

UTC Project Information	
Project Title	Evaluating Signal Timing Planning Options in Terms of Coordination between Successive Signals at Continuous Flow Intersections, Phase II (Project G6)
University	Team: University of North Carolina at Chapel Hill and North Carolina State University
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Funding Source(s) and Amounts Provided (by each agency or organization)	STRIDE: \$64,750
Total Project Cost	\$64,750
Agency ID or Contract Number	69A3551747104
Start and End Dates	April 1, 2022, to March 31, 2023
Brief Description of Research Project	Continuous flow intersections (CFIs) have been proven to increase the capacity for motorized vehicles. However, in a CFI, motorized traffic must go through one or more extra intersections often the crosswalks are multi-staged. Therefore, the coordination among different signals is critical to all movements for a CFI. Moreover, the full benefit of a CFI for motorized traffic can only be achieved at the cost of a complex and multi-staged crosswalk. Past studies that attempted to improve the coordination of the intersections at a CFI primarily focused on motorized traffic. This project will investigate the coordination of crosswalk signals, with the primary focus on pedestrians, at a CFI and its tradeoff with the motorized operation. First, the team will determine the signal timing plan that will maximize the coordination of motorized traffic for a given set of traffic operations and geometric characteristics of a CFI. For this model, the team will assess different crosswalk options regarding the signal coordination for pedestrians and develop an updated signal timing plan. Geometric characteristics critical to pedestrian movements will be identified. The performance of the models developed in these two steps will be compared to estimate the tradeoffs. It is expected that the outcomes of this project will help agencies to make CFI designs more convenient for pedestrians without significantly compromising motorized vehicle operations.



Describe Implementation of Research Outcomes (or why not implemented)	Not available yet.
Place Any Photos Here	
Impacts/Benefits of	Not available yet.
Implementation (actual, not	
anticipated)	
Web Links	https://stride.ce.ufl.edu/project-g6/
Reports	
Project website	