U.S.Department of Transportation Federal Highway Administration

EXECUTIVE SUMMARY: INFORMATION SHARING FOR TRAFFIC INCIDENT MANAGEMENT

Information sharing is critical for safe, quick, and appropriate traffic incident management (TIM); these efforts have direct correlations to safety and mobility. Successful information sharing between TIM responders facilitates resource identification, response coordination, and information dissemination.

Information Exchange by Public and Private Responders

Incident response activities are interdependent and responders must

agree to basic task definitions, lines of authority, organizational issues, and assignments of responsibility. Four broad categories of information exchange are:

- Face-to-Face
- Remote Voice

- Electronic Text
- Other Media and Advanced Systems

Information Collection and Distribution Practices that Maximize Safety and Facilitate Quick Clearance

Vital for effective incident response, better information collection practices improve response efforts by ensuring that proper equipment and resources are available. Better information dissemination allows motorists to make better travel decisions. Overall incident impacts are reduced through use of:

- Integrated response
- Automation or technology
- Strong relationships

- Shared command
- Definition of roles and responsibilities
- Debrief sessions

Information Collection

Incident details are needed for effective, efficient response and traffic management. This information can be collected by on-scene personnel, ITS field devices, computer aided dispatch, or a combination of these elements. It must then be shared between agencies that handle various response components to realize improvements in overall safety and operations.

Information Dissemination

Responders must share and disseminate incident information between themselves and with the motoring public. With greater automation and integration, they can provide the most accurate, reliable, and timely information available as incident congestion conditions change.

Coordination Between Public Safety and Transportation Agencies

Information dissemination is most effective when a centralized location is used as an information clearinghouse for response efforts. This reduces redundant notifications, improves accuracy, and keeps on-scene responders from being distracted by repeated requests for information that detracts from activities requiring their attention, particularly when the incident response is complex or spread out over a large area.

Institutional Arrangement and Agreements

Memoranda of Understanding/Agreement provide the framework for incident operations and define responder roles and responsibilities. This framework helps to keep everyone involved in incident response clear and informed, especially when a response plan grows in complexity or is influenced by external factors.

Training and Debriefings

Training and debriefing sessions allow responders to share knowledge on practices and techniques. TIM team meetings can be an effective forum for discussions to gauge current TIM performance and establish strategies for on-scene operations, response protocols, communications, and outreach and training to meet and exceed performance expectations.

Performance Measurement and Continuous Improvement Best Practices

TIM Program-Level Performance Measures Focus States Initiative

Monitoring and measuring TIM strategy effectiveness is essential to continually evaluate progress and identify improvements. Two particular objectives place specific emphasis on communications measurement and improvement, and require well-developed communications between response agencies as well as a strong commitment to an integrated TIM program:

- Improve communications between responders and managers
- Provide timely, accurate, and useful traveler information

Evaluation and Lessons Learned

Because baseline information or data specific to information sharing can be extremely limited, precise incident metrics are difficult to quantify. Additional reporting capabilities and resources need development, so responders must be careful when working toward measures that exceed current data collection and reporting system capabilities. Responders may find it easier to answer these questions:

- Were resources engaged more quickly?
- Were proper resources brought to the incident scene?
- Was the incident investigation process improved?
- Was the response effort improved?
- Were traffic disruptions minimized?
- Were safety improvements realized, including secondary crashes?
- Did traffic congestion recover more quickly?
- Was roadway customer satisfaction improved?

BARRIERS TO INFORMATION SHARING

While information sharing is generally accepted by incident responders as a positive and desirable practice, various barriers still remain. The foundation to overcome any such barriers is organizations' willingness and commitment to work cooperatively with one another. Formal frameworks for response activities and close working relationships at all organizational levels increase the opportunities for effective and efficient information sharing. These barriers fall into three categories:

- Administrative/Institutional
- Operational
- Technological

This Primer is available from FHWA's Web site at http://ops.fhwa.dot.gov/incidentmgmt/publications.htm.

