


ROADWAY SAFETY INSTITUTE

Advancing roadway safety with user-centered solutions

UTC Project Information	
Project Title	Alcohol-Related Hot-Spot Analysis and Prediction for Improving DWI/OVI Law Enforcement
University	University of Akron
Principal Investigator	William Schneider
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Funding Source(s) and Amounts Provided (by each agency or organization)	Roadway Safety Institute (USDOT): \$130,000 University of Akron: \$130,000
Total Project Cost	\$260,000
Agency ID or Contract Number	UTC Grant Number: DTRT13-G-UTC35 CTS# 2015040
Start and End Dates	8/1/2014 – 12/31/2016
Brief Description of Research Project	<i>Final report abstract:</i> This project developed methods to more accurately identify alcohol-related crash hot spots, ultimately allowing for more effective and efficient enforcement and safety campaigns. Advancements in accuracy came from improving the calculation of spatial autocorrelation and interpolation, the identification of spatio-temporal patterns, and the influence of geographical patterns on the spatial distribution of crashes. The project then used the location-based hot-spot maps created using these improved methods to develop a new method of patrolling for intoxicated drivers. This method guides officers to statistically significant locations where intoxicated drivers are most likely to be, allowing officers to be more accurate while patrolling. Additionally, this method allows officers to pass through more alcohol-related crash locations per minute and mile than current patrolling practices. By improving how officers patrol, individuals may be deterred from driving while intoxicated, and alcohol-related crashes may be ultimately reduced.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	<i>No data available.</i>

Last updated (5/3/2018)



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Impacts/Benefits of Implementation (actual, not anticipated)	<i>No data available.</i>
Web Links <ul style="list-style-type: none">• Reports• Project website	http://www.roadwaysafety.umn.edu/research/search/projectdetail.html?id=2015040 http://www.roadwaysafety.umn.edu/publications/researchreports/reportdetail.html?id=2586

Last updated (5/3/2018)

