

Transit Management Survey

AGENCY CHARACTERISTICS

- 1a. County where agency headquarters is located: **County**
- 1b. Other counties in service area: **Other_Counties**

TRANSIT VEHICLE CHARACTERISTICS

2. Total number of vehicles used in revenue service:

Fixed Route Bus: **Buses**

Heavy or Rapid Rail: **HeavyRail**

Light Rail: **LightRail**

Paratransit: **Paratransit**

Demand Responsive: **DemandResp**

Commuter Rail: **CommuterRail**

Ferry Boat: **Ferry**

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

Fixed Route Bus: **Buses_AVL**

Heavy or Rapid Rail: **HeavyRail_AVL**

Light Rail: **LightRail_AVL**

Paratransit: **Paratransit_AVL**

Demand Responsive: **DemandResp_AVL**

Commuter Rail: **CommuterRail_AVL**

Ferry Boat: **Ferry_AVL**

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

Fixed Route Bus: **Buses_Real_Time**

Heavy or Rapid Rail: **HeavyRail_Real_Time**

Light Rail: **LightRail_Real_Time**

Paratransit: **Paratransit_Real_Time**

Demand Responsive: **DemandResp_Real_Time**

Commuter Rail: **CommuterRail_Real_Time**

Ferry Boat: **Ferry_Real_Time**

5. Total number of vehicles where automated dispatching or control software is available:

Fixed Route Bus: **Buses_CAD**

Heavy or Rapid Rail: **HeavyRail_CAD**

Light Rail: **LightRail_CAD**

Paratransit: **Paratransit_CAD**

Demand Responsive: **DemandResp_CAD**

Commuter Rail: **CommuterRail_CAD**

Ferry Boat: **Ferry_CAD**

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

Fixed Route Bus: **Buses_Mobile**

Heavy or Rapid Rail: **HeavyRail_Mobile**

Light Rail: **LightRail_Mobile**

Paratransit: **Paratransit_Mobile**

Demand Responsive: **DemandResp_Mobile**

Commuter Rail: **CommuterRail_Mobile**

Ferry Boat: **Ferry_Mobile**

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

Fixed Route Bus: **Buses_Counters**

Heavy or Rapid Rail: **HeavyRail_Counters**

Light Rail: **LightRail_Counters**

Paratransit: **Paratransit_Counters**

Demand Responsive: **DemandResp_Counters**

Commuter Rail: **CommuterRail_Counters**

Ferry Boat: **Ferry_Counters**

TRANSIT SIGNAL PRIORITY/PREEMPTION

8. Number of Fixed Route Buses that have traffic signal priority capability: **traff_signal_priority_fixed_bus**
9. Number of Fixed Route Buses that have traffic signal pre-emption capability: **traff_signal_preemption_fixed_bus**
10. Number of Light Rail vehicles that have traffic signal priority capability: **traff_signal_priority_light_rail**
11. Number of Light Rail vehicles that have traffic signal pre-emption capability: **traff_signal_preemption_light_rail**

12. Number of Demand Responsive vehicles that have traffic signal priority capability: traff_signal_priority_demand_resp

13. Number of Paratransit vehicles that have traffic signal priority capability: traff_signal_priority_paratransit

RAMP METER SIGNAL PRIORITY

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

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

16. Number of Paratransit vehicles with ramp meter signal priority capability: Ramp_meter_priority_paratransit

VEHICLES OPERATED AS PROBES

17. Does your agency operate any vehicles as probes to collect travel time, speed or road condition information?

[1] Yes operate_vehicle_probes

[2] No (go to Next Section)

[3=No response]

18. Total number of Fixed Route Buses operated as vehicle probes to collect travel time, speed, and conditions on FREEWAYS: num_of_probes_buses_freeways

19. Total number of Fixed Route Buses operated on vehicle probes to collect travel time, speed, and conditions on ARTERIALS: num_of_probes_buses_arterials

20. Total number of Ferry Boats operated as vehicle probes to collect travel time, speed, and conditions on waterways: num_of_probes_ferries_waterways

21. Does your agency share vehicle probe data with any other agency?

[1] Yes share_probe_data

Indicate which agencies: (Check all that apply) 1=Selected, 0=Not selected

Freeway Management share_probe_data_freeway

Arterial Management share_probe_data_arterial

Other Transit share_probe_data_other_transit

Other (please specify): share_probe_data_other

[2] No

[3=No response]

ORGANIZED REGIONAL INCIDENT MANAGEMENT PROGRAM

22. Does your agencies operators or dispatchers report traffic incidents (e.g., stalled vehicles, crashes) to other agencies involved in traffic incident management?

[1] Yes Report_Incidents

What reporting tools and methods are used to report traffic incidents? (Check all that apply) 1=Selected, 0=Not selected

Telephone or radio call to traffic incident management agency reporting_tool_telephone

Direct entry in automated reporting system reporting_tool_direct

Other (please specify): reporting_tool_other

[2] No

[3=No response]

PLANNING FOR EMERGENCIES AND PLANNED SPECIAL EVENTS

23. Does your agency participate in multi-agency regional planning for planned special events? participate_special_events

[1] Yes

[2] No

[3=No response]

24. Does your agency participate in multi-agency regional planning for emergency evacuations (e.g., due to hurricane, other natural or man-made disaster)?

[1] Yes participate_emergency_evacuation

[2] No

[3=No response]

ELECTRONIC FARE PAYMENT

25. Number of vehicles / stations equipped with Magnetic Stripe Readers:

26. Number of vehicle / stations equipped with Smart Card Readers (with embedded computer chip):

Fixed Route Buses:

Magnetic_Buses

Smart_Buses

Heavy or Rapid Rail Stations:

Magnetic_Heavy_Rail_Stations

Smart_Heavy_Rail_Stations

Light-Rail Stations:

Magnetic_Light_Rail_Stations

Smart_Light_Rail_Stations

Demand Responsive Vehicles:

Magnetic_Demand_Resp

Smart_Demand_Resp

Paratransit Vehicles:

Magnetic_Paratransit

Smart_Paratransit

Commuter Rail Stations:

Magnetic_Commuter_Rail_Stations

Smart_Commuter_Rail_Stations

Ferry Boat Landings:

Magnetic_Ferry_Landings

Smart_Ferry_Landings

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

[1] Yes Fare_payment_used_service_planning

[2] No

[3=No response]

28. Please indicate with which modes your agency's electronic fare payment system is integrated: (Check all that apply)

1=Selected, 0=Not selected

Bus (within my agency)

Fare_payment_integrated_bus

Commuter Rail (within my agency)

Fare_payment_integrated_rail

Ferry (within my agency)

Fare_payment_integrated_ferry

Vans (within my agency)

Fare_payment_integrated_vans

Other transit agencies

Fare_payment_integrated_transit

Parking payment systems

Fare_payment_integrated_payment

Other toll collection systems in this metropolitan area (e.g., road or bridge tolls)

Fare_payment_integrated_toll

Electronic fare payment is not integrated.

Fare_payment_integrated_not

We do not have fare payment.

Fare_payment_integrated_do_not_have

29. Please indicate the types of electronic fare payment system operated by your agency: (Check all that apply)

1=Selected, 0=Not selected

Closed loop, proprietary system

Fare_payment_type_closed

Open loop, bank card system

Fare_payment_type_open

Other (please specify): Fare_payment_type_other

TRAVELER INFORMATION OR TRIP PLANNING

30. Has your agency deployed a web-based trip planner to assist travelers in making trip related decisions?

[1] Yes

web_based_trip_planner

[2] No

[3=No response]

30a. If you answered Yes to question 30, please answer the following questions about your agency's web-based trip planner:

a. Does this tool incorporate multiple transit systems?

web_based_trip_planner_multiple

1=Yes, 2=No, 3=No response

b. Does this tool incorporate modes other than transit (e.g., walking, biking, auto)?

web_based_trip_planner_modes

1=Yes, 2=No, 3=No response

c. Does this tool incorporate real-time traffic condition information?

web_based_trip_planner_realtime

1=Yes, 2=No, 3=No response

31. Does your agency have an agreement with a private vendor to distribute real-time transit information to travelers?

[1] Yes

agreement_private_vendor

[2] No

[3=No response]

Please indicate the methods used to disseminate (#32) *Transit Routes, Schedules, and Fare Information* and / or (#33) *Real-time Transit Schedule Adherence or Arrival and Departure Times* to the public: (Check all that apply)

1=Selected, 0=Not selected

	32. Transit Routes, Schedules, and Fare Information	33. Real-time Transit Schedule Adherence or Arrival and Departure Times
Website	Static_Web	Dynamic_Web
Email	Static_email	Dynamic_email
Twitter	Static_twitter	Dynamic_twitter
Facebook	Static_facebook	Dynamic_facebook
App for mobile device such as smart phone or tablet	Static_app	Dynamic_app
511	Static_511	Dynamic_511
Other (non-511) telephone systems (including customer service centers)	Static_other_phone	Dynamic_other_phone
Dynamic Message Signs In-station	Static_dms_station	Dynamic_dms_station
Dynamic Message Signs In-vehicle	Static_dms_vehicle	Dynamic_dms_vehicle
Dynamic Message Signs At stop	Static_dms_stop	Dynamic_dms_stop
Kiosks	Static_Kiosks	Dynamic_Kiosks
Other (please specify):	Static_other	Dynamic_other
Static_Dynamic_other_text		

34. Please indicate the total number of the following facilities:

Bus Stops	Bus_stops
Rail Stations	Rail_stations
Bus Depots	Bus_depots
Multi-modal Stations or Transfer Stations	Multi_modal_stations

35. Please indicate the total number of your agency's facilities where dynamic traveler information (e.g., schedule and system information) is electronically displayed to the public or delivered by SMS or text:

	Publicly displayed	Delivered by SMS or text
Bus Stops	Bus_stops_trav_info_public	Bus_stops_trav_info_sms
Rail Stations	Rail_stations_trav_info_public	Rail_stations_trav_info_sms
Bus Depots	Bus_depots_trav_info_public	Bus_depots_trav_info_sms
Multi-modal Stations or Transfer Stations	Multi_modal_trav_info_public	Multi_modal_trav_info_sms

36. Total number of fixed route buses that electronically display automated or dynamic traveler information (e.g., schedule and system information) to the public:

Buses_trav_info

SAFETY AND SECURITY

37. Total number of fixed route buses with audio or video surveillance to enhance security:

Buses_Audio_Video

38. Total number of facilities with audio or video surveillance to enhance security:

Bus Stops	Bus_stops_Audio_Video
Rail Stations	Railstations_Audio_Video
Bus Depots	Bus_depots_Audio_Video
Multi-modal Stations or Transfer Stations	Multi_modal_Audio_Video

39. Total number of vehicles that can be remotely shut down via wireless communication:

Fixed Route Bus	Buses_remote_shutdown
Heavy or Rapid Rail	HeavyRail_remote_shutdown

40. Does your agency use advanced video technologies to re-create crashes for accident review?

advanced_video_technologies

[1] Yes

[2] No

[3=No response]

TRANSPORTATION DEMAND MANAGEMENT

41. Does your agency use data from technologies such as AVL/CAD systems and automatic passenger counter systems, to assist in planning?

use_data_assist_planning

[1] Yes

[2] No

[3=No response]

42. Does your agency employ automated vehicle location, combined with dispatching and reservation technologies to provide flexible routing and scheduling?

[1] Yes

[2] No

[3=No response]

flexible_routing_scheduling

43. Does your agency employ vehicle monitoring and communication technologies to facilitate the coordination of passenger transfers between vehicles or between transit systems (e.g., connection protection)?

passenger_transfer

[1] Yes

[2] No

[3=No response]

44. Does your agency provide ride sharing and carpool matching services?

carpool_matching

[1] Yes

[2] No

[3=No response]

45. Does your agency operate a transportation management travel coordination center and/or participate in a brokerage service that coordinates travel requests or performs vehicle dispatching, or billing for multiple agencies (e.g., social service agencies, Health and Human Services, other transit agencies)?

1=Selected, 0=Not selected

Yes, operates a transportation management travel coordination center

operate_trans_coord_center

Which of the following functions does this center perform? (Check all that apply)

Coordinates travel information

coord_travel_info

Performs vehicle dispatching

perform_vehicle_dispatch

Performs billing

perform_billing

Other (please describe):

coord_participate_other

Yes, participates in a brokerage service

participate_brokerage

No

no_coordinate_participate

INTEGRATED CORRIDOR MANAGEMENT

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

[1] Yes icm_identified_corridors

How many corridors have been identified for integrated transportation operations?

icm_identified_number_corridors

[1] 1 corridor identified

[2] 2 corridors identified

[3] 3 or more corridors identified

[4=No response]

[2] No (go to Next Section)

[3=No response]

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

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

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

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

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

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

48. Approximately how long is the corridor? icm_length

- [1] Less than 10 miles
- [2] 11-20 miles
- [3] 21-30 miles
- [4] 31-50 miles
- [5] More than 50 miles
- [6=No response]

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

			1=Selected, 0=Not selected	
Currently Coordinate in Corridor	Plan to Coordinate in Corridor	No Plans to Coordinate in Corridor	Not Applicable	Agency Names
a. Freeway agencies: icm_currently_coord_freeway	icm_plan_coord_freeway	icm_no_plans_coord_freeway	icm_coord_not_applicable_freeway	icm_coord_freeway_name
b. Arterial agencies: icm_currently_coord_arterial	icm_plan_coord_arterial	icm_no_plans_coord_arterial	icm_coord_not_applicable_arterial	icm_coord_arterial_name
c. Transit agencies: icm_currently_coord_transit	icm_plan_coord_transit	icm_no_plans_coord_transit	icm_coord_not_applicable_transit	icm_coord_transit_name
d. Other agencies (e.g., MPOs, Toll Authorities, Port Operators): icm_currently_coord_other	icm_plan_coord_other	icm_no_plans_coord_other	icm_coord_not_applicable_other	icm_coord_other_name

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

- [1] Yes, already signed icm_signed_agreements
 - [1] One instrument signed icm_yes_signed_agreements
 - [2] Multiple instruments signed
 - [3=No response]
- [2] Agreements, MOUs, or instruments are being developed (plan to sign)
- [3] No, there is no plan to develop or sign Agreements, MOUs, or other instruments
- [4] Do not know
- [5=No response]

IF SIGNED OR PLAN TO SIGN:

Please describe what is covered by the Agreements, MOUs, or instruments: icm_describe_coverage_agreement

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

1=Selected, 0=Not selected

Manual data sharing: Corridor stakeholders call, radio, fax or email relevant corridor data to one another icm_data_cond_manual

Automated sharing of real-time video data (video servers/switcher communicate directly to one another in real time to share video images through video protocols) icm_data_cond_auto_video

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

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

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

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

[3=No response]

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

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

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

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

[3=No response]

Other (please specify): icm_data_cond_other_text

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

1=Selected, 0=Not selected

My agency Receives	My agency Collects and Sends	My agency Collects but does not send	My agency does not collect	Not Applicable
a. Freeway incident data				
icm_receives_freeway_incident	icm_sends_freeway_incident	icm_collects_not_share_freeway_incident	icm_not_collect_freeway_incident	icm_not_applicable_freeway_incident
b. Freeway traffic volumes, speeds, or travel times				
icm_receives_freeway_traffic	icm_sends_freeway_traffic	icm_collects_not_share_freeway_traffic	icm_not_collect_freeway_traffic	icm_not_applicable_freeway_traffic
c. Arterial incident data				
icm_receives_arterial_indicent	icm_sends_arterial_indicent	icm_collects_not_share_arterial_indicent	icm_not_collect_arterial_indicent	icm_not_applicable_arterial_indicent
d. Arterial traffic volumes, speeds, or travel times				
icm_receives_arterial_traffic	icm_sends_arterial_traffic	icm_collects_not_share_arterial_traffic	icm_not_collect_arterial_traffic	icm_not_applicable_arterial_traffic
e. Transit incident data				
icm_receives_transit_incident	icm_sends_transit_incident	icm_collects_not_share_transit_incident	icm_not_collect_transit_incident	icm_not_applicable_transit_incident
f. Transit vehicle location data (AVL)				
icm_receives_transit_location	icm_sends_transit_location	icm_collects_not_share_transit_location	icm_not_collect_transit_location	icm_not_applicable_transit_location
g. Transit schedule adherence data				
icm_receives_transit_schedule	icm_sends_transit_schedule	icm_collects_not_share_transit_schedule	icm_not_collect_transit_schedule	icm_not_applicable_transit_schedule
h. Transit passenger count data				
icm_receives_transit_passenger	icm_sends_transit_passenger	icm_collects_not_share_transit_passenger	icm_not_collect_transit_passenger	icm_not_applicable_transit_passenger
i. Other data (please describe):				
icm_receives_other	icm_send_rec_other_text	icm_collects_not_share_other	icm_not_collect_other	icm_not_applicable_other

b. For each type of data that is sent or received among coordinating agencies (as indicated in part a above), please indicate with what level of frequency the data is shared. For each item, a-i, select only one response. 1=Selected, 0=Not selected

	0-5 Minutes	6-15 Minutes	16-59 Minutes	60+ Minutes
a. Freeway incident data	<code>icm_freq_5_freeway_incident</code>	<code>icm_freq_15_freeway_incident</code>	<code>icm_freq_59_freeway_incident</code>	<code>icm_freq_60_freeway_incident</code>
b. Freeway traffic volumes, speeds, or travel times	<code>icm_freq_5_freeway_traffic</code>	<code>icm_freq_15_freeway_traffic</code>	<code>icm_freq_59_freeway_traffic</code>	<code>icm_freq_60_freeway_traffic</code>
c. Arterial incident data	<code>icm_freq_5_arterial_incident</code>	<code>icm_freq_15_arterial_incident</code>	<code>icm_freq_59_arterial_incident</code>	<code>icm_freq_60_arterial_incident</code>
d. Arterial traffic volumes, speeds, or travel times	<code>icm_freq_5_arterial_traffic</code>	<code>icm_freq_15_arterial_traffic</code>	<code>icm_freq_59_arterial_traffic</code>	<code>icm_freq_60_arterial_traffic</code>
e. Transit incident data	<code>icm_freq_5_transit_incident</code>	<code>icm_freq_15_transit_incident</code>	<code>icm_freq_59_transit_incident</code>	<code>icm_freq_60_transit_incident</code>
f. Transit vehicle location data (AVL)	<code>icm_freq_5_transit_location</code>	<code>icm_freq_15_transit_location</code>	<code>icm_freq_59_transit_location</code>	<code>icm_freq_60_transit_location</code>
g. Transit schedule adherence data	<code>icm_freq_5_transit_schedule</code>	<code>icm_freq_15_transit_schedule</code>	<code>icm_freq_59_transit_schedule</code>	<code>icm_freq_60_transit_schedule</code>
h. Transit passenger count data	<code>icm_freq_5_transit_passenger</code>	<code>icm_freq_15_transit_passenger</code>	<code>icm_freq_59_transit_passenger</code>	<code>icm_freq_60_transit_passenger</code>
i. Other data (described above):	<code>icm_freq_5_other</code>	<code>icm_freq_15_other</code>	<code>icm_freq_59_other</code>	<code>icm_freq_60_other</code>

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

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

	1=Selected, 0=Not selected	Currently Coordinate Across Facilities	Plan to Coordinate Across Facilities	No Plans to Coordinate	Not Applicable
a. Traffic incident management		<code>icm_coord_incident_currently</code>	<code>icm_coord_incident_plan</code>	<code>icm_coord_incident_no_plans</code>	<code>icm_coord_incident_na</code>
b. Freeway ramp metering		<code>icm_coord_ramp_currently</code>	<code>icm_coord_ramp_plan</code>	<code>icm_coord_ramp_no_plans</code>	<code>icm_coord_ramp_na</code>
c. Emergency management (e.g., evacuations)		<code>icm_coord_evac_currently</code>	<code>icm_coord_evac_plan</code>	<code>icm_coord_evac_no_plans</code>	<code>icm_coord_evac_na</code>
d. Cross jurisdictional traffic signal coordination		<code>icm_coord_cross_currently</code>	<code>icm_coord_cross_plan</code>	<code>icm_coord_cross_no_plans</code>	<code>icm_coord_cross_na</code>
e. Traffic responsive signal timing/coordination		<code>icm_coord_resp_currently</code>	<code>icm_coord_resp_plan</code>	<code>icm_coord_resp_no_plans</code>	<code>icm_coord_resp_na</code>
f. Transit signal priority		<code>icm_coord_priority_currently</code>	<code>icm_coord_priority_plan</code>	<code>icm_coord_priority_no_plans</code>	<code>icm_coord_priority_na</code>
g. Physical bus priority (e.g. bus-on-shoulder)		<code>icm_coord_bus_currently</code>	<code>icm_coord_bus_plan</code>	<code>icm_coord_bus_no_plans</code>	<code>icm_coord_bus_na</code>
h. Demand-sensitive transit capacity increases (e.g., add cars/routes)		<code>icm_coord_demand_currently</code>	<code>icm_coord_demand_plan</code>	<code>icm_coord_demand_no_plans</code>	<code>icm_coord_demand_na</code>
i. Real-time parking availability information (e.g., at transit stations)		<code>icm_coord_realtime_currently</code>	<code>icm_coord_realtime_plan</code>	<code>icm_coord_realtime_no_plans</code>	<code>icm_coord_realtime_na</code>
j. Road weather management		<code>icm_coord_weather_currently</code>	<code>icm_coord_weather_plan</code>	<code>icm_coord_weather_no_plans</code>	<code>icm_coord_weather_na</code>
k. Planned special events		<code>icm_coord_special_currently</code>	<code>icm_coord_special_plan</code>	<code>icm_coord_special_no_plans</code>	<code>icm_coord_special_na</code>
l. Real-time traveler information delivered pre-trip		<code>icm_coord_pretrip_currently</code>	<code>icm_coord_pretrip_plan</code>	<code>icm_coord_pretrip_no_plans</code>	<code>icm_coord_pretrip_na</code>
m. Real-time information delivered en-route (e.g., Dynamic Message Signs)		<code>icm_coord_enroute_currently</code>	<code>icm_coord_enroute_plan</code>	<code>icm_coord_enroute_no_plans</code>	<code>icm_coord_enroute_na</code>
n. Electronic multimodal payment systems		<code>icm_coord_multimodal_currently</code>	<code>icm_coord_multimodal_plan</code>	<code>icm_coord_multimodal_no_plan</code>	<code>icm_coord_multimodal_na</code>
o. Other (please specify):		<code>icm_coord_otherText</code>	<code>icm_coord_other_plan</code>	<code>icm_coord_other_no_plans</code>	<code>icm_coord_other_na</code>

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

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

[6=No response] icm_inst_coord

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

1=Selected, 0=Not selected	Document Completed	Currently Developing	Plan to Develop Next 2-3 Years	No Immediate Plans to Develop	Do Not Know
a. ICM Concept of Operations (ConOps)	icm_ICM_doc_ConOps_Complete	icm_ICM_doc_ConOps_Developing	icm_ICM_doc_ConOps_Plans	icm_ICM_doc_ConOps_NoPlan	icm_ICM_doc_ConOps_DontKnow
b. ICM System Requirements Specifications (SyRS)	icm_ICM_doc_SyRS_Complete	icm_ICM_doc_SyRS_Developing	icm_ICM_doc_SyRS_Plans	icm_ICM_doc_SyRS_NoPlan	icm_ICM_doc_SyRS_DontKnow
c. ICM Analysis Modeling and Simulation (AMS) Plan	icm_ICM_doc_AMS_Complete	icm_ICM_doc_AMS_Developing	icm_ICM_doc_AMS_Plans	icm_ICM_doc_AMS_NoPlan	icm_ICM_doc_AMS_DontKnow
d. ICM Implementation Plan	icm_ICM_doc_Plan_Complete	icm_ICM_doc_Plan_Developing	icm_ICM_doc_Plan_Plans	icm_ICM_doc_Plan_NoPlan	icm_ICM_doc_Plan_DontKnow

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

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

[6=No response] icm_response_plans

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

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

- [1] Yes, deployed
- [2] Plan to deploy
- [3] No (no plans to deploy)
- [4] Do not know

[5=No response] icm_decision_support_system

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

- [1] Yes, corridor-level/multimodal performance measures identified icm_identified_perf_measures
- [2] Agency plans to identify corridor-level/multimodal performance measures [5=No response]
- [3] No plans to identify corridor-level/multimodal performance measures
- [4] Do not know

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

DATA COLLECTION AND ARCHIVING

60. Does your agency have an archived data management system? archive

- [1] Yes [3=No response]
- [2] No (go to Next Section)

61. What information does your agency collect/archive in real time? (Check all that apply) 1=Selected, 0=Not selected

- Vehicle time and location archive_vehicle_time_location
- Vehicle diagnostics and health archive_vehicle_diag
- Passenger count archive_passenger_count
- Trip itinerary planning records archive_trip_itinerary
- Passenger information archive_passenger_information
- Vehicle monitoring status archive_vehicle_monitoring
- Road surface conditions archive_road_conditions
- Emergency vehicle signal preemption events archive_emergency_preemption
- Transit vehicle signal priority events archive_transit_priority
- Weather conditions (e.g., snow, fog, rain) archive_weather_conditions
- Incidents archive_incidents
- Impact of work zones on transit operations archive_impact_work_zones
- Do not collect/archive data in real time archive_donot
- Other (please specify): archive_otherText

62. What are the data used for? (Check all that apply) 1=Selected, 0=Not selected

- Operation planning/analysis archive_used_operation_analysis
- Construction impact determination archive_used_construction
- Capital planning/analysis archive_used_capital
- Work zone planning/analysis archive_used_work_zone
- Incident detection algorithm development archive_used_indicent
- Roadway impact analysis archive_used_roadway
- Accident prediction models archive_used_accident
- Dissemination to the public archive_used_dissemination
- Traffic management archive_used_traffic_mgt
- Measurement of performance archive_used_measurement
- Safety analysis archive_used_safety
- Other (please specify): archive_used_otherText

63. Are any data provided to third parties so they can create transit traveler information applications?

[1] Yes [data_provided_third_party](#)

Check all that apply:

1=Selected, 0=Not selected

My agency has developed data sharing boilerplate agreements

[sharing_boilerplate](#)

My agency places restrictions on the data provided outside the agency (please describe below in 63a)

[restrictions_data](#)

Applications have been developed by third party application developers (please describe below in 63b)

[apps_developed_third_party](#)

[2] No (go to Next Section)

[3=No response]

63a. Please describe any restrictions (if applicable) indicated in question 63:

[restrictions_data_describe](#)

63b. Please describe any applications (if applicable) indicated in question 63:

[apps_developed_third_party_describe](#)

ITS STANDARDS

64. Please check any of the following transit-related ITS standards implemented by your agency: (Check all that apply)

1=Selected, 0=Not selected

Contactless Fare Media System Standard (CFMS)

[std_cfms](#)

Traffic Management Data Dictionary (TMDD)

[std_tmdd](#)

Message Sets for External Traffic Management Center Communications

[std_message_sets](#)

Standards for Transit Communications Interface Profiles APTA TCIP-S-001 3.0.0

[std_apt_tcip](#)

Standard for Traffic Incident Management Message Sets for Use by Emergency Management Centers IEEE 1512.1-2006

[std_ieee_1512](#)

Standard for the Interface Between the Rail Subsystem and the Highway Subsystem at a Highway Rail Intersection IEEE 1570-2002

[std_ieee_1570](#)

Serial Data Communications Between Microcomputer Systems in Heavy-Duty Vehicle Applications SAE J1708

[std_sae_j1780](#)

Standard for ATIS Message Set Delivered Over Reduced Bandwidth Media SAE J2369

[std_sae_j2369](#)

ITS In-Vehicle Message Priority SAE J2395

[std_sae_j2395](#)

My agency has not implemented any of these standards

[std_do_not](#)

DEDICATED SHORT RANGE COMMUNICATIONS (DSRC) STANDARD

65. Is your agency familiar with Dedicated Short Range Communications (DSRC) technology?

[1] Yes [familiar_DSRC](#)

[2] No (go to Next Section)

[3=No response]

66. Does your agency currently use or have plans to use dedicated short range communications (DSRC) in operating any of its ITS infrastructure?

[currently_use_plan_DSRC](#)

[1] Currently use DSRC

[2] Plan to use DSRC

[3] No plans to use DSRC (go to Next Section)

[4=No response]

67. Is your agency using or does it plan to use any DSRC-enabled technologies to support the deployment of the following:

1=Selected, 0=Not selected

	Currently Using	Plan to Use	No Plans to Use
Safety applications (e.g. intersection collision avoidance)	DSRC_safety_currently	DSRC_safety_plan	DSRC_safety_noplans
Mobility applications	DSRC_mobility_currently	DSRC_mobility_plan	DSRC_mobility_noplans
Tolling operations	DSRC_tolling_currently	DSRC_tolling_plan	DSRC_tolling_noplans
Commercial Vehicle Operations and regulation	DSRC_commercial_currently	DSRC_commercial_plan	DSRC_commercial_noplans

ITS FUNDING

Screening question: Do you have a separate budget for ITS?

its_budget

1=Yes, 2=No, 3=No response

68a. Please indicate whether you track the budget separately for each of the following categories:

1=Selected, 0=Not selected

68b. Please indicate the percentage of budget allocated to each category that is separately tracked:

ITS Planning and Systems Engineering	its_budget_planning	its_budget_planning_percent
Device Installation	its_budget_device	its_budget_device_percent
ITS Operations	its_budget_operations	its_budget_operations_percent
ITS Maintenance and Inspection	its_budget_maintenance	its_budget_maintenance_percent
Repair of ITS Technologies	its_budget_repair	its_budget_repair_percent
Other (please specify):	its_budget_otherText	its_budget_other_percent
Do not track categories separately (go to next section)	its_budget_do_not_track	

ITS PURCHASE DECISION-MAKING

69. Please rate the importance of each of the following factors to your agency's decision to purchase ITS technologies: (1 = Not at All Important; 2 = Not Very Important; 3 = Neutral; 4 = Somewhat Important; 5 = Very Important) Please check only one rating box per row.

1=Selected, 0=Not selected

	Not at All Important	Not Very Important	Neutral	Somewhat Important	Very Important
Cost of initial deployment	Cost_Initial_NotAtAll	Cost_Initial_NotVery	Cost_Initial_Neutral	Cost_Initial_Somewhat	Cost_Initial_Very
Cost to maintain and repair	Cost_Maint_NotAtAll	Cost_Maint_NotVery	Cost_Maint_Neutral	Cost_Maint_Somewhat	Cost_Maint_Very
Public/constituent involvement	Public_NotAtAll	Public_NotVery	Public_Neutral	Public_Somewhat	Public_Very
Funding/grant availability	Funding_NotAtAll	Funding_NotVery	Funding_Neutral	Funding_Somewhat	Funding_Very
Mobility benefits (e.g., to address congestion)	Mobility_NotAtAll	Mobility_NotVery	Mobility_Neutral	Mobility_Somewhat	Mobility_Very
Safety benefits	Safety_NotAtAll	Safety_NotVery	Safety_Neutral	Safety_Somewhat	Safety_Very
Environmental benefits	Environmental_NotAtAll	Environmental_NotVery	Environmental_Neutral	Environmental_Somewhat	Environmental_Very
Integration with other agencies	Int_agencies_NotAtAll	Int_agencies_NotVery	Int_agencies_Neutral	Int_agencies_Somewhat	Int_agencies_Very
Integration with your current technologies	Int_tech_NotAtAll	Int_tech_NotVery	Int_tech_Neutral	Int_tech_Somewhat	Int_tech_Very
TCIP compliant	TCIP_NotAtAll	TCIP_NotVery	TCIP_Neutral	TCIP_Somewhat	TCIP_Very
Already used by other agencies	Already_NotAtAll	Already_NotVery	Already_Neutral	Already_Somewhat	Already_Very
Other (please specify):	Other_Factor_Text	Other_NotVery	Other_Neutral	Other_Somewhat	Other_Very

70. Does your agency have any plans to invest in new ITS technology or to expand current ITS coverage in 2014 through 2016?

[1] Yes [invest_its](#)

Check all that apply: [1=Selected, 0=Not selected](#)

Invest in new ITS [invest_its_new](#)

Expand current ITS coverage [invest_its_expand](#)

[2] No

[3=No response]

70b. Please describe new ITS (if applicable): [invest_its_describe](#)

BENEFITS OF TRANSIT MANAGEMENT TECHNOLOGIES

71. Based on your agency experience, please rate the benefits of the following technologies using a scale of 1 (No Benefit) to 5 (Significant Benefit) or No Experience. Please check only one box per row.

[1=Selected, 0=Not selected](#)

	No Benefit (1)	(2)	Moderate Benefit (3)	(4)	Major Benefit (5)	No Experience
Automatic Vehicle Location	AVL_1	AVL_2	AVL_3	AVL_4	AVL_5	AVL_NA
Communications	Comm_1	Comm_2	Comm_3	Comm_4	Comm_5	Comm_NA
Traveler Information	Traveler_1	Traveler_2	Traveler_3	Traveler_4	Traveler_5	Traveler_NA
Data Management - GIS	GIS_1	GIS_2	GIS_3	GIS_4	GIS_5	GIS_NA
Computer Aided Dispatch and Scheduling	CAD_1	CAD_2	CAD_3	CAD_4	CAD_5	CAD_NA
Maintenance Tracking	Maintenance_1	Maintenance_2	Maintenance_3	Maintenance_4	Maintenance_5	Maintenance_NA
Electronic Fare Payment	EFP_1	EFP_2	EFP_3	EFP_4	EFP_5	EFP_NA
Security Cameras	Cameras_1	Cameras_2	Cameras_3	Cameras_4	Cameras_5	Cameras_NA
Weather Information System	Weather_1	Weather_2	Weather_3	Weather_4	Weather_5	Weather_NA
Automatic Passenger Counters	APC_1	APC_2	APC_3	APC_4	APC_5	APC_NA
Transit Signal Priority	Priority_1	Priority_2	Priority_3	Priority_4	Priority_5	Priority_NA

ADDITIONAL COMMENTS

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

[additional_comments](#)