Metropolitan Intelligent Transportation Systems (ITS) Infrastructure 2004 Freeway Management Survey

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Section I

FREEWAY SURVEILLANCE:

Please enter the current information for 2004 and the current estimate for 2005 in the boxes provided. We have entered the information your agency provided in 2002 to assist you.

	Total in 2002	2002 estimated total by 2005	Total in 2004	2004 estimated total by 2005
1a. Total number of freeway centerline miles with real-time traffic data collection technologies (does not include CCTV):.....				
Traffic data collection technologies deployed:	**Miles Covered**			
Loop detectors:				
Video imaging detectors:				
Probe readers using ETC tags:				
Probe readers using other technology:				
Probe readers for transit vehicles:				
Acoustic detectors:				
Microwave radar:				
Other:				

1b. Please describe the spacing of your detectors

1c. Please describe the average percent of detectors in service

RAMP CONTROL:

Please enter the current information for 2004 and the current estimate for 2005 in the boxes provided. We have entered the information your agency provided in 2002 to assist you.

	Total in 2002	2002 estimated total by 2005	Total in 2004	2004 estimated total by 2005
2a. Total number of ramp meters.....				
Number of isolated (or stand-alone) ramp meters:				
Number of centrally controlled ramp meters:				
Number of pretimed ramp meters:				
Number of traffic responsive ramp meters:				
Number of HOV bypass lanes at ramp meters:				
Number of ramp meters that provide preemption for emergency vehicles:				
Number of ramp meters that provide priority for transit vehicles:				
Number of freeway to freeway ramp meters:				

RAMP CONTROL (Cont.):

2b. Under what circumstances do you meter traffic or close ramps as a traffic management strategy? (Check all that apply)

	Ramp Metering	Ramp Closure
Time of day (recurrent congestion)	☐	☐
Traffic incidents	☐	☐
Planned special events	☐	☐
Other (please specify)	☐	☐

3. If your agency has not deployed Ramp Metering and has no plans to do so by 2008, has a feasibility study been conducted on the use of Ramp Metering?

☐ Yes, please indicate the reason(s) for not deploying Ramp Metering

- ☐ Not feasible
- ☐ Lack of perceived need
- ☐ Lack of institutional support
- ☐ Lack of funding
- ☐ Other:

☐ No, if a study is planned, when will it be conducted?

LANE MANAGEMENT:

Please enter the current information for 2004 and the current estimate for 2005 in the boxes provided. We have entered the information your agency provided in 2002 to assist you.

	Total in 2002	2002 estimated total by 2005	Total in 2004	2004 estimated total by 2005
4. Total number of freeway centerline miles under lane control.....				

5. Please provide the number of centerline miles and the time of operation for each type of lane control:

	Freeway centerline miles	Time of operation
Occupancy control (HOV):		
Express lanes (reversible flow):		
Lane open/closed (traffic incidents, roadway maintenance, etc.):		
Truck only:		
Variable speeds:		
Pricing or tolls:		
Other:		

6. Do you have any variable speed limit signs?

☐ Yes, how many?

☐ No

ROADSIDE TECHNOLOGIES USED TO DISTRIBUTE EN-ROUTE TRAVELER INFORMATION:

Please enter the current information for 2004 and the current estimate for 2005 in the boxes provided. We have entered the information your agency provided in 2002 to assist you.

	Total Miles in 2002	2002 estimated total Miles by 2005	Total Miles in 2004	2004 estimated total Miles by 2005
7. Number of centerline miles covered by Highway Advisory Radio (HAR)				
8. Number of centerline miles covered by other roadside technologies:	N/A	N/A		

Dynamic Message Signs (DMS)

	Total in 2002	2002 estimated total by 2005	Total in 2004	2004 estimated total by 2005
9. Total number of Permanent DMS deployed on freeways.....				
10. Total number of Portable DMS deployed on freeways.....				

11. Do you have established formal policies or procedures

that govern the operation of the DMS?

- ☐ Yes
- ☐ No

that govern the display of messages on the DMS?

- ☐ Yes
- ☐ No

that govern how messages are developed prior to being displayed on the DMS?

- ☐ Yes
- ☐ No

12. Approximately, how many hours a day is a message display on the DMS?

13. What type of information is displayed? (Check all that apply)

- ☐ Congestion
- ☐ Diversion
- ☐ Accident sites
- ☐ Transit operations
- ☐ Maintenance and construction work site information
- ☐ Roadway status
- ☐ Special events
- ☐ Parking availability
- ☐ Speed warnings
- ☐ Weather alerts
- ☐ Other:

DISSEMINATION OF INFORMATION TO THE PUBLIC:

Please enter the current information for 2004 and the current estimate for 2005 in the boxes provided. We have entered the information your agency provided in 2002 to assist you.

14a. Please check all the methods that your agency uses, or will use, to distribute information to the public.

	2002 Response		2004 Response	
	In 2002	By 2005	In 2004	By 2005
Dedicated cable TV:	☐	☐	☐	☐
Automated telephone system:	☐	☐	☐	☐
Internet Web sites	☐	☐	☐	☐
Pagers or personal data assistants:	☐	☐	☐	☐
Interactive TV:	☐	☐	☐	☐
Kiosks:	☐	☐	☐	☐
E-mail or other direct PC communication:	☐	☐	☐	☐
In-vehicle navigation systems:	☐	☐	☐	☐
Cell phone/automated voice:	☐	☐	☐	☐
Facsimile:	☐	☐	☐	☐
Video feed to the media:	N/A	N/A	☐	☐
Do not distibute information:	☐	☐	☐	☐
Other:			☐	☐

14b. Please check all the types of information that your agency distributes, or will distribute, to the PUBLIC and/or MEDIA.

	to the PUBLIC		to the MEDIA	
	In 2004	By 2005	In 2004	By 2005
Freeway travel times:	☐	☐	☐	☐
Freeway travel speeds:	☐	☐	☐	☐
Incident information:	☐	☐	☐	☐
Special events:	☐	☐	☐	☐
Work zones/construction events:	☐	☐	☐	☐
Parking:	☐	☐	☐	☐
Weather:	☐	☐	☐	☐
Road surface conditions:	☐	☐	☐	☐
Road closures:	☐	☐	☐	☐
Detours:	☐	☐	☐	☐
Alternate routes:	☐	☐	☐	☐
Road restrictions:	☐	☐	☐	☐
Congestion:	☐	☐	☐	☐
CCTV images:	☐	☐	☐	☐
Travel and Tourist information:	☐	☐	☐	☐
Real-time construction information:	☐	☐	☐	☐
Other:	☐	☐	☐	☐

15. Does your agency have or plan to have an operational 511 system?

☐ No, there are no plans to implement 511 at this time
☐ Yes:

Status:

☐ Operational
☐ Planned (deployment date:)

Content:

- ☐ Basic service provided free of charge
  - ☐ Traveler and tourist information
  - ☐ Roadway information
  - ☐ Public transportation
- ☐ Operational content (premium service) for specific users provided for a fee

Describe optional content:

Does the system incorporate a Voice Recognition Service?

- ☐ Yes:
- ☐ No

Is the system multilingual?

- ☐ Yes:
- ☐ No

Operating hours:

- ☐ 24 hours
- ☐ Other (please specify):

What are the sources of data for your 511 system?

- ☐ Public safety (incident information)
  - ☐ State police
  - ☐ Local agencies
- ☐ Traffic management
- ☐ Operations and maintenance
  - ☐ Construction contractors
  - ☐ DOT Project Managers
- ☐ Incident management service patrols
- ☐ Private traveler information
  - ☐ Cellular phone calls
- ☐ Information service providers, please name:
- ☐ News media
- ☐ National weather service
- ☐ Weather sensor data
- ☐ Road surface condition detectors
- ☐ Public transportation
- ☐ Inductive loop detectors
- ☐ CCTV
- ☐ Microwave radar detectors
- ☐ Maintenance road patrols
- ☐ Snow and ice removal services
- ☐ Work zone areas
- ☐ Private meteorological services
- ☐ Other (please specify):

REAL-TIME INFORMATION TRANSFER AND RECEIPT:

Please enter the current information for 2004 and the current estimate for 2005 in the boxes provided. We have entered the information your agency provided in 2002 to assist you.

16. Does your agency receive, in real-time, freeway travel times derived from vehicle probes from any toll collection agency?

	2002 Response	2004 Response
Yes:	☐	☐
No:	☐	☐
No toll collection:	☐	☐

17. Does your agency receive, in real-time, incident information (e.g., clearance activities, type, severity, etc.) from any Public Safety agency?

	2002 Response		2004 Response	
	Yes	No	Yes	No
Incident clearance:	☐	☐	☐	☐
Incident severity and type:	☐	☐	☐	☐

18. Does your agency provide, in real-time, incident information (e.g., type, severity, etc.) and/or freeway information(e.g., travel times, speed, and conditions) to the following types of agencies?

	incident information (e.g. type, severity, etc.)				freeway information (e.g. travel times, speed, and conditions)			
	2002 Response		2004 Response		2002 Response		2004 Response	
	Yes	No	Yes	No	Yes	No	Yes	No
Freeway Management Agencies:	☐	☐	☐	☐	☐	☐	☐	☐
Arterial Management Agencies:	☐	☐	☐	☐	☐	☐	☐	☐
Public Transit Agencies:	☐	☐	☐	☐	☐	☐	☐	☐
Public Safety Agencies:	☐	☐	☐	☐	☐	☐	☐	☐
Emergency Management Agencies:	N/A	N/A	☐	☐	N/A	N/A	☐	☐

SERVICE PATROLS:

Please enter the current information for 2004 and the current estimate for 2005 in the boxes provided. We have entered the information your agency provided in 2002 to assist you.

	Total in 2002	2002 estimated total by 2005	Total in 2004	2004 estimated total by 2005
19. Total number of freeway centerline miles patrolled by service patrols				
20. Number of vehicles.....				

21. Service Hours

2002 Response	2004 Response	
☐	☐	Peak hours only
☐	☐	24/7
☐	☐	Other:

INCIDENT DETECTION AND VERIFICATION METHODS:

Please enter the current information for 2004 and the current estimate for 2005 in the boxes provided. We have entered the information your agency provided in 2002 to assist you.

Please provide the miles covered by the following incident detection/verification methods.

	Total miles in 2002	2002 estimated total miles by 2005	Total miles in 2004	2004 estimated total miles by 2005
22. Free cellular phone call to a dedicated phone number other than 911.....				
23. Computer algorithms.....				
24. CCTV.....				
25. Call boxes.....				

26. Are the images from your CCTV cameras available to the public?

- ☐ Yes
- ☐ No
- ☐ No CCTV

Section II

DATA COLLECTION AND ARCHIVING:

27. Does your agency archive any operations data?

- ☐ Yes, how long have you been archiving? ____
- ☐ No, but we plan to begin archiving data in the next year
- ☐ No, but we plan to begin archiving data within the next two years
- ☐ No, but we plan to begin archiving data in the future (five to ten years)
- ☐ No, we do not plan to begin archiving data

28. How are data archived? (Check all that apply)

- ☐ Computer database - Store raw data. (e.g., sensor feed)
- ☐ Computer database - Store processed data (e.g., traffic conditions)
  - What is the size of the database? ____
- ☐ Other (please specify) ____

29. Are you aware of the Standard Guide for Archiving and Retrieving Intelligent Transportation System - Generated Data (ASTM E2259-03)?

- ☐ Yes, are you using it?
  - ☐ Yes
  - ☐ No
- ☐ No

30. Please check all the methods your agency uses to make the archived data available.

- ☐ On-Line (Web)
- ☐ CD
- ☐ Paper reports
- ☐ Other (please specify) ____

31. For what portion of your region/transportation network is ITS data archived?

- ☐ Freeway system within the central business district
- ☐ Freeway system within the metropolitan region
- ☐ Freeway system in rural areas within the MPO planning boundary
- ☐ Congested areas only
- ☐ Other (please specify): ____

Please enter the current information for 2004 in the boxes provided. We have entered the information your agency provided in 2002 to assist you.

32. Please check the information your agency collects/archives from sensors.

	Collected in 2002	Archived in 2002	Collect in 2004	Archive in 2004
Traffic volumes:	☐	☐	☐	☐
Traffic speeds:	☐	☐	☐	☐
Lane occupancy:	☐	☐	☐	☐
Vehicle classification:	☐	☐	☐	☐
Travel time:	☐	☐	☐	☐
Road conditions (e.g., wet, icy, etc.):	☐	☐	☐	☐
Weather conditions (e.g., snow, fog, rain, etc.):	☐	☐	☐	☐
Video surveillance:	☐	☐	☐	☐
Other (please specify) ____			☐	☐

DATA COLLECTION AND ARCHIVING (Cont.):

33. What is the time spacing of readings from sensors?

- ☐ Every second
- ☐ Every five seconds
- ☐ Every twenty seconds
- ☐ Other (please specify): _____

34. What is the time resolution of archived sensor data?

- ☐ Archived as it is received from sensors
- ☐ Aggregated using one minute intervals
- ☐ Other (please specify): _____

Please enter the current information for 2004 in the boxes provided. We have entered the information your agency provided in 2002 to assist you.

35. Please check the information your agency collects/archives from other sources

	Collected in 2002	Archived in 2002	Collect in 2004	Archive in 2004
Route designations (snow emergency, etc.):	☐	☐	☐	☐
Current work zones:	☐	☐	☐	☐
Scheduled work zones:	☐	☐	☐	☐
Intermodal (air, rail, water) connections:	☐	☐	☐	☐
Emergency/evacuation routes and procedures:	☐	☐	☐	☐
Vehicle occupancy:	☐	☐	☐	☐
Violation rates for HOV lanes:	☐	☐	☐	☐
Incident location:	N/A	N/A	☐	☐
Incident type:	N/A	N/A	☐	☐
Incident detection time:	N/A	N/A	☐	☐
Incident response time:	N/A	N/A	☐	☐
Incident clearance time:	N/A	N/A	☐	☐
Metering rates	N/A	N/A	☐	☐
Other (please specify) _____			☐	☐
Do not collect/archive information:	☐	☐	☐	☐

36. What are the data used for?

	2002 Response	2004 Response
Do not know:	☐	☐
Traffic analysis:	☐	☐
Construction impact determination:	N/A	☐
Capital planning/analysis:	☐	☐
Operation planning/analysis:	☐	☐
Incident detection algorithm development:	☐	☐
Roadway impact analysis:	☐	☐
Accident prediction models:	☐	☐
Dissemination to the public:	☐	☐
Monitor system performance:	☐	☐
Safety analysis:	☐	☐
Traffic simulation modeling:	☐	☐
Traffic control:	☐	☐
Travel time prediction:	☐	☐
Other (please specify) _____		☐

OPERATIONAL PLANS AND PROCEDURES:

Special Events:

37. Does your agency participate in a formal multi-agency initiative to proactively plan for and coordinate activities regionally related to special events?

- ☐ Yes, what are the associated components of this effort? (Check all that apply)
  - ☐ Agencies plan and coordinate
  - ☐ Documented traffic management plans
  - ☐ Specific traffic control plans
  - ☐ Established operational procedures and protocols
  - ☐ Day of event multiagency traffic management team
  - ☐ Other: _____

  Please check the special events included in this effort (Check all that apply):

  - ☐ Street use events
  - ☐ Rural event
  - ☐ Recurring events at permanent venue
  - ☐ Non-recurring events at permanent venue
  - ☐ Events at temporary venues
  - ☐ Other event types. _____
- ☐ No, will your agency participate by 2008?
  - ☐ Yes
  - ☐ No

Alternate Route Plans:

38. Does your agency have pre-planned alternate route plans to implement for certain sections of your freeway system?

- ☐ Yes, please check the type of event that requires the implementation of the plan: (Check all that apply)

Event	Number of Freeway Centerline Miles
☐ Roadway construction	
☐ Roadway maintenance	
☐ Roadway closure - weather	
☐ Major traffic incident	
☐ Planned special events	
☐ Other _____	

- ☐ No

39. What criteria must be met to implement the alternate route plan? (Check all that apply)

- ☐ Type of incident
- ☐ Incident duration
- ☐ Incident location
- ☐ Number of freeway lanes blocked
- ☐ Time of day
- ☐ Other: _____

SYSTEM PERFORMANCE MONITORING, EVALUATION, AND REPORTING:

40. How often does your agency report on the performance of the freeway system?

- ☐ Monthly
- ☐ Annually
- ☐ Other (please specify) _____

41. Which of the following performance measures are used to report on the performance for the specified portions of the freeway system?

	travel time	travel time reliability	vehicles per lane per mile	vehicles per hour	person throughput per lane per hour	person throughput per hour	average auto occupancy
Spot location.....	☐	☐	☐	☐	☐	☐	☐
Corridor.....	☐	☐	☐	☐	☐	☐	☐
System wide.....	☐	☐	☐	☐	☐	☐	☐

42. Who receives this performance report? (Check all that apply)

- ☐ Agency traffic operations
- ☐ Management
- ☐ Executive management
- ☐ Elected officials
- ☐ MPOs
- ☐ Other (please specify) _____

43. What formats are used to present these measures? (Check all that apply)

- ☐ Tables
- ☐ Graphics/Charts
- ☐ Maps
- ☐ Text
- ☐ Other (please specify) _____

WORK ZONES:

44. Have you used ITS at Work Zones?

- ☐ Yes. What types of deployments are these? (Check all that apply)
  - ☐ Temporary
  - ☐ Permanent
  - ☐ Temporary deployments to take over functions of permanent systems that degraded or were made inoperative by construction activities
  - ☐ Other (please specify) _____

  What technologies are employed? (Check all that apply)
  - ☐ Intrusion alarm
  - ☐ Dynamic lane merge system
  - ☐ Queue detection and alert system
  - ☐ Travel time system
  - ☐ Advanced speed information system (ASIS)
  - ☐ Other (please specify) _____

  What are the reasons for deployment? (Check all that apply)
  - ☐ Reduce crashes
  - ☐ Improve workers safety
  - ☐ Reduce congestion
  - ☐ Provide traveler information to reduce frustation
  - ☐ Other (please specify) _____
- ☐ No

OTHER TECHNOLOGIES:

45. Has your agency deployed over-height warning systems?

- ☐ Yes
- ☐ No

46. Does your agency operate automated and/or manual freeway ramp gates?

- ☐ Yes
- ☐ No

47. Does your agency have any accident investigation sites?

- ☐ Yes. How many? ____
- ☐ No

48. Does your agency have any Reference Location Signs (1/10 or 2/10 mile markers)?

- ☐ Yes
- ☐ No

49. Does your agency have any Dynamic Curve Warning System?

- ☐ Yes, how many? ____
  - Number of urban freeway ramps with Truck only warning: ____
  - Number of urban freeway ramps with warning for all vehicles: ____
- ☐ No

NATIONAL ITS STANDARDS

50. Please check the ITS standards that you are using (deployed or in current RFP) or considering (assesing for use) in your operational freeway management systems. The U.S. DOT ITS Standards Program recognizes that there may be other ITS standards surveys being conducted by other entities. If this is the case, please pardon any overlap; however, your input to these surveys will help the U.S. DOT ITS Standards Program better serve your needs and requirements. If no standards are used, skip to the question 52.

List of standards to consider when deploying freeway management projects:

Traffic Management

Using	Considering	
☐	☐	NTCIP 1202 - Object Definitions for Actuated Traffic Signal Controller Units
☐	☐	NTCIP 1210 - Objects for Signal Systems Master
☐	☐	NTCIP 1211 - Objects for Signal Control Priority

Freeway Management

Using	Considering	
☐	☐	NTCIP 1203 - Object Definitions for Dynamic Message Signs
☐	☐	NTCIP 1204 - Object Definitions for Environmental Sensor Stations
☐	☐	NTCIP 1205 - Objects for CCTV Camera Control
☐	☐	NTCIP 1206 - Object Definitions for Data Collection and Monitoring (DCM) Devices
☐	☐	NTCIP 1207 - Object Definitions for Ramp Meter Control
☐	☐	NTCIP 1208 - Object Definitions for Video Switches
☐	☐	NTCIP 1209 - Object Definitions for Transportation Sensor System
☐	☐	NTCIP 1213 - Electrical and Lighting Mgmt System Interoperability & Intercommunications Std
☐	☐	NTCIP 1301 - Weather Report Message Set for ESS

Advanced Transportation Controller

Using	Considering	
☐	☐	ITE 9603-1 - Application Programming Interface (API) Standard for the Advanced Transportation Controller (ATC)
☐	☐	ITE 9603-2 - Advanced Transportation Controller (ATC) Cabinet
☐	☐	ITE 9603-3 - Advanced Transportation Controller (ATC) Standard Specification for the Type 2070 Controller

Profiles and Base Standards

Using	Considering	
☐	☐	NTCIP 1201 - Global Object Definitions
☐	☐	NTCIP 1102 - Octet Encoding Rules (OER)
☐	☐	NTCIP 1103 - Transportation Management Protocol
☐	☐	NTCIP 1104 - CORBA Naming Convention Specification
☐	☐	NTCIP 1105 - CORBA Security Service Specification
☐	☐	NTCIP 1106 - CORBA Near-Real Time Data Service Specification
☐	☐	NTCIP 2101 - Point to Multi-Point Protocol Using RS-232 Subnetwork Profile
☐	☐	NTCIP 2102 - Subnetwork Profile for PMPP using FSK Modems
☐	☐	NTCIP 2103 - Subnet Profile for Point-to-Point Protocol using RS 232
☐	☐	NTCIP 2104 - Subnetwork Profile for Ethernet
☐	☐	NTCIP 2201 - Transportation Transport Profile
☐	☐	NTCIP 2202 - Transport Profile for Internet (TCP/IP and UDP)
☐	☐	NTCIP 2301 - Application Profile for Simple Transportation Management Framework (STMF)
☐	☐	NTCIP 2302 - Application Profile for Trivial File Transfer Protocol
☐	☐	NTCIP 2303 - Application Profile for File Transfer Protocol (FTP)
☐	☐	NTCIP 2304 - Application Profile for Data Exchange ASN.1 (DATEX)
☐	☐	NTCIP 2305 - Application Profile for Common Object Request Broker Architecture (CORBA)

Using Considering

- ☐ ☐ NTCIP 8003 - Profiles - Framework and Classification of Profiles
- ☐ ☐ NTCIP 9010 - XML Standard for Center-to-Center Communications
- ☐ ☐ IEEE P1488 - IEEE Standard for Message Set Template for Intelligent Transportation Systems
- ☐ ☐ IEEE P1489 - IEEE Standard for Data Dictionaries for Intelligent Transportation Systems - Part 1 Functional Area Data Dictionaries

Center-to-Center Communications

Using Considering

- ☐ ☐ ITE TM 1.03 - Standard for Functional Level Traffic Management Data Dictionary (TMDD)
- ☐ ☐ ITE TM 2.01 - Message Sets for External TMC Communication (MS/ETMCC)
- ☐ ☐ NTCIP 1602 - Generic Reference Model for C2C Communications

Incident Management

Using Considering

- ☐ ☐ IEEE 1512-2000 Standard for Common Incident Management Message Sets for use by Emergency Management Centers
- ☐ ☐ IEEE P1512.1 - Standard for Traffic Incident Management Message Sets for Use by EMCs
- ☐ ☐ IEEE P1512.2 - Standard for Public Safety Incident Management Message Sets for Use by EMCs
- ☐ ☐ IEEE 1512.3-2000 - Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers
- ☐ ☐ IEEE 1512.4 - Standard for Emergency Management to Emergency Vehicle Subsystems Use by Emergency Management Centers
- ☐ ☐ IEEE P1556 - Standard for Security and Privacy of Vehicle/Roadside Communication Including Smart Card Comm.

Advanced Traveler Information System

Using Considering

- ☐ ☐ SAE J2354 - Message Set for Advanced Traveler Information System (ATIS)
- ☐ ☐ SAE J2540-2 - ITIS Phrase Lists (International Traveler Information Systems)
- ☐ ☐ SAE J2630 - Converting ATIS Message Standards from ASN.1 to XML

Transit

Using Considering

- ☐ ☐ APTA - TCIP Dialogs
- ☐ ☐ NTCIP 1400 - TCIP - Framework Standard
- ☐ ☐ NTCIP 1401 - TCIP - Common Public Transportation (CPT) Business Area Standard
- ☐ ☐ NTCIP 1402 - TCIP - Incident Management (IM) Business Area Standard
- ☐ ☐ NTCIP 1403 - TCIP - Passenger Information (PI) Business Area Standard
- ☐ ☐ NTCIP 1404 - TCIP - Scheduling/Runcutting (SCH) Business Area Standard
- ☐ ☐ NTCIP 1405 - TCIP - Spatial Representation (SP) Business Area Standard
- ☐ ☐ NTCIP 1406 - TCIP - Onboard (OB) Business Area Standard
- ☐ ☐ NTCIP 1407 - TCIP - Control Center (CC) Business Area Standard
- ☐ ☐ NTCIP 1408 - TCIP - Fare Collection (FC) Business Area Standard

Commercial Vehicle Operations

Using Considering

- ☐ ☐ ANSI TS284 - Commercial Vehicle Safety Reports
- ☐ ☐ ANSI TS285 - Commercial Vehicle Safety and Credentials Information Exchange
- ☐ ☐ ANSI TS286 - Commercial Vehicle Credentials

Dedicated Short Range Communications

Using	Considering	
☐	☐	IEEE 1609.1 - Standard for Dedicated Short Range Communications (DSRC) Resource Manager
☐	☐	IEEE 1609-2 - Standard for Dedicated Short Range Communications (DSRC) Application Layer
☐	☐	IEEE 1609.3 - Standard for IP Interface for Dedicated Short Range Communications (DSRC)
☐	☐	IEEE 1609.4 - Standard for Dedicated Short Range Communications (DSRC) Medium Access Control (MAC) Layer
☐	☐	E2213-02 Standard Specification for Telecommunications and Information Exchange Between Roadside and Vehicle Systems - 5 GHz Band Dedicated Short Range Communications (DSRC) Medium Access Control (MAC) and Physical Layer (PHY) Specifications
☐	☐	SAE J2xxx - Standard for Data Dictionary and Message Sets for Dedicated Short Range Communications (DSRC)
☐	☐	E2158-01 Standard Specification for Dedicated Short Range Communication (DSRC) Physical Layer using Microwave in the 902 to 928 MHz Band
☐	☐	ASTM E17.54.00.1 - Standard Guidelines for Archiving ITS-Generated Data
☐	☐	PS 105-99: Standard Provisional Specification for Dedicated Short Range Communication (DSRC) Data Link Layer

Archived Data User Service (ADUS)

Using	Considering	
☐	☐	ASTM E2259-03 -Standard Guidelines for Archiving
☐	☐	ASTM E-17.54.02.1 Standard Specifications for Metadata Content for ITS-Generated Data
☐	☐	ASTM E-17.54.02.2 Standard Specifications for Archiving ITS-Related Traffic Monitoring Data

Location Referencing

Using	Considering	
☐	☐	SAE J2266 - Location Referencing Message Specification

51. What factors helped your agency decide to use ITS standards? Please pick top three factors, check only one item in each column.

1	2	3	
☐	☐	☐	Options offered in the standards
☐	☐	☐	Products employ standards
☐	☐	☐	Regional architecture document requirements
☐	☐	☐	Additional funding provided
☐	☐	☐	Integration opportunities
☐	☐	☐	Consultant or integrator’s recommendation
☐	☐	☐	My agency's participation on standard committees
☐	☐	☐	Training and Technical Assistance support provided by US DOT
☐	☐	☐	Responding to the rule to use ITS Standards
☐	☐	☐	Compliance testing is readily available

52. Do you feel that using the standards helped with the integration needs for your agency? Please list project name(s) next to each option.

Absolutely

Somewhat

Not exactly

53. If no ITS standards are currently used, what factors will ensure that your agency uses ITS standards? Please pick top three factors, check only one item in each column (if your are using standards, please move to the next question).

1	2	3	
☐	☐	☐	We are already committed to using standards when they are complete
☐	☐	☐	Vendors provide standard-compliant products
☐	☐	☐	Standards being accepted by the ITS community and being used in deployments
☐	☐	☐	Training and technical support being provided to my agency
☐	☐	☐	Standards are developed that apply to my system
☐	☐	☐	Additional funding being provided to use the standards
☐	☐	☐	Standards use enables interoperability of systems
☐	☐	☐	Other:

54. What tool, resource, or support mechanism was/would be most helpful for implementing the standards? Please pick top three, check only one item in each column.

1	2	3	
☐	☐	☐	Training courses
☐	☐	☐	Published standards provided for free
☐	☐	☐	Published standards are easily available
☐	☐	☐	Support documents (i.e. procurement and implementation guides) are available
☐	☐	☐	Workshops
☐	☐	☐	Standards Web site
☐	☐	☐	Standards forum
☐	☐	☐	Software tools to assist with correctly specifying and procuring the standard
☐	☐	☐	E-mail bulletins
☐	☐	☐	Resource documents (i.e., user guides and reference notebooks)
☐	☐	☐	Testing tools
☐	☐	☐	Case studies of other similar projects that used standards successfully
☐	☐	☐	Other:

55. Who can we contact in your agency regarding ITS standards?

Name:

Affiliation:

Phone:

E-mail:

56. May FHWA follow up with this agency contact for possible peer networking?

☐ Yes
☐ No

TRAFFIC INCIDENT MANAGEMENT:

57. Does your agency participate in a formal multi-agency regional or statewide program to coordinate management of traffic incidents that contains all of the following elements?

Strategic Planning - A mutually agreed to statement of multi-agency program goals and measurable objectives.

Program Plan - A multi-year, multi-agency program plan that maps out the process toward meeting program goals and identifying initiatives, tasks and funding sources.

Annual Work Plan - A plan of tasks, projects, or initiatives for participating agencies to be done during the current year with funding secured.

- ☐ Yes
- ☐ No
- ☐ Don't know

58. Does your agency participate in a team that meets on a regular basis to evaluate and improve coordinated incident response and to address traffic problems as well?

- ☐ Yes
- ☐ No
- ☐ Don't know

59. Does your agency have formal established call-out procedures for responding to traffic incidents?

- ☐ Yes, when are these procedures in effect and whom in your agency do they affect?

  Procedures are in place: (Check all that apply)

  - ☐ 24 hours a day, 7 days a week, 365 days a year
  - ☐ Peak periods only
  - ☐ Normal business hours only
  - ☐ Weekends
  - ☐ Holidays
  - ☐ Other: _____

  Whom do they affect: (Check all that apply)

  - ☐ Traffic control
  - ☐ Roadway maintenance
  - ☐ Bridges/Tunnels (structures)
  - ☐ Other: _____

- ☐ No
- ☐ Don't know

60. Are on-call supervisors permitted to take public vehicles or equipment home in order to facilitate their response to traffic incidents?

- ☐ Yes
- ☐ No
- ☐ Don't know

61. Has a multi-agency contact list been developed in your area containing the names, phone numbers, pager numbers, and other pertinent information for the appropriate response personnel?

- ☐ Yes
- ☐ No
- ☐ Don't know

TRAFFIC INCIDENT MANAGEMENT (Cont.):

62. With what types of agencies does your agency electronically share real-time and/or after-the-fact reporting information on traffic incidents?

Real-Time Data	After-The-Fact Data	
☐	☐	Other transportation agencies
☐	☐	Law enforcement (local)
☐	☐	Law enforcement (state)
☐	☐	Fire and rescue agencies
☐	☐	Other:
☐	☐	Do not electronically exchange information
☐	☐	Do not know

63. Is an Incident Management (Incident Command) System used on-scene to manage traffic incidents?

- ☐ Yes, specified by state law
- ☐ Yes, through agreement
- ☐ No
- ☐ Don't know

64. Is there a legal specification by state law or formal agreement as to who is in charge at the scene of a traffic incident (Incident Commander)?

- ☐ Yes, who?
- ☐ No
- ☐ Don't know

65. Has a plan been developed and adopted by responding agencies for staging and parking response vehicles and equipment at a traffic incident site in a manner that minimizes lane blockage and facilitates the re-opening of lanes?

- ☐ Yes
- ☐ No
- ☐ Don't know

66. Are respondents protected through law or court opinion for liability claims for damages to vehicles or cargoes during clearance activities so long as the removal was not done in a careless or grossly negligent manner?

- ☐ Yes
- ☐ No
- ☐ Legislation or action being planned
- ☐ Don't know

67. Does your state or local jurisdiction have a law that requires drivers involved in a property-damage only accident (where vehicles can be driven) to move the vehicles from travel lanes to a safe location to exchange information or wait for police?

- ☐ Yes
- ☐ No
- ☐ Legislation planned or in progress
- ☐ Don't know

68. How long are abandoned vehicles allowed to remain on a freeway shoulder (assuming they are not an imminent hazard)?

- ☐ 0 to 4 hours
- ☐ 4 to 24 hours
- ☐ More than 24 hours (Please specify):
- ☐ Don't know

TRAFFIC INCIDENT MANAGEMENT (Cont.):

69. Are there any laws or policies regarding the removal of stalled or abandoned vehicles from freeway shoulders in your metropolitan area?

- ☐ Yes, please describe briefly
- ☐ No
- ☐ Don't know

70. Are there any policies and procedures to facilitate quick removal of heavily damaged vehicles and non-hazardous cargoes in your metropolitan area?

- ☐ Yes, please briefly describe the policy or procedures.
- ☐ No
- ☐ Don't know

71. What agency usually directs traffic on scene at major traffic incidents in your area? (select only one)

- ☐ Law enforcement
- ☐ Fire and rescue
- ☐ Transportation
- ☐ Auxiliary or reserves (fire or police)
- ☐ Don't know

72. Are on-scene responders to traffic incidents from your agency familiar with standards for traffic control specified in the Manual on Uniform Traffic Control Devices (MUTCD)?

- ☐ Yes
- ☐ No
- ☐ Don't know

73. Does your agency participate in a statewide disaster planning program?

- ☐ Yes
- ☐ No
- ☐ Don't know

74. Does your agency operate a Traffic Management Center (TMC)?

- ☐ Yes. Please provide contact information (name, e-mail, phone) if different from the survey respondant.
- ☐ No

75. Does your agency operate weather systems (e.g., anti-icing/deicing systems, Road Weather Information Systems [RWIS], motorist warning systems) within your metropolitan area?

- ☐ Yes. Please provide contact information (name, e-mail, phone) if different from the survey respondant.
- ☐ No

EVALUATION:

76. The U.S. DOT is interested in networking with evaluators of Intelligent Transportation Systems (ITS) nationwide. Is there a point of contact in your region for ITS evaluations?

☐ Yes. Please provide the name, e-mail, and phone number

☐ No

☐ Don't know

77. The U.S. DOT ITS JPO actively collects data on the benefits and costs of ITS implementations and makes this information available at the following URL: http://www.benefitcost.its.dot.gov/. Are you aware of any locally produced and funded evaluations that could be added to this national database?

☐ Yes. Please provide a point of contact (name, phone number and e-mail) or reference (e.g., URL) for the evaluation report.

☐ No

☐ Don't know

COST AND BENEFITS:

78. Is your agency willing to share COST information on ITS-related equipment and projects (i.e., capital and O&M cost, project component breakdown, and brief description)? This information will be used to update the ITS JPO sponsored ITS costs database.

☐ Yes. Please provide name, phone number, and e-mail of the cost information contact if different from respondent. This person will be contacted for the cost information at a later date.

☐ No

79. Is your agency willing to share BENEFITS information from ITS deployments? This information will be used to update the ITS JPO sponsored ITS benefits database.

☐ Yes. Please provide name and phone number of the benefits information contact if different from respondent. This person will be contacted for the benefits information at a later date.

☐ No