10 hours a week
- 10 hours to 20 hours a week
- 20 hours to 30 hours per week
- 30 or more hours per week

7. Since I received my iDevice, I have been using it to perform the following tasks as they relate to Telecommunications:

- To access e-mail
- To make and receive calls
- To use communication apps (VRS, IP, Text to Speech, etc) that allow me to communicate over distance
- To access internet
- To text
- To follow severe weather information
- Other (please specify)

8. Has your iDevice become your main tool for communication?

- Yes, I use my iDevice most of the time.
- I use my iDevice as much as I use other technology for phone and other communication.
- No, I do not use my iDevice for phone and other communication.

9. Since receiving my iDevice, I have found I use it as my primary telecommunications access:

- Yes, I tend to use my iDevice more than other telecommunications equipment.
- I use my iDevice equally to other telecommunications equipment.
- No, I use other more traditional devices (computer, telephone) for telecommunications.

10. I feel I am now connected to my community

- less than I was before receiving my iDevice
- more than I was before receiving my iDevice

11. I am now using the following types of accessibility features on my iDevice?

- | | | |
|---|---|---|
| <input type="checkbox"/> Hearing aid compatibility | <input type="checkbox"/> Voice Over | <input type="checkbox"/> On/Off Labels |
| <input type="checkbox"/> Zoom | <input type="checkbox"/> LED Flash for Alerts | <input type="checkbox"/> Guided Access |
| <input type="checkbox"/> Larger type (font enlargement) | <input type="checkbox"/> Mono Audio | <input type="checkbox"/> Vibration for ring |
| <input type="checkbox"/> Invert Colors | <input type="checkbox"/> Switch Controls | <input type="checkbox"/> Increase Contrast |
| <input type="checkbox"/> Speak Selections | <input type="checkbox"/> Assistive Touch | <input type="checkbox"/> Reduce Motion |
| <input type="checkbox"/> Speak Auto Text | <input type="checkbox"/> Home Click Speed | <input type="checkbox"/> None |
| <input type="checkbox"/> Bold Text | <input type="checkbox"/> Reduce Motion | <input type="checkbox"/> |

Other (please specify)

12. Has your iDevice become your primary communication tool?

- Yes
- No

13. I have been accessing the Wi-Fi for my iDevice in the following types of locations:

- Home
- Friend's or relative's home
- Work
- School/college/university
- Library
- Restaurants and coffee houses
- Shopping centers
- Other (please specify)

18. Based on your experience, would you recommend that iDevices become part of the TDDP program?

Yes

No

19. During the course of the pilot we have been using your feedback to formulate a future study and possible permanent program. Would you be willing to continue sharing information and participate in future surveys?

Yes. I am willing to participate in future surveys. I understand that these surveys are optional.

No. I do not want to participate in any future surveys.

20. At this point, how satisfied are you with your iDevice

Very Satisfied

Satisfied

Neutral

Unsatisfied

Very Unsatisfied



Wireless Pilot Test Survey

Please fill out this brief survey using your wireless device.

1. Enter participant ID number.

2. What device are you using to complete this survey?

iPad

iPod Touch

iPad Mini

3. What is your favorite flavor of ice cream?

Wireless Pilot Test Survey

Thanks for completing the brief survey. We will see you on June 13th for your next in person training.

Wireless Expansion Pilot, Phase 2, Survey 1 - February-April 2017

Demographic Questions

* 1. Enter participant ID number.

* 2. How do you describe yourself?

- White or Caucasian
- Black or African American
- American Indian or Alaska Native
- Asian or Asian American
- Other (please specify)

* 3. I am of Hispanic, Latino, or Spanish origin:

- Yes
- No

* 4. Please tell us the county where you live:

- Bucks
- Chester
- Delaware
- Montgomery
- York
- Lancaster
- Philadelphia

* 5. Which category below includes your age?

- 17 or younger
- 18-29
- 30-39
- 40-49
- 50-59
- 60 or older

* 6. How do you describe yourself?

- Male
- Female
- Other
- Prefer not to answer

* 7. What is your main form of communication?

- American Sign Language
- Spoken English
- Written English
- Other (please specify)

* 8. Please check any devices that you currently use:

- Hearing Aid
- Cochlear Implant
- Assistive Listening Device
- Electro-Larynx
- Augmentative and Alternative Communication (AAC) Device
- White Cane
- Braille note taker
- Service Animal
- Wheel Chair
- Walker
- I don't use any
- Other (please specify)

* 9. This pilot is studying specific groups of individuals who find telecommunication access difficult. Based on the groups in this pilot, what do you consider to be your primary disability?

- Blind
- Deaf
- Deaf-Blind
- Hard of Hearing
- Low Vision
- Speech Impaired
- Intellectual/Developmental/Cognitive
- Other (please specify)

* 10. In addition to the disability noted above, I also have the following disability (select all that apply):

- Blind
- Cognitive/Learning Disability
- Deaf
- Hard of Hearing
- Low Vision
- Mobility Impaired
- Speech Impaired
- No other disability
- Other (please specify)

Wireless Expansion Pilot Phase 2 Survey 1 - February-April 2017

Questions about Pilot

* 11. The device that I received for this project is?

- iPad Air
- iPad mini
- iPod touch
- iPhone 7
- iPhone 7 plus
- Jitterbug Flip
- Jitterbug Smart
- Sesame phone/tablet

* 12. I am using my _____ for this survey:

- iPad Air
- iPad mini
- iPod touch
- iPhone 7
- iPhone 7 plus
- Jitterbug Flip
- Jitterbug Smart
- Sesame phone/tablet
- Paper and Pen/Pencil

* 13. I am taking this survey at _____?

- Home
- at the library
- at school/college/university
- in a public location (examples: Starbucks, McDonalds, Taco Bell, Burger King, Gas Station, State Park, Community Center)
- At a neighbor's/friend's/other family member's home
- Other (please specify)

* 14. When it comes to understanding how to use iTechnology, I know _____.

- Nothing, I need a lot of help
- A little, I need some help
- Some, I may require some help
- Quite a bit, minimal help needed
- A lot, I might be able to help someone else

* 15. My goal in this Wireless Pilot is to be able to better perform the following tasks as they relate to Telecommunications:

- To access e-mail
- To make and receive calls
- To use communication apps (VRS, IP, Text to Speech, etc) that allow me to communicate over distance
- To access internet
- To text
- To get emergency information
- Other (please specify)

* 16. Do you think that you will use any of the following accessibility features on your iDevice?

- | | | |
|---|---|---|
| <input type="checkbox"/> Hearing aid compatibility | <input type="checkbox"/> Voice Over | <input type="checkbox"/> On/Off Lables |
| <input type="checkbox"/> Zoom | <input type="checkbox"/> LED Flash for Alerts | <input type="checkbox"/> Guided Access |
| <input type="checkbox"/> Larger type (font enlargement) | <input type="checkbox"/> Mono Audio | <input type="checkbox"/> Vibration for ring |
| <input type="checkbox"/> Invert Colors | <input type="checkbox"/> Switch Controls | <input type="checkbox"/> Increase Contrast |
| <input type="checkbox"/> Speak Selections | <input type="checkbox"/> Assistive Touch | <input type="checkbox"/> Reduce Motion |
| <input type="checkbox"/> Speak Auto Text | <input type="checkbox"/> Home Click Speed | <input type="checkbox"/> None |
| <input type="checkbox"/> Bold Text | <input type="checkbox"/> Reduce Motion | |

* 17. Do you currently know how to use any of the following accessibility features?

- | | | |
|---|---|---|
| <input type="checkbox"/> Hearing aid compatibility | <input type="checkbox"/> Voice Over | <input type="checkbox"/> On/Off Lables |
| <input type="checkbox"/> Zoom | <input type="checkbox"/> LED Flash for Alerts | <input type="checkbox"/> Guided Access |
| <input type="checkbox"/> Larger type (font enlargement) | <input type="checkbox"/> Mono Audio | <input type="checkbox"/> Vibration for ring |
| <input type="checkbox"/> Invert Colors | <input type="checkbox"/> Switch Controls | <input type="checkbox"/> Increase Contrast |
| <input type="checkbox"/> Speak Selections | <input type="checkbox"/> Assistive Touch | <input type="checkbox"/> Reduce Motion |
| <input type="checkbox"/> Speak Auto Text | <input type="checkbox"/> Home Click Speed | <input type="checkbox"/> None |
| <input type="checkbox"/> Bold Text | <input type="checkbox"/> Reduce Motion | <input type="checkbox"/> |
| <input type="checkbox"/> | <input type="checkbox"/> | |

* 18. I think I will access the Wi-Fi for my device most often from _____.

- home
- within 1 mile of home
- within 5 miles of home
- within 10 miles of home
- more than 10 miles from home

* 19. The reason I applied for this Wireless Pilot study was (select all that apply):

- I want to learn new technology
- I like that this is a mainstream device
- I want to access telecommunication from outside of my home
- I feel I can give valuable feedback for other people who may have similar telecommunication difficulties
- Other (please specify)

Wireless Expansion Pilot, Phase 2, Survey 1 - February-April 2017

Training Satisfaction Questions

* 20. Please mark your satisfaction with today's training.

	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
Overall, I am satisfied with the training I received.	<input type="radio"/>				
As a result of this training, my knowledge has increased.	<input type="radio"/>				
The information I learned will be useful to me.	<input type="radio"/>				
The trainer was helpful and effective.	<input type="radio"/>				
The trainer encouraged participation and questions.	<input type="radio"/>				

* 21. One of the new things I learned today was

* 22. Additional comments or questions about today's training

Wireless Expansion Pilot, Phase 2, Survey 2, April-May 2017

Demographic Questions

1. Enter participant ID number.

Wireless Expansion Pilot, Phase 2, Survey 2, April-May 2017

Questions about Pilot

2. I am using my _____ to complete this survey.

- iPad Air
- iPad mini
- iPod touch
- iPhone 7
- iPhone 7 plus
- Jitterbug Flip
- Jitterbug Smart
- Sesame phone/tablet
- Other (please specify)

3. I am taking this survey at _____.

- Home
- The library
- School/college/university
- A public location (examples: Starbucks, McDonalds, Community Center)
- A neighbor's/friend's/other family members home
- Other (please specify)

4. When it comes to understanding how to use iTechnology,_____.

- I still need a lot of help
- I am getting better but I still need some help
- I am getting much better but still may require some help
- I have it down and need minimal help
- I got this and I might be able to help someone else

5. During the last meeting, did you share your contact information with others in your group?

- Yes, I shared my information.
- No, I didn't share my information this time but I might next meeting.
- No, I do not currently want to share my contact information.
- N/A

6. On average, I use my iDevice_____.

- I have not used my device
- 1 day per week
- 2 days per week
- 3 days per week
- 4 days per week
- 5 days per week
- 6 days per week
- Everyday

7. The time I spend using my iDevice for telecommunication (including e-mail, texting, FaceTime or Skype, etc.) is:

- Less than 30 minutes per week
- 30 minutes to 1 hour per week
- 1 hour to 5 hours per week
- 5 hours to 10 hours per week
- 10 hours to 20 hours per week
- 20 hours to 30 hours per week
- 30 or more hours per week
-

8. Since I received my iDevice, I have used it for the following telecommunications tasks: (Check all that apply)

- To access e-mail
- To make and receive calls
- To use Video Relay, FaceTime, etc., for distance communication
- To search the internet
- To text
- Other (please specify)

9. How important is your iDevice for telecommunication?

- Most important
- As important as other technology I use
- Not important

10. I am now using the following types of accessibility features on my iDevice: (Check all that apply)

- | | | |
|---|---|---|
| <input type="checkbox"/> Hearing aid compatibility | <input type="checkbox"/> Voice Over | <input type="checkbox"/> On/Off Labels |
| <input type="checkbox"/> Zoom | <input type="checkbox"/> LED Flash for Alerts | <input type="checkbox"/> Guided Access |
| <input type="checkbox"/> Larger type (font enlargement) | <input type="checkbox"/> Mono Audio | <input type="checkbox"/> Vibration for ring |
| <input type="checkbox"/> Invert Colors | <input type="checkbox"/> Switch Controls | <input type="checkbox"/> Increase Contrast |
| <input type="checkbox"/> Speak Selections | <input type="checkbox"/> Assistive Touch | <input type="checkbox"/> Reduce Motion |
| <input type="checkbox"/> Speak Auto Text | <input type="checkbox"/> Home Click Speed | <input type="checkbox"/> None |
| <input type="checkbox"/> Bold Text | <input type="checkbox"/> Reduce Motion | <input type="checkbox"/> |

Other (please specify)

11. I have accessed Wi-Fi in the following locations: (Check all that apply)

- Home
- Friend's or family member's home
- Work
- School/college/university
- Library
- Restaurants and coffee houses
- Shopping centers
- Other (please specify)

12. Have you contacted Teltex for service or repair of your iDevice?

- No
- Yes

If yes, please explain:

13. If you have contacted Teltex for customer service, was the staff friendly?

- Yes
- No
- Have not contacted Teltex for repair or service on iDevice

14. If you have contacted Teltex for customer service, was the problem resolved?

- Yes
- No
- Have not contacted Teltex for repair or service on iDevice

15. What has been the best thing about your iDevice?

16. How has your iDevice helped you with your telecommunication needs?

17. Are you satisfied with your iDevice?

Very Satisfied

Satisfied

Neutral

Unsatisfied

Very Unsatisfied

Wireless Expansion Pilot, Phase 2, Survey 2, April-May 2017

Training Satisfaction Questions

18. Please mark your satisfaction with the training you received during your 3rd in person training.

Strongly Agree

Somewhat Agree

Neutral

Somewhat Disagree

Strongly Disagree

Overall, I am satisfied with the training I received.

As a result of this training, my knowledge has increased.

The information I learned will be useful to me.

The trainer was helpful and effective.

The trainer encouraged participation and questions.

19. One of the new things I learned during my 3rd in person training was:

20. Additional comments or questions about the 3rd in person training:

Wireless Expansion Pilot, Phase 2, Survey 3 - May 2017

Demographics

1. Enter your participant ID number.

2. Please tell us the county where you live:

Bucks

Chester

Delaware

Montgomery

Philadelphia

Other (please specify)

3. Which category below includes your age?

17 or younger

18-29

30-39

40-49

50-59

60 or older

Wireless Expansion Pilot, Phase 2, Survey 3 - May 2017

Questions about your iDevice

4. I am using my _____ to complete this survey:

- iPad Air
- iPad mini
- iPod touch
- iPhone 7
- iPhone 7 plus
- Jitterbug Flip
- Jitterbug Smart
- Sesame phone/tablet
- Paper/Pencil
- Other (please specify)

5. I am taking this survey at _____.

- Home
- The library
- School/college/university
- A public location (examples: Starbucks, McDonalds, Community Center)
- A neighbor's/friend's/relative's home
- Other (please specify)

6. When it comes to understanding how to use iDevice, I know _____.

- I still need a lot of help
- I am getting better but I still need some help
- I am getting much better but still may require some help
- I have it down and need minimal help
- I got this and I might be able to help someone else

7. Upon completion of this Wireless Pilot, I might be interested in sharing my knowledge with other consumers through peer support:

- Yes
- No
- Maybe, I would like to think about it.

8. On average, I use my iDevice how many days of the week?

- 0 days per week
- 1 day per week
- 2 days per week
- 3 days per week
- 4 days per week
- 5 days per week
- Almost everyday
- Everyday

9. The time I spend using my iDevice for telecommunication (including e-mail, texting, FaceTime or Skype, etc):

- Less than 30 minutes a week
- 30 minutes to 1 hour a week
- 1 hour to 5 hours a week
- 5 hours to 10 hours a week
- 10 hours to 20 hours a week
- 20 hours to 30 hours per week
- 30 or more hours per week

10. Since I received my iDevice, I have been using it to perform the following tasks as they relate to Telecommunications:

- To access e-mail
- To make and receive calls
- To use communication apps (VRS, IP, Text to Speech, etc) that allow me to communicate over distance
- To access internet
- To text
- To follow severe weather information
- Other (please specify)

11. Has your iDevice become your main tool for communication?

- Yes, I use my iDevice most of the time.
- I use my iDevice as much as I use other technology for phone and other communication.
- No, I do not use my iDevice for phone and other communication.

12. Since receiving my iDevice, I have found I use it as my primary telecommunications access:

- Yes, I tend to use my iDevice more than other telecommunications equipment.
- I use my iDevice equally to other telecommunications equipment.
- No, I use other more traditional devices (computer, telephone) for telecommunications.

13. I feel I am now connected to my community

- less than I was before receiving my iDevice
- more than I was before receiving my iDevice
- Other (please specify)

14. I am now using the following types of accessibility features on my iDevice?

- | | | |
|---|---|---|
| <input type="checkbox"/> Hearing aid compatibility | <input type="checkbox"/> Voice Over | <input type="checkbox"/> On/Off Labels |
| <input type="checkbox"/> Zoom | <input type="checkbox"/> LED Flash for Alerts | <input type="checkbox"/> Guided Access |
| <input type="checkbox"/> Larger type (font enlargement) | <input type="checkbox"/> Mono Audio | <input type="checkbox"/> Vibration for ring |
| <input type="checkbox"/> Invert Colors | <input type="checkbox"/> Switch Controls | <input type="checkbox"/> Increase Contrast |
| <input type="checkbox"/> Speak Selections | <input type="checkbox"/> Assistive Touch | <input type="checkbox"/> Reduce Motion |
| <input type="checkbox"/> Speak Auto Text | <input type="checkbox"/> Home Click Speed | <input type="checkbox"/> None |
| <input type="checkbox"/> Bold Text | <input type="checkbox"/> Reduce Motion | <input type="checkbox"/> |

Other (please specify)

15. Has your iDevice become your primary communication tool?

- Yes
- No

16. I have been accessing the Wi-Fi for my iDevice in the following types of locations:

- Home
- Friend's or relative's home
- Work
- School/college/university
- Library
- Restaurants and coffee houses
- Shopping centers
- Other (please specify)

17. Have you contacted Teltex for service or repair of your iDevice?

- No
- Yes
- If yes, please explain:

18. If you have contacted Teltex for customer services, was the staff friendly?

- Yes
- No
- Have not contacted Teltex for repair or service on iDevice

19. If you have contacted Teltex for customer service, was the problem resolved?

- Yes
- No
- Have not contacted Teltex for repair or services on iDevice

20. What types of apps are you using regularly?

- FaceTime
- Google Hangouts
- Skype
- Oovoo
- Talkatone
- Other (please specify)

21. Emergency Apps: Have you used any of the following apps for information related to weather alerts?

NOAA - weather app

WeatherBug

The Weather Channel

FEMA

Red Cross

Nixte

Engage by Eview

Other (please specify)

Wireless Expansion Pilot Phase 2, Survey 3 - May 2017

Your feedback and recommendations

22. Are there any other apps that you think would be important to add to future devices? Why?

23. At this point, how satisfied are you with your iDevice?

Very Satisfied

Satisfied

Neutral

Unsatisfied

Very Unsatisfied



24. How has your iDevice helped with your telecommunication needs and experience?

25. How has your iDevice impacted your relationship with your community?

26. Do you feel the iDevice is accessible to individuals with disabilities?

Yes

No

Other (please specify)

27. Based on your experience, would you recommend that iDevices become part of the TDDP program?

Yes

No

28. Do you have any recommendations that would improve the Wireless Pilot?

29. Please mark your satisfaction with the most recent training you received.

	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
Overall, I am satisfied with the training I received.	<input type="radio"/>				
As a result of this training, my knowledge has increased.	<input type="radio"/>				
The information I learned will be useful to me.	<input type="radio"/>				
The trainer was helpful and effective.	<input type="radio"/>				
The trainer encouraged participation and questions.	<input type="radio"/>				

30. One of the new things I learned during my most recent training was:

31. Additional comments or questions about my most recent training:

Wireless Expansion Pilot Phase 2 Survey 4 - May 1, 2017

1. Enter your tester number.

2. I am using my _____ for this survey:

- iPad Air
- iPad mini
- iPod touch
- iPhone 7
- iPhone 7 plus
- Jitterbug Flip
- Jitterbug Smart
- Sesame phone/tablet

3. When it comes to understanding how to use my iDevice, I know _____.

- I still need a lot of help
- I am getting better but I still need some help
- I am getting much better but still may require some help
- I have it down and need minimal help
- I got this and I might be able to help someone else

4. I would be interested in sharing my knowledge with other consumers through peer support:

- Yes
- No

5. On average, I use my iDevice how many days of the week?

- 0 days per week
- 1 day per week
- 2 days per week
- 3 days per week
- 4 days per week
- 5 days per week
- Almost everyday
- Everyday

6. The time I spend using my iDevice for telecommunication (including e-mail, texting, FaceTime or Skype, etc):

- Less than 30 minutes a week
- 30 minutes to 1 hour a week
- 1 hour to 5 hours a week
- 5 hours to 10 hours a week
- 10 hours to 20 hours a week
- 20 hours to 30 hours per week
- 30 or more hours per week

7. Since I received my iDevice, I have been using it to perform the following tasks as they relate to Telecommunications:

- To access e-mail
- To make and receive calls
- To use communication apps (VRS, IP, Text to Speech, etc) that allow me to communicate over distance
- To access internet
- To text
- To follow severe weather information
- Other (please specify)

8. Has your iDevice become your main tool for communication?

- Yes, I use my iDevice most of the time.
- I use my iDevice as much as I use other technology for phone and other communication.
- No, I do not use my iDevice for phone and other communication.

9. Since receiving my iDevice, I have found I use it as my primary telecommunications access:

- Yes, I tend to use my iDevice more than other telecommunications equipment.
- I use my iDevice equally to other telecommunications equipment.
- No, I use other more traditional devices (computer, telephone) for telecommunications.

10. I feel I am now connected to my community

- less than I was before receiving my iDevice
- more than I was before receiving my iDevice

11. I am now using the following types of accessibility features on my iDevice?

- | | | |
|---|---|---|
| <input type="checkbox"/> Hearing aid compatibility | <input type="checkbox"/> Voice Over | <input type="checkbox"/> On/Off Lables |
| <input type="checkbox"/> Zoom | <input type="checkbox"/> LED Flash for Alerts | <input type="checkbox"/> Guided Access |
| <input type="checkbox"/> Larger type (font enlargement) | <input type="checkbox"/> Mono Audio | <input type="checkbox"/> Vibration for ring |
| <input type="checkbox"/> Invert Colors | <input type="checkbox"/> Switch Controls | <input type="checkbox"/> Increase Contrast |
| <input type="checkbox"/> Speak Selections | <input type="checkbox"/> Assistive Touch | <input type="checkbox"/> Reduce Motion |
| <input type="checkbox"/> Speak Auto Text | <input type="checkbox"/> Home Click Speed | <input type="checkbox"/> None |
| <input type="checkbox"/> Bold Text | <input type="checkbox"/> Reduce Motion | <input type="checkbox"/> |

Other (please specify)

12. Has your iDevice become your primary communication tool?

- Yes
- No

13. I have been accessing the Wi-Fi for my iDevice in the following types of locations:

- Home
- Friend's or relative's home
- Work
- School/college/university
- Library
- Restaurants and coffee houses
- Shopping centers
- Other (please specify)

14. What types of apps are you using regularly?

- FaceTime
- Google Hangouts
- Skype
- Oovoo
- Talkatone
- Other (please specify)

15. Emergency Apps: Have you used any of the following apps for information related to weather alerts?

- NOAA - weather app
- WeatherBug
- The Weather Channel
- FEMA
- Red Cross
- Nixle
- Engage by Eview
- Other (please specify)

16. Do you feel the iDevice is accessible to individuals with disabilities?

- Yes
- No
- Other (please specify)

17. On a scale of 1 to 10, with 10 being the hardest, how would you rank using an iDevice?

Very Easy Neither
Easy or
Hard Very Hard

18. Based on your experience, would you recommend that iDevices become part of the TDDP program?

- Yes
- No

19. During the course of the pilot we have been using your feedback to formulate a future study and possible permanent program. Would you be willing to continue sharing information and participate in future surveys?

- Yes, I am willing to participate in future surveys. I understand that these surveys are optional.
- No, I do not want to participate in any future surveys.

20. At this point, how satisfied are you with your iDevice

Very Satisfied Satisfied Neutral Unsatisfied Very Unsatisfied

Wireless Pilot Phase 2 Test Survey

Please fill out this brief survey using your wireless device.

1. Enter participant ID number.

2. What device are you using to complete this survey?

- iPad Air
- iPad mini
- iPod touch
- iPhone 7
- iPhone 7 plus
- Jitterbug Flip
- Jitterbug Smart
- Sesame phone/tablet

3. What is your favorite flavor of ice cream?

Wireless Pilot Phase 2 Test Survey

Thanks for completing the brief survey. Please contact your trainer if you have any trouble using your device to complete the survey.

ATTACHMENT 7

Current Equipment Price List

At this time, we recommend equipment with standard warranties and service be provided as part of a permanent program. During the pilot, we use two separate vendors to supply equipment with care plans. We needed the care and service plans because of specific requirements of the pilot program.

These vendors are Teltex and Raz Mobility. Teltex is a well-known distributor of communication equipment for people with disabilities. They also distribute, support and service iOS mobile devices. If a customer chose an android device, Raz Mobility was the vendor. All prices and products indicated here are estimates and based on the current market.

Device	Device Only	Device + Support/Service Plan
Apple iPad Air 32G Wi-Fi Only	\$ 300 - 500	\$ 400 - 1350
Apple iPad 32G 4G	\$ 459 - 635	\$ 558 - 1480
Apple iPhone 7	\$ 549 - 775	\$ 649 - 1650
Apple iPhone 7 Plus	\$ 669 - 875	\$ 769 - 1650
Apple 8	\$ 699	\$ 799 - 1700
Lucia mobile phone		\$ 524
Motorola Moto G5	\$ 210	\$ 669
Motorola Moto X4	\$ 400	\$ 839
Motorola Moto Z2	\$ 756	\$ 949
Samsung Galaxy Tablet S2	\$	\$ 749 - 899
Sesame head-tracking solution w/ Motorola Moto X4 or Samsung Galaxy Tablet 2		\$1709 - \$1759 (Exceptions Equipment)
Serene 201 Wireless Super Bed-Shaker	\$ 60	
Sonic Bomb Bluetooth Alarm	\$ 60	
Bellman Cellphone Sensor	\$ 40	
Serene Central Alarm CA-CX	\$ 40	
Ditto Wearable	\$ 40	
Sonic Alert Home Aware Master Kit	\$ 125	
Sonic Alert Home Aware Smartphone Transmitter* Must have Home Alert Master Kit	\$ 80	
Apple Watch Series 1	\$ 249	
Geemarc T-loop Neckloop	\$ 75	
ClearSounds CLA7v2	\$ 85	
ClearSounds Quattro 4 Neckloop	\$ 270	
Amplicom NL100 Neckloop	\$ 30	
NAXA Set Headphones	\$ 25	
Apple EarPods	\$ 35	
Heavy Duty Stand	\$ 100	
Serene RF200 Ring Signaler	\$ 68	
Cosmonaut Specialty Stylus	\$ 30	
Mouth Stylus	\$ 40	
Speakers (Non-Bluetooth)	\$ 25	