Projects First-Round Winner
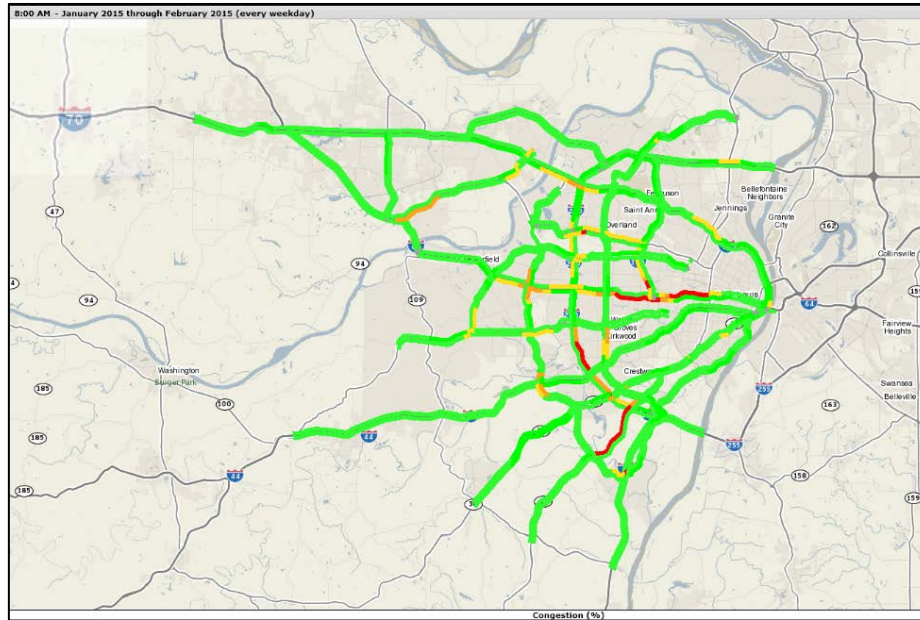Innovations Challenge
http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm

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Prepared by Transportation Planning
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*Innovations*Showcase

Live Traffic Data

Description

In March 2014, MoDOT began using live traffic data (speeds and travel times) from a third-party vendor, HERE, on about 12,000 miles of roadways throughout the state. This data provides MoDOT with up to the minute, real-time information related to traffic conditions on the state's most heavily traveled roadways. Essentially, MoDOT receives a live data feed from HERE that is integrated into MoDOT's TMC operations and traveler information resources (such as the Traveler Information Map). The data is being used to provide customers with real-time traffic conditions, enhance and simplify the generation of performance measures, and provide MoDOT staff with a live visualization of traffic conditions resulting from congestion, incidents, work zones, and adverse weather. Once the data went live, MoDOT's real-time information for traffic conditions increased exponentially. The data feed is being utilized by MoDOT staff in Traffic, Maintenance, Construction, Emergency Response, Planning and Customer Relations.

Benefit

The most immediate benefit was more comprehensive traveler information made available to MoDOT staff and customers. Briefly after purchasing the data, MoDOT's Traveler Information Map added a live traffic conditions layer for about 12,000 miles of roads in the state. This was done without any physical installation of field equipment, an alternative MoDOT could neither afford nor maintain. Internally, one of the greatest benefits realized by using the new data was the time saving and simplification of Tracker measures. With the new dataset, information is assembled and processed in as little as one work day by a single employee in Central Office. Another benefit is comprehensive data for work zone mobility analysis. This measure was also previously collected manually but now, MoDOT can use the data to identify slowdowns through significant

work zones at any time of the day. Yet another benefit of the data is text/email alerts for internal staff related to traffic slowdowns along critical corridors, through work zones, and during adverse weather. The alerts are currently being tested and will allow MoDOT staff to receive notice of adverse conditions without the need to continually monitor the Traveler Information Map or cameras. These alerts can help MoDOT quickly identify incidents or backups in work zones. In the future, the data will be used to generate automated congestion warning messages to customers via MoDOT's 65 or so rural dynamic message signs.

Materials and Labor
Live Traffic Data has reoccurring costs of $198,000 per year. There were 120 hours in labor to integrate the data.

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Additional photos can be seen by accessing the Innovations Challenge homepage at: http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm.