U.S. Department of Transportation

ITS for Traffic Incident Management

According to the Federal Highway Administration, effective Traffic Incident Management (TIM) reduces the duration and impacts of traffic incidents; improves the safety of motorists, crash victims, and emergency responders; and reduces the frequency of secondary crashes.[1]

This document provides examples of ITS-enabled TIM strategies that focus on improving incident detection, scene clearance, and traveler information for demand management. The featured benefits and lessons learned are based on ITS project evaluations contained in the ITS Databases at: www.itsknowledgeresources.its.dot.gov.

Click on each example to learn more.

Traffic Incident Management

Improved Traveler Information in Utah

Researchers analyzed message logs from 21 variable message signs and associated crash records on a 57-mile segment of I-15 in the Salt Lake City area. The study found that combined messages of "Prepare to Stop" along with the number of miles to the crash site could increase route diversion rates by drivers approaching major incidents.

Quicker Incident Detection in Georgia

Georgia DOT deployed an incident connectivity platform with a cloud-based call-taking app that allows traffic operations and emergency centers to quickly locate and continuously communicate with motorists. Based on a 3-month pilot program, this platform reduced the time to locate stranded motorists by 85%.

Quicker On-Scene Clearance in South Carolina

The deployment of a collision and ticket tracking system for crash, personal contacts, and citation data reduced police investigation time by 63% and decreased average report processing time by 85%. This electronic data system also provided more timely, accurate, and complete crash data, which increased the reliability of the data for safety decision making and improved efficiency by supporting simultaneous access by multiple agencies.