



MEGAREGION MASS EVACUATION SPATIOTEMPORAL TRAFFIC CHARACTERISTICS

The 2017 evacuation of Hurricane Irma has been referred to as the largest evacuation in the history of the nation with approximately 6.5 million Floridians under mandatory or voluntary evacuation orders (Marshall, 2017; Cook, 2017). The goal of this research is to build upon the prior knowledge and expand the scientific understanding of traffic flow principles governing large scale emergency evacuations. The Hurricane Irma evacuation data will be collected from 510 SunGuide locations, from across the state for the 34-day period encompassing the Hurricane Irma Evacuation.

The SunGuide program gathers roadway data from across the State of Florida. Traffic counts and average travel speeds are reported every hour and archived for analysis. The analysis of the temporal characteristics of the evacuation phenomenon in this research will determine when Floridians decided to evacuate and how the evacuation progressed over time.

The spatial analysis component will assess the evacuation origins and destinations, from across the state. In doing so, this research seeks to develop a better understanding of the travel flow patterns and traffic flow principles during the evacuation process.

In addition, the association between the evacuation and the path of the hurricane will be investigated as well as the association between the evacuation and the proximity to the coast.

Lastly, the relationship between detector volumes and evacuation announcement/information timing will be investigated. This knowledge can be leveraged to better plan for and respond to other large scale evacuations as well as identify best practices moving forward.

Spatiotemporal Traffic Characteristics of Megaregion Mass Evacuation (#CM2-45)

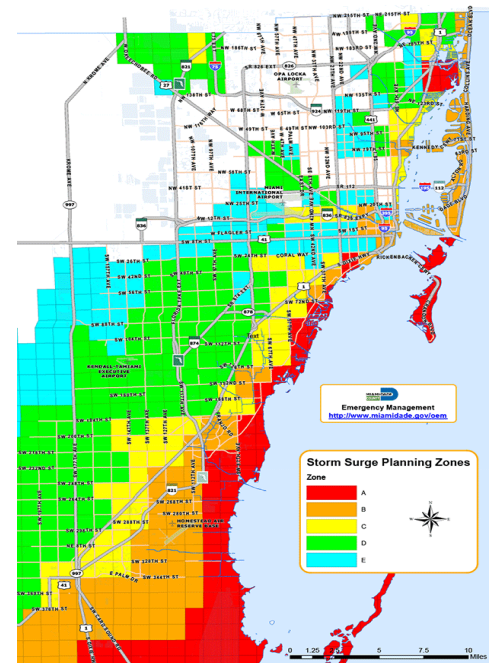
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Project Information Form:
<http://sites.utexas.edu/cm2/files/2018/06/Year-3-Brian-Wolshon-Spatiotemporal-Traffic-Characteristics.pdf>



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Hurricane Irma Evacuation

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