



The Pennsylvania Department of Transportation (PennDOT District 2-0) has commissioned this program, Regional Intelligent Transportation Systems Architecture Development Program, with the aim of addressing major transportation issues in the region, creating a framework to identify transportation system components and interconnections, improving communications, and identifying integration opportunities as defined in the National ITS Architecture.

A key element for the success of this program is input from local residents, transportation agencies, and non-transportation agencies about major transportation issues affecting your local area.

Please take a few minutes to complete this questionnaire. The information received from this questionnaire will be compiled in a database and used to inventory ITS technologies and services currently deployed in the region. It will also help us identify and prioritize transportation needs in your local area.

If you have any questions, please contact the project manager on (215) 735-1932 or email him at kcaglar@orth-roddgers.com.

Thank you for your cooperation.

Transit Management and Electronic Fare Payment

Local Area: _____ Date Completed: _____
Name: _____ Title: _____
Organization: _____
Street: _____
City: _____ State: _____ Zip: _____
Phone Number: _____ Fax Number: _____
Email: _____

Technical questions can be directed to:

Please return completed questionnaire to:

1. Please identify the geographical and/or jurisdictional areas to which your answers to this survey apply (e.g., all freeways within the region, or freeways only within certain counties). Area of geographical or jurisdictional coverage:



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2. Please provide the following information about your agency's public transportation services.

Public Transportation
 The objectives of Transit Management are to:

- Monitor the location of transit vehicles to support schedule management and emergency response
- Monitor maintenance status of the transit vehicle fleet
- Provide demand responsive flexible routing and scheduling of transit vehicles
- Provide real-time, accurate, transit information to travelers

Question #	Question			
I	Name Center			
II	Identify Stakeholder/Agency/Organization Associations			
III	Does your Public Transportation Center manage (or plan to manage) transit vehicles? (Yes or No)			
IIIa	If answered Yes to question 3, Indicate what types of technologies are used:			
	• Fixed Route			
	• Rail			
	• Demand Response			
IV	Does your transit element provide (or plan to provide) maintenance of the transit vehicles? (Existing, Planned or Not Planned)			
V	Do you have (or plan to have) an Automated Vehicle Location (AVL) System? (Existing, Planned or Not Planned)			



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3. Please complete the following for all the services your agency operates.

	Motor Bus	Demand Responsive
Total vehicles operated		
Total router miles operated		
Number of stations		
Vehicles equipped with Automatic Vehicle Location Capability		
Vehicles equipped with Automatic Vehicle Identification Capability		
Vehicles equipped with Traffic Signal Priority Capability		
Vehicles equipped with Electronically Registering Fareboxes		
Vehicles (stations) equipped with Magnetic Stripe Readers	Stations: Vehicles:	Stations: Vehicles:
Vehicles (stations) equipped with Smart Card Readers	Stations: Vehicles:	Stations: Vehicles:
Vehicles equipped with navigation aids to facilitate operations		
Vehicles operated under computer aided dispatch system (e.g. data messaging capability)		
Vehicles that have component system (e.g. engine, brakes) electronically monitored as part of a fleet management/monitoring system		



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4. Do you have major fixed route bus or rail transfer locations that display schedule and fare information electronically (e.g., television screen, kiosk, terminal)?

- No; go to Question 4.
- Yes, please complete the following:

- a. How many major bus transfer points do you have? _____
- b. How many major bus transfer points display traveler information? _____
- c. How many rail transfer stations do you have? _____
- d. How many rail transfer stations display date? _____
- e. What methods are used to display information: _____
- f. What type of information is displayed (check all that apply)?
 - Published routes, schedules, and fares
 - Real-time schedule adherence
 - Other (specify) _____

5. Do you use electronic fare media (e.g., magnetic strip card, smart card, etc.) to collect fares on the services you provide?

- No; go to Question 5.
- Yes

If yes, do you store these data electronically for later use in route and service planning?

- No; go to Question 5.
- Yes

If yes, approximately what percentage of electronically collected fare data is stored for later use in service planning? _____ % of fares

6. The following questions relate to the use of common electronic fare media between your agency and other transit agencies in your local area.

a. Please complete the following regarding your operations. If you operate modes in addition to fixed-route bus, which ones are capable of having their riders use the same electronic fare media (e.g., stripe or smart cards)? (check all that apply)

- Light Rail Heavy Rail Paratransit Services Other(specify)_____

b. Please complete the following regarding other transit operators within your local area.

For all the other transit agencies operating within your local area, how many are capable of having their riders use the same electronic fare media (e.g., stripe or smart cards) as you do? (provide the appropriate number of agencies)

Fixed-route buses _____ Light Rail _____ Heavy Rail _____ Paratransit Services _____
Other (specify) _____



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THE FOLLOWING QUESTIONS ARE DESIGNED TO DETERMINE WHETHER YOUR AGENCY USES TRAFFIC SURVEILLANCE DATA COLLECTED BY OTHER TRANSPORTATION AGENCIES TO ADJUST TRANSIT ROUTES AND SCHEDULES IN REAL-TIME. FOR EXAMPLE, YOUR AGENCY MAY RECEIVE INFORMATION FROM ANOTHER AGENCY IN YOUR REGION THAT INDICATES A STREET IS BLOCKED DUE TO A TRAFFIC ACCIDENT. YOUR AGENCY MAY THEN USE THIS INFORMATION TO ADJUST A TRANSIT ROUTE OR SCHEDULE IN REAL-TIME TO ACCOMMODATE ANY DELAY ASSOCIATED WITH THIS ACCIDENT.

7. Do you receive information describing freeway travel times, speeds, or conditions automatically in real time via electronic means (e.g., from a regional freeway management center)?

No; go to Question 7.

Yes

If yes, please identify the agency providing the information and describe how this transfer of information is accomplished:

If yes, do you use these data to adjust transit routes or schedules in any way?

No

Yes

8. Do you receive information describing arterial travel times, speeds, or conditions in real-time via electronic means (e.g., from a traffic signal control system)?

No; go to Question 8.

Yes

If yes, please identify the agency providing the information and describe how this transfer of information is accomplished:

If yes, do you use these data to adjust transit routes or schedules in any way?

No

Yes



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9. Do you receive information describing incident severity, location, and type in near real-time by any means (e.g., from a regional incident management program)? (A phone call, radio transmission, or computer-based notification all qualify as "near real-time.")

No; go to Question 9.

Yes

If yes, please identify the agency providing the information and describe how this transfer of information is accomplished:

If yes, do you use these data to adjust transit routes or schedules in any way?

No

Yes

THE FOLLOWING QUESTIONS ARE DESIGNED TO DETERMINE WHETHER YOUR AGENCY PROVIDES INFORMATION TO A REGIONAL MULTIMODAL TRAVELER INFORMATION CENTER OR INFORMATION SERVICE PROVIDER. THESE ENTITIES ARE REPOSITORIES FOR DATA ON SYSTEM PERFORMANCE FROM SEVERAL MODES, INCLUDING TRANSIT, AND DISSEMINATE THIS INFORMATION TO TRAVELERS THROUGH A VARIETY OF MEDIA SUCH AS KIOSKS, INTERNET SITES, CABLE TV, AND PERSONAL NAVIGATION DEVICES.

10. Does your agency provide information describing your motor bus, demand responsive, heavy rail, light rail, or other services to another public or private organization in your region for display on kiosks, Internet sites, and other means to the general public?

No; go to Question 10

Yes

If yes, what type of information is provided and how many of the route-miles operated by motor bus, demand responsive, heavy rail, light rail or other services are included (check all that apply):

Publish transit routes, schedules and fares

Name of organization, group, or agency that receives the information: _____

Total route miles included in the information transferred (check all that apply and provide the total route miles covered by the transfer):

Motor bus _____

Demand Responsive _____

Heavy Rail _____

Light Rail _____



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10. Continued

Real-time schedule adherence from transit vehicles in operation transferred by electronic means

Name of organization, group, or agency that receives the information: _____

Total route miles included in the information transferred (check all that apply and provide the total route miles covered by the transfer):

- Motor bus _____
- Demand Responsive _____
- Heavy Rail _____
- Light Rail _____

11. Are your motor buses equipped as vehicle probes to determine highway travel times or speeds on freeways?

- No; go to Question 11.
- Yes

If yes, how many motor buses are equipped to serve as probes? _____

How is the information collected by the probe vehicles transferred for use in freeway management? (check all that apply)

- Transfer between separate computer systems _____
- A common shared data base is used _____
- Other, please describe _____

12. Are your motor buses equipped as vehicle probes to determine highway travel times or speeds on signalized arterial streets?

- No
- Yes

If yes, how many motor buses are equipped to serve as probes? _____

How is the information collected by the probe vehicles transferred for use in traffic signal control? (check all that apply)

- Transfer between separate computer systems _____
- A common shared data base is used _____
- Other, please describe _____



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Additional Comments: