

UTC Project Information	
Project Title	Developing a Methodology to Evaluate Detours for Major Construction Projects in the Era of Real-Time Route Guidance (Project D3)
University	University of Alabama at Birmingham
Principal Investigator	Andrew J. Sullivan, Ph.D. Associate Professor Department of Civil, Construction, and Environmental Engineering
PI Contact Information	<a href="mailto:asullivan@uab.edu">asullivan@uab.edu</a> 205-934-8414
Funding Source(s) and Amounts Provided (by each agency or organization)	STRIDE: \$55,000 UAB: \$55,000
Total Project Cost	\$55,000
Agency ID or Contract Number	69A3551747104
Start and End Dates	November 15, 2019 – November 15, 2020
Brief Description of Research Project	On major road construction projects, maintaining agencies typically designate detour routes and provide detour information to motorists. In the era of real-time traffic information and in-vehicle route guidance, it is not clear to what extent this detour information is followed or if all components are necessary. An example is the current project to reconstruct Interstate 20/59 in downtown Birmingham, in which a 1.5 mile segment of the interstate has been completely closed for a duration of over 1 year. Prior to construction this segment carried approximately 160,000 vehicles per day, so the traffic diversions are significant, but it is not clear to what extent motorists are using the detour routes designated and signed by the Alabama DOT or the detour information being provided through the media. Understanding how the regional network has been affected can provide useful information for future projects involving closures of major facilities. Using big data analytics and traveler surveys, this project will attempt to quantify the extent to which motorists have used designated detour routes or chosen to use alternate routes, what means they have used to make those choices, and what the

	impact has been on local and regional congestion. The goal is to provide insight on how motorists make detour choices with the abundance of traffic information available to them and develop a methodology for creating detour plans for large construction projects to assist travelers and minimize congestion impacts.
Describe Implementation of Research Outcomes (or why not implemented)  Place Any Photos Here	Not available. Research is in progress.
Impacts/Benefits of Implementation (actual, not anticipated)	Not available. Research is in progress.
Web Links <ul style="list-style-type: none"><li>• Reports</li><li>• Project website</li></ul>	<a href="https://stride.ce.ufl.edu/project-d3/">https://stride.ce.ufl.edu/project-d3/</a>