

UTC Project Information	
Project Title	Protecting Vulnerable Road-Users: Ensuring the Safety of Bicyclist Infrastructure for an Aging Population
University	Florida State University (FSU)
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Total Project Cost	\$136,200
Agency ID or Contract Number	DTRT13-G-UTC42-03317-34695
Start and End Dates	1/9/2014 – 12/23/2014
Brief Description of Research Project	<p>Bicycling is a popular outdoor activity for people of all ages and is associated with significant health benefits. However, bicycling is also one of the most dangerous modes of travel. When involved in a collision, a bicyclist's risk of injury or death is more than seven times that of a motorist, and this risk increases with age, with cyclists aged 65 and older facing a risk three times that of the already elevated risk of younger cyclists. Implementing effective traffic countermeasures, such as bicycle lanes and shared lane markings (sharrows), can enhance the safety of both younger and older bicyclists by encouraging more predictable cyclist behavior, improving cyclist conspicuity, and encouraging motorists to give bicyclists greater leeway when passing. While past work examining the effectiveness of bicycle lanes and sharrows have consistently found some benefits with respect to some safety-related measures, these studies often do not find an increase in the distance at which motorists pass bicycles, sometimes finding that motorists pass at closer distances after the installation of bicycle facilities. Proposed studies examine the influence of additional factors related to the distance at which motorists choose to pass cyclists. First, we examine the influence of cyclist lane position and the presence of lane markings on passing distances in a simulated driving task. Second, one potential reason studies do not consistently find larger average passing distances is because there may be significant individual differences among drivers in the ability to judge a safe distance at which to pass bicyclists, which contributes to variability in passing distances observed in field studies. Increased variability would make it more difficult to detect differences in passing distances before and after the installation of cyclist facilities. In this study we also examine potential age and individual differences in distance estimates in both a simulated driving and field task. A third goal of this research is to validate passing distances in a simulated driving task against those observed in a field task for both younger and older adults.</p>
Describe Implementation of Research Outcomes (or why not implemented)	
Place Any Photos Here	
Impacts/Benefits of Implementation (actual, not anticipated)	
Web Links <ul style="list-style-type: none"> • Reports • Project website 	