UTC Project Info				
Project Title	Utilizing Assistive Technology to Remove Communication Barriers in			
•	the Public Transportation System for Passengers with Disabilities			
University	The University of Tennessee			
Principal Investigator	Rupy Sawhney, Ph.D			
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Funding Source(s) & match	\$48,292			
amounts provided (by each	740,232			
agency or organization)				
Total Project Cost (includes	\$ 96,584			
cost sharing)	\$ 50,50 4			
Agency ID or Contract #	2014-OE-08			
Start and End Dates	September 1, 2014 – August 31, 2015			
Start and End Dates	September 1, 2014 – August 31, 2013			
Brief Description of Research	The objective of the project is to overcome communication barrier			
Project	experienced by the disabled when using public transportation. This			
1 Toject	barrier was cited by numerous disability groups as one of the top			
	reasons for not using public transportation since they could not			
	communicate their questions or concerns including those that are			
	safety related. The need to provide information to passengers has			
	recently been recognized by the transit organizations. Communication			
	devices such as IPad/Tablets have been introduced into the Knox			
	County transportation system in 2013. Regionally, ETHRA			
	Transportation has completed their conversion to tablet scheduling			
	and dispatch and CAC Transit plans their fleet conversion to tablets in			
	the summer of 2014.			
	the summer of 2014.			
Describe Implementation of	This research will generate the following deliverables:			
Research Outcomes (or why	Smart Communication Board based on commercial tablet brands (such			
not implemented)	as Apple iPad or google NEXUS) to be installed on transit vehicles that			
Place any photos here	can serve as a crucial tool for better communication between drivers			
ridee diff photos here	and disabled passengers. Mobile app on smart phone for passengers to			
	receive the pickup-delivery schedules, route update, and schedule			
	change alert. Centralized online dashboard system that is connected to			
	Smart Communication Boards for transit agencies to monitor, share			
	and/or reschedule the bus timeline in case of emergency situations.			
	and or resentative the bus timeline in case of efficigency situations.			
Impact/Benefits of				
Implementation (Actual, not				
anticipated)				
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