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NON-COMPETITIVE DIVISION

Clarifying The Heuristics Of Roadway Closures In Tropical Cyclone Evacuations

The closure of roadways during tropical cyclone events is an understudied, yet vital moment in the management of tropical cyclone evacuations; for many coastal residents it represents a penultimate moment of their emergency experience. When roads and bridges from coastal barrier islands close during mandatory evacuations, their residents' window to evacuate does as well.

The closure of bridges and roadways in hurricanes in the United States is an often confusing patch-worked practice of regional, state, and even intra-state region policies and workflows spread across overlapping jurisdictions and agencies. Despite recognition that factors such as the transparency, accuracy, and detail of warning messages and announcements are critical to public buy-in and participation, little if any serious investment has been made in studying the heuristics of roadway closures. Without clear heuristics and decision making strategies for when, how, and why roadways are closed in evacuations, transparent, accurate, and detailed communication with publics bridge about those closures is obstructed. Without improved public communication about bridge and roadway closures in evacuations, engaging publics to willingly participate in the evacuations such closures loom over will remain difficult to achieve.

This poster presents Critical Decision Methods (CDM) as a means of developing sensitive, flexible, and evidence-based best-practices and policy recommendations

to improve future evacuation roadway closures. This poster presents the fundamental tenants of CDM methodologies, and develops a methodological framework to conduct field-study on the decision making heuristics involved in closing roads and bridges in tropical cyclones. Finally, this poster describes the potential Emergency Management scholarship, training, and communication products that CDM field-studies might offer EM professionals and publics to help navigate the closures roads and bridges in evacuations.

Presentation Theme: EM decision making support and communication in bridge and roadway closures.

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