Center for Sustainable Transportation Infrastructure
Partners with WalkWorks Program to Promote Pedestrian Activity

The Center for Sustainable Transportation Infrastructure (CSTI) in the Department of Civil and Environmental Engineering (CEE) has partnered with WalkWorks to improve the health of Pennsylvania residents by conducting walkability assessments of pedestrian routes throughout the state.

WalkWorks, a collaboration of the Pennsylvania Department of Health and Pitt’s Graduate School of Public Health (GSPH), encourages people to increase the amount of time spent walking as a preventative health measure. The program identifies, develops, and promotes community-based walking routes, particular in areas where data has shown high rates of poor health.

The CSTI originally began working with WalkWorks to help spread awareness of the changes in government policy that are making these pedestrian-friendly initiatives more achievable. One of the major challenges often associated with improving pedestrian infrastructure is informing communities that funding exists to make these improvements.

“You can do a lot of great things, but the money needs to be there to do them,” said Mark Magalotti, PhD, CEE senior lecturer and co-director of CSTI. “It’s a fairly new development to use transportation engineering funding for pedestrian walkways and bicycle lanes instead of highways. We are trying to show communities how they can use that funding to improve pedestrian infrastructure.”

A variety of studies have shown walking or other moderate physical activity for about 30 minutes a day can provide health benefits. According to the Centers for Disease Control and Prevention (CDC), people who are physically active live longer and have a lower risk for heart disease, stroke, type 2 diabetes, depression, and some cancers. Additionally, the CDC reports that improving spaces and having safe places to walk can help more people become physically active.

To encourage people to choose active transportation over motorized vehicles, WalkWorks routes often include educational information about the area’s history, the surrounding flora and fauna, or other themed points of interest along the walking route in the built environment. The program also coordinates walking groups, which offer support and a social component to the experience for those interested in walking as a recreational activity in addition to daily exercise.

Developing these walking routes requires technical and transportation engineering assistance, so Pitt’s GSPH sought the help of CSTI and the CEE department. Dr. Magalotti and Richard Feder, CEE adjunct lecturer, along with graduate students Yuan Hu and Halima Bariyeh assess proposed walking routes first-hand to see if they need safety improvements. Since many of the routes are located in rural Pennsylvania communities, they must make sure they have sufficient sidewalks, well-timed traffic signals and crosswalks, and a low risk of hazards like pedestrian-vehicle conflicts. Their reports and research assisted WalkWorks when it came to promoting infrastructure planning, design, implementation, and maintenance policies.

The four Pennsylvania counties that currently offer WalkWorks routes and groups are Blair, Fayette, Indiana, and McKean. There is also a route in the Capital Complex in Harrisburg. As communities throughout Pennsylvania continue to develop, WalkWorks, CSTI, and other partnering organizations are encouraging government officials to include pedestrian concerns in local and regional planning efforts.

This past spring, CSTI developed the Complete Streets Workshop with GSPH and the Pennsylvania Department of Health. “Complete Streets” is a general term that refers to roadways that are designed and operated to accommodate all users: pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. The workshop provided participants with fact sheets on the benefits of Complete Streets and policy implementations, a detailed overview of the elements necessary for a successful policy, and examples of the Complete Street policies and guides.

“We are trying to look further into the future of what you can do as a community to make sure you have sustainable transportation infrastructure,” said Dr. Magalotti.

Created in August 2007, CSTI works to advance sustainable transportation research through multi-disciplinary efforts, education, and dissemination of new technologies and knowledge. Researchers explore sustainable ways to meet the needs of the present, without compromising the needs of the future. By partnering with organizations like the American Society of Highway Engineers, PennDOT, and the State Transportation Innovation Council, CSTI aims to define the role engineers will have in the future of sustainable transportation development.