SCAN TEAM REPORT

NCHRP Project 20 68A, Scan 10 04

BEST PRACTICES SUPPORTING TRAFFIC INCIDENT MANAGEMENT (TIM) THROUGH INTEGRATED COMMUNICATION BETWEEN TRAFFIC MANAGEMENT CENTER AND LAW ENFORCEMENT AND EFFECTIVE PERFORMANCE-MEASUREMENT DATA COLLECTION

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Executive Summary

Traffic incident management (TIM) depends fundamentally on effective communication among responsible personnel (e.g., in incident reporting, response dispatch, and traffic management). Experience gained from each incident provides opportunities to improve agencies' TIM performance. Both communication and learning from experience are being enhanced by new technology and management practices, such as computer-aided dispatch (CAD), inter-jurisdictional harmonization of agency communication procedures (e.g., standardization of terminology and adoption of common radio frequencies), and channels for communicating with travelers and collecting data on traffic performance.

This scan focused on examining the TIM practices in regions that have enhanced TIM performance through integrated communication between traffic management centers (TMCs) and law enforcement (LE) and effective performance-measurement data collection. The scan team selected and subsequently interviewed scan participants to learn about their best practices and the important features of those practices in each region. The team placed additional focus on collecting the lessons learned and insights gained through the participants' adoption of their particular practices, with particular regard for adoption of CAD and related technologies. The scan explicitly considered the perspectives of transportation, LE, and other incident-response agencies.

The scan team was particularly interested in having discussions with state departments of transportation (DOTs) and other agencies that perform traditional traffic operations, specifically related to TIM, in collaboration with LE or emergency management and their respective CAD technologies. Furthermore, of those entities that have developed processes and procedures for collaboration, the team wanted to learn what performance measures they regularly monitor and track to ensure that their program is delivering the desired results. Additionally, the team searched for those entities that perform the above-mentioned collaboration in a collocated facility or TMC.

The team's general topics of interest included:

- Specialized technologies being used for existing and new projects and programs associated with TMC operations

- Standards, guidance, and best practices for developing and fostering collaboration and data sharing between TIM operations and LE personnel

- Criteria for measuring the effectiveness and/or performance of the various strategies in use at TMCs

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The scan team collected data for consideration in developing a fully functional, inter-jurisdictional, multiagency operations center, with a focus on data sharing and operational efficiencies between TIM and LE. This information is being used to assist the American Association of State Highway Officials (AASHO) and the Federal Highway Administration (FHWA) in developing best practices and technologies to maximize the realized collaboration benefits between TIM and LE personnel at TMCs.

Based on the desk scan of agencies and their current practices in the areas of interest, the scan team developed an extensive list of amplifying questions to further examine what each agency believed was most instrumental to their program's success. This additional information and further discussions with each agency enabled the scan team to hone the list of agencies of interest even further. A number of factors beyond simply collocation of different entities or successful data integrations enabled the scan team to identify the following agencies for further investigation and on-site fact-finding meetings:

- New Jersey DOT (NJDOT)

- Delaware DOT (DelDOT)

- Maryland State Highway Administration (MDSHA)

- FHWA

- Illinois State Toll Highway Authority (Tollway)

- Kentucky Transportation Cabinet (KYTC)

- Wisconsin DOT (WisDOT)

- Oregon DOT (ODOT)

- Washington State DOT (WSDOT)
  - Vancouver
  - Olympia
  - Tacoma

The entire scan team visited the host agencies over two weeks. The data and information that were collected ultimately lead to the findings and recommendations that are included in this report.

The scan team thoroughly reviewed the information supplied by each agency during the tour, collated the individual team members' notes, and identified a handful of key strategies of interest. The team determined a subset of consistent practices and/or objectives that have proven beneficial to the TIM and LE stakeholders and assembled a series of recommended best practices that could be adapted to a vast array of scenarios and TMC configurations. The scan team believes that by adopting some of these practices or simply understanding their underlying objectives, members of

the TIM and LE community can create and foster a more efficient, productive, and collaborative means of managing traffic incidents and improving the user experience for all.

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