

UTC Project Information	
Project Title	MPC-647 – A Systems-level Analysis of Left-turning Vehicle-Pedestrian Crashes
University	University of Colorado Denver
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Funding Source(s) and Amounts Provided (by each agency or organization)	<p>USDOT, Office of the Assistant Secretary for Research and Technology \$103,173</p> <p>University of Colorado Denver \$103,173</p>
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Agency ID or Contract Number	69A3551747108
Start and End Dates	March 26, 2021 to July 31, 2022
Brief Description of Research Project	<p>Left-tuning vehicle-pedestrian crashes have long been dangerous for pedestrians in situations when drivers should be yielding the right of way. They outnumber right-turning vehicle-pedestrian crashes by a factor of 3 to 1 and are grossly overrepresented in terms of crash severity. If a driver does not properly yield, it is easy for traffic engineers to tally such crashes among the more than 90% of crashes that we attribute to human error. Yet, an accumulation of challenging conditions for a driver suggests that left-turning vehicle-pedestrian crashes are systematic problems and not random crashes caused by human error.</p> <p>Accordingly, the proposed project seeks to take a system-level approach to studying this crash type via an empirical, macroscopic analysis of eight cities across multiple years. This includes: i) determining where this crash type is over- or under-represented while controlling for the level of pedestrian activity; and ii) statistically evaluating what</p>

	<p>combination of signal, design, and/or policy approaches associates with better or worse safety outcomes while also accounting for crash migration. Instead of focusing solely on signalization solutions, as is common in the existing literature, the intent is to shed light on how cities can employ a combination of approaches.</p>
<p>Describe Implementation of Research Outcomes (or why not implemented)</p> <p>Place Any Photos Here</p>	
<p>Impacts/Benefits of Implementation (actual, not anticipated)</p>	
<p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project Website 	