SAFER TRAVEL

IMPROVED ECONOMIC PRODUCTIVITY

Incident Management Systems

Tackling the Challenges of Congestion with Cost-Effective Technologies and Interagency Cooperation

"Incident management is the most effective and beneficial means of attacking incident-related congestion."
—J.R. Robinson, Director of ITS Programs, Virginia DOT

State and Local Governments Nationwide Suffer from the Costs of Congestion

"The Seattle metropolitan area has an average daily traffic count of over 230,000 vehicles a day on the interstate system. Any incident causes a major congestion problem."
—Jerry Althauser, Incident Response Team Supervisor, Washington DOT

Traffic incidents on our nation's roadways quickly deteriorate traffic conditions. The increased congestion costs are:
- Delayed response to emergencies
- Police, fire, and ambulances are unable to reach the scene in time for effective response, affecting recovery and rescue, and the resultant adverse effect on the citizens' quality of life
- Weakened regional economy
- Commuters and industry decide to relocate to a different area, eroding the tax base
- Lost tourism revenue
- Vacationers rethink their travel plans, damaging the livelihood of local businesses

Yet building more roads, because of the lack of available land, expense involved, and environmental concerns, is no longer a viable solution to congestion.

Incident Management Systems Keep Traffic Moving with Innovative Techniques and High-Tech Devices

Incident management systems reduce congestion and make the roads safer.

"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
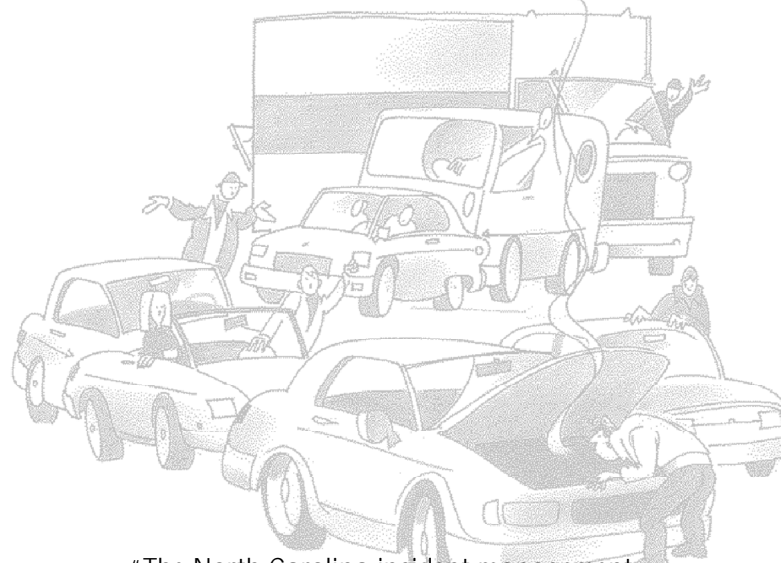
"The North Carolina incident management program does a very effective job of responding to incidents on our highways… it greatly reduces the negative impact of incidents on the free flow of traffic."
—Frank Emory Jr., Member of the North Carolina Board of Transportation

Less costly than building new roads, the systems leverage existing technology such as:

- Embedded sensors in roads
- Closed circuit television cameras mounted along the highway
- Variable message signs

These technologies, in turn, help traffic control centers to:
- Detect slowdowns caused by accidents and initiate response within seconds of an incident occurring
- Verify incident sites and determine the appropriate emergency resources required
- Respond by dispatching resources
- Provide information to motorists

These systems allow state and local governments to detect, verify, respond to, and clear incidents faster, reduce congestion, and maximize resources.

"We remotely assess incident scenes by video to identify what resources are needed to respond to the incident. This leads to reduced incident clearance times, minimized traffic impacts, and more efficient use of our resources."
—Sean Nozzari, Chief of Caltrans Transportation Management Center, San Francisco Bay Area

Governments Build Complete Transportation Solutions with Interagency Cooperation

Effective incident management systems are not based solely on proven technologies, they also require cooperation and communication among diverse organizations.

Integrating both technology and the needs of various institutions is critical for each incident management system.

Coordinating Resources To Keep Traffic Moving

"Our Traffic Incident Management Enhancement (TIME) Program began as a consensus-building effort to better understand inter-agency communication needs and to enhance the level of coordination between highway operations and emergency service entities clearing incidents from the freeways."

— John Corbin, Freeway Operations Engineer, Wisconsin DOT

Coordinated efforts yield many benefits:

- Introduce new levels of government efficiency by sharing ideas and tasks
- Develop a consistent structure for statewide incident management
- Reduce response time to, and traffic delays associated with, vehicle incidents across geographical areas

Governments Gain Efficiency with Incident Management Systems

Incident management systems help state and local governments:

- Save taxpayer dollars by stretching existing resources
- Reduce their working citizens' commute times
- Boost economic development
- Cut operating costs of responding agencies
- Reduce fuel consumption and emissions
- Make communities more mobile, prosperous, and livable

"An economic side effect of a working incident management program is that it keeps traffic moving. In our case, traffic is mostly trucks which carry produce and trade, so it is in the economy's best interests to keep them moving."
—William Stoeckert, Director of Highway Operations, Connecticut DOT

Communities with incident management programs typically attract profitable business.

"Our success depends on our product reaching our plant in a narrow window of time… delays of only 20 minutes can create quantifiable losses in production. We look to the Birmingham Regional Incident Management Program as a means of ensuring the continued economic vitality of our first U.S. production facility."

—Emmett Meyer, Vice President, Mercedes Benz US International

MICHIGAN INTELLIGENT TRANSPORTATION SYSTEMS CONTROL CENTER

INTELLIGENT TRANSPORTATION SYSTEMS

U.S. Department of Transportation
Room 3401, HOIT-1
400 7th Street, SW
Washington, DC 20590
Phone: (202) 366-0722
Facsimile: (202) 366-3302
Or visit our web site at www.its.dot.gov