CE 650C

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**Return to normal operating conditions model**

Identifying incidents have significantly improved over time but once identified traffic management center operators do not have a way to estimate how long the incident will last. Many models have been developed but typically focused on accidents and hazards/stalled vehicles. The models rarely took into account real-time traffic speeds or weather and would report the clearance time as when responders left the scene. This project will attempt to combine TMC incident information, crowd-sourced incidents (Waze), crash data, roadway geometry, probe speed data (INRIX), and weather to develop a model that can ingest data in real time and estimate the time traffic will return to normal conditions. The TMC, Waze, crash and geometry are relatively small in size but the INRIX (~500gb/year) and weather (>1TB/year) will require big data analytics. Once completed this model could be implemented in real time to provide estimates for TMC operators, the office of traffic operations, and the public for route planning and guidance.