

Productivity First-Round Winner
Innovations Challenge

April 2016

Prepared by Transportation Planning
Missouri Department of Transportation

Field Traffic Alert System

1. Map feature for road segment selection. Users simply point and click.



Description

In March 2014, MoDOT began purchasing real-time traffic data on over 11,000 miles of roads in the state. This data provides live average speeds for various road segments throughout the state. The data was initially implemented into the MoDOT Traveler Information Map so that customers and staff could visually see live speeds online at any time. While very useful, this tool was most beneficial for employees that routinely had access to a computer. Field employees, however, had need for a more proactive way to monitor the data. As a result, the Traffic and Highway Safety Division worked with Information Systems to develop an internal text alert system to disseminate the real-time traffic data to staff. The system was launched in April 2015 and it allows a MoDOT employee (or a contractor) to sign up for specific road segments in which he or she would like to receive notification when speeds fall below a defined threshold. Users can sign up for as many segments as they like, and they can receive notifications either via text or email. In addition, users have complete control over the criteria they establish for their alerts (time of day, day of week, speed threshold, etc.). For example, if a user is responsible for a work zone, they can sign up for only the road segment(s) in the work zone and determine at what times and at what speed threshold they want to receive an alert. These text alerts have become very useful to MoDOT staff, particularly in the areas of work zone and traffic incident management. Today, around 200 users utilize the text alerts in their day to day operations, including all three MoDOT TMC's and a couple of MSHP Troops.

Benefit

By utilizing the text alerts, MoDOT staff (and contractors) can now be notified immediately when traffic conditions warrant a response of some kind. This could be congestion in a work zone, a traffic crash, adverse weather, or just everyday congestion. By signing up for the text alerts, users can specify the exact times an alert would be most critical for them or, if necessary, they can elect to receive alerts 24/7. Many times, these alerts have been the first notification an employee has had regarding adverse traffic conditions in their area of interest. The earlier notification provided by these alerts allows staff to respond more promptly, a critical component of improving safety in any kind of congested traffic environment. The sooner crews can respond, the quicker the issue can be resolved, lanes can be re-opened, and safety can be improved.

Materials and Labor

No materials cost
Labor: 80 hours

For More Information Contact:

Jon Nelson at jonathan.nelson@modot.mo.gov or (573) 751-1157.

Additional photos can be seen by accessing the Innovations Challenge SharePoint page at:
<http://sharepoint/systemdelivery/TP/Documents/InnovationsChallenge.aspx>.