MPC-603 – Investigating Bicyclist Safety Perceptions and Behaviors at Roundabouts
Utah State University
Patrick A. Singleton, Ph.D.
Assistant Professor Department of Civil and Environmental Engineering Utah State University Phone: (435) 797-7109 Email: patrick.singleton@usu.edu ORCID: 0000-0002-9319-2333
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Installing a modern roundabout is a proven safety countermeasure that has been shown to improve intersection safety and operational efficiency in many situations. However, research from Europe (where roundabouts are more common and have been used for longer) suggests that roundabouts have mixed results for bicyclist safety and may even increase vehicle—bicycle crashes. Unfortunately, corresponding evidence for bicyclist safety at roundabouts in US contexts is not readily available, in part because roundabouts and bicycle crashes at roundabouts are less frequent. To overcome this lack of information on objective safety performance, there is a need to study subjective perceptions of safety (and safety-motivated behaviors) of bicyclists at roundabouts. The primary objective of this research is to characterize and evaluate how bicyclists perceive the safety of roundabouts overall and of specific design and operational characteristics of roundabouts. A questionnaire will be developed to survey bicyclists' safety perceptions, preferences, and behavior associated with different roundabout designs and situations. Survey responses will be quantitatively and qualitatively analyzed for behavioral implications in addition to design and operational recommendations. As transportation agencies consider installing roundabouts to improve

Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	We suggest updating US roundabout design guidelines to include "protected roundabouts" allowing these separated bicycle lanes. Considering bicycle preferences and perceived comfort at roundabouts can help encourage cycling for people of all ages and abilities.
Impacts/Benefits of Implementation (actual, not anticipated)	The study's findings can help to revise US roundabout design guidelines and create roundabouts that are safer and more comfortable, in order to encourage people of all ages and abilities to cycle.
Web Links Reports Project Website 	MPC Final Report – <u>Investigating Bicyclist Safety Perceptions</u> and Behaviors at Roundabouts