

2013 Transportation Management Center (TMC) Survey

General Information

1. Center name:

2. Location (address):

3. Does your TMC have a website?

Yes

URL: _____

No

4. What is the geographical area of coverage of your TMC? (Please describe)

5. What modes are included within the TMC? (Check all that apply)

Freeways

Arterials

Transit

Public Safety

Other (please specify): _____

TMC Functions

6. Which of the following best describes the functions or services performed on FREEWAYS supported by this Transportation Management Center (check all that apply)?

- Does not perform any freeway functions or services
- Network or roadway surveillance and data collection
- Real-time traveler information dissemination to the public
- Incident management detection, verification, and monitoring Incident response dispatch
- Environmental monitoring (e.g., air quality, noise and weather)
- Planned special event traffic management
- Evacuation management and traffic coordination
- Emergency services traffic control coordination
- Ramp management and control
- Lane management and control (e.g., HOV, reversible lanes)
- Integrated Corridor Management
- Network performance monitoring, evaluation and reporting
- Maintenance dispatch
- Road weather management and/or weather-related maintenance
- Manage work zones (coordinate lane closures, monitor WZ traffic conditions)
- Other (please specify): _____

7. Which of the following best describes the functions or services performed on ARTERIALS supported by this Transportation Management Center? (Check all that apply)

- Does not perform any arterial functions or services
- Network or roadway surveillance and data collection
- Real-time traveler information dissemination to the public
- Incident management detection, verification, and monitoring
- Incident response dispatch
- Environmental monitoring (e.g., air quality, noise and weather)
- Planned special event traffic management
- Evacuation management and traffic coordination
- Emergency services traffic control coordination
- Traffic signal coordination or control
- Lane management and control (e.g., HOV, reversible lanes)
- Integrated Corridor Management
- Network performance monitoring, evaluation and reporting
- Maintenance dispatch
- Road weather management and/or weather-related maintenance
- Manage work zones (coordinate lane closures, monitor WZ traffic conditions)
- Other (please specify): _____

8. Which of the following best describes the functions or services performed on PUBLIC TRANSIT supported by this Transportation Management Center? (Check all that apply)

- Does not perform any transit functions or services
- Transit scheduling and dispatch
- Other (please specify): _____

Operations

9. Does your TMC employ any Center-to-Center communications standards?

Yes

Which of the following standards are used? (Check all that apply)

IEEE 1512

SAE J2354

TMDD v2.01

TMDD v3.0

Other (please specify): _____

No

10. Does this TMC have established Center-to-Center connections to other TMCs?

Yes

No

11. Does this TMC have established Center-to-Center connections to private sector information disseminators?

Yes

No

12. Does your TMC have an Operations Manual?

Yes,

Does the Operations Manual contain detailed (measurable) requirements?

Yes

No

No

13. Approximately how many planned special events does your TMC manage per year?

14. Has your agency deployed a decision support system to assist in operating the following?

Yes,

Please indicate which decision support systems have been deployed. (Check all that apply)

Road weather management

Incident management

Emergency management

Evacuation

Maintenance

Other (please specify): _____

No

15. Is there any shared control of field devices between your TMC and other agencies?

Yes,

Please indicate which devices are shared. (Check all that apply)

Dynamic message signs

Closed circuit TV

Traffic signals

Lane management control devices

Ramp meters

Other (please specify): _____

No

Emergency Operations

16. Does your agency participate in a regional or statewide disaster planning program?

Yes, regional - intrastate

Yes, statewide

Yes, regional - multi-state

No

17. Does your region or state activate a designated multi-agency emergency operations center (EOC) in case of natural or man-made disasters?

Yes

No (go to question 20)

18. How is the EOC integrated with your TMC? (Check all that apply)

The TMC facility houses the EOC

Workstations are placed in the related Emergency Operations Center (EOC)

We have a formal interagency agreement with emergency management agencies covering goals, policies, and organizational roles

We have a private data network with availability limited to cooperating regional agencies

We have a restricted-access website for cooperating agencies

Other (please specify): _____

19. If an EOC is used, how much of your TMC staff is physically located at the EOC during emergency operations?

All

Some, not all

None

20. Which of the following approaches are used by your TMC during emergency operations to make your TMC system more reliable? (Check all that apply)

Backup power in center

Backup power for some or all field devices

Redundant data systems

Multiple data communications paths

None

Other (please specify): _____

Integration with Public Safety

21. Does the TMC have responsibility (shared or otherwise) for emergency vehicle dispatch?

- Yes
- No

22. Are 911 facilities located within, or adjacent, to the TMC location?

- Yes
- No

23. Do you integrate public safety Computer Aided Dispatch (CAD) information within the TMC through an interagency agreement?

Yes,

What is included in the agreement? (Check all that apply)

- Definition of what CAD information will be passed
- Use of common incident location identifiers
- Use of common format or an exchange format
- The TMC can push data to the public safety CAD

No

24. Do you have methods other than CAD of receiving incident notifications from public safety agencies?

Yes

Please describe: _____

No

Traffic Incident Management

25. Is the traffic incident management program integrated with the TMC?

Yes.

Is there is an established interagency on-scene communications procedure detailed in a memorandum of understanding (MOU)?

- Yes
- No

No

26. Do you have a formally recognized multi-agency Traffic Incident Management committee?

Yes.

Check all that apply to your committee:

- It operates with an agreement signed by multiple agencies
- The committee has regularly scheduled meetings
- The scope of the committee is Regional
- The scope of the committee is Statewide

No

27. Does your TMC have a full time Traffic Incident Management Engineer?

Yes

No

28. For what hours is response by on-duty Department of Transportation (DOT) personnel available?

24/7

Other

Please specify: _____

29. Does your Traffic Incident Management program include safety service patrols?

Yes,

Are the safety service patrol personnel trained to serve as incident responders?

Yes

No

No

30. Are the DOT maintenance/operations staff trained to serve as incident responders?

Yes

No

31. Is the Incident Command System widely used and common practice at all incident scenes?

Yes

No

32. Is a HAZMAT agency integrated into your TMCs traffic incident management program and on-scene response?

Yes,

Are the HAZMAT requirements, cleanup procedures, and defined process for quick clean up widely understood by responding contractors?

Yes

No

No

TMC Performance Measures

33. Which of the following performance measures, if any, are tracked? (Check all that apply)

Roadway clearance times

Incident clearance times

Agency response times

Secondary incident times

None (go to question 36)

Other (please specify): _____

34. Are the Federal Highway Administration (FHWA) definitions used for the above measures?

Yes

No

35. Are performance goals for incident clearance established?

Yes,

Check the categories of incidents for which performance goals apply:

Major incidents

Moderate incidents

Minor incidents

No

Integrated Corridor Management

36. Have you identified corridor(s) for the purpose of integrating operations across multiple transportation facilities (including freeways, major arterials, and public transit networks) in order to actively manage travel demand and capacity in the corridor as a whole?

Yes,

How many corridors have been identified for integrated transportation operations?

1 corridor identified

2 corridors identified

3 or more corridors identified

No (go to Next Section)

37. The next set of questions all pertain specifically to the corridor you identified above. If you identified more than one corridor, please tell us about the corridor where the greatest level of coordination is taking place. In your responses, please do NOT include coordination efforts that are occurring outside the specific corridor you have identified.

Please name the key facilities that comprise the corridor (please be as specific as possible):

Freeway(s) (e.g., US-75):

Key Arterial(s) (e.g., Greenville Avenue, US-75 Frontage Roads):

Public Transit Services (e.g., DART Red/Orange Light Rail Line, MTS Express Bus):

Other (e.g., freight, rail, bicycle, pedestrian):

38. Approximately how long is the corridor?

Less than 10 miles

11-20 miles

21-30 miles

31-50 miles

More than 50 miles

39. For each agency type listed below, please indicate whether you are currently coordinating or plan to coordinate integrated transportation operations in the corridor specified above. If yes, please provide the name of the agencies in the corridor with which your agency is coordinating (referred to as the "coordinating agencies" in this survey). Please do NOT include coordination efforts that are occurring outside the corridor. For each agency type, a-d, select only one response.

	Currently Coordinate in Corridor	Plan to Coordinate in Corridor	No Plans to Coordinate in Corridor	Not Applicable	Agency Name
Freeway agencies					
Arterial agencies					
Transit agencies					
Other agencies (e.g., MPOs, Toll Authorities, Port Operations)					

40. Has your agency signed any formal multi-jurisdictional or multi-agency Agreements, Memorandums of Understanding (MOUs), or other instruments with these coordinating agencies regarding the integrated operations of the corridor?

Yes,

 Already signed

 One instrument signed

 Multiple instruments signed

Agreements, MOUs, or instruments are being developed (plan to sign)

No, there is no plan to develop or sign Agreements, MOUs, or other instruments

Do not know

IF SIGNED OR PLAN TO SIGN: Please describe what is covered by the Agreements, MOUs, or instruments:

41. How are data about conditions in the corridor shared among the coordinating agencies? (Check all that apply)

Manual data sharing: Corridor stakeholders call, radio, fax or email relevant corridor data to one another
 Automated sharing of real-time video data (video servers/switcher communicate directly to one another in real time to share video images through video protocols)

Automated sharing of real-time data (computers, database servers communicate directly to one another to transmit data automatically (in real time) via center-to-center protocols)

In general is this sharing of real-time data active or passive? (select one)

Active (your agency receives alerts; data is pushed to your agency)

Passive (your agency must access the data; no alerts are received)

Information Clearing House/Information Exchange Network (IEN) between corridor networks/agencies (a software system that collects, aggregates, warehouses and distributes traffic flow/transit performance data and incident/construction data for the corridor. All corridor agencies can access the agency/network information)

In general, is this sharing of data active or passive? (select one)

Active (your agency receives alerts; data is pushed to your agency)

Passive (your agency must access the data; no alerts are received)

Other (please specify): _____

42a. We want to understand if data is sent and/or received among the coordination agencies in the corridor. For each type of data below, please indicate if your agency receives this data from the other coordinating agencies in the corridor, collects and sends this data to the other coordinating agencies, collects but does not send this data to the other coordinating agencies, or does not collect this data. For each item, a-i, check all that apply.

	My Agency Receives	My Agency Collects and Sends	My Agency Collects but Does Not Send	My Agency Does Not Collect	Not Applicable
a-Freeway incident data					
b-Freeway traffic volumes, speeds, or travel times					
c-Arterial incident data					
d-Arterial traffic volumes, speeds, or travel times					
e-Transit incident data					
f-Transit vehicle location data (AVL)					
g-Transit schedule adherence data					
h-Transit passenger count data					
i-Other data (please describe below):					

42b. For each type of data that is sent or received among coordinating agencies (as indicated in part a above), please indicate with what level of frequency the data is shared. For each item, a-i, select only one response.

	0-5 Minutes	6-15 Minutes	16-59 Minutes	60+ Minutes
a-Freeway incident data				
b-Freeway traffic volumes, speeds, or travel times				
c-Arterial incident data				
d-Arterial traffic volumes, speeds, or travel times				
e-Transit incident data				
f-Transit vehicle location data (AVL)				
g-Transit schedule adherence data				
h-Transit passenger count data				
i-Other data (described above):				

43. For each of the following types of operations strategies please indicate whether your agency is currently coordinating or plans to coordinate operations with other corridor agencies across transportation facilities (i.e., freeway, arterial and transit) in order to achieve shared operations objectives. For each item, a-n, select only one response.

For example, if traffic signal timing is coordinated across facilities, then signal timing on arterials is adjusted based on information about both freeway and arterial conditions.

	Currently Coordinate Across Facilities	Plan to Coordinate Across Facilities	No Plans to Coordinate	Not Applicabl e
a. Traffic incident management				
b. Freeway ramp metering				
c. Emergency management (e.g., evacuations)				
d. Cross jurisdictional traffic signal coordination				
e. Traffic responsive signal timing/coordination				
f. Transit signal priority				
g. Physical bus priority (e.g. bus-on-shoulder)				
h. Demand-sensitive transit capacity increases (e.g., add cars/routes)				
i. Real-time parking availability information (e.g., at transit stations)				
j. Road weather management				
k. Planned special events				
l. Real-time traveler information delivered pre-trip				
m. Real-time information delivered en-route (e.g., Dynamic Message Signs)				
n. Electronic multimodal payment systems				
o. Other (please specify):				

44. How would you describe the institutional coordination among the corridor stakeholders? Please select one response from the following scale, which ranges from less formal institutional coordination (1) to more formal institutional coordination (5).

- 1 (Less Formal) - Ad hoc coordination; no regular meetings; corridor stakeholders address near-term issues only
- 2 - Informal working groups; regular meetings among corridor stakeholders
- 3 - Formally established working groups; assigned responsibilities for Integrated Corridor Management
- 4 - Funded staff person(s) and well-defined responsibilities for Integrated Corridor Management
- 5 - (More Formal) - Legal entity with dedicated resources and a governing board

45. Have the coordinating agencies in the corridor developed any of the following Integrated Corridor Management (ICM) documents for the corridor? For each item, a-d, select only one response.

	Document Completed	Currently Developing	Plan to Develop Next 2-3 Years	No Immediate Plans to Develop	Do Not Know
a-ICM Concept of Operations (ConOps)					
b-ICM System Requirements Specifications (SyRS)					
c-ICM Analysis Modeling and Simulation (AMS) Plan					
d-ICM Implementation Plan					

46. Have the coordinating agencies in the corridor developed a documented set of response plans or strategies, in any level of detail, that are based on shared operational objectives and that are designed to optimize performance in the corridor as a whole (e.g., across transportation facilities/modes) during conditions of both recurring and non-recurring congestion? In your response, please do not include response plans developed for emergency situations, such as evacuations.

- Response plans or strategies have been developed for day-to-day operations during conditions of both recurring and non-recurring congestion
- Response plans or strategies are currently being developed
- There are plans to develop response plans or strategies
- There are no plans to develop response plans or strategies (skip to last question for additional comments)
- Do not know

47. Has your agency deployed, or does it plan to deploy, a Decision Support System (DSS) to assist in the integrated operations of the Corridor?

***NOTE:** A DSS is a subsystem that utilizes measurements of real-time corridor conditions to recommend coordinated response plans to all corridor agencies. The DSS continues to update its recommendation based on corridor measurements showing changing corridor conditions.*

- Yes, deployed
- Plan to deploy
- No (no plans to deploy)
- Do not know

48. Have the coordinating agencies identified corridor-level/multimodal performance measures (e.g., person throughput, average travel time, average travel speed, etc.) that will be used to measure the effectiveness of the strategies and response plans that are implemented in the corridor?

- Yes, corridor-level/multimodal performance measures identified
- Agency plans to identify corridor-level/multimodal performance measures
- No plans to identify corridor-level/multimodal performance measures
- Do not know

49. Additional comments about the integration and coordination of operations in the corridor:

Additional Comments

50. Please use the space below to provide any additional comments regarding your agency's deployment, operations, or maintenance of ITS. (Please be as specific as possible when commenting on particular ITS technologies.)
