

**SHARING
RESOURCES**

**COORDINATING
RESPONSE**



**Deploying and
Operating
Incident
Management
Systems**

Tackling Incidents with Cost-Effective Technology and Interagency Cooperation

“The keys to incident management are communication, coordination, and cooperation between all the players. The Department of Transportation is a support player in an incident management system. The providers include: fire, police, emergency medical services (EMS), towing, and recovery. The DOT covers the traffic management role.”

—Jon DuFresne, Chairman, Statewide Incident Management Committee, Virginia DOT

Effective management of roadway incidents can be achieved by balancing coordination of people resources with investment in technology.

“Our incident management program allows us to all work off the same page during a major closure. Using technology, we all know exactly where traffic is being diverted to, and using the multi-agency relationships we have forged in coordination meetings, we know who everyone is and what their responsibilities are when we meet at a scene.”
—William Stoeckert, Director of Highway Operations, Connecticut DOT

Detection, verification, and communications technologies go hand-in-hand with inter-agency cooperation to respond to and clear incidents in a safe and effective manner.

“It can be awkward for police officers to have a traffic management center dispatch telling them how to do their job. We rotate officers to work in our Transportation Management Center (TMC) and to experience the technology first hand. Now when they are dispatched to a freeway incident, the police will radio the TMC for more detailed

information on location and severity of an incident.”

—Police Captain Timothy Kelly, TMC Operations Supervisor, Houston Metro

Implementing incident management systems can be less costly than other solutions such as building additional road capacity. Even as part of a rebuild project, incident management systems:

- Cut operating costs
- Provide efficient communication channels
- Improve road safety

“In the future, as ITS [intelligent transportation systems] solutions are incorporated into the reconstruction of the transportation infrastructure, our abilities as a region to cost-effectively utilize our highway and transit capacity will increase even more dramatically.”

—John Corbin, Freeway Operations Engineer, Wisconsin DOT



“One of our priorities on the I-70 Corridor is to get enough traveler information out to reduce the traveler and incident responder problems. With good information about an incident, travelers can either delay their trips or take an alternative route, and the incident responders have less congestion to manage.”

—John Muscatell, Manager, Staff Traffic and Safety Branch, Colorado DOT

Incident Management Systems Leverage Available Resources

Solutions range from simple, yet effective, measures to sophisticated technologies. Agencies can first implement the most simple parts and then build on those to create an effective and successful incident management program.

“Our safety service patrol trucks have been a tremendous benefit to us. I consider them as building blocks of our incident management system because the success of our four trucks has won us political support both internally in the DOT and externally with elected officials. We have now been given a budget towards cameras, variable message signs, and other new technologies.”

—Patricia Harrison, Safety Director, South Carolina DOT

Colorado, as an example, used a simple solution—connecting a radar gun to a variable message sign that alerts drivers of their speed and immediately warns them of the 45 m.p.h. curve approaching. On this particularly dangerous curve, there have not been any overturned trucks since this was deployed.

“We are continually asking ourselves how we can reduce the window of an incident by reducing the time it takes to respond to and clear an incident. Increased usage of technology, beginning with incident detection and notification, effective communication and proper use of responding resources, all contribute to minimizing the time span of an incident.”

—Charles R. Manuel, Incident Management Coordinator, AZTech, Arizona DOT

Demonstrating Successful Incident Management Systems Attracts Stakeholder Support

Continued support for an incident management program depends on stakeholder buy-in. Early demonstration of benefits is essential for continued support for the program.

“Learn from the early successes of other stakeholders and find quick solutions you can implement to prove to your stakeholders that putting electronics on the roadways really works.”

—John Muscatell, Manager, Staff Traffic and Safety Branch, Colorado DOT

Incident Management Is Cooperation and Resource Management

The success of incident management programs in most cases does not depend on technical issues. The success depends on the resolution of institutional and nontechnical issues.

“Keep in mind that it takes time to pull a successful incident management team together. In the beginning, some of our agencies would send people to our meetings who only knew they were required to be there. A year later, those same agencies have seen the results and are full-fledged, active members of the team.”

—Jon DuFresne, Chairman, Statewide Incident Management Committee, Virginia DOT

“Incident management, conducted with the support of all involved stakeholders in a pre-planned and organized manner, will provide great benefits to the region in terms of safety and efficiency of the transportation system.”

—J.R. Robinson, Director of ITS Programs, Virginia DOT



MICHIGAN INTELLIGENT TRANSPORTATION SYSTEMS CONTROL CENTER

“For a really successful program, all parties involved must be committed to clearing the roadway. Sometimes that means educating the various agencies on the effects of an incident to the entire road network. Each partner must also understand each other’s responsibilities and what each one needs to get their job done.”

—Dan Powell, Project Manager, AZTech, Arizona DOT

INTELLIGENT TRANSPORTATION SYSTEMS



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