

Collaboration Guidance

✓ LEVEL 1 TO LEVEL 2

Why Collaboration is Important

The development and implementation of TSM&O requires a collaborative approach. The effectiveness of most strategies is dependent on improving the coordinated performance of each partner.

Improvement Target

From	Relationships on informal, infrequent and personal basis (L1)
To	Regular collaboration at regional level (L2)
By	Establishing mechanisms for regular coordination and cooperation

Key Sub-dimensions

- [Public Safety Agency Collaboration](#)
- [MPO/RTPA/Local Government Cooperation](#)
- [Outsourcing/Public-private Partnerships](#)

Public Safety Agency Collaboration Action Plan (L1 to L2)

Strategy Summary

Establish working relationships

Key Actions

- A** Establish relationships at agency and district/regional level (metro and rural) with fire, police, emergency management and other responders and agree to regular interaction aimed at improving processes—with initial focus on emergency response and incident management
- B** Identify mutual objectives (shared vision) and key challenges to joint/cooperation in TSM&O and establish initial approach to performance management
- C** Review voice and data communications interoperability and information transfer for potential resolution
- D** Review, discuss and clarify key incident and emergency management data items needed for communication among key players in real time to support effective management
- E** Review, discuss, clarify and train for roles and responsibilities both in the field and centers for all key participants

ACTIONS

Action A: Establish relationships at agency and district/regional level (metro and rural) with fire, police, emergency management and other responders and agree to regular interaction aimed at improving processes—with initial focus on emergency response and incident management

Rationale: A close working relationship is essential to identify and carry out the key roles set forth in the operational concepts at more than a “nominal” level.

A.1 Identify and establish relationships among key personnel at the transportation agency, regional and local government level and among public safety counterparts (state patrol and local law enforcement, fire, and emergency entities) and agree to meet to discuss traffic-related activities focused on mutual cooperation to achieve respective agency objectives. Utilize as appropriate existing regional general purpose government planning and program mechanisms as conveners.

A.2 Identify and establish relationships among key personnel at the transportation agency central office (statewide) level and among public safety counterparts, including other state agencies and with appropriate state-level associations. Utilize as appropriate existing state and regional general purpose government program mechanism and administration level conveners as appropriate to establish and maintain the relationships.

Responsibility and Relationships: A working relationship needs to be both at the district/region level and at the agency level (CEO-to-CEO). DOT Executive sponsorship will be necessary, supplemented by district/regional leadership, to establish a framework for and interagency activity at the district/regional staff level. In some cases an MPO/RTPA or Council of Governments can provide the convening function.

Action B: Identify mutual objectives (shared vision) and key challenges to joint/cooperation in TSM&O and establish initial approach to performance management

Rationale: An understanding of respective (and differing) agency objectives, priorities, and constraints regarding safety, mobility, and law enforcement is essential to the development of an understanding of key issues as the basis for developing an effective cooperative approach. This understanding is essential both in the field and at the executive management level.

B.1 At the regional/district level, review the material from National Traffic Incident Management Responder Training Program (SHRP 2 L12/L32) and the National Transportation Incident Management Coalition (NTIMC) including shared objectives related to responder safety, quick clearance, and interoperable communications, as they relate to basic operational issues from each agency perspective in conduct of both routine and special procedures; do this in a formal manner for use as an agenda for follow-up joint consideration. (See references below for available material.)

B.2 At the central office level, review the material from the NTIMC and the relationship between field activities and overall agency-level policy, program, and resource considerations on the part of each agency.

Responsibility and Relationships: Utilize working group(s) as established in Action A.

Action C: Review voice and data communications interoperability and information transfer for potential resolution

Rationale: Effective operating relationships depend on good data and voice interchange among key players in real-time to establish situational awareness and to coordinate information and actions that must be based on compatible technologies.

C.1 Review status of existing and planned communications improvements (voice and data) regarding interoperability on an interagency basis—both center to center and field.

C.2 Review mutual availability of public safety agency computer-aided dispatch (CAD) information and DOT camera and sensor data in support of improved incident and emergency management, focusing on real-time availability of critical information.

C.3 Identify a potential staged plan to reach an acceptable level of interoperability and the commitment implications for each agency.

Responsibility and Relationships: Central Office staff working with district/regional traffic management centers and partners.

Action D: Review, discuss and clarify key incident and emergency management data items needed for communication among key players in real time to support effective management

Rationale: Effective incident and emergency and management depend on center and field personnel receiving key information items regarding incident characteristics and status in real time.

D.1 Review best practice regarding incident management procedures and protocols in light of current local practice to identify key information needed by public safety agencies, DOT, and towing and recovery participants to provide most effective response.

D.2 Identify specific information items, formats and sequences for communication (voice and data) needed by key participants at each key stage of incident and emergency management.

D.3 Develop appropriate communications protocols.

Responsibility and Relationships: Central Office staff working with district/regional traffic management centers and key partners (public safety agencies and private sector).

Action E: Review, discuss, clarify, and train for roles and responsibilities both in the field and centers for all key participants

Rationale: Effective incident and emergency response requires both joint preplanning and close real-time cooperation on the part of key players.

E.1 Identify key procedures and protocols among all key players with reference to incident and emergency management best practice and the National Incident Management Systems (NIMS), including incident command and support roles.

E.2 Review and discuss lines of authority within DOT and partner public safety agencies and clarify where necessary.

E.3 Conduct appropriate training, drills and tabletop exercises to test and improve concepts and familiarize personnel with roles and procedures, and to test communication protocols. (See the

National Traffic Incident Management Responder Training Program [SHRP 2 L12/L32] in the references.)

Responsibility and Relationships: Central office staff working with district/regional traffic management centers and partners.

Examples/References:

- Simplified Guide to the Incident Command System:
http://ops.fhwa.dot.gov/publications/ics_guide/ics_guide.pdf
- Intelligent Transportation System (ITS) Operational Support Contracts Implementation Plan:
http://utrc2.org/~old_site/research/assets/76/itsoperations1.pdf
- For state of the practice material: <http://ntimc.transportation.org/Pages/default.aspx> and http://ops.fhwa.dot.gov/eto_tim_pse/index.htm
- National Traffic Incident Management Responder Training Program:
http://www.fhwa.dot.gov/goshrp2/Solutions/Reliability/L12_L32/National_Traffic_Incident_Management_Responder_Training_Program

MPO/RTPA/Local Government Cooperation Action Plan (L1 to L2)

Strategy Summary

Develop and formalize basis for cooperative needs/opportunity analysis

Key Actions

- A** Establish mechanism for interagency dialogue regarding TSM&O at district/regional level between DOT and other transportation planning and operating agencies
- B** Participate in regional planning regarding agency priorities and funding opportunities

ACTIONS

Action A: Establish mechanism for interagency dialogue regarding TSM&O at district/regional level between DOT and other transportation planning and operating agencies

Rationale: There may be several road and transit operators in a regional service network including state facilities where TSM&O strategy development and operational coordination opportunities exist and are currently not considered by relevant jurisdictions.

A.1 Identify key participants in regional planning, systems development, routine systems operation, and emergency response—both highway and transit—and conduct mutual briefings regarding TSM&O policy, objectives, and program activities.

A.2 Establish (if it doesn't exist) or participate in interagency group to focus on ITS and TSM&O in regional transportation systems development or operations, including appropriate existing MPO/RTPA committees.

A.3 Coordinate local government TSM&O discussions with state and local public safety community as described above.

Responsibility and Relationships: Central office and district planning and operations staff taking initiative with MPO/RTPA staff through appropriate regional planning task force. Senior district/regional executive support may be essential to establish framework.

Action B: Participate in regional planning regarding agency priorities and funding opportunities

Rationale: A metropolitan and rural regional or local government transportation planning activity (if it exists) needs to consider TSM&O development and state DOT representation, and is essential as part of its planning and programming process in order to accomplish desired objectives and outcomes.

B.1 Participate in regional planning regarding agency priorities and funding opportunities representing agency interests at the regional level.

B.2 Identify cross-jurisdictional boundary issues and cooperative mechanisms to overcome cooperative barriers.

Responsibility and Relationships: Central office and district planning and operations staff taking initiative with MPO/RTPA staff through appropriate regional planning task force. Senior district/regional executive support may be essential to establish framework.

Examples/References:

- “The Benefits of Regional Collaboration in Managing Network Transportation Operations”: <http://www.piarc.org/ressources/documents/actes-seminaires06/c14-malaisie06/8619,TS15-Berman.pdf>
- “Institutional Architectures to Improve Systems Operations and Management” (SHRP 2 L06): <http://www.trb.org/Main/Blurbs/165285.aspx>
- Regional Concept for Transportation Operations: http://www.plan4operations.dot.gov/reg_concept.htm
- Regional Transportation Operations Collaboration and Coordination: A Primer for Working Together to Improve Transportation Safety, Reliability, and Security (FHWA): http://ntl.bts.gov/lib/jpodocs/repts_te/13686/13686.pdf
This primer was written for transportation professionals and public safety officials from cities, counties, and states that are responsible for day-to-day management and operations within a metropolitan region. It is intended to help agencies and organizations, and the operations people within them, understand the importance of regional collaboration and coordination, how it happens, and how to get started.

Outsourcing/Public-Private Partnerships Action Plan (L1 to L2)

Strategy Summary

Analyze opportunities for beneficial outsourcing and/or other public-private partnership opportunities

Key Actions

- A Identify TSM&O activities that may lend themselves to outsourcing and/or hybrid staffing
- B Review pros and cons of leveraging private sector resources and outsourcing functions

ACTIONS

Action A: Identify TSM&O activities that may lend themselves to outsourcing and/or hybrid staffing

Rationale: While there is wide variation in applicability, certain TSM&O functions and needed resource development may be candidates for outsourcing or purchase from private service providers where dictated by staffing, cost or technology considerations. These may include: traffic management center staffing, service patrol, systems maintenance and systems engineering, and planning and design responsibilities. In addition there may be revenue-raising and cost saving potential regarding right-of-way resource sharing, or purchase of private traffic or asset conditions data.

A.1 Identify functions where constraints indicate that outsourcing may be a beneficial approach to achieve agency objectives including: access to flexible or low cost staffing, capitalizing on special outside expertise, acquiring private data, or overcoming staffing constraints.

A.2 Identify peer state settings for outsourcing and contact client agency for lessons learned including range of approaches to procurement and contract management for outsourcing functions with a focus on relationships between functions to be supplied and type and length of contract and procurement strategy.

Responsibility and Relationships: Central office working with key district/regional staff.

Action B: Review pros and cons of leveraging private sector resources and outsourcing functions

Rationale: There is always a range of trade-offs to be made when considering staffing vs. outsourcing.

B.1 Analyze the relative merits of agency staffing vs. outsourcing, carefully considering the cost components of functions (capital, labor, management, maintenance), staffing/hiring flexibility, maintenance of internal capabilities, and sustainability.

B.2 Consider benefits of applying a performance contracting approach to outsourcing, including capabilities needed to shift from managing people to managing performance by external contractor, and the ability to impose performance measurement as a basis for contracting.

B.3 Review comparative potential costs (direct and indirect) of outsourcing vs. internal provision and assess the level of competition for cost comparability and other factors as itemized in [Action A](#) above. Consider the need to maintain core capacities in-house—technical and management—(rather than outsource) to maintain policy and to ensure sustainability of basic agency capability to advance program in both the short and long run. Where the agency has multiple service delivery units (districts, regions, traffic management centers) a mixed approach may be feasible.

Responsibility and Relationships: Central office working with key district/regional staff.

Examples/References:

- State DOT Outsourcing and Private-Sector Utilization: http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_313.pdf
- Outsourcing of Kansas Department of Transportation functions: http://www.e-archives.ky.gov/Pubs/transportation/tc_rpt/ktc_05_12_spr282_04_1f.pdf
- Congestion Mitigation and Air Quality Improvement (CMAQ) and public-private partnerships: http://www.fhwa.dot.gov/environment/air_quality/cmaq/reference/public-private_partnerships/
- “Procuring, Managing, and Evaluating the Performance of Contracted TMC Services”: http://tmcdfs.ops.fhwa.dot.gov/projects/perf_cont_tmc.htm