



# Carnegie Mellon University



## CALL FOR VOLUNTEER PARTICIPATION **USER TESTS**

### PEDPAL SMARTPHONE APP FOR SAFE INTERSECTION CROSSING

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**DATES: USER TESTS WILL TAKE PLACE OVER THE PERIOD  
AUGUST 12 – 23, 2019 AND SEPTEMBER 3-13, 2019**

**TIME: EACH TEST WILL TAKE 1-2 HOURS PER USER**

**LOCATION: TESTING WILL TAKE PLACE AT 2-3 TRAFFIC  
INTERSECTIONS IN THE PITTSBURGH EAST END**

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Researchers at Carnegie Mellon University are seeking volunteers to participate in a field test of a new smartphone app, PedPal, designed to assist pedestrians with mobility challenges to cross signalized intersections. We are conducting user trials of *PedPal* in August and September, 2019 in the Pittsburgh East End. We are seeking volunteers (specifically persons with vision or mobility challenges) who would be willing to participate in these trials. During each test session, researchers will provide training on how to use the app, accompany users through a series of crossing trials in the field (both with and without use of the app), and collect feedback on the usefulness of the app.

FOR MORE INFORMATION OR TO SIGN UP, PLEASE CONTACT US AT:  
[PEDPAL-USERSTUDY@LISTS.ANDREW.CMU.EDU](mailto:PEDPAL-USERSTUDY@LISTS.ANDREW.CMU.EDU) | 412-268-8811



## **MORE INFORMATION ON PEDPAL:**

With funding from the Dept. of Transportation, researchers in the Intelligent Coordination and Logistics Laboratory of the Robotics Institute at Carnegie Mellon University have developed a smartphone app called *PedPal* that enables mobility impaired pedestrians to communicate directly with the intersection, and to actively influence traffic signal control decisions.

Most basically, *PedPal* knows its user's travel speed and can tell the intersection how much time the user needs to safely cross in the desired crossing direction. The traffic control system, in return, ensures that sufficient crossing time is given when the user subsequently gets the crossing signal. When a future crossing phase has been selected, *PedPal* counts down to the phase start and provides crosswalk information to help prepare the pedestrian to cross. The app announces that it is ok to cross at the appropriate time, and then counts down the remaining time as the user proceeds to cross.

*PedPal* provides multiple interaction modalities to the user, including a visual interface, voiceover capability, and haptic signaling. User interaction can be personalized to meet each user's needs and preferences.