

<b>STC Research Project Description</b>	
<b>Project Title:</b>	Analysis of Crashes in Freeway Work Zone Queues
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<b>Project Start Date:</b>	8/1/2007
<b>End Date:</b>	5/31/2008
<b>Other Milestones, Dates:</b>	N/A
<b>Project Objective:</b>	To facilitate greater knowledge about the factors that lead to secondary crashes in work zone queues.
<b>Project Abstract:</b>	The primary focus of this research is to determine the factors that lead to secondary crashes in work zone queues. The proposed research will be conducted in Jacksonville, Florida, with the cooperation with the Florida Department of Transportation, Jacksonville Traffic Management Center and the Florida Highway Patrol, Troop G. Crash data will be obtained from the Florida Highway Patrol and those crashes occurring in the vicinity of the identified work zones will be isolated from the larger crash data set. Once these crash records have been isolated, the characteristics of those crashes can be examined within the context of traffic data collected from the FDOT Traffic Management Center. This approach will provide a more thorough understanding of how traffic flow and safety are impacted by crashes in work zone queues.
<b>Task Description:</b>	1. Literature Review, 2. Data Collection and Reduction, 3. Analysis of Traffic Impacts, 4. Formulation of Recommendations, 5. Preparation and Submittal of the Final Report, and 6. Submit Final Report
<b>Total Budget:</b>	\$ 25,000
<b>Student Involvement (Thesis, Assistantships, Paid Employment):</b>	This project will be part of a Ph.D. dissertation and will involve one graduate student and one or two undergraduate researchers.
<b>Relationship to Other Projects:</b>	This project will be an extension of an existing FDOT project.
<b>Technology Transfer Activities:</b>	<ul style="list-style-type: none"> <li>• Documentation of all project activities and results in a final report to be submitted to the STC for posting on their website;</li> <li>• Preparation of an executive summary and submitted to the STC for posting on their website;</li> <li>• Development of at least one scholarly paper to be submitted to a refereed journal for potential publication;</li> <li>• Presentation of the project activities and results at one or more technical conferences, such as the Transportation Research Board meeting; and</li> <li>• Preparation of press releases for the University of Florida Technology Transfer (T<sup>2</sup>) Center newsletter and Florida Highway Patrol newsletter.</li> </ul>
<b>Potential Benefits of Project:</b>	The results this study could be used to guide the setup of the work zone for a specific area, in order to minimize the impacts of the queuing activity and the corresponding expected secondary crashes. This research will then provide the foundation upon which future work zone capacity and research can be conducted.
<b>TRB Keywords:</b>	Work zones, safety, secondary crashes