2004 Transit Management Survey

FLEET CHARACTERISTICS

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.*

1. Total number of vehicles used in revenue service:

	Total in 2002	2002 Estimated total by 2005	Total in 2004	2004 Estimated total by 2005
Fixed Route Bus:	Provided to Surveyee	Provided to Surveyee		
Heavy or Rapid Rail:	Provided to Surveyee	Provided to Surveyee		
Light Rail:	Provided to Surveyee	Provided to Surveyee		
Demand Responsive:	Provided to Surveyee	Provided to Surveyee		
Commuter Rail:	Provided to Surveyee	Provided to Surveyee		
Ferry Boat:	Provided to Surveyee	Provided to Surveyee		

2. Total number of vehicles equipped with Automated Vehicle Location (AVL):

	Total in 2002	2002 Estimated total by 2005	Total in 2004	2004 Estimated total by 2005
Fixed Route Bus:	Provided to Surveyee	Provided to Surveyee		
Heavy or Rapid Rail:	Provided to Surveyee	Provided to Surveyee		
Light Rail:	Provided to Surveyee	Provided to Surveyee		
Demand Responsive:	Provided to Surveyee	Provided to Surveyee		
Commuter Rail:	Provided to Surveyee	Provided to Surveyee		
Ferry Boat:	Provided to Surveyee	Provided to Surveyee		

3. Total number of vehicles with real-time monitoring of vehicle components:

	Total in 2002	2002 Estimated total by 2005	Total in 2004	2004 Estimated total by 2005
			2004	101al by 2005
Fixed Route Bus:	Provided to Surveyee	Provided to Surveyee		
Heavy or Rapid Rail:	Provided to Surveyee	Provided to Surveyee		
Light Rail:	Provided to Surveyee	Provided to Surveyee		
Demand Responsive:	Provided to Surveyee	Provided to Surveyee		
Commuter Rail:	Provided to Surveyee	Provided to Surveyee		
Ferry Boat:	Provided to Surveyee	Provided to Surveyee		

4. Total number of vehicles equipped with mobile data terminals:

	Total in 2002	2002 Estimated total by 2005	Total in 2004	2004 Estimated total by 2005
Fixed Route Bus:	Provided to Surveyee	Provided to Surveyee		
Heavy or Rapid Rail:	Provided to Surveyee	Provided to Surveyee		
Light Rail:	Provided to Surveyee	Provided to Surveyee		
Demand Responsive:	Provided to Surveyee	Provided to Surveyee		
Commuter Rail:	Provided to Surveyee	Provided to Surveyee		
Ferry Boat:	Provided to Surveyee	Provided to Surveyee		

5. Total number of vehicles that have Automatic Passenger Counters (Do not include registering fareboxes):

	Total in 2002	2002 Estimated total by 2005	Total in 2004	2004 Estimated total by 2005
Fixed Route Bus:	Provided to Surveyee	Provided to Surveyee		
Heavy or Rapid Rail:	Provided to Surveyee	Provided to Surveyee		
Light Rail:	Provided to Surveyee	Provided to Surveyee		
Demand Responsive:	Provided to Surveyee	Provided to Surveyee		
Commuter Rail:	Provided to Surveyee	Provided to Surveyee		
Ferry Boat:	Provided to Surveyee	Provided to Surveyee		

6. Total number of vehicles where automated dispatching or control software¹ is available:

	Total in 2002	2002 Estimated total by 2005	Total in 2004	2004 Estimated total by 2005
Fixed Route Bus:	Provided to Surveyee	Provided to Surveyee		
Heavy or Rapid Rail:	Provided to Surveyee	Provided to Surveyee		
Light Rail:	Provided to Surveyee	Provided to Surveyee		
Demand Responsive:	Provided to Surveyee	Provided to Surveyee		
Commuter Rail:	Provided to Surveyee	Provided to Surveyee		
Ferry Boat:	Provided to Surveyee	Provided to Surveyee		

MOTOR VEHICLE OPERATED AS VEHICLE PROBES

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. Motor buses used as probes to collect travel time, speed, and conditions on FREEWAYS:

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

¹ Software that displays AVL-equipped vehicle locations, vehicle data, and operator data on dispatcher monitors, automated control software for light or heavy rail systems, or automated scheduling software for demand responsive service.

8. Motor buses used as probes to collect travel time, speed, and conditions on ARTERIALS:

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

ORGANIZED REGIONAL INCIDENT MANAGEMENT PROGRAM

9. Does your agency's operators or dispatchers report traffic incidents (e.g., stalled vehicles, crashes)?

Total in 2002	2005 Estimate in 2002	Total in 2004	Estimated total by 2005
Provided to Surveyee	Provided to Surveyee	Yes	Yes
FIONIDED to Surveyee	FIONIDED to Sulveyee	No	No

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

2002 Response	2004 Response
	Yes
Provided to Surveyee	No
	Don't know

ADVANCED TRAVELER INFORMATION SYSTEM (ATIS)

11. Does your agency have an Advanced Traveler Information System (ATIS)

2002 Response	2005 Estimate in 2002	2004 Response	2005 Estimate
Provided to Surveyee	Drovidod to Survoyoo	Yes	Yes
Provided to Surveyee	Provided to Surveyee	No	No

12. Services the advanced traveler information system applies or will apply to:

	2002 Response	2005 Estimate in 2002	2004 Response	2005 Estimate
Fixed Route Bus:	Provided to Surveyee	Provided to Surveyee		
Heavy or Rapid Rail:	Provided to Surveyee	Provided to Surveyee		
Light Rail:	Provided to Surveyee	Provided to Surveyee		
Demand Responsive:	Provided to Surveyee	Provided to Surveyee		
Commuter Rail:	Provided to Surveyee	Provided to Surveyee		
Ferry Boat:	Provided to Surveyee	Provided to Surveyee		

13. Is or will the ATIS be multi-carrier/multi-modal with other transit operators?

2002 Response	2005 Estimate in 2002	2004 Response	2005 Estimate
Drovided to Surveyee	ed to Surveyee Provided to Surveyee	Yes	Yes
Provided to Surveyee		No	No

14. Is or will the ATIS be multi-carrier/multi-modal with highway information?

2002 Response	2005 Estimate in 2002	2004 Response	2005 Estimate
Drewided to Currence	eyee Provided to Surveyee	Yes	Yes
Provided to Surveyee		No	No

15. Please check all the methods your agency uses, or will use, to disseminate information to the public:

Method		used to dissemi and Fare Inform			Methods used to disseminate schedule adherence or Arriv Times to the pu		rrival and De		
Wethod	2002 F	lesponse	2004 Re	esponse	2002 F	2002 Response		2004 Response	
	In 2002	By 2005	In 2004	By 2005	In 2002	By 2005	In 2004	By 2005	
Dedicated cable TV:	Provided to	Provided to			Provided to	Provided to			
	Surveyee	Surveyee			Surveyee	Surveyee	-		
Automated telephone		Provided to			Provided to	Provided to			
system:	Surveyee	Surveyee			Surveyee	Surveyee			
Internet Web sites:	Provided to	Provided to			Provided to	Provided to			
internet web sites.	Surveyee	Surveyee			Surveyee	Surveyee			
Pagers or personal	Provided to	Provided to			Provided to	Provided to			
data assistants:	Surveyee	Surveyee			Surveyee	Surveyee			
Interactive TV/	Provided to	Provided to			Provided to	Provided to			
Interactive TV:	Surveyee	Surveyee			Surveyee	Surveyee			
Kin alan	Provided to	Provided to			Provided to	Provided to			
Kiosks:	Surveyee	Surveyee			Surveyee	Surveyee			
E-mail or other direct	Provided to	Provided to			Provided to	Provided to			
PC communication:	Surveyee	Surveyee			Surveyee	Surveyee			
In-vehicle navigation	Provided to	Provided to			Provided to	Provided to			
systems:	Surveyee	Surveyee			Surveyee	Surveyee			
Variable Message	Provided to	Provided to			Provided to	Provided to			
Signs (in vehicle):	Surveyee	Surveyee			Surveyee	Surveyee			
Monitors/VMS (not in	Provided to	Provided to			Provided to	Provided to			
vehicles):	Surveyee	Surveyee			Surveyee	Surveyee			
	Provided to	Provided to			Provided to	Provided to			
Audible Enunciators:	Surveyee	Surveyee			Surveyee	Surveyee			
	Provided to	Provided to			Provided to	Provided to			
Facsimile:	Surveyee	Surveyee			Surveyee	Surveyee			
511 Telephone	Provided to	Provided to		1	Provided to	Provided to			
System:	Surveyee	Surveyee			Surveyee	Surveyee			
, Automated web-	, Provided to	, Provided to			Provided to	Provided to			
based trip planner:	Surveyee	Surveyee			Surveyee	Surveyee			
	Provided to	Provided to		1	Provided to	Provided to			
Other:	Surveyee	Surveyee			Surveyee	Surveyee			

16. Total number of bus stops:

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

17. Number of bus stops that electronically display or will display automated and dynamic traveler information to the public:

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

18. Total number of rail stations:

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

19. Number of rail stations that electronically display or will display automated and dynamic traveler information to the public:

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

TRAFFIC SIGNAL PRIORITY

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.

20. Number of Fixed Route Buses that have or will have traffic signal priority capability:

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

21. Number of Light Rail vehicles that have or will have traffic signal priority capability:

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

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

22. Number of Demand Responsive vehicles that have or will have traffic signal priority capability:

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

RAMP METER SIGNAL PRIORITY

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.

23. Number of Fixed Route Buses with ramp meter signal priority capability:

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

24. Number of Demand Responsive vehicles with ramp meter signal priority capability:

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

ELECTRONIC FARE PAYMENT

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.

25. Vehicles/Stations equipped with Magnetic Stripe Readers

	Total in 2002	2005 Estimate in 2002	Total in 2004	Estimated total by 2005
Fixed Route Buses:	Provided to Surveyee	Provided to Surveyee		
Heavy or Rapid Rail Stations:	Provided to Surveyee	Provided to Surveyee		
Light-Rail Stations:	Provided to Surveyee	Provided to Surveyee		
Demand Responsive Vehicles:	Provided to Surveyee	Provided to Surveyee		
Commuter Rail Stations:	Provided to Surveyee	Provided to Surveyee		
Ferry Boat Landings:	Provided to Surveyee	Provided to Surveyee		

26. Vehicle/Stations equipped with Smart Card Readers (with embedded computer chip)

	Total in 2002	2005 Estimate in 2002	Total in 2004	Estimated total by 2005
Fixed Route Buses:	Provided to Surveyee	Provided to Surveyee		
Heavy or Rapid Rail Stations:	Provided to Surveyee	Provided to Surveyee		
Light-Rail Stations:	Provided to Surveyee	Provided to Surveyee		
Demand Responsive Vehicles:	Provided to Surveyee	Provided to Surveyee		
Commuter Rail Stations:	Provided to Surveyee	Provided to Surveyee		
Ferry Boat Landings:	Provided to Surveyee	Provided to Surveyee		

27. Is the fare paid by electronic fare payment by monthly pass only?

2002 Response	2005 Estimate in 2002	2004 Response	2005 Estimate
Dravidad to Surveyoe	had to Surveyor Drovided to Surveyor		Yes
Provided to Surveyee	Provided to Surveyee	No	No

28. Does your agency electronically store collected fare payment data for use in route and service planning?

2002 Response	2005 Estimate in 2002	2004 Response	2005 Estimate
Browided to Surveyoe	Broyidad to Surveyoo	Yes	Yes
Provided to Surveyee Provided to Surveyee	No	No	

29. Are there or will there be by 2005 any other Transit Agencies in your metropolitan area that use the same electronic fare payment system that can be used to pay for your transit fares?

2002 Response	2005 Estimate in 2002	2004 Response	2005 Estimate
Provided to Surveyee	Provided to Surveyee	Yes Please list them in the space provided: No, there are no other Transit Agencies No	Yes Please list them in the space provided: No, there are no other Transit Agencies No

30. Are there or will there be by 2005 any Toll Collection Operators in your metropolitan area that use electronic toll collection media (e.g., EZ PASS) that can be used to pay for your transit fares?

2002 Response	2005 Estimate in 2002	2004 Response	2005 Estimate
Provided to Surveyee	Provided to Surveyee	Yes Please list them in the space provided:	Yes Please list them in the space provided:
		No, there is no Toll Collection No	No, there is no Toll Collection No

31. Does your agency coordinate billing with social service agencies?

Yes No

SECURITY

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.

32. How many of your BUSES are equipped, or will be equipped, with the following security devices?

	Total in 2002	2005 Estimate in 2002	Total in 2004	Estimated total by 2005
Silent alarms:	Provided to Surveyee	Provided to Surveyee		
Cameras:	Provided to Surveyee	Provided to Surveyee		
Covert microphones:	Provided to Surveyee	Provided to Surveyee		
Remote disabling system:	Provided to Surveyee	Provided to Surveyee		
Other:	Provided to Surveyee	Provided to Surveyee		

33. How many of your RAIL VEHICLES are equipped, or will be equipped, with the following security devices?

	In 2004	2005 Estimate
Silent alarms:		
Cameras:		
Covert microphones:		
Other:		

34. How many of your RAIL STATIONS are equipped, or will be equipped, with the following security devices?

	In 2004	2005 Estimate
Silent alarms:		
Cameras:		
Covert microphones:		
Other:		

35. Does your agency have electronic ID cards for employees?

Yes

No

COMMUNICATIONS TECHNOLOGY

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.

36. What type of radio system does your agency have?

	Total in 2002	2005 Estimate in 2002	Total in 2004	Estimated total by 2005
Radio system is Digital:	Provided to Surveyee	Provided to Surveyee		
Radio system is Analog:	Provided to Surveyee	Provided to Surveyee		
Radio system is Regular:	Provided to Surveyee	Provided to Surveyee		
Radio system is Trunked:	Provided to Surveyee	Provided to Surveyee		

37. If you are planning or need to update your mobile communications system, what alternative are you thinking about?

Updating your 150 or 450 MHz to a digital system Converting to a dedicated 800 MHz system? Joining an area wide 800 MHz system? No updates planned at this time

38. How do you now communicate with public safety agencies?

Have a dedicated radio channel No direct means of communicating via the mobile communications system A partner in a joint interoperable system Do not communicate with public safety agencies

39. Are you considering adding the capability of interoperability with public safety agencies?

By use of a communication switch (such as the ACU-1000 or other brand)

By becoming part of an area wide interoperable system

No

INTEGRATION

40. Does your agency coordinate or will coordinate by 2005 travel requests and vehicle dispatching for multiple agencies (e.g., social service agencies, HHS, other transit agencies, etc.)?

2002 Response	2004 Response	
Provided to Surveyee	Yes No, and do not plan to do so 2005 No, but plan to do so by 2005	

41. Is there technology in place to coordinate rail, bus, and demand response services?

No

Connection protection software Technology to support using demand response assets to feed fixed route services Other:

Don't know

42. Is there or will there be by 2005 a Transportation Management Center (TMC) that controls transit and highway modes (e.g. rail operations, traffic signals, message signs, incident management, etc.) in your metropolitan area?

Yes, including rail operations Yes, but it is primarily oriented to traffic No, and do not plan to have a TMC by 2005 No, but plan to have a TMC by 2005 Don't know

43. Is there a regional ITS architecture for your region?

Yes, complete In progress, to be completed in calendar year: Not aware of an existing or planned regional architecture

WEATHER

44. Does your agency receive weather products tailored to your particular requirements?

Yes No

EVALUATION

45. The U.S. DOT is interested in networking with evaluators of Intelligent Transportation Systems (ITS)

nationwide. Is there a point of contact in your state 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

46. 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

47. 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

48. 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

DATA COLLECTION AND ARCHIVING

49. Does your agency have an archived data management system?

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

50. 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) Do not archive data

51. 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

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

On-Line (Web) CD Paper reports Other (please specify) Do not make archive data available/do not archive data 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.

	Collected in 2002	Archived in 2002	Collect in 2004	Archive in 2004
Vehicle time and location	Provided to Surveyee	Provided to Surveyee		
Passenger count	Provided to Surveyee	Provided to Surveyee		
Trip itinerary planning records	Provided to Surveyee	Provided to Surveyee		
Passenger information	Provided to Surveyee	Provided to Surveyee		
Vehicle monitoring status	Provided to Surveyee	Provided to Surveyee		
Road conditions (e.g. wet, icy, etc.)	Provided to Surveyee	Provided to Surveyee		
Emergency vehicle signal preemption events	Provided to Surveyee	Provided to Surveyee		
Transit vehicle signal priority events	Provided to Surveyee	Provided to Surveyee		
Weather conditions (e.g., snow, fog, rain, etc.)	Provided to Surveyee	Provided to Surveyee		
Incidents	Provided to Surveyee	Provided to Surveyee		

53. Please check the information your agency collects/archives in real-time

54. Please check the information that your agency collects/archives electronically

	Collected in 2002	Archived in 2002	Collect in 2004	Archive in 2004
Route designations (snow emergency, etc.)	Provided to Surveyee	Provided to Surveyee		
Current road work zones for transit	Provided to Surveyee	Provided to Surveyee		
Scheduled road work zones for transit	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		
Highway operations coordination information	Provided to Surveyee	Provided to Surveyee		
Transit operations coordination information	Provided to Surveyee	Provided to Surveyee		
Other:	Provided to Surveyee	Provided to Surveyee		
Do not collect/archive information	Provided to Surveyee	Provided to Surveyee		

55. What are the data used for?

	2002 Response	2004 Response
Do not know	Provided to Surveyee	
Operation planning/analysis	Provided to Surveyee	
Construction impact determination	Provided to Surveyee	
Capital 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	
Traffic Management	Provided to Surveyee	
Measurement of performance	Provided to Surveyee	
Safety analysis	Provided to Surveyee	
Other:	Provided to Surveyee	

NATIONAL ITS STANDARDS

56. Please check the ITS standards that you are using (deployed or in current RFP) or considering (assessing for use) in your operational arterial 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 59.

List of standards to consider when deploying arterial 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		

57. 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			

58. 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

59. 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
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:			

60. 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:			

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

- Name: Affiliation: Phone: E-mail:
- NOTE: This information is not included in the companion Excel Spreadsheets.

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

- Yes
- No