

1999 Arterial Management Survey

In order to assist you in responding for the appropriate geographic area covered, we have included a map of your metropolitan area. The metropolitan planning area boundary depicted on this map follows the metropolitan transportation planning boundary established by your Metropolitan Planning Organization (MPO). Please examine this map and provide the following information:

(Map NOT Included Here)

1a. Number of arterial miles contained within the metropolitan transportation planning boundary that your agency owns or maintains:

1b. Number of arterial miles contained within the metropolitan transportation planning boundary that your agency considers when planning for deployment of ITS for arterial management:

1c. Number of highway-rail intersections contained within the metropolitan transportation planning boundary on roadways that your agency maintains:

1d. Number of highway-rail intersections contained within the metropolitan transportation planning boundary that your agency considers when planning for deployment of technologies for highway-rail intersection ITS strategies:

2. Which of the following best describe the type of facilities used to conduct arterial management activities by your agency? (Circle all the numbers that apply)

1. Activities housed in a free-standing dedicated building
2. Activities housed in a building shared with other activities
3. Activities conducted in a dedicated control room
 1. control room contains operator console(s)
 2. control room contains electronic wall map
 3. control room contains CCTV display(s)
4. Activities conducted in a room containing workstations or PCs that manage traffic
5. Facilities are electronically linked to other transportation management facilities
6. Other (please describe) and/or additional information:

**3. Which of the following best describe the staffing and hours of operation of your arterial management?
(Circle all the numbers that apply)**

1. Staffed by _____ full-time agency staff members and/or _____ contractor staff members
2. Staffed by _____ part-time agency staff members and/or _____ contractor staff members
3. Staffed 24 hours a day
 1. by agency staff
 2. by others
4. Staffed during peak hours only
 1. by agency staff
 2. by others
5. Staffed by others during off-peak hours
6. Agency staff perform transportation management as an ancillary duty
7. Agency staff dedicated to transportation management duty
8. Other: (please describe)

4. Which of the following best describe the types of operations conducted by your agency or contractor staff for arterial management ? (Circle all the numbers that apply)

1. Incident detection and management
2. Monitoring and troubleshooting status of system components
3. Radio communications with other agencies
4. Exchange of electronic data with other agencies such as computer aided dispatch
5. Manual override of traffic signal timing plans
6. Operating transportation management roadside devices (e.g., VMS, CCTV, etc.)
7. Other (please describe)

5. Which of the following statements describes your agency's role in traffic signal control for your metropolitan area? (Circle number of your answer)

1. Do not operate¹ traffic signals. Go to question 9
2. Operate¹ traffic signals on state routes only
3. Operate¹ traffic signals on county routes only
4. Operate¹ traffic signals on all roads in the county
5. Operate¹ traffic signals on all roads in the county outside incorporated area
6. Operate¹ traffic signals on all roads in the county except state routes
7. Operate¹ traffic signals on all roads in incorporated area
8. Operate¹ traffic signals on all roads in incorporated area except state routes
9. Operate¹ traffic signals on all roads in own incorporated area, and roads in another local jurisdiction
10. Operate¹ traffic signals on all roads in incorporated area except state and county routes
11. Other (please describe)

¹ Operate means signals for which your agency is primarily responsible for system monitoring, data collection and analysis, and system modification and updates, including updating timing plans.

6. The following information pertains to traffic signals operated by your agency and located within the metropolitan planning boundary.

NOTE: The "1999 Estimated Deployed by 2005" figures and selection information are not included in the companion Excel Spreadsheets.

Number of signalized intersections

	Deployed in 1997	Deployed in 1999	1999 Estimated Deployed by 2005
1. Number of signalized intersections operated by your agency and owned by your agency	Provided to Surveyee		
2. Number of signalized intersections operated by your agency but owned by another agency)	Provided to Surveyee		
3. Total number of signalized intersections operated by your agency (the sum of 1 and 2 above)	Provided to Surveyee		

Characteristics of the signalized intersections that your agency operates

	Deployed in 1997	Deployed in 1999	1999 Estimated Deployed by 2005
1. Number of signalized intersections operated by your agency under closed loop or central system control	Provided to Surveyee		
2. Number of signalized intersections operated by your agency under real-time traffic adaptive control using SCOOT/SCATS or other similar advanced software	Provided to Surveyee		
3. Number of signalized intersections operated by your agency that allow signal preemption for emergency vehicles	Provided to Surveyee		
4. Number of signalized intersections operated by your agency that allow signal priority for transit vehicles	Provided to Surveyee		
5. Number of signalized intersections operated by your agency within 200 feet of a highway-rail intersection	Provided to Surveyee		
6. Number of signalized intersections operated by your agency within 200 feet of a highway-rail intersection that adjust signal timing in response to train crossing to avoid vehicle entrapment, or are interconnected with active crossing devices	Provided to Surveyee		

7. The following information pertains to the software your agency currently uses or plans to use to control the signals that your agency operates.

NOTE: The "1999 Estimated Deployed by 2005" figures and selection information are not included in the companion Excel Spreadsheets.

Date of last upgrade to traffic signal control system software:

In general, how often do you update your signal timing?

Please list the traffic signal system software that your agency uses to operate traffic signals.

Software	Number of Signalized Intersections Under Control		
	1997	1999	1999 Estimated Deployed by 2005
Software 1	Provided to Surveyee		
Software 2	Provided to Surveyee		
....			
Software N			

8. The following information pertains to the controllers your agency currently uses or plans to use to control the signals that your agency operates.

NOTE: The "1999 Estimated Deployed by 2005" figures and selection information are not included in the companion Excel Spreadsheets.

Controllers	Number of Controllers		
	1997	1999	1999 Estimated Deployed by 2005
NEMA	Provided to Surveyee		
170/179	Provided to Surveyee		
2070	Provided to Surveyee		
Other (please specify)			
Other (please specify)			

9. Has your agency deployed (or will your agency deploy by 2005) any of the following technologies associated with highway-rail intersections? (Circle number of your answer)

- 1. No, go to question 10
- 2. Yes

Please provide the following information:

Please record the number of highway-rail intersections that you operate which have the following capabilities:

NOTE: The "1999 Estimated Deployed by 2005" figures and selection information are not included in the companion Excel Spreadsheets.

	Number of Highway-Rail Intersections		
	1997	1999	1999 Estimated Deployed by 2005
1. Video surveillance	Provided to Surveyee		
2. Electronic surveillance other than video	Provided to Surveyee		
3. Ability to predict train arrivals electronically	Provided to Surveyee		
4. Equipped with electronic traffic violator devices	Provided to Surveyee		
5. Other (please specify)			
Total number of highway-rail intersections under electronic surveillance	Provided to Surveyee		

10. Does your agency use (or will your agency use by 2005) any of the following real-time electronic traffic data collection technologies to collect vehicle volume, speed, and density data on arterials for the purpose of monitoring traffic flow (excluding actuators on intersection approaches)? (Circle number of your answer)

- 1. No, go to question 11
- 2. Yes

Please provide the following information:

Please indicate the number of signalized intersections that have the following data collection technologies:

NOTE: The "1999 Estimated Deployed by 2005" figures and selection information are not included in the companion Excel Spreadsheets.

	Number of Signalized Intersections Under Surveillance		
	1997	1999	1999 Estimated Deployed by 2005
1. Loop detectors	Provided to Surveyee		
2. Video detection cameras	Provided to Surveyee		
3. Probe readers reading toll tags	Provided to Surveyee		
4. Probe readers reading license plates	Provided to Surveyee		
5. Other (please specify)			
Total number of signalized intersections covered by electronic surveillance for monitoring traffic flow	Provided to Surveyee		

11. Does your agency distribute (or will your agency distribute by 2005) traveler information about arterial conditions through any of the following roadside devices? (Circle number of your answer)

1. No, go to question 12
2. Yes

Please provide the following information:

Please indicate the number of signalized intersections that have the following data collection technologies:

NOTE: The "1999 Estimated Deployed by 2005" figures and selection information are not included in the companion Excel Spreadsheets.

	Number of Deployed		
	1997	1999	1999 Estimated Deployed by 2005
1. Highway Advisory Radio (HAR)	Provided to Surveyee		
2. In-Vehicle Signing (IVS)	Provided to Surveyee		
3. VMS controlling parking access	Provided to Surveyee		

	Miles Covered		
	1997	1999	1999 Estimated Deployed by 2005
1. Highway Advisory Radio (HAR)	Provided to Surveyee		
2. In-Vehicle Signing (IVS)	Provided to Surveyee		
3. VMS controlling parking access	Provided to Surveyee		

12. Have you identified candidate locations for the deployment of Variable Message Signs (VMS) on arterials? (Circle number of your answer)

1. No, go to question 13
2. Yes

Please provide the following information:

NOTE: The "1999 Estimated Deployed by 2005" figures and selection information are not included in the companion Excel Spreadsheets.

	Number of Candidate VMS Locations		
	1997	1999	1999 Estimated Deployed by 2005
1. Number of candidate locations for deployment of VMS where VMS has been or will be deployed	Provided to Surveyee		
2. Total number of candidate locations for deployment of VMS	Provided to Surveyee		
3. Percent of candidate locations where VMS has been or will be deployed	Provided to Surveyee		

Please describe criteria used to identify these locations:

13. Has your agency deployed (or will your agency deploy by 2005) any of the following communication technologies for communicating between traffic signals and/or between a central computer and traffic control in your metropolitan transportation planning boundary? (Circle number of your answer)

- 1. No, go to question 14
- 2. Yes

Please provide the following information:

NOTE: The "1999 Estimated Deployed by 2005" figures and selection information are not included in the companion Excel Spreadsheets.

Type of communication	Number of Signalized Intersections Communicated with by each Type of Communication		
	1997	1999	1999 Estimated Deployed by 2005
1. Twisted pair cable	Provided to Surveyee		
2. Coaxial cable	Provided to Surveyee		
3. Fiber-optic cable	Provided to Surveyee		
4. Wireless	Provided to Surveyee		
5. Dial-up modems	Provided to Surveyee		
6. Leased lines	Provided to Surveyee		
7. Other (please specify)			

Comments:

14. Does your agency convey information on highway-rail intersection crossing status to travelers via roadside media such as VMS or HAR? (Circle number of your answer)

- 1. No
- 2. Yes

15. Are you using any ITS standards related to traffic signal control? (Circle number of your answer)

- 1. No, go to question 16
- 2. Yes

Please indicate the standards used (Circle all the letters that apply)

- a. Advanced Transportation Controller (ATC) Software Application Interface (ITE 9603-1)
- b. ATC Physical Cabinet Functional Design (ITE-9603-2)
- c. ATC Functionality and Interface Definitions (ITE-9603-3)
- d. National Transportation Communications for ITS Protocol (NTCIP) Class B Profile (AASHTO TS 3.3)
- e. NTCIP Data Collection and Monitoring Devices (AASHTO TS 3.DCM)
- f. NTCIP Object Definitions for Video Camera Control (AASHTO TS 3.VCC)
- g. NTCIP Object Definitions for Actuated Traffic Signal Controller Units (AASHTO TS 3.5)
- h. Other (please specify)

16. Would your agency be willing to participate in the testing of ITS standards related to traffic signal control? (Circle number of your answer)

- 1. No
- 2. Yes

Please provide name and phone number of contact if different from respondent

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

17. Does your agency have any agreements in place with any other agencies or jurisdictions to use similar hardware and software to aid maintenance and interoperability? (Circle number of your answer)

- 1. No
- 2. Yes

18. Please indicate whether data are (or will be by 2005) collected, archived, and/or transferred to another agency or Information Service Provider (ISP). We also ask you to indicate the importance of making the information available to the public by ranking it High, Medium, or Low.

Circle 1999 if currently collected, archived or transferred

Circle 2005 if it will be collected, archived or transferred by 2005

Circle H for High importance, M for Medium importance, and L for Low importance

	Collected by your agency		Archived by your agency		Transferred to another agency by your agency		Importance of making information available to the public		
	1999	2005	1999	2005	1999	2005	H	M	L
1. Traffic volumes	1999	2005	1999	2005	1999	2005	H	M	L
2. Traffic speeds	1999	2005	1999	2005	1999	2005	H	M	L
3. Lane occupancy	1999	2005	1999	2005	1999	2005	H	M	L
4. Vehicle classification	1999	2005	1999	2005	1999	2005	H	M	L
5. Probe vehicles	1999	2005	1999	2005	1999	2005	H	M	L
6. Turning movements	1999	2005	1999	2005	1999	2005	H	M	L
7. Queues	1999	2005	1999	2005	1999	2005	H	M	L
8. Phasing/cycle lengths	1999	2005	1999	2005	1999	2005	H	M	L
9. Road conditions	1999	2005	1999	2005	1999	2005	H	M	L
10. Emergency vehicle signal preemption	1999	2005	1999	2005	1999	2005	H	M	L
11. Transit vehicle signal priority	1999	2005	1999	2005	1999	2005	H	M	L
12. Route designations (snow emergency, etc.)	1999	2005	1999	2005	1999	2005	H	M	L
13. Weather conditions	1999	2005	1999	2005	1999	2005	H	M	L
14. Incidents	1999	2005	1999	2005	1999	2005	H	M	L
15. Current work zones	1999	2005	1999	2005	1999	2005	H	M	L
16. Scheduled work zones	1999	2005	1999	2005	1999	2005	H	M	L
17. Intermodal (air, rail, water) connections	1999	2005	1999	2005	1999	2005	H	M	L
18. Emergency/evacuation routes and procedures	1999	2005	1999	2005	1999	2005	H	M	L
19. Highway operations coordination information	1999	2005	1999	2005	1999	2005	H	M	L
20. Other (please specify)	1999	2005	1999	2005	1999	2005	H	M	L

Which of the following groups typically make requests for the data? (Circle all the numbers that apply)

1. Universities
2. State DOT personnel
3. Federal DOT personnel
4. Media (e.g., TV stations, radio stations)
5. MPOs
6. Consultants
7. Advanced Traveler Information Systems (ATIS) providers
8. Other (please specify)

What are these data used for? (Circle all the numbers that apply)

1. Do not know
2. Traffic analysis
3. Construction impact determination
4. Planning
5. Incident detection algorithm development
6. Roadway impact analysis
7. Accident prediction models
8. Dissemination to the public
9. Other (please specify)

19. Does your agency directly or indirectly (i.e., through another agency or organization) use (or will your agency use by 2005) any of the following technologies to distribute arterial travel time, speeds, and conditions information to the public? (Circle number of your answer)

1. No, go to question 20
2. Yes

Please provide the following information:

Methods used to disseminate arterial travel times, speeds, and conditions to the public in 1999 and by 2005.

Circle 1999 if the method is currently used

Circle 2005 if the method will be used by 2005

	Your agency		Other organization	
	1999	2005	1999	2005
1. Dedicated cable TV	1999	2005	1999	2005
2. Telephone system	1999	2005	1999	2005
3. Internet Web sites	1999	2005	1999	2005
4. Pagers or personal data assistants	1999	2005	1999	2005
5. Interactive TV	1999	2005	1999	2005
6. Kiosks	1999	2005	1999	2005
7. E-mail or other direct PC communication	1999	2005	1999	2005
8. In-vehicle navigation systems	1999	2005	1999	2005
9. Cell phone/voice	1999	2005	1999	2005
10. Cell phone/data	1999	2005	1999	2005
11. Facsimile	1999	2005	1999	2005
12. Other (please specify)	1999	2005	1999	2005

If your agency or another organization has one or more Internet Web sites reporting arterial conditions, please provide the URLs below:

If your agency has one or more telephone systems for reporting freeway travel times, speeds, and conditions to the public, please provide the number(s) below:

Please list below any organization (public or private) to which your agency sends information for dissemination to the public:

20. The following information is used to determine the extent to which your agency is integrated with other traffic signal agencies in your metropolitan area. Integration can occur through the sharing of information describing pre-agreed upon timing plans, coordination of changes to pre-agreed upon timing plans, and turning over control of signals during non-peak hours or special events.

Please indicate the traffic signal agencies in your metropolitan area with which you share timing plan information, coordinate changes to timing plans, and/or turn over control of signals in 1999 and by 2005. (This is intended to be an exhaustive list of applicable agencies and your own agency will be included and can be ignored)

Circle 1999 if currently in place

Circle 2005 if in place by 2005

Traffic Signal Control	Share Timing Plans Information		Coordinate Changes to Timing Plans		Turn Over Control of Signals	
	1999	2005	1999	2005	1999	2005
Agency 1	1999	2005	1999	2005	1999	2005
Agency 2	1999	2005	1999	2005	1999	2005
Agency 3	1999	2005	1999	2005	1999	2005
....	1999	2005	1999	2005	1999	2005
Agency N	1999	2005	1999	2005	1999	2005
Other (please specify)	1999	2005	1999	2005	1999	2005
Other (please specify)	1999	2005	1999	2005	1999	2005

21. The following information is used to determine the extent to which your agency is integrated with other transportation agencies in your metropolitan area. Integration can occur through the sending of information to these agencies (i.e., your agency transmits arterial travel times, speeds, and conditions information to an agency in real-time via electronic means), through the sharing of infrastructure with any agency (e.g., building, computer system, communication lines), or through coordinated operations with another agency (e.g., jointly developing a common control strategy).

Please indicate to which agencies your agency provides arterial travel times, speeds, and conditions information, and/or shares infrastructure, and/or coordinates operation in 1999 or will by 2005. (This is intended to be an exhaustive list of applicable agencies and your own agency will be included and can be ignored)

Circle 1999 if currently in place

Circle 2005 if in place by 2005

Freeway Management	Provide Information		Share Infrastructure		Coordinate Operation	
	1999	2005	1999	2005	1999	2005
Agency 1						
Agency 2						
Agency 3						
....						
Agency N						
Other (please specify)						
Other (please specify)						

Incident Management	Provide Information		Share Infrastructure		Coordinate Operation	
	1999	2005	1999	2005	1999	2005
Agency 1						
Agency 2						
Agency 3						
....						
Agency N						
Other (please specify)						
Other (please specify)						

Public Transit Operators	Provide Information		Share Infrastructure		Coordinate Operation	
	1999	2005	1999	2005	1999	2005
Agency 1						
Agency 2						
Agency 3						
....						
Agency N						
Other (please specify)						
Other (please specify)						

Arterial Management	Provide Information		Share Infrastructure		Coordinate Operation	
	1999	2005	1999	2005	1999	2005
Agency 1	1999	2005	1999	2005	1999	2005
Agency 2	1999	2005	1999	2005	1999	2005
Agency 3	1999	2005	1999	2005	1999	2005
....	1999	2005	1999	2005	1999	2005
Agency N	1999	2005	1999	2005	1999	2005
Other (please specify)	1999	2005	1999	2005	1999	2005
Other (please specify)	1999	2005	1999	2005	1999	2005

22. The following information is used to determine whether your agency is receiving real-time information via electronic means from other groups, agencies, or organizations in your metropolitan area and/or sharing infrastructure (buildings, computer systems, communication lines, etc.) with other groups, agencies, or organizations.

Circle 1999 if currently in place

Circle 2005 if in place by 2005

Please indicate the Freeway Management agencies from which your agency currently receives freeway travel times, speeds, and conditions information or will receive this information by 2005.

Agency 1	1999	2005
Agency 2	1999	2005
Agency 3	1999	2005
....	1999	2005
Agency N	1999	2005
Other (please specify)	1999	2005
Other (please specify)	1999	2005

Please indicate the Public Transit operators from which your agency currently receives arterial travel times from vehicle probes information or will receive this information by 2005.

Agency 1	1999	2005
Agency 2	1999	2005
Agency 3	1999	2005
....	1999	2005
Agency N	1999	2005
Other (please specify)	1999	2005
Other (please specify)	1999	2005

Please indicate the Incident Management agencies from which your agency currently receives incident clearance information and/or incident severity, location, and type information or will receive this information by 2005.

	Receive Information on Incident Clearance		Receive Information on Incident Severity, Location, and Type	
	1999	2005	1999	2005
Agency 1	1999	2005	1999	2005
Agency 2	1999	2005	1999	2005
Agency 3	1999	2005	1999	2005
....	1999	2005	1999	2005
Agency N	1999	2005	1999	2005
Other (please specify)	1999	2005	1999	2005
Other (please specify)	1999	2005	1999	2005

Please indicate the Toll Collection agencies from which your agency currently receives arterial travel times from vehicle probes information or will receive this information by 2005.

Agency 1	1999	2005
Agency 2	1999	2005
Agency 3	1999	2005
....	1999	2005
Agency N	1999	2005
Other (please specify)	1999	2005
Other (please specify)	1999	2005

This section gathers data about a number of aspects associated with incident management on arterial streets including incident detection and verification methods, incident response procedures, information dissemination to the public, and integration with other agencies.

Please note: We understand that currently it is very unusual for an agency or group to operate an incident management program targeted exclusively at arterials. Therefore, before completing the remaining portion of this survey, we need to establish whether it is accurate to conclude that your agency provides for such a program in your metropolitan area. With this in mind, please answer the following questions, and remember that these questions pertain to the activities of your agency and not other incident management programs (both freeway and arterial) that are operated by other agencies in your metropolitan area.

23. Does your agency receive information on highway-rail intersection crossing blockages for the purpose of managing incident response? (Circle number of your answer)

- 1. No
- 2. Yes

24. Does your agency operate or sponsor (or will your agency operate or sponsor by 2005) any of the following service patrols to assist in the detection, verification, and response to incidents on arterial streets? (Circle all the numbers that apply)

- 1. Yes, Publicly operated service patrol vehicles
- 2. Yes, Privately operated service patrol vehicles operated under public contract
- 3. No, go to question 25

Total number of arterial miles patrolled in 1997 _____ in 1999 _____ deployed by 2005 _____

NOTE: The "1999 Estimated Deployed by 2005" figure is not included in the companion Excel Spreadsheets.

25. Does your agency detect and verify (or will your agency detect and verify by 2005) incidents on arterial streets? (Circle number of your answer)

- 1. No, go to question 25
- 2. Yes

Please provide the following information:

Detection and verification methods used:

NOTE: The "1999 Estimated Deployed by 2005" figures and selection information are not included in the companion Excel Spreadsheets.

	1997	1999	Deployed by 2005
1. Free cellular phone call to a dedicated phone number other than 911	Provided to Surveyee		
2. Free cellular phone call to an area radio station	Provided to Surveyee		
3. Police patrols	Provided to Surveyee		
4. Computer algorithms	Provided to Surveyee		
5. CCTV	Provided to Surveyee		
6. Private sector sources (e.g., Shadow Traffic, SmartRoutes)	Provided to Surveyee		
7. Other (please specify)			

26. Does your agency have in place any of the following procedures for arterial incident response? (Circle number of your answer)

- 1. No
- 2. Yes

Please indicate which one(s)

- 1. Working agreement(s)/arrangement(s) with other agencies
- 2. Inter-agency incident management administrative team that meets on a regular basis
- 3. Major incident response team made up of senior persons from major agencies (e.g., police, fire, towing) that responds to major incidents for the purpose of coordinating their agencies' activities with each other
- 4. Set of goals and objectives for incident management that has been formally adopted by agencies in your region
- 5. Other (please describe)

If you answered .NO. to Questions 24, 25, and 26

STOP

**Your agency does not operate an Arterial Incident Management Program.
Otherwise please complete remaining questions in this survey.**

27. What methods of communication are used on-site at an incident (or while responding to an incident) by state or local DOT, police, fire/rescue, and towing services? (Circle the responders that use each method of communication)

Method of communication:	Responders			
1. Two-way radio	Police	Fire/Rescue	DOT	Towing
2. 800 MHz trunked radio	Police	Fire/Rescue	DOT	Towing
3. Cellular telephone	Police	Fire/Rescue	DOT	Towing
4. Hand-held (i.e., walkie-talkie)	Police	Fire/Rescue	DOT	Towing
5. Automated data systems (i.e., CAD)	Police	Fire/Rescue	DOT	Towing
6. Other: (please describe)	Police	Fire/Rescue	DOT	Towing

28. Which police agencies typically respond to incidents on the arterials? (Circle all the numbers that apply)

- 1. State Police
- 2. County Police or Sheriff
- 3. City Police

29. Who provides on-site emergency medical response? (Circle all the numbers that apply)

- 1. Fire
- 2. Emergency Management Service Agency (describe)
- 3. Private hospital (describe) 2. County Police or Sheriff

30. 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? (Circle number of your answer)

1. No
2. Yes
3. Don't know

31. Is the Incident Command System (ICS) used to manage incident scenes? (Circle number of your answer)

1. No
2. Yes
3. Don't know

32. Is there a legal specification by state law or formal agreement as to who is "in charge" at the incident scene (Incident Commander)? (Circle all the numbers that apply)

1. Specified by state law
if so, who?
2. Formal agreement
if so, who?
3. Not specified or don't know.

33. Is an on-scene command post used to manage and coordinate the activities of responding agencies? (Circle number of your answer)

1. No, go to question 34
2. Don't know, go to question 34
3. Yes

Please answer the following question:

Are there communications linkages to a communications or traffic/freeway management center? (Circle number of your answer)

1. No
2. Yes

34. Has a plan been developed and adopted by responding agencies for staging and parking response vehicles and equipment at the incident site in a manner that minimizes lane blockage and facilitates the re-opening of lanes? (Circle number of your answer)

1. No
2. Yes
3. Don't know

35. 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? (Circle number of your answer)

1. No
2. Yes
3. Don't know
4. Legislation or action being planned

36. In your area, are overturned tank trucks (especially those containing petroleum products or other Hazmat), which are intact and not leaking, uprighted without first off-loading? (Circle number of your answer)

1. No
2. Yes

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

1. No
2. Yes
3. Legislation is in progress

38. Do you have laws or policies regarding the removal of stalled or abandoned vehicles from freeway shoulders? (Circle number of your answer)

1. No, go to question 39
 2. Yes
- Please briefly describe:

39. How long are abandoned vehicles allowed to remain on a freeway shoulder (assuming they are not an imminent hazard)? (Circle number of your answer)

1. 0 to 24 hours
2. 25 to 36 hours
3. More than 37 hours
4. Don't know

40. Do you have policies and procedures to facilitate quick removal of vehicles? (Circle number of your answer)

1. No, go to question 41
 2. Yes
- Please briefly describe the policy or procedures:

41. Is Total Station equipment (Total Station equipment uses infrared-based survey equipment for mapping incident scenes) used to investigate (measure and document) major incidents? (Circle number of your answer)

1. No, go to question 42
 2. Don't know, go to question 42
 3. Yes
- Please indicate who operates the equipment

42. How is towing response to incidents handled in your area? (Circle all the numbers that apply)

1. Formal contract based on qualifications
 2. Rotation with companies under contract
- Are separate lists kept for light and heavy response and for specialty recovery? (Circle number of your answer)
1. No
 2. Yes
3. Rotation list with minimal qualifications
 4. Other
- Please describe

43. In your towing qualifications, do you require towers to be certified under the Towing and Recovery Association of America's National Drivers Certification Program? (Circle number of your answer)

1. No
2. Yes
3. Being considered
4. Don't know about program

44. Does your agency directly or indirectly (i.e., through another agency or organization) use (or will your agency use by 2005) any of the following technologies to distribute incident location and severity information about arterial incidents to the public? (Circle number of your answer)

- 1. No, go to question 45
- 2. Yes

Please provide the following information:

Methods used to disseminate arterial incident location and severity to the public in 1999 and by 2005

Circle 1999 if the method is currently used

Circle 2005 if the method will be used by 2005

	Your agency		Other organization	
	1999	2005	1999	2005
1. Dedicated cable TV	1999	2005	1999	2005
2. Telephone system	1999	2005	1999	2005
3. Internet Web sites	1999	2005	1999	2005
4. Pagers or personal data assistants	1999	2005	1999	2005
5. Interactive TV	1999	2005	1999	2005
6. Kiosks	1999	2005	1999	2005
7. E-mail or other direct PC communication	1999	2005	1999	2005
8. In-vehicle navigation systems	1999	2005	1999	2005
9. Cell phone/voice	1999	2005	1999	2005
10. Cell phone/data	1999	2005	1999	2005
11. Facsimile	1999	2005	1999	2005
12. Other: (please specify)	1999	2005	1999	2005

If your agency or another organization has one or more World Wide Web sites reporting incident information, please provide the URLs below:

If your agency has one or more telephone systems for reporting incident information to the public, please provide the number(s) below:

Please list below any organization (public or private) to which your agency sends information for dissemination to the public:

45. The following information is used to determine the extent to which your arterial incident management program is integrated with other transportation agencies in your metropolitan area. Integration can occur through the sending of information to these agencies (i.e., your agency transmits incident severity, location, and type to an agency in real-time via electronic means), through the sharing of infrastructure with any agency (e.g., building, computer system, communication lines), or through coordinated operations with another agency (e.g., jointly developing a common control strategy).

Please indicate to which agencies your agency provides incident severity, location, and type information, and/or shares infrastructure, and/or coordinates operation in 1999 or will by 2005.

Circle 1999 if currently in place

Circle 2005 if in place by 2005

Emergency Management	Provide Information		Share Infrastructure		Coordinate Operation	
	1999	2005	1999	2005	1999	2005
Agency 1	1999	2005	1999	2005	1999	2005
Agency 2	1999	2005	1999	2005	1999	2005
Agency 3	1999	2005	1999	2005	1999	2005
.....	1999	2005	1999	2005	1999	2005
Agency N	1999	2005	1999	2005	1999	2005
Other: (please specify)	1999	2005	1999	2005	1999	2005
Other: (please specify)	1999	2005	1999	2005	1999	2005

Freeway Management	Provide Information		Share Infrastructure		Coordinate Operation	
	1999	2005	1999	2005	1999	2005
Agency 1	1999	2005	1999	2005	1999	2005
Agency 2	1999	2005	1999	2005	1999	2005
Agency 3	1999	2005	1999	2005	1999	2005
.....	1999	2005	1999	2005	1999	2005
Agency N	1999	2005	1999	2005	1999	2005
Other: (please specify)	1999	2005	1999	2005	1999	2005
Other: (please specify)	1999	2005	1999	2005	1999	2005

Public Transit Operators	Provide Information		Share Infrastructure		Coordinate Operation	
	1999	2005	1999	2005	1999	2005
Agency 1	1999	2005	1999	2005	1999	2005
Agency 2	1999	2005	1999	2005	1999	2005
Agency 3	1999	2005	1999	2005	1999	2005
.....	1999	2005	1999	2005	1999	2005
Agency N	1999	2005	1999	2005	1999	2005
Other: (please specify)	1999	2005	1999	2005	1999	2005
Other: (please specify)	1999	2005	1999	2005	1999	2005

46. The following information is used to determine whether your arterial incident management program is receiving real-time information via electronic means from other groups, agencies, or organizations in your metropolitan area.

Circle 1999 if currently in place
 Circle 2005 if in place by 2005

Please indicate the Emergency Management agencies from which your agency receives arterial incident clearance and/or arterial incident severity information in 1999 or will receive by 2005.

	Receive Arterial Incident Clearance Information		Receive Arterial Incident Severity Information	
	1999	2005	1999	2005
Agency 1	1999	2005	1999	2005
Agency 2	1999	2005	1999	2005
Agency 3	1999	2005	1999	2005
.....	1999	2005	1999	2005
Agency N	1999	2005	1999	2005
Other: (please specify)	1999	2005	1999	2005
Other: (please specify)	1999	2005	1999	2005

Please indicate the Traffic Signal Control agencies from which your agency currently receives arterial travel times, speeds, and conditions information or will receive this information by 2005. (This is intended to be an exhaustive list of applicable agencies and your own agency will be included and can be ignored)

Agency 1	1999	2005
Agency 2	1999	2005
Agency 3	1999	2005
.....	1999	2005
Agency N	1999	2005
Other: (please specify)	1999	2005
Other: (please specify)	1999	2005

Please indicate the Freeway Management agencies from which your agency currently receives freeway travel times, speeds, and conditions information or will receive this information by 2005.

Agency 1	1999	2005
Agency 2	1999	2005
Agency 3	1999	2005
.....	1999	2005
Agency N	1999	2005
Other: (please specify)	1999	2005
Other: (please specify)	1999	2005

47. If there is anything else you want to tell us about any ITS effort in your agency, please use this space for that purpose. Also, any comments you wish to make that you think may help us in future efforts to track ITS deployment will be appreciated, either here or in a separate letter.

48. Your contribution to this effort is greatly appreciated. If you would like to receive a copy of your metropolitan area report and the national summary report, please indicate below. (Circle number of your answer)

1. Yes, send a copy of the reports to me.
2. No, do not send a copy of the reports to me.