



10th University Transportation Centers Spotlight Conference on Pedestrian and Bicycle Safety

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The Keck Center of the
National Academies of Sciences, Engineering, and Medicine
Washington, D.C.

Abstracts
Due by
August 9,
2016

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The subject of the 10th University Transportation Centers Spotlight Conference is Pedestrian and Bicycle Safety. Each year, pedestrian and bicycle fatalities comprise over 12 percent of all traffic fatalities. Conditions for safe bicycling and walking have wide-ranging impacts related to accessing public transportation, commuting to school and work, accessing local services, and improving general health. USDOT Secretary Foxx's pedestrian and bicycle safety initiative has become one of the Department's signature programs. However, there is a dearth of data and research on the topic leading to more questions than answers.

The conference will promote synergies among diverse transportation research and practitioner groups in order to understand and address the unique issues involved with pedestrian and bicycle safety; to spotlight recently completed and ongoing research by USDOT University Transportation Centers (UTC) and others; and to identify existing knowledge gaps in current research and related activities.

Abstracts are invited for posters presenting basic or applied research or case studies of practice. Abstracts that are accepted for presentation will be included in conference materials and posted online. Posters will be presented at an informal gathering in the afternoon of the first day of the conference.

For this conference, pedestrian and bicycle safety is defined as encompassing both objective measures (e.g. crashes, injuries) and perceptions of safety, which influence people's decisions on whether, when, and where to walk and bicycle. In addition, we are interested in both safety related to traffic and safety related to personal security and crime.

While the outcomes of the conference focus on the U.S., we welcome lessons from outside the U.S. We also aim to be multidisciplinary, expanding beyond the traditional engineering and planning fields.

Topics of interest include the following:

Defining the problem and its dimensions

- How safe are walking and bicycling as modes of transportation?
- How does safety vary across time, geographies, and populations (including age, gender, etc.)? What are the equity implications of these patterns?
- Is there safety in numbers? What are the behavioral factors behind safety in numbers?
- What factors influence pedestrian and bicyclist safety, including behavioral and design factors?
- What measures and data do we have and what do we need to understand pedestrian and bicycle safety?
- How do objective measures of safety and perceptions of safety relate to each other?

Additional, specific topic areas

- How are bicycle and pedestrian safety different?
- How safe is bike share?
- How safe are e-bikes?
- How safe are other human-powered modes, e.g. skateboards
- What do we know about conflicts among these modes (bikes, e-bikes, pedestrians, skateboards, etc.)
- How does *Vision Zero* address bicycles and pedestrians?
- How can the Highway Safety Manual be used to improved bicycle and pedestrian safety?
- What are the relationships between bicycle and pedestrian Level-of-Service (LOS) and interactions with motor vehicles?
- Are there innovative and efficient means of collecting meaningful exposure data?
- How is pedestrian/bicycle safety related to new types of road infrastructure, e.g. diverging diamond interchanges?
- What are MUTCD warrants for various devices for crossing safety for pedestrians and bicycles?

Actions to address the problem

- What can be done to improve the safety of walking and bicycling for transportation? This includes behavioral and engineering solutions involving all road users, vehicles, and infrastructure.
- Is communication (whether through campaigns, roadway markings, or signage) successful at implementing change?
- What are the effects of these actions on safety? How are the actions affecting equity considerations?
- What are the implementation opportunities and challenges for implementing these actions?
- How might emerging and future technologies affect pedestrian and bicycle safety? Can we use technology and operate infrastructure that informs how well people are behaving?

Submitting an Abstract

Abstracts must be submitted electronically by August 9, 2016. Go to: <https://s.zoomerang.com/r7DKKWTD> for the electronic abstract submittal form.

If your abstract is accepted, you will be informed by mid-September. All presenters are expected to register for and attend the conference.

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