

Research Needs Statement

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Title:	Drones and Other Technologies to Assist in Disaster Relief Efforts
Key Words:	Drones, technology, disaster relief, asset management, emergency preparedness, emergency response
Research Problem Statement:	As natural disasters and extreme weather events are becoming more prevalent due to the impact of climate change, emergency preparedness and efficient disaster relief efforts need to be a priority for the State of Tennessee. What are the most efficient technologies TDOT and other state agencies should be employing for disaster relief efforts? What are the best practices and most impactful techniques for utilizing these technologies in disaster relief efforts?
Research Objective:	Identify the types of technologies best suited for emergency preparedness and disaster relief efforts in Tennessee. Determine best practices and most impactful techniques in terms of utilizing drones and other technologies for these efforts.
Related Research/Continuation of Past or Current Project:	N/A
Expected Deliverables:	<ol style="list-style-type: none"> 1. Analysis of the technologies best suited for emergency management efforts in Tennessee. 2. Report identifying the best use of these technologies for TDOT to aid in disaster relief efforts and properly prepare for emergencies throughout the state.
Estimate of Problem Funding & Research Period:	\$150,000; 18 month research period
Urgency and Potential Benefits:	Natural disasters have been increasing throughout the nation and are increasingly a threat to the state of Tennessee; this research will serve as an important resource for TDOT and other agencies in the way we both prepare for emergencies and provide aid across the state in a more efficient and cost effective manner.
Implementation Planning:	TDOT, in conjunction with other state agencies, can use the recommendations and outcomes of this research to help enhance emergency management efforts throughout the state.
Person(s) Developing the Problem Statement:	Melanie Murphy - Senior Transportation Planner Melanie.Murphy@tn.gov



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