Assessing Detroit Regional Traffic Conditions Using Intelligent Transportation System Data

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OPPORTUNITY AND SIGNIFICANCE
- Intelligent Transportation System (ITS) data can measure and monitor the operational performance of the Detroit road network as conditions change, including new public transportation, construction zones, and winter operations.
- ITS data can provide speed mobility graphs which can be used as a method for analyzing cost-benefit calculations.
- The speed mobility graphs quantify travel time delays along I-75 by analyzing 566 traffic message channels (TMC) that produced 983,778,775 travel time data points over a 5 year period.¹

METHODOLOGY

NORTHBOUND
- Reconstruction of a video with the lane elements and congestion.
- Traffic patterns at one of the interchanges.
- Example of speed changes by multiple routes.

SOUTHBOUND
- Traffic patterns at one of the interchanges.
- Example of speed changes by multiple routes.