2004 Freeway Management Survey

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.

NOTE: The "2004 Estimated by 2005" figures and selection information are not included in the companion Excel Spreadsheets.

1a. Total number of freeway centerline miles with real-time traffic data collection technologies (does not include CCTV):

Traffic data collection technologies	Miles Covered				
deployed	Total in 2002	2002 Estimated total by 2005	Total in 2004	2004 Estimated total by 2005	
Loop detectors:	Provided to Surveyee	Provided to Surveyee			
Video imaging detectors:	Provided to Surveyee	Provided to Surveyee			
Probe readers using ETC tags:	Provided to Surveyee	Provided to Surveyee			
Probe readers using other technology:	Provided to Surveyee	Provided to Surveyee			
Probe readers for transit vehicles:	Provided to Surveyee	Provided to Surveyee			
Acoustic detectors:	Provided to Surveyee	Provided to Surveyee			
Microwave radar:	Provided to Surveyee	Provided to Surveyee			
Other:	Provided to Surveyee	Provided to Surveyee			

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.

NOTE: The "2004 Estimated by 2005" figures and selection information are not included in the companion Excel Spreadsheets.

2a. Total number of ramp meters

	Total in 2002	Total Ramp Meters in 2004	2004 Estimated total by 2005
Number of isolated (or stand-alone) ramp meters:	Provided to Surveyee		
Number of centrally controlled ramp meters:	Provided to Surveyee		
Number of pretimed ramp meters:	Provided to Surveyee		
Number of traffic responsive ramp meters:	Provided to Surveyee		
Number of HOV bypass lanes at ramp meters:	Provided to Surveyee		
Number of ramp meters that provide preemption for emergency vehicles:	Provided to Surveyee		
Number of ramp meters that provide priority for transit vehicles:	Provided to Surveyee		
Number of freeway to freeway ramp meters:	Provided to Surveyee		

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 2002 and the current estimate for 2005 in the boxes provided. We have entered the information your agency provided in 2000 to assist you.

NOTE: The "2004 Estimated by 2005" figures and selection information are not included in the companion Excel Spreadsheets.

4. Total number of freeway centerline miles under lane control

Total in 2002	2002 Estimated total by 2005	Total in 2004	2004 Estimated total by 2005
Provided to Surveyee	Provided to Surveyee		

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.	Doy	you	have	any	variable	speed	limit	signs	s?

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.

NOTE: The "2004 Estimated by 2005" figures and selection information are not included in the companion Excel Spreadsheets.

7. Number of centerline miles covered by Highway Advisory Radio (HAR)

Total miles in 2002	2002 Estimated total miles by 2005	Total miles in 2004	2004 Estimated total miles by 2005
Provided to Surveyee	Provided to Surveyee		

8. Number of centerline miles covered by other roadside technologies:

Total miles in 2002	2002 Estimated total miles by 2005	Total miles in 2004	2004 Estimated total miles by 2005
Provided to Surveyee	Provided to Surveyee		

Specify other roadside technology:

Dynamic Message Signs (DMS)

9. Total number of Permanent DMS deployed on freeways

Total miles in 2002	2002 Estimated total miles by 2005	Total miles in 2004	2004 Estimated total miles by 2005
Provided to Surveyee	Provided to Surveyee		

10. Total number of Portable DMS deployed on freeways

Total miles in 2002	2002 Estimated total miles by 2005	Total miles in 2004	2004 Estimated total miles by 2005
Provided to Surveyee	Provided to Surveyee		

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.

NOTE: The "2004 Estimated by 2005" figures and selection information are not included in the companion Excel Spreadsheets.

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:	Provided to Surveyee	Provided to Surveyee		
Automated telephone system:	Provided to Surveyee	Provided to Surveyee		
Internet Web sites	Provided to Surveyee	Provided to Surveyee		
Pagers or personal data assistants:	Provided to Surveyee	Provided to Surveyee		
Interactive TV:	Provided to Surveyee	Provided to Surveyee		
Kiosks:	Provided to Surveyee	Provided to Surveyee		
E-mail or other direct PC communication:	Provided to Surveyee	Provided to Surveyee		
In-vehicle navigation systems:	Provided to Surveyee	Provided to Surveyee		
Cell phone/automated voice:	Provided to Surveyee	Provided to Surveyee		
Facsimile:	Provided to Surveyee	Provided to Surveyee		
Video feed to the media:	Provided to Surveyee	Provided to Surveyee		
Do not distribute information:	Provided to Surveyee	Provided to Surveyee		
Other:	Provided to Surveyee	Provided to Surveyee		

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:

Public safety (incident information)

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	Provided to Surveyee	
No	Provided to Surveyee	
No toll collection	Provided to Surveyee	

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
Incident clearance:	Provided to Surveyee	Yes/No
Incident severity and type:	Provided to Surveyee	Yes/No

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)
Freeway Management Agencies:		
Arterial Management Agencies:		
Public Transit Agencies:		
Public Safety Agencies:		
Emergency Management Agencies		

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.

NOTE: The "2004 Estimated for 2005" figures and selection information are not included in the companion Excel Spreadsheets.

19. Total number of freeway centerline miles patrolled by service patrols

Total in 2002	2002 Estimated total by 2005	Total in 2004	2004 Estimated total by 2005
Provided to Surveyee	Provided to Surveyee		

20. Number of vehicles

Total in 2002	2002 Estimated total by 2005	Total in 2004	2004 Estimated total by 2005
Provided to Surveyee	Provided to Surveyee		

21. Service Hours

	2002 Response	2004 Response
Peak hours only	Provided to Surveyee	
24/7	Provided to Surveyee	
Other	Provided to Surveyee	

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.

NOTE: The "2004 Estimated for 2005" figures and selection information are not included in the companion Excel Spreadsheets.

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

22. Free cellular phone call to a dedicated phone number other than 911

Total miles in 2002	2002 Estimated total miles by 2005	Total miles in 2004	2004 Estimated total miles by 2005
Provided to Surveyee	Provided to Surveyee		

23. Computer algorithms

Total miles in 2002	2002 Estimated total miles by 2005	Total miles in 2004	2004 Estimated total miles by 2005
Provided to Surveyee	Provided to Surveyee		

24. CCTV

Total miles in 2002	2002 Estimated total miles by 2005	Total miles in 2004	2004 Estimated total miles by 2005
Provided to Surveyee	Provided to Surveyee		

25. Call boxes

Total miles in 2002	2002 Estimated total miles by 2005	Total miles in 2004	2004 Estimated total miles by 2005
Provided to Surveyee	Provided to Surveyee		

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

Yes No No CCTV

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
```

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

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

36. What are the data used for?

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

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?

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 frustration 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 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 (assessing 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

Standard	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

Standard	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

Standard	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

Standard	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)		
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

Standard	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

Standard	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

Standard	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

Standard	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

Standard	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

Standard	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)

Standard	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

Standard	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 you are using standards, please move to the next question).

1	2	3
	1	1 2

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:			
			i

55.	Who can we contact in your agency regarding ITS standards?
	Name:
	Affiliation:
	Phone:
	F-mail·

NOTE: This information is not included in the companion Excel Spreadsheets.

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 vour agen	cy participate in a team that meets on a	regular hasis to e	valuate and impr	ove coordinated
	se and to address traffic problems as we	_	raidate and imp.	ove cooramatea
Yes				
No				
Don't knov	v			
2011 (11110)	•			
59. Does vour agen	cy have formal established call-out proc	edures for respon	ding to traffic inc	idents?
Yes	,			
When a	are these procedures in effect and whom	in your agency do	they affect?	
	rocedures are in place: (Check all that ap		•	
	24 hours a day, 7 days a week, 365 days			
	Peak periods only	, ,		
	Normal business hours only			
	Weekends			
	Holidays			
	Other:			
W	hom do they affect: (Check all that apply	/)		
	Traffic control	,		
	Roadway maintenance			
	Bridges/Tunnels (structures)			
	Other:			
No				
Don't know	V			
60. Are on-call supe	ervisors permitted to take public vehicle	s or equipment ho	ome in order to fa	cilitate their
response to tra	ffic incidents?			
Yes				
No				
Don't know	v			
61. Has a multi-age	ncy contact list been developed in your	area containing th	e names, phone	numbers, pager
numbers, and o	ther pertinent information for the appro	opriate response p	ersonnel?	
Yes				
No				
Don't know	v			
62. With what type	s of agencies does your agency electron	ically share real-ti	me and/or after-	the-fact reporting
information on	traffic incidents?			
				1
		Real-Time	After-The-Fact	
		Data	Data	
	Other transportation agencies			
	Law enforcement (local)	İ	i	l

	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 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 reopening 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
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
	DOT CKNOW
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 respondent.
	NOTE: This information is not included in the companion Excel Spreadsheets.
	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 respondent.
	NOTE: This information is not included in the companion Excel Spreadsheets.
	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

NOTE: This information is not included in the companion Excel Spreadsheets.

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.

NOTE: This information is not included in the companion Excel Spreadsheets.

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.

NOTE: This information is not included in the companion Excel Spreadsheets.

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.

NOTE: This information is not included in the companion Excel Spreadsheets.

No