Tracking the Deployment of the Integrated Metropolitan ITS Infrastructure in Atlanta

FY99 Results

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Part 1 - Background and Purpose

In January 1996, Secretary Peña set a goal of deploying the integrated metropolitan Intelligent Transportation System (ITS) infrastructure in 75[1] of the nation's largest metropolitan areas by 2006:

> *"I'm setting a national goal: to build an intelligent transportation infrastructure across the United States to save time and lives, and improve the quality of life for Americans. I believe that what we do, we must measure . . . Let us set a very tangible target that will focus our attention . . . I want 75 of our largest metropolitan areas outfitted with a complete intelligent transportation infrastructure in 10 years."*[2]
>
> *-- Secretary Peña, 1996*

In 1997, the U.S. Department of Transportation initiated an effort to track progress toward fulfillment of this goal by conducting a survey of deployment in the nation's largest metropolitan areas. Traditionally, the product of a transportation infrastructure investment consists of a fixed asset such as a highway, bridge, or public transportation vehicle developed, constructed, or purchased by a single agency. Tracking the level of deployment for such traditional fixed assets can be accomplished by simply counting the number of such assets deployed. Measuring the deployment of the metropolitan ITS infrastructure is more complex because it consists of a set of systems, often deployed by multiple agencies, and integrated through a combination of complex institutional and technical arrangements. In brief, it is often difficult to simply count the number of systems deployed without first devising a measurement approach that captures the essential features of such systems in a consistent fashion across many deployment environments.

In order to track progress toward fulfillment of the Secretary's goal for deployment, the U.S. Department of Transportation ITS Joint Program Office developed the metropolitan ITS deployment tracking methodology. This methodology tracks deployment of the nine components that make up the Metropolitan ITS infrastructure: Freeway Management; Incident Management; Arterial Management; Emergency Management; Transit Management; Electronic Toll Collection; Electronic Fare Payment; Highway-Rail Intersections; and Regional Multimodal Traveler Information. Through a set of indicators tied to the major functions of each component, the level of deployment is tracked for the nation's largest metropolitan areas. In addition, the integration links between agencies operating the infrastructure are also tracked. The details of

[1] Since Secretary Peña's speech, the number of metropolitan areas that DOT will measure has been increased from 75 to 78. However, to maintain reporting consistency across the 10-year goal period, this report considers only the original 75 metropolitan areas.

[2] Excerpt of a speech delivered by Secretary of Transportation Peña at the Transportation Research Board in Washington, DC on January 10, 1996.

the methodology are explained elsewhere.[3]

During the summer and fall of 1999, the U.S. DOT undertook a new data collection effort for the purpose of examining ITS deployment progress in the nation's largest metropolitan areas. The Atlanta metropolitan area was among the areas surveyed in 1997 and again in 1999. This report presents the results of the 1999 survey efforts and compares the results of the 1997 survey against those observed in 1999. The overall response rate for the surveys administered in the Atlanta region was 91% in 1997 and 90% in 1999.

Part 2 contains a summary of the 1999 survey results, and Part 3 provides a comparison of 1999 survey results and the 1997 survey results.

The report also contains a set of appendices containing a map of the survey area, the list of local contacts surveyed along with a status of their response to the survey and a summary of the data collected from the surveys.

Agencies are encouraged to review the data presented in this report for completeness and accuracy and to direct any comments or corrections to the data provided to the contacts listed below:

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[3] Additional Resources: "Measuring ITS Deployment and Integration" (Electronic Document Number: 4372). U.S. Department of Transportation, Joint Program Office for Intelligent Transportation Systems, 400 Seventh St., SW (HVH-1), Washington, DC 20590, Phone: 202-366-9536, Fax: 202-366-3302, Web: http://www.its.dot.gov.

Part 2 - Summary 1999 Survey Results

Deployment indicators have been developed for two broad areas of interest: (1) the individual components, including their basic functions and characteristics and (2) integration of components, including how these components work together to provide coordinated regional service. As mentioned earlier, these indicators are expressed as percentages of the possible deployment opportunity and not necessarily what should be deployed based on local needs. Requirements for deployment and integration between each component will vary based on local conditions and cannot be assigned without extensive coordination with individual metropolitan areas.

The following two figures portray the surrogate indicators for each of the nine components in Atlanta and the same indicators at the national level. These are judged to be the single best representative of a component and are being used as summary indicator for component. The summary indicators are expressed as a percentage; however, because deployment goals have yet to be established, these indicators should not be read as a comparison of what is deployed versus eventual deployment goals. Instead, they only reflect what is deployed compared to full market saturation (i.e., opportunity for deployment).

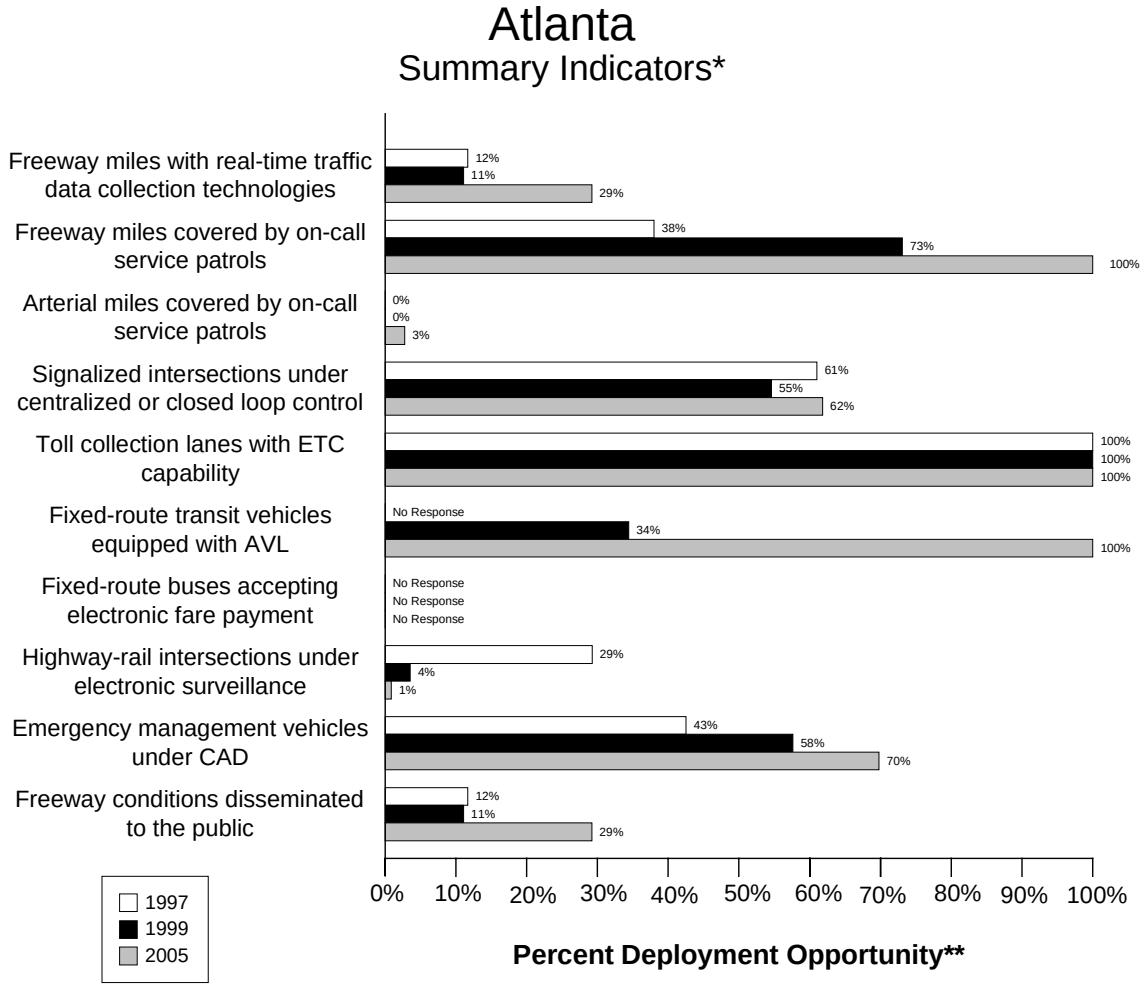
Each component indicator was selected to reflect a critical function of the individual components. For example, in the case of Freeway Management, three basic functions were defined: surveillance, traffic control, and information display. The three indicators developed to reflect these functions are: percentage of freeway centerline miles under electronic surveillance (surveillance function), percentage of freeway entrance ramps managed by ramp meters (traffic control function), and percentage of freeway centerline miles covered by permanent VMS, HAR, or in-vehicle signing (information display function). The indicators are surrogates that do not necessarily reflect the full breadth of metropolitan ITS deployment activity.

A critical aspect of ITS that provides much of its capability is the integration of individual components to form a unified regional traffic control system. Individual ITS components routinely collect information that is used for purposes internal to that component. For example, the Arterial Management component monitors arterial conditions to revise signal timing and to convey these conditions to travelers through such technologies as variable message signs and highway advisory radio. Other ITS components can make use of this information in formulating their control strategies. For example, Transit Management may alter routes and schedules based on real-time information on arterial traffic conditions, and Freeway Management may alter ramp metering or diversion recommendations based on the same information.

As with the component indicators, definitions for inter- and intra-component integration were developed for each component, and indicators, derived from these definitions, were produced for each component. A total of 34 individual integration indicators was specified and is portrayed in the third figure which follows. Each integration indicator has been assigned a number and an origin/destination path from one ITS infrastructure component to another. For example, the

integration of information from the Freeway Management component to the Regional Multimodal Traveler Information component is identified by the number “10.”

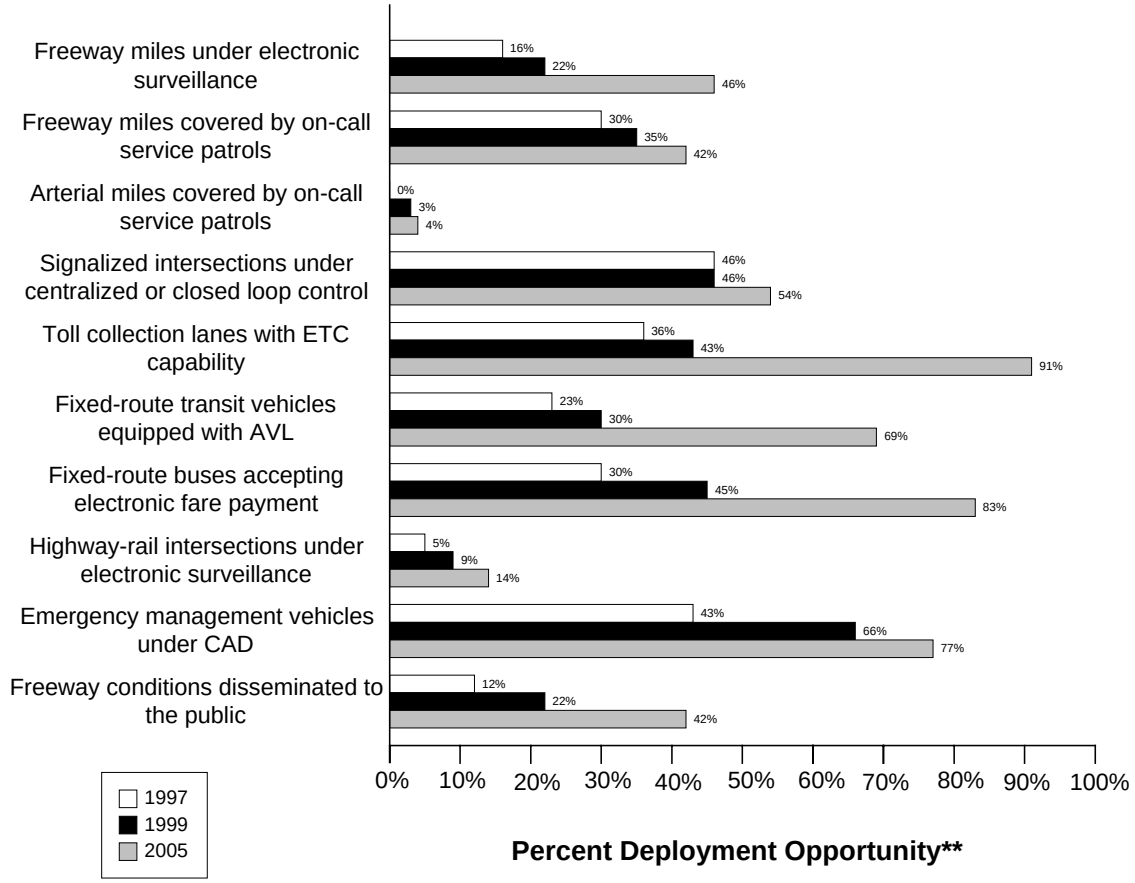
Data as of 5/1/00



* Indicators are single surrogates that do not necessarily reflect the full breadth of ITS deployment activity.
** Deployment opportunity reflects potential totals that do not necessarily reflect actual need.

Data as of 5/1/00

National
Summary Indicators*



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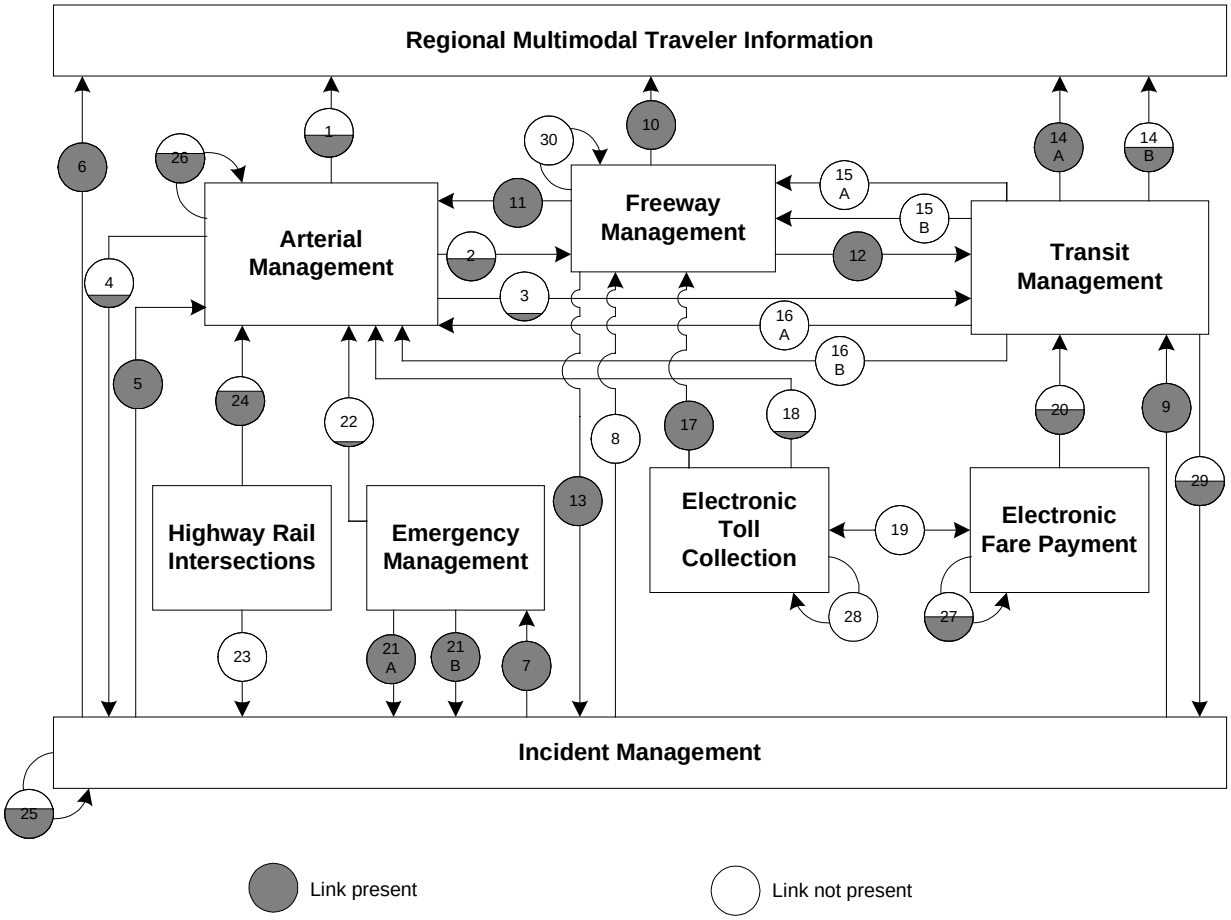
Atlanta Integration Links



Note: Shading indicates the value of the link. For example a circle half shaded equals 50%

Link	Description	Link	Description
1	Arterial Management to Regional Multimodal Traveler Information	2	Arterial Management to Freeway Management
3	Arterial Management to Transit Management	4	Arterial Management to Incident Management
5	Incident Management to Arterial Management	6	Incident Management to Regional Multimodal Traveler Information
7	Incident Management to Emergency Management.	8	Incident Management to Freeway Management
9	Incident Management to Transit Management	10	Freeway Management to Regional Multimodal Traveler Information
11	Freeway Management to Arterial Management	12	Freeway Management to Transit Management

Link	Description	Link	Description
13	Freeway Management to Incident Management	14a 14b	Transit Management to Regional Multimodal Traveler Information (static route information) Transit Management to Regional Multimodal Traveler Information (schedule adherence information)
15a 15b	Transit Management to Freeway Management Transit Management to Freeway Management (transit vehicle probes)	16a 16b	Transit Management to Arterial Management Transit Management to Arterial Management (transit vehicle probes)
17	Electronic Toll Collection to Freeway Management (ETC equipped probes)	18	Electronic Toll Collection to Arterial Management (ETC equipped probes)
19	Electronic Fare Payment and Electronic Toll Collection	20	Electronic Fare Payment to Transit Management
21a 21b	Emergency Management to Incident Management (incident notification) Emergency Management to Incident Management (incident clearance)	22	Emergency Management to Arterial Management
23	Highway-rail intersections to Incident Management (crossing status)	24	Highway-rail intersections to Arterial Management (crossing status)
25	Incident Management intra component	26	Arterial Management intra component
27	Electronic Fare Payment intra component.	28	Electronic Toll Collection intra component
29	Transit Management to Incident Management (incident reporting)	30	Freeway Management intra component

Part 3 - Detailed 1999 Survey Results

The following figures and tables summarize the complete set of component and integration indicators developed for the Atlanta metropolitan area. The figures summarizing the component indicators consist of a bar chart portraying the deployment levels for 1997, 1999, and 2005 accompanied by detailed tables of the data used to calculate each component indicator value (*Num* stands for numerator and *Den* stands for denominator; blank space indicates that no response was received.)

Example: Calculating Component Indicators for Freeway Management

Consider a metropolitan area with 100 miles of freeway and 25 freeway entrance ramps. The area has no ramp meters, 10 freeway miles for which traffic data are collected electronically, and 5 freeway miles, which are covered by highway advisory radio.

The component indicator for electronic surveillance is calculated as (10/100) or 10%.

The component indicator for ramp meter control is calculated as (0/25) or 0%.

The component indicator for HAR coverage is calculated as (5/100) or 5%.

The summary indicator for the metropolitan area is calculated as (10%+0%+5%)/3 = 5%.

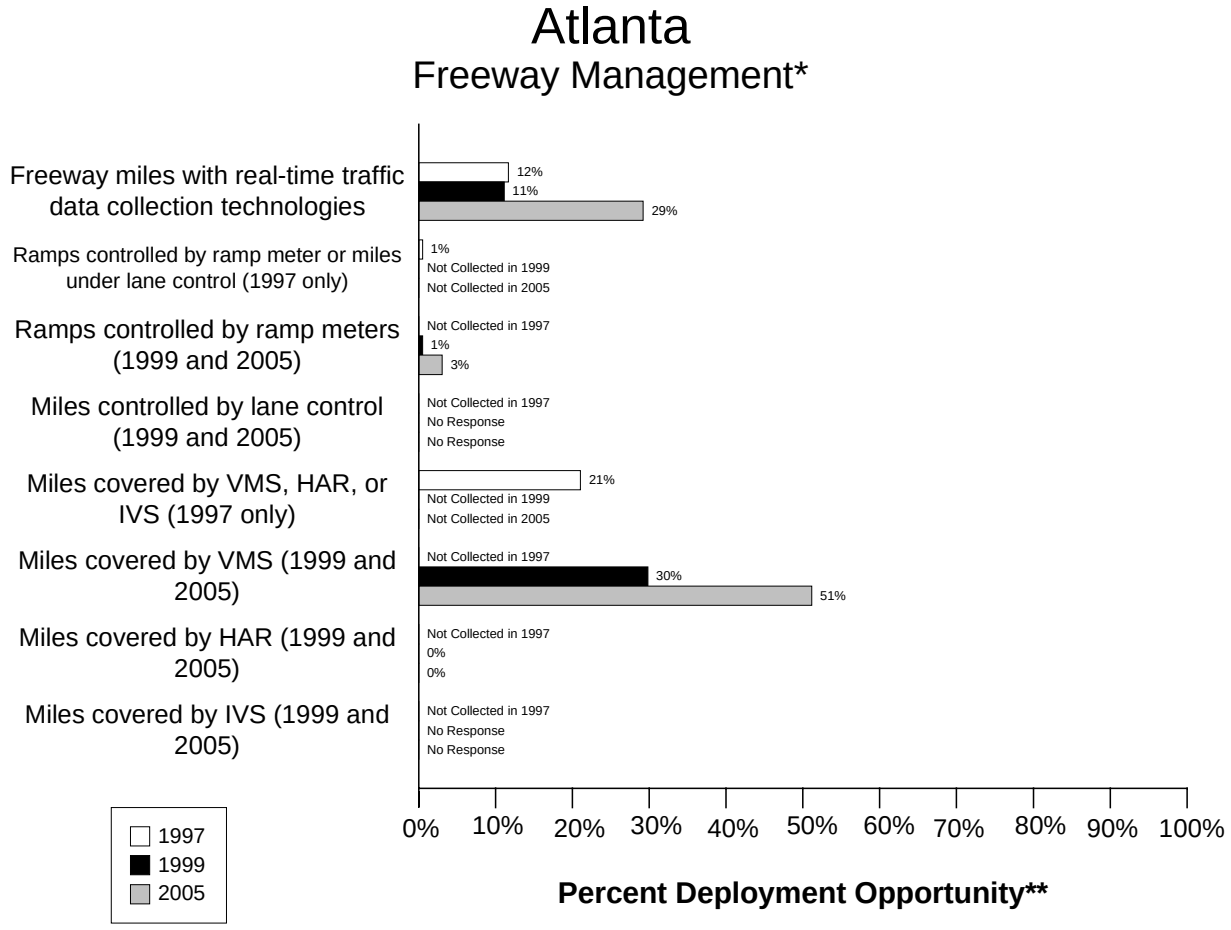
The figures summarizing the integration indicators consist of a diagram for each of the nine metropolitan ITS components portraying the integration level for 1999 (*italic*) and 2005 (**bold**), accompanied by tables providing an explanation of the data and calculations performed to develop each integration indicator value for 1999 and 2005. Each diagram portrays the proportion of agencies providing information to a component (e.g., the flow of incident information from Incident Management to Freeway Management) and the proportion of agencies providing information from one component to other components (e.g., the flow of freeway travel condition information from Freeway Management to Arterial Management).

Example: Calculating Integration between Arterial Management and Regional Multimodal Traveler Information

Consider a metropolitan area with three arterial management agencies. One out of three provides information to the public using a Regional Multimodal Traveler Information Media (e.g., internet, kiosk, pager, etc...). The integration indicator is 1/3 or 33%.

Freeway Management Component Indicators

Data as of 5/1/00



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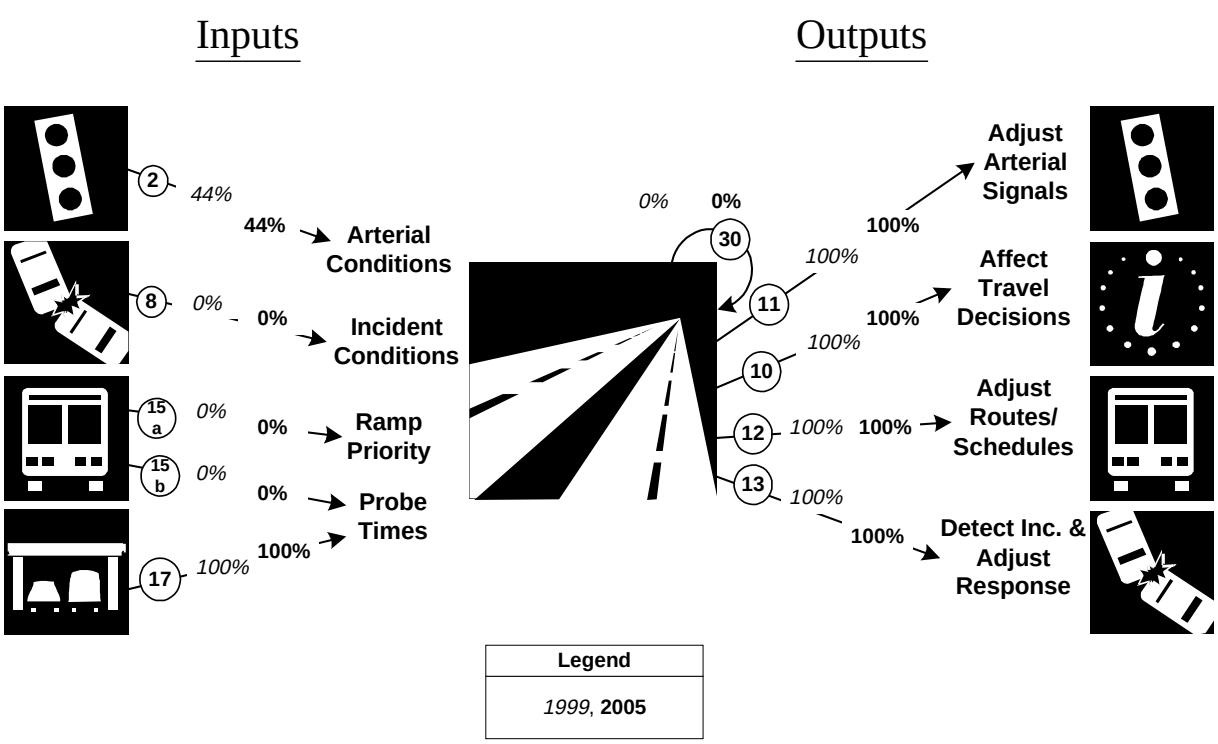
** Deployment opportunity reflects potential totals that do not necessarily reflect actual need.

	1997			1999			2005		
Description	Num	Den	%	Num	Den	%	Num	Den	%
Freeway centerline miles are under electronic surveillance for monitoring traffic flow	40	342	12%	38	342	11%	100	342	29%
Freeway entrance ramps are controlled by ramp meters or miles under lane control	5	980	1%						

Description	1997			1999			2005		
	Num	Den	%	Num	Den	%	Num	Den	%
Freeway entrance ramps are controlled by ramp meters				5	980	1%	30	980	3%
Freeway centerline miles will be controlled by lane control					342			342	
Freeway miles are covered by VMS, HAR, or IVS	72	342	21%						
Freeway miles are covered by VMS				102	342	30%	175	342	51%
Freeway miles are covered by HAR				0	342	0%	0	342	0%
Freeway miles are covered by IVS					342			342	

Freeway Management Integration Indicators

Atlanta
Freeway Management Integration*



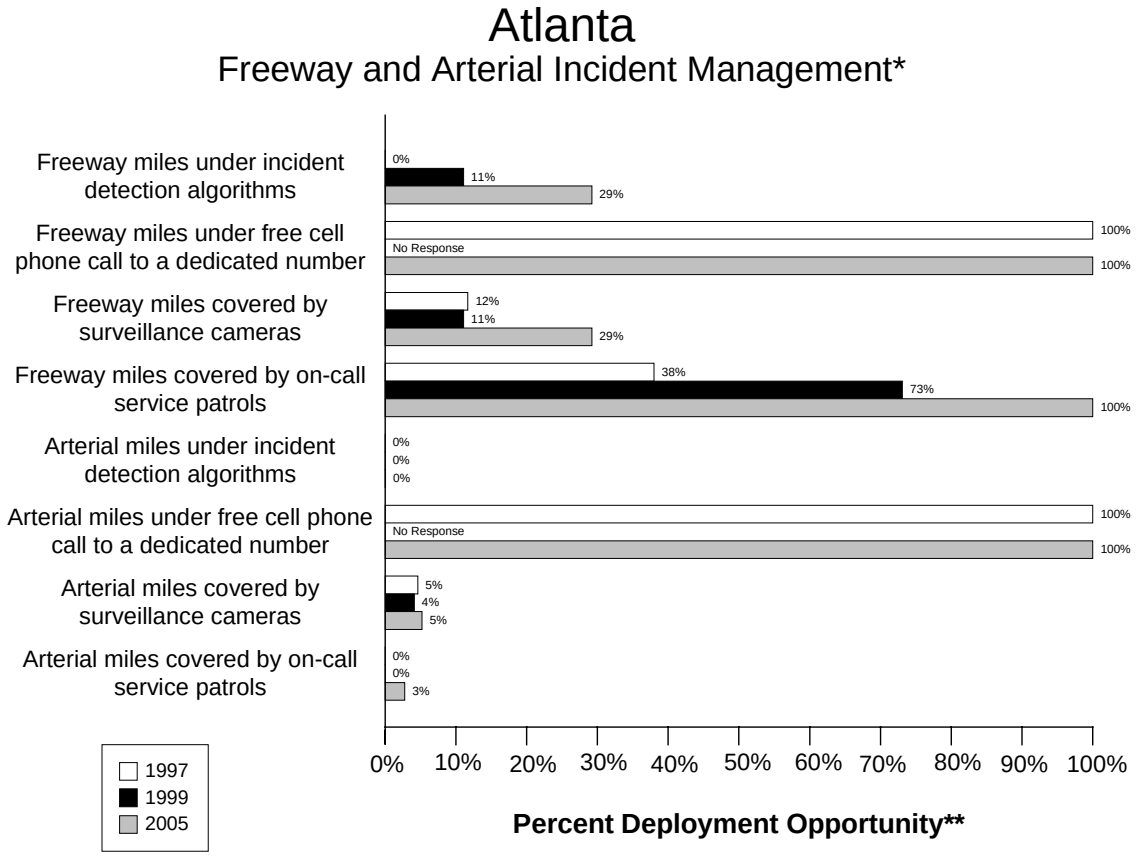
* Indicators are single surrogates that do not necessarily reflect the full breadth of ITS deployment activity

Link Description	1999	2005
2. Arterial Management agencies sending information to Freeway Management	(4/ 9) 44%	(4/ 9) 44%
8. Incident Management agencies sending information to Freeway Management	(0/ 1) 0%	(0/ 1) 0%
15a. Transit management agencies with vehicles equipped with ramp meter priority	(0/ 2) 0%	(0/ 2) 0%
15b. Transit Management agencies with vehicles equipped as probes	(0/ 2) 0%	(0/ 2) 0%
17. Freeway Management agencies receiving freeway conditions from vehicle probes	(1/ 1) 100%	(1/ 1) 100%
30. Freeway Management agencies sending information to another Freeway Management agency	(0/ 1) 0%	(0/ 1) 0%
11. Freeway Management agencies sending information to Arterial Management	(1/ 1) 100%	(1/ 1) 100%

Link Description	1999	2005
10. Freeway Management agencies disseminating freeway conditions to the public	(1/ 1) 100%	(1/ 1) 100%
12. Freeway Management agencies sending freeway conditions to Transit Management	(1/ 1) 100%	(1/ 1) 100%
13. Freeway Management agencies sending freeway conditions to Incident Management	(1/ 1) 100%	(1/ 1) 100%

Incident Management Component Indicators

Data as of 5/1/00



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** Deployment opportunity reflects potential totals that do not necessarily reflect actual need.

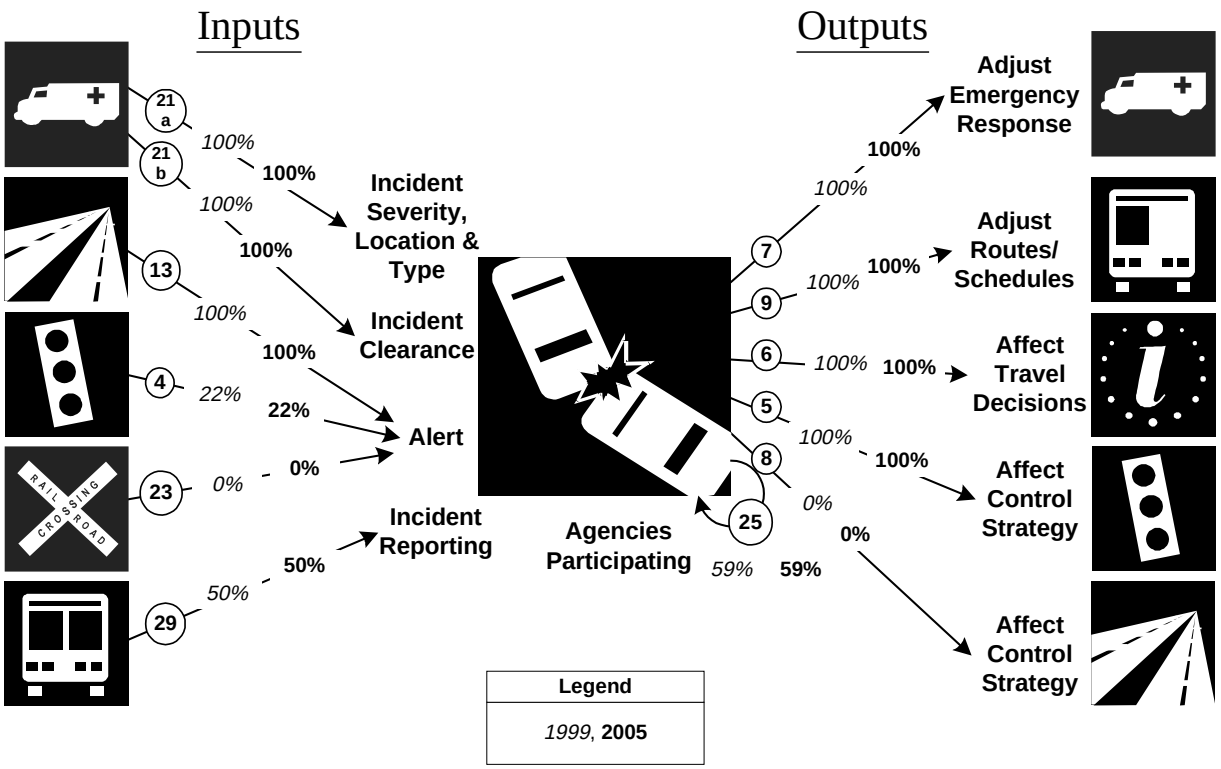
	1997			1999			2005		
Description	Num	Den	%	Num	Den	%	Num	Den	%
Freeway miles are covered by incident detection algorithms	0	342	0%	38	342	11%	100	342	29%
Freeway miles are covered by free cellular phone calls to a dedicated number	342	342	100%		342		342	342	100%
Freeway miles are covered by surveillance cameras.	40	342	12%	38	342	11%	100	342	29%

Description	1997			1999			2005		
	Num	Den	%	Num	Den	%	Num	Den	%
Freeway miles are covered by on-call publicly-sponsored service patrol or towing services.	130	342	38%	250	342	73%	342	342	100%
Arterial miles are covered by incident detection algorithms	0	1813	0%	0	1813	0%	1	1813	0%
Arterial miles are covered by free cellular phone calls to a dedicated number	1813	1813	100%		1813			1813	100%
Arterial miles are covered by surveillance cameras	84	1813	5%	75	1813	4%	95	1813	5%
Arterial miles are covered by on-call publicly-sponsored service patrol or towing services	0	1813	0%	0	1813	0%	50	1813	3%

Incident Management Integration Indicators

Atlanta

Incident Management Integration*



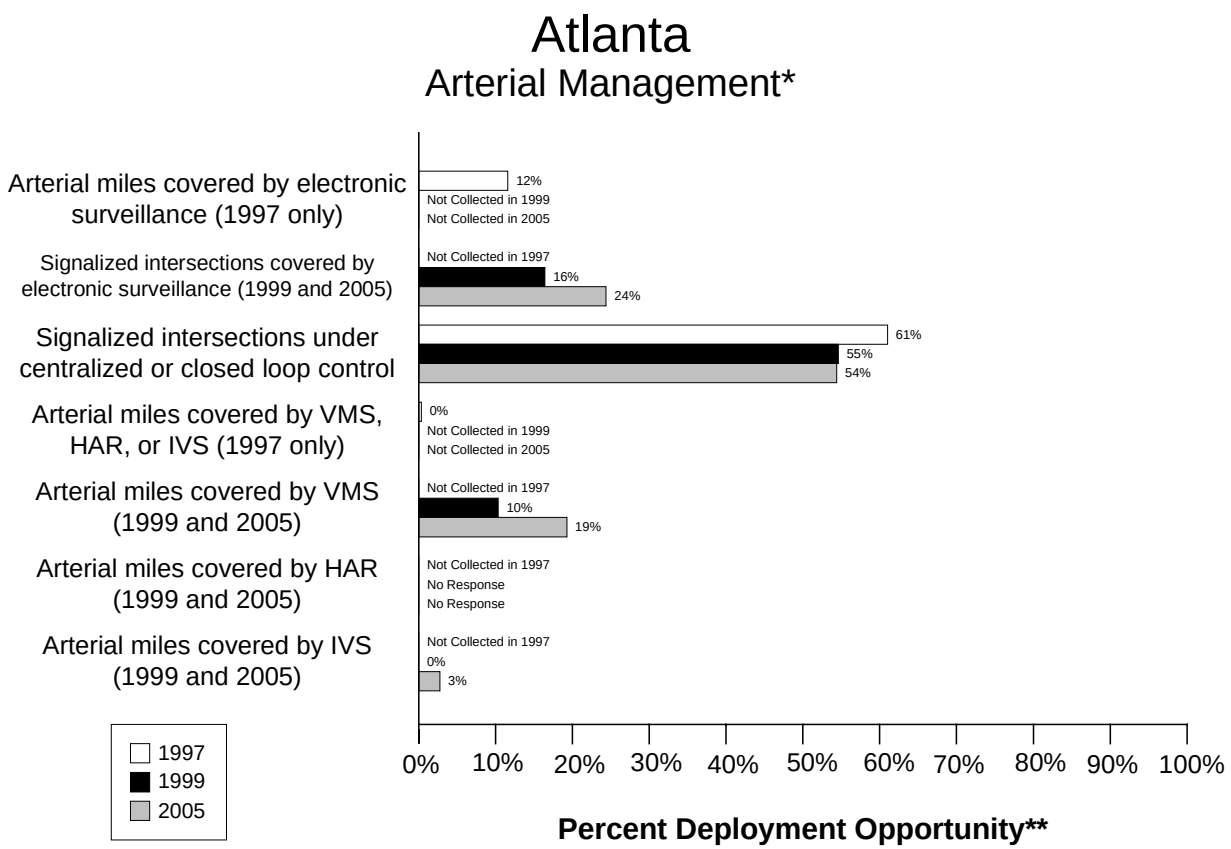
* Indicators are single surrogates that do not necessarily reflect the full breadth of ITS deployment activity

Link Description	1999	2005
21a. Incident management agencies receiving incident severity from Emergency Management	(1/ 1) 100%	(1/ 1) 100%
21b. Incident management agencies receiving incident clearance activities from Emergency Management	(1/ 1) 100%	(1/ 1) 100%
13. Freeway Management agencies sending freeway conditions to Incident Management	(1/ 1) 100%	(1/ 1) 100%
4. Arterial Management agencies sending arterial conditions to Incident Management	(2/ 9) 22%	(2/ 9) 22%
23. Arterial Management agencies receive information on highway-rail intersection crossing blockages for the purpose of managing incident response	(0/ 9) 0%	(0/ 9) 0%
29. Transit Management agencies report traffic incidents as part of an organized regional incident management program	(1/ 2) 50%	(1/ 2) 50%

Link Description	1999	2005
7. Incident management agencies transfer information describing incident severity, location, and type to Emergency Management agencies	(1/ 1) 100%	(1/ 1) 100%
9. Incident Management agencies transfer information describing incident severity, location, and type to Transit Management agencies	(1/ 1) 100%	(1/ 1) 100%
6. Incident Management agencies disseminate information describing incident severity, location, and type to the public	(1/ 1) 100%	(1/ 1) 100%
5. Incident Management agencies transfer information describing incident severity, location, and type to Arterial Management agencies	(1/ 1) 100%	(1/ 1) 100%
8. Incident Management agencies transfer information describing incident severity, location, and type to Freeway Management agencies	(0/ 1) 0%	(0/ 1) 0%
25. Police, fire, and EMS agencies participating in a formal incident management plan/team	(22/ 37) 59%	(22/ 37) 59%

Arterial Management Component Indicators

Data as of 5/1/00



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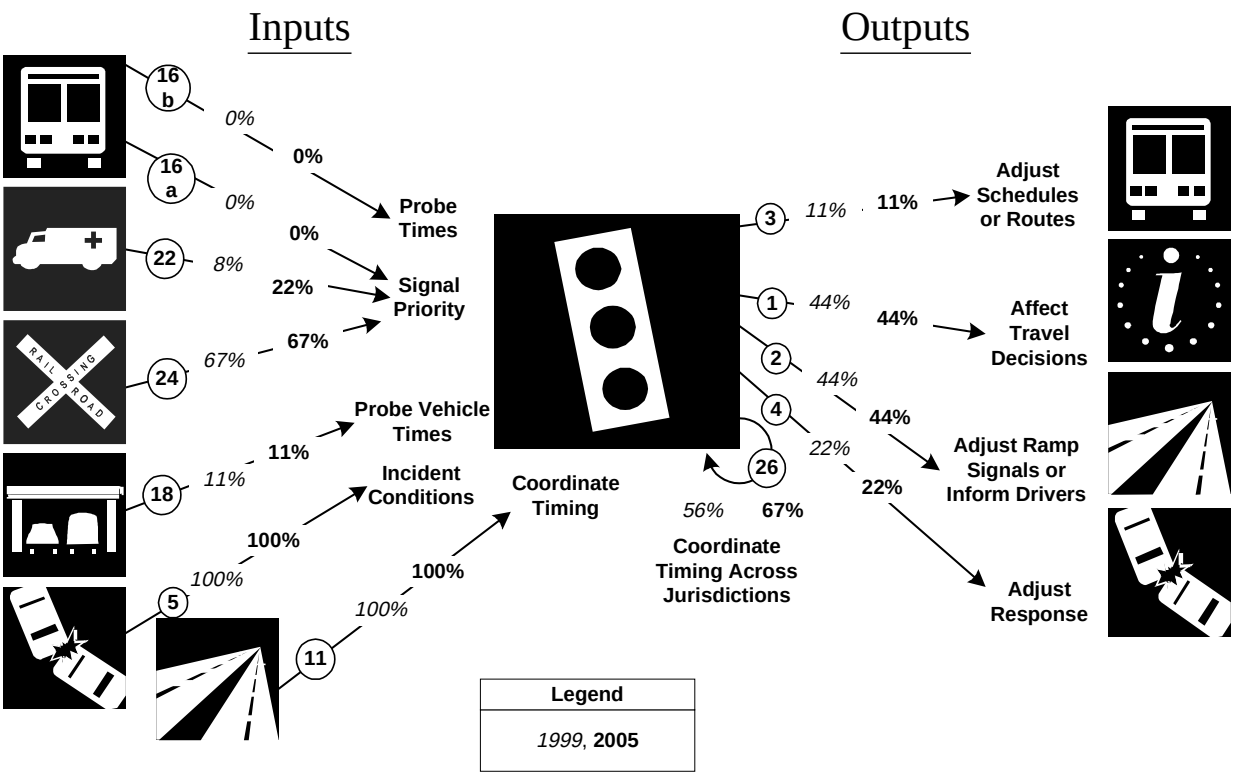
	1997			1999			2005		
Description	Num	Den	%	Num	Den	%	Num	Den	%
Arterial miles covered by electronic surveillance	210	1813	12%						
Signalized intersections are covered by electronic surveillance for monitoring traffic flow				409	2492	16%	500	2050	24%
Signalized intersections are under centralized or closed loop control	1318	2160	61%	1361	2492	55%	1115	2050	54%

Description	1997			1999			2005		
	Num	Den	%	Num	Den	%	Num	Den	%
Arterial miles are covered by VMS, HAR, or IVS	6	1813	0%						
Arterial miles are covered by VMS				188	1813	10%	350	1813	19%
Arterial miles are covered by HAR					1813			1813	
Arterial miles are covered by IVS				0	1813	0%	50	1813	3%

Arterial Management Integration Indicators

Atlanta

Arterial Management Integration*



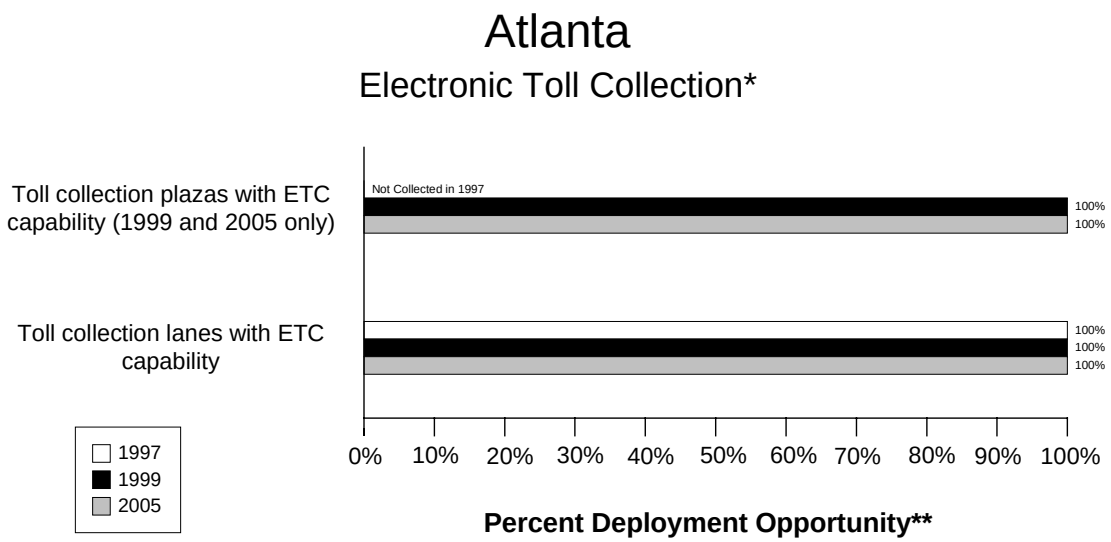
* Indicators are single surrogates that do not necessarily reflect the full breadth of ITS deployment activity

Link Description	1999	2005
16a. Transit management agencies with vehicles equipped with traffic signal priority	(0/ 2) 0%	(0/ 2) 0%
16b. Transit Management agencies have vehicles equipped as probes on arterials	(0/ 2) 0%	(0/ 2) 0%
22. Emergency Management agencies have vehicles equipped with traffic signal preemption capability	(3/ 37) 8%	(8/ 37) 22%
24. Arterial Management agencies have traffic signals within 200 feet of a highway rail intersection with the capability of having their signal timing adjusted in response to a train crossing	(6/ 9) 67%	(6/ 9) 67%
18. Number of Arterial Management agencies receiving information from vehicle probes	(1/ 9) 11%	(1/ 9) 11%
5. Incident Management agencies transfer information describing incident severity, location, and type to Arterial Management	(1/ 1) 100%	(1/ 1) 100%
11. Freeway Management agencies transfer freeway travel times, speeds, and conditions to Arterial Management agencies	(1/ 1) 100%	(1/ 1) 100%

Link Description	1999	2005
3. Arterial Management agencies transfer arterial travel times, speeds, and conditions to Transit Management	(1/ 9) 11%	(1/ 9) 11%
1. Arterial Management agencies disseminate arterial travel times, speeds, and conditions to the public	(4/ 9) 44%	(4/ 9) 44%
2. Arterial Management agencies send traffic condition information to Freeway Management	(4/ 9) 44%	(4/ 9) 44%
4. Arterial Management agencies transfer arterial travel times, speeds, and conditions to Incident Management	(2/ 9) 22%	(2/ 9) 22%
26. Arterial Management agencies under cooperative agreement to share traffic signal timing for coordinated response	(5/ 9) 56%	(6/ 9) 67%

Electronic Toll Collection Component Indicators

Data as of 5/1/00



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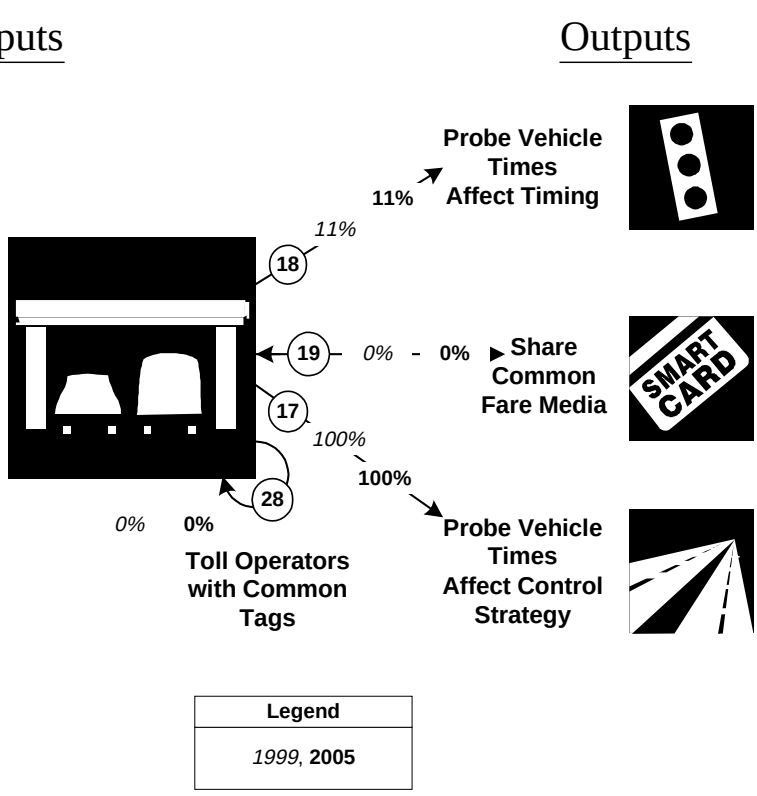
** Deployment opportunity reflects potential totals that do not necessarily reflect actual need.

	1997			1999			2005		
Description	Num	Den	%	Num	Den	%	Num	Den	%
Toll collection plazas with ETC capability				1	1	100%	1	1	100%
Toll collection lanes with ETC capability	18	18	100%	18	18	100%	18	18	100%

Electronic Toll Collection Integration Indicators

Atlanta
Electronic Toll Collection Integration*

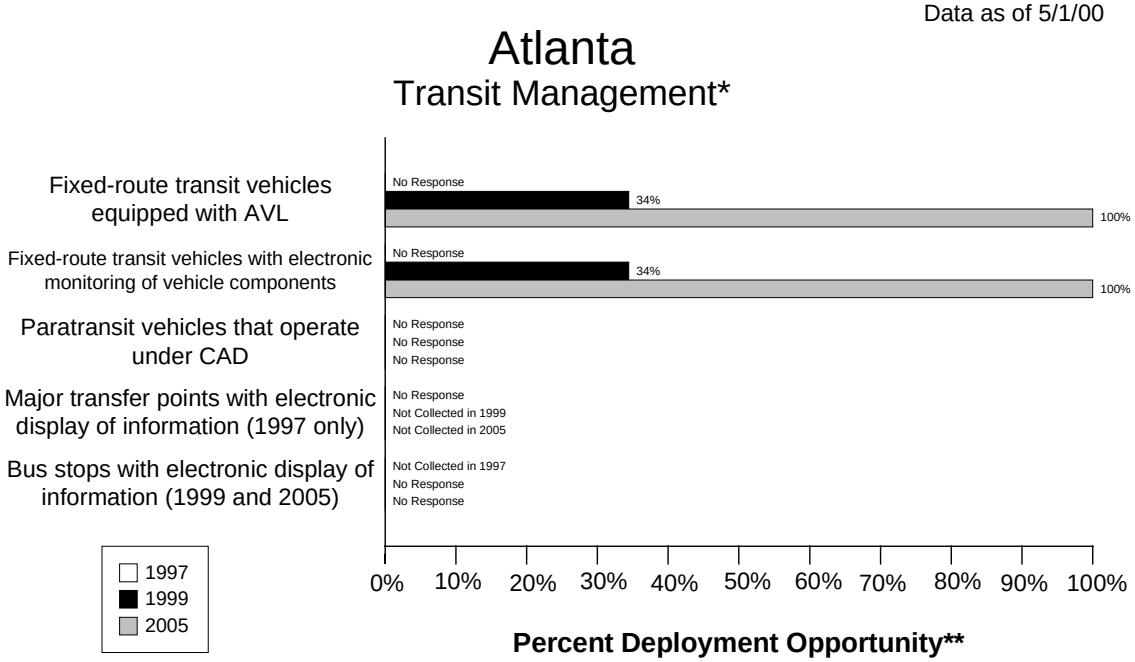


* Indicators are single surrogates that do not necessarily reflect the full breadth of ITS deployment activity

Link Description	1999	2005
18. Number of Arterial Management agencies receiving information from vehicle probes	(1/ 9) 11%	(1/ 9) 11%
19. Transit agencies that accept electronic payment through the use of electronic toll collection media	(0/ 2) 0%	(0/ 2) 0%
17. Freeway Management agencies receiving information from vehicle probes	(1/ 1) 100%	(1/ 1) 100%
28. Toll operators using common toll tag technology	(0/ 1) 0%	(0/ 1) 0%

Transit Management Component Indicators

Data as of 5/1/00



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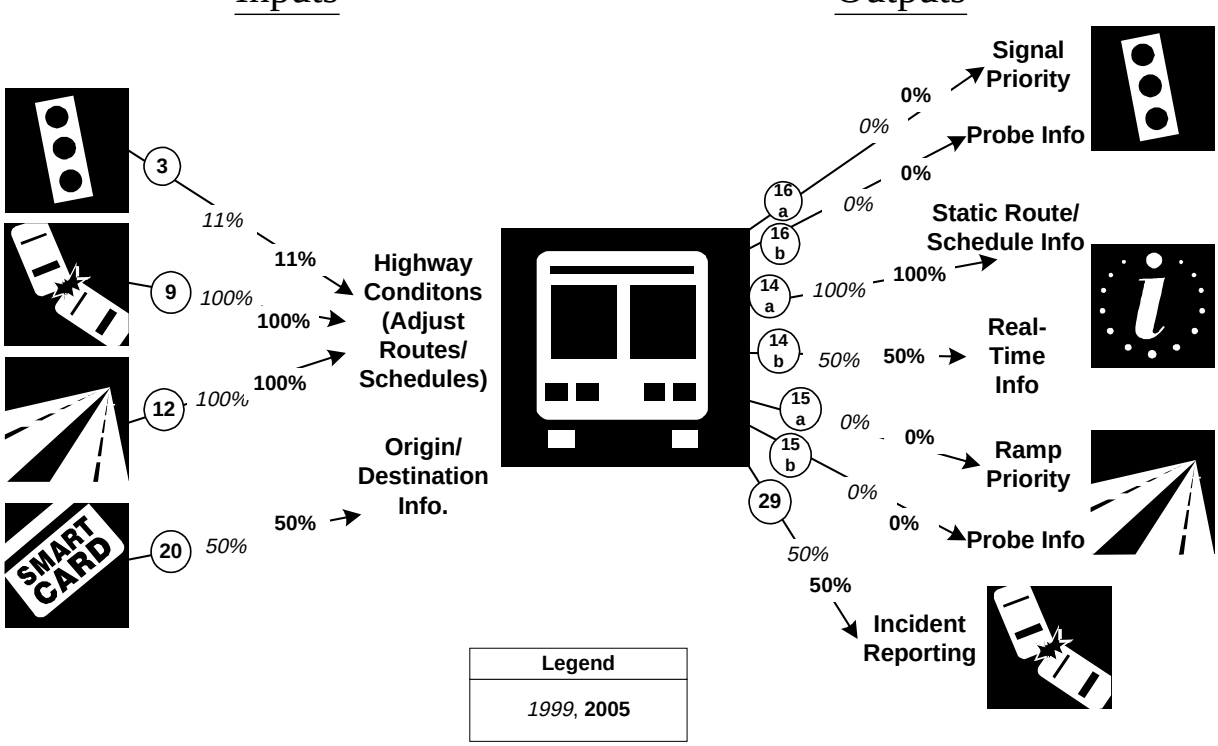
** Deployment opportunity reflects potential totals that do not necessarily reflect actual need.

	1997			1999			2005		
Description	Num	Den	%	Num	Den	%	Num	Den	%
Fixed-route transit vehicles are equipped with AVL	0	0		242	703	34%	703	703	100%
Fixed-route transit vehicles are equipped with electronic monitoring of vehicle component	0	0		242	703	34%	703	703	100%
Paratransit vehicles operate under computer-aided dispatch	0	0			20			30	
Percent fixed-route transfer locations with electronic display of information	0	0							
Bus stops display information to the public					12000				

Transit Management Integration Indicators

Atlanta
Transit Management Integration*



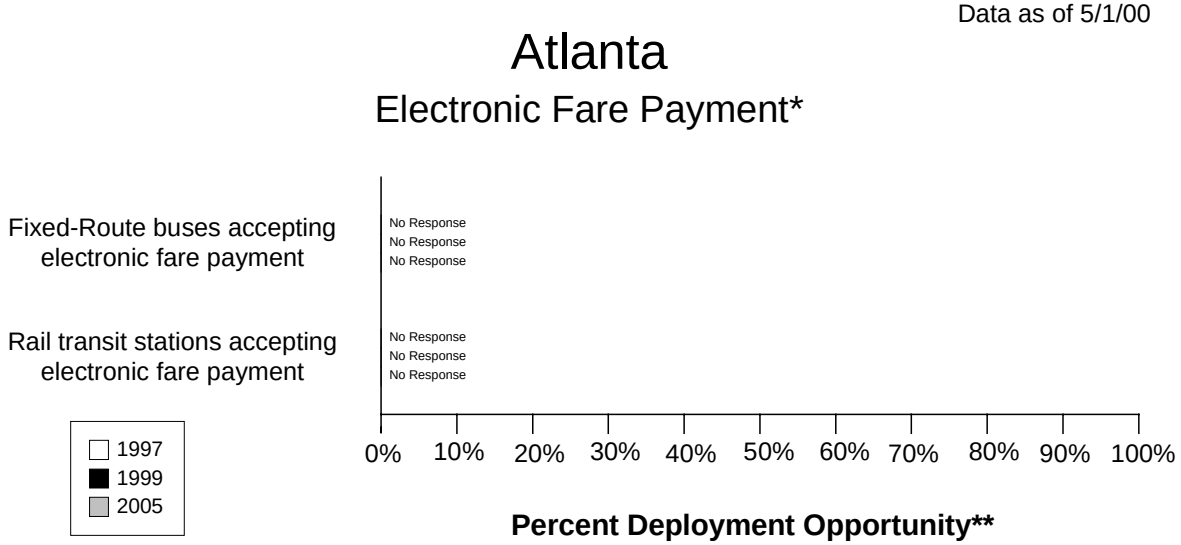
* Indicators are single surrogates that do not necessarily reflect the full breadth of ITS deployment activity

Link Description	1999	2005
3. Arterial Management agencies transfer arterial travel times, speeds, and conditions to Transit Management	(1/ 9) 11%	(1/ 9) 11%
9. Incident management agencies transfer information describing incident severity, location, and type to Transit Management	(1/ 1) 100%	(1/ 1) 100%
12. Freeway Management agencies transfer freeway travel times, speeds, and conditions to Transit Management	(1/ 1) 100%	(1/ 1) 100%
20. Transit Management agencies using Electronic Fare Payment data in transit service planning	(1/ 2) 50%	(1/ 2) 50%
16a. Transit Management agencies have vehicles equipped with traffic signal priority capability	(0/ 2) 0%	(0/ 2) 0%
16b. Transit Management agencies have vehicles equipped as probes on arterials	(0/ 2) 0%	(0/ 2) 0%
14a. Transit Management agencies disseminate information describing transit routes, schedules, and fares to travelers	(2/ 2) 100%	(2/ 2) 100%

Link Description	1999	2005
14b. Transit Management agencies disseminate information describing schedule/route adherence to travelers	(1/ 2) 50%	(1/ 2) 50%
15a. Transit Management agencies have vehicles equipped with ramp meter priority capability	(0/ 2) 0%	(0/ 2) 0%
15b. Transit Management agencies have vehicles equipped as probes on freeways	(0/ 2) 0%	(0/ 2) 0%
29. Transit Management agencies that report traffic incidents as part of an organized regional Incident Management program	(1/ 2) 50%	(1/ 2) 50%

Electronic Fare Payment Component Indicators

Data as of 5/1/00



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** Deployment opportunity reflects potential totals that do not necessarily reflect actual need.

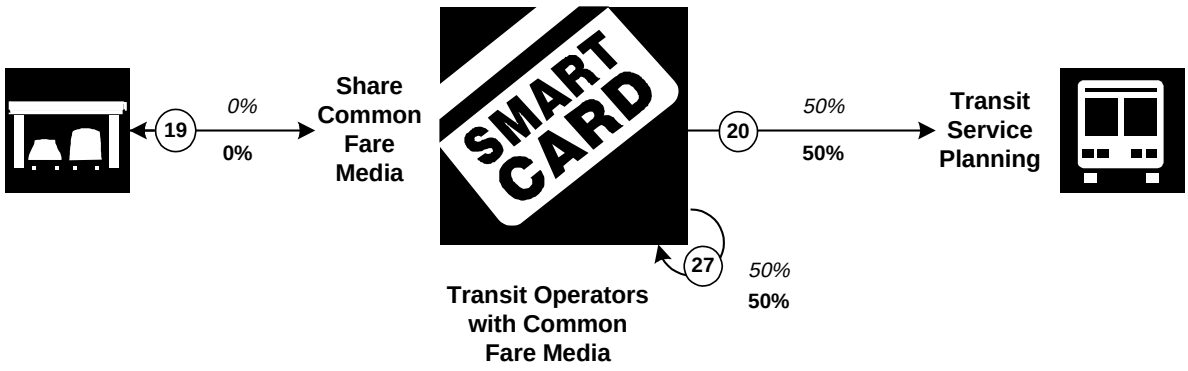
Description	1997			1999			2005		
	Num	Den	%	Num	Den	%	Num	Den	%
Fixed-route transit vehicles that accept electronic payment	0	0			703			703	
Rail transit stations that accept electronic payment	0	0			41				

Electronic Fare Payment Integration Indicators

Atlanta

Electronic Fare Payment Integration*

Inputs Outputs



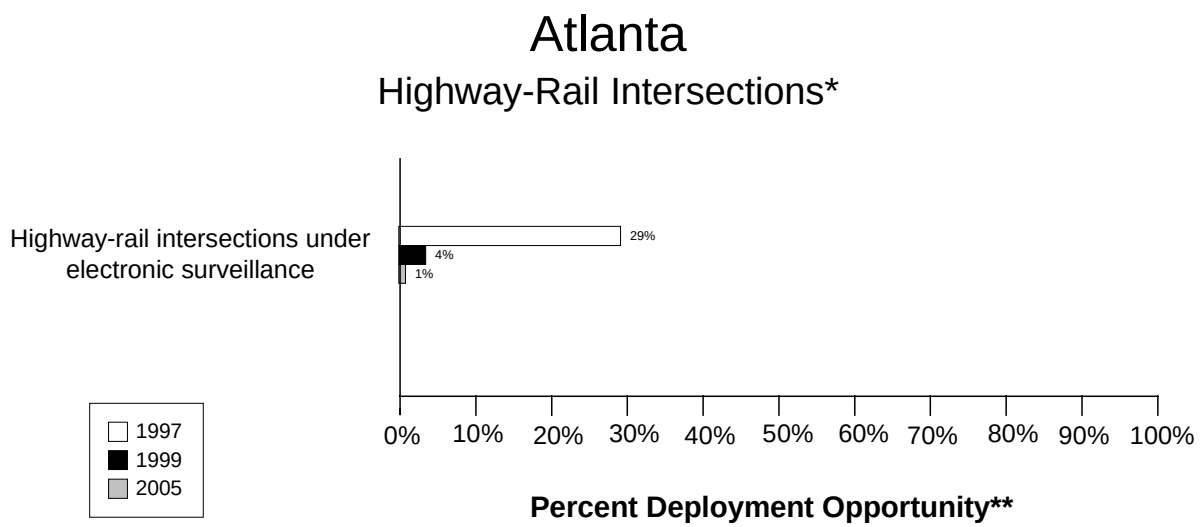
Legend
1999
2005

* Indicators are single surrogates that do not necessarily reflect the full breadth of ITS deployment activity

Link Description	**1999**	**2005**
19. Transit agencies that accept electronic payment through the use of electronic toll collection media	(0/ 2) 0%	(0/ 2) 0%
20. Transit Management agencies use Electronic Fare Payment data in transit service planning	(1/ 2) 50%	(1/ 2) 50%
27. Transit Management agencies that use the same electronic payment system	(1/ 2) 50%	(1/ 2) 50%

Highway Rail Intersection Component Indicators

Data as of 5/1/00



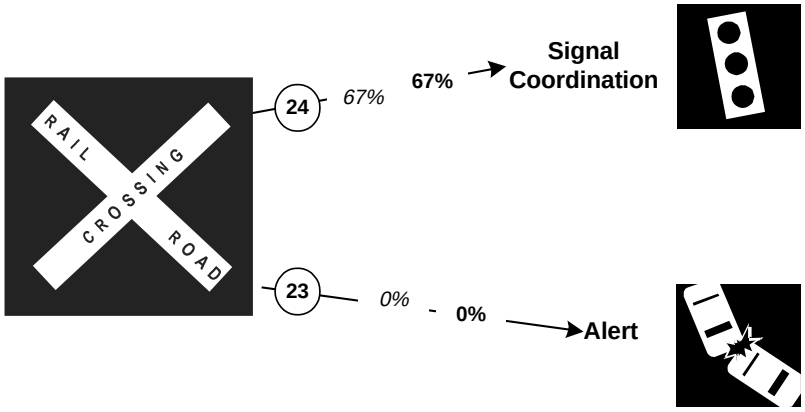
* Indicators are single surrogates that do not necessarily reflect the full breadth of ITS deployment activity.
** Deployment opportunity reflects potential totals that do not necessarily reflect actual need.

	1997			1999			2005		
Description	Num	Den	%	Num	Den	%	Num	Den	%
Highway-rail intersections are under electronic surveillance	24	82	29%	20	559	4%	5	559	1%

Highway Rail Intersection Integration Indicators

Atlanta
Highway Rail Intersections Integration*

Inputs Outputs



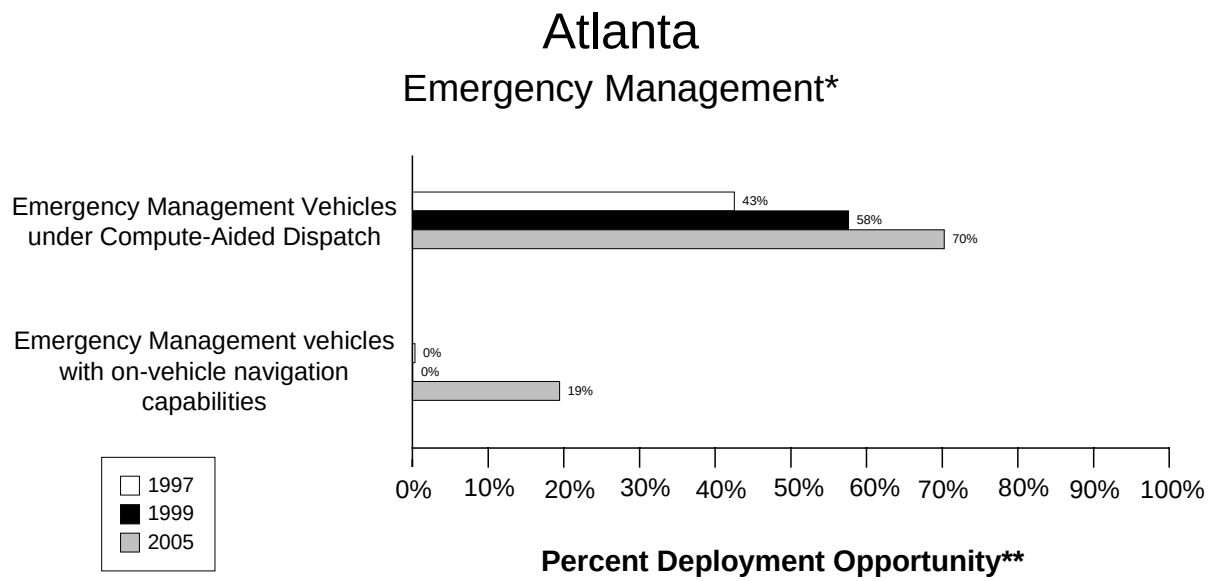
Legend
1999, **2005**

* Indicators are single surrogates that do not necessarily reflect the full breadth of ITS deployment activity

Link Description	1999	2005
24. Arterial Management agencies with traffic signals within 200 feet of a highway rail intersection with the capability of having their signal timing adjusted in response to a train crossing	(6/ 9) 67%	(6/ 9) 67%
23. Arterial Management agencies receive information on highway-rail intersection crossing blockages for the purpose of managing incident response	(0/ 9) 0%	(0/ 9) 0%

Emergency Management Component Indicators

Data as of 5/1/00



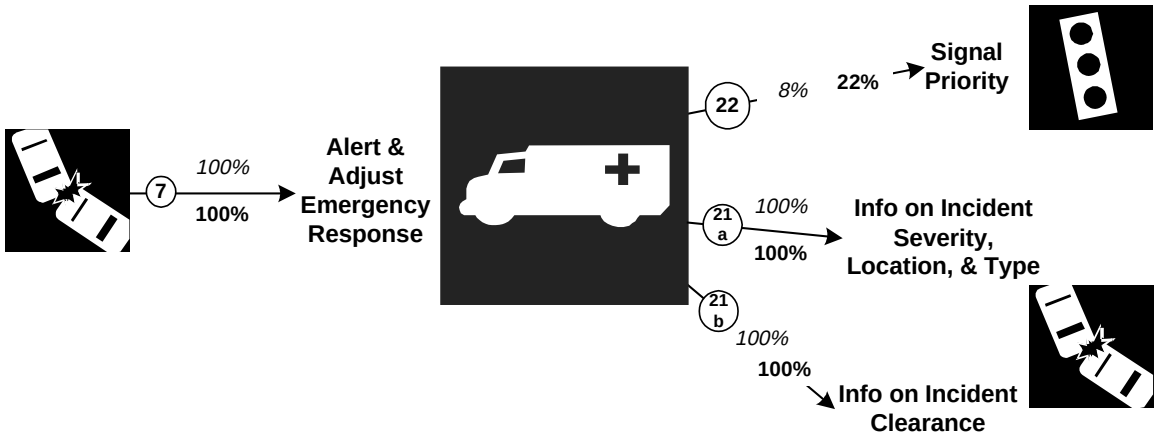
* Indicators are single surrogates that do not necessarily reflect the full breadth of ITS deployment activity.
** Deployment opportunity reflects potential totals that do not necessarily reflect actual need.

	1997			1999			2005		
Description	Num	Den	%	Num	Den	%	Num	Den	%
Public sector emergency vehicles that operate under computer-aided dispatch	1336	3141	43%	1565	2715	58%	2194	3122	70%
Public sector emergency vehicles that have in-vehicle route guidance capability	10	3141	0%	1	2715	0%	607	3122	19%

Emergency Management Integration Indicators

Atlanta
Emergency Management Integration*

Inputs Outputs



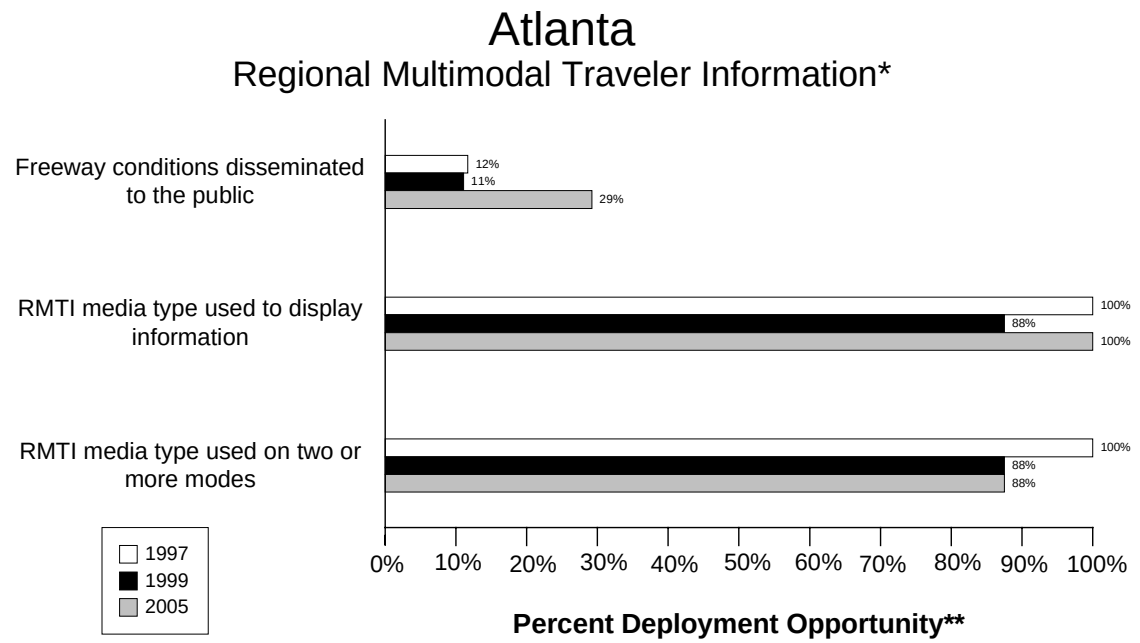
Legend
1999, **2005**

* Indicators are single surrogates that do not necessarily reflect the full breadth of ITS deployment activity

Link Description	**1999**	**2005**
7. Freeway Management agencies transfer information describing incident severity, location, and type to Emergency Management agencies	(1/ 1) 100%	(1/ 1) 100%
22. Emergency Management agencies have vehicles equipped with traffic signal preemption capability	(3/ 37) 8%	(8/ 37) 22%
21a. Freeway Management agencies receive incident severity, location, and type data from Emergency Management agencies	(1/ 1) 100%	(1/ 1) 100%
21b. Freeway Management agencies receive incident clearance activities information from Emergency Management agencies	(1/ 1) 100%	(1/ 1) 100%

Regional Multimodal Traveler Information Component Indicators

Data as of 5/1/00



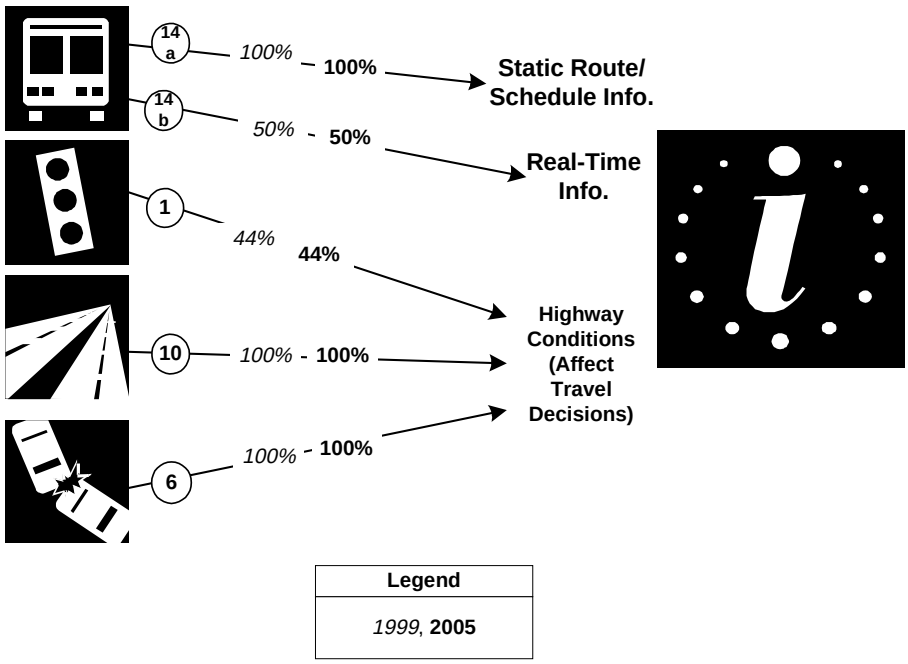
* Indicators are single surrogates that do not necessarily reflect the full breadth of ITS deployment activity.
** Deployment opportunity reflects potential totals that do not necessarily reflect actual need.

	1997			1999			2005		
Description	Num	Den	%	Num	Den	%	Num	Den	%
Freeway conditions disseminated to travelers	40	342	12%	38	342	11%	100	342	29%
Possible RMTI media types are used to display information to travelers	8	8	100%	7	8	88%	8	8	100%
Possible RMTI media are used to display information on *two or more modes* to travelers	8	8	100%	7	8	88%	7	8	88%

Regional Multimodal Traveler Information Integration Indicators

Atlanta

Regional Multimodal Traveler Information Integration*

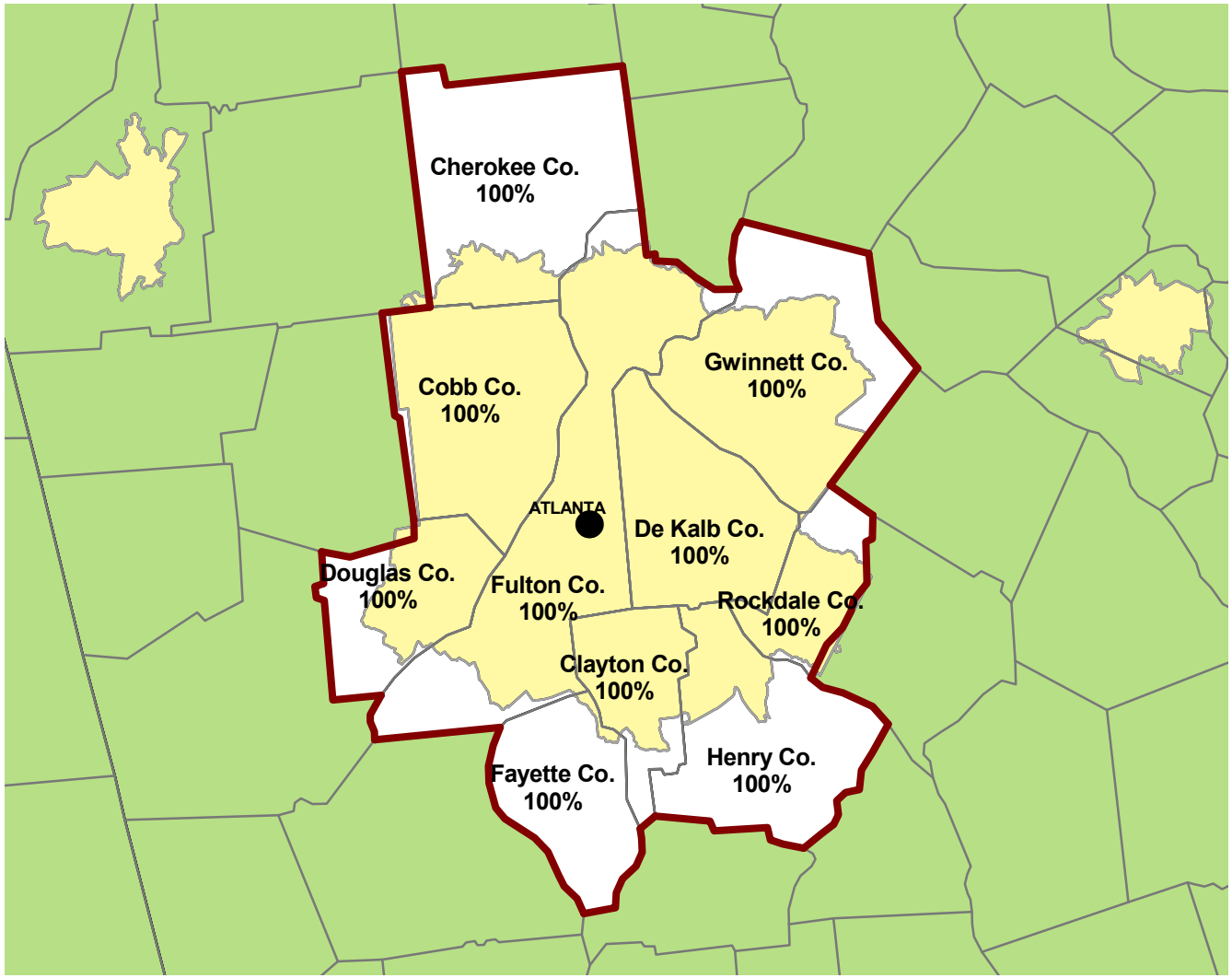


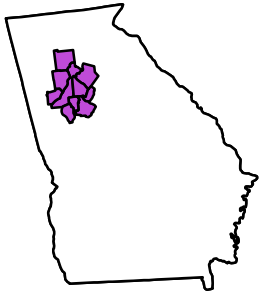
* Indicators are single surrogates that do not necessarily reflect the full breadth of ITS deployment activity

Link Description	1999	2005
14a. Transit Management agencies that disseminate information describing transit routes, schedules, and fares to travelers	(2/ 2) 100%	(2/ 2) 100%
14b. Transit Management agencies that disseminate information describing schedule/route adherence to travelers	(1/ 2) 50%	(1/ 2) 50%
1. Arterial Management agencies that disseminate arterial travel times, speeds, and conditions to the public	(4/ 9) 44%	(4/ 9) 44%
10. Freeway Management agencies that disseminate freeway travel times, speeds, and conditions to travelers	(1/ 1) 100%	(1/ 1) 100%
6. Incident Management agencies that disseminate information describing incident severity, location, and type to the public	(1/ 1) 100%	(1/ 1) 100%

Appendix A
Survey Coverage Area

ATLANTA REGIONAL COMMISSION, GA





City Included in Surveys

Metropolitan Planning Area Boundary

County Boundary

Urbanlized Area

Outside Survey Area

Percentage on the Map Represents Percentage of County Population Included within MPO Boundary

Appendix B
Surveyed Agencies

Surveyed Agencies

Agency Name	Phone	Fax	1999		1997	
			Out	In	Out	In
ATLANTA						
Arterial Management						
Henry County	(770) 954-2405	(770) 954-2418	7/30/1999	10/22/1999	07/23/1997	
Atlanta City	(404) 330-6501	(404) 658-7085	7/30/1999	12/17/1999	07/23/1997	10/21/1997
Cherokee County	(770) 479-0452	(770) 345-3372	7/30/1999	10/15/1999		
Georgia Department of Transportation	(404) 635-8117	(404) 635-8001	7/30/1999	12/28/1999	07/23/1997	09/23/1997
Clayton County	(770) 477-3691	(770) 473-5701	7/30/1999	8/13/1999	07/23/1997	09/09/1997
Cobb County	(770) 528-1608	(770) 528-1611	7/30/1999	8/16/1999	07/23/1997	09/09/1997
Gwinnett County	770-822-7450	(770) 822-7478	7/30/1999	10/21/1999	07/23/1997	09/23/1997
Rockdale County	(770) 785-5919	(770) 785-6909	7/30/1999		07/23/1997	
Fulton County	(404) 335-2539	(404) 730-6325	7/30/1999	10/21/1999	09/16/1997	11/24/1997
DeKalb County	(404) 508-3683	(404) 508-3609	7/30/1999		07/23/1997	08/26/1997
Electronic Toll Collection						
Georgia Federal Highway Administration	(404) 562-3655	(404) 562-3703	6/30/1999	7/8/1999	07/23/1997	09/09/1997
Emergency Management						
Henry County Police Department	(770) 954-2485	(770) 954-2295	6/2/1999	6/10/1999	07/25/1997	05/18/1998
Union City Fire Department	770-964-9934	770-969-9108	6/2/1999	6/8/1999	07/24/1997	08/05/1997
Clayton County Fire Department	(770) 473-7833	(770) 473-3837	6/2/1999	6/8/1999	07/24/1997	05/14/1998
Cobb County Fire Department	(770) 528-8309	(770) 528-8015	6/2/1999	8/16/1999	07/25/1997	05/14/1998
Smyrna City Fire Department	(770) 434-6667	(770) 431-2878	6/2/1999	6/2/1999	07/24/1997	07/25/1997
Cobb County Police Department	(770) 499-3904	(770) 499-4195	6/2/1999	7/23/1999	07/25/1997	07/28/1997
Fulton County Sheriff Department	(404) 730-5100	(404) 730-7105	6/2/1999	8/25/1999	07/24/1997	07/14/1998
Douglas County Fire Department	(770) 942-8626	(770) 920-7153	6/2/1999	6/2/1999	07/24/1997	05/13/1998
East Point City Fire Department	404-765-1120	404-765-1172	6/3/1999	6/9/1999	07/25/1997	08/07/1997
Fayette County Sheriffs Department	770-461-6353	(770) 719-5538	6/2/1999	9/3/1999	07/25/1997	05/14/1998
Atlanta City Fire Department	404-853-7000	404-853-7094	7/23/1999	8/19/1999	07/25/1997	05/20/1998
Douglas County Sheriff Department	(770) 920-4926	(770) 920-7135	6/2/1999	6/2/1999	07/24/1997	05/14/1998
Decatur City Fire Department	(404) 370-4122	(404) 370-4117	6/2/1999	6/11/1999	07/25/1997	08/06/1997
DeKalb County Emergency Management	(404) 294-2858	(404) 294-2003	6/1/1999	6/2/1999	07/24/1997	07/25/1997
Smyrna City Police Department	(770) 434-9481	(770) 431-2810	6/2/1999	6/3/1999	07/24/1997	07/28/1997
DeKalb County Police Department	(404) 294-2858	(404) 294-2003	6/1/1999	6/2/1999	07/24/1997	07/25/1997
Gwinnett County Police Department	(770) 513-5210	(770) 513-5005	6/2/1999	8/30/1999	07/25/1997	07/29/1997
Clayton County Police Department	770-477-3765	770-603-4086	6/2/1999	6/2/1999	07/26/1997	06/17/1998
Atlanta City Police Department	(404) 817-6885	404-817-6887	6/2/1999	9/2/1999	07/28/1997	08/04/1997

Agency Name	Phone	Fax	1999		1997	
			Out	In	Out	In
Georgia Emergency Management Agency	404-635-7007	404-635-7205	6/2/1999	6/7/1999	07/25/1997	07/29/1997
Fulton County Fire Department	(404-699-8907	404-699-8908	6/2/1999	6/3/1999	07/24/1997	07/29/1997
Marietta City Fire Department	(770) 794-5451	(770) 794-5465	6/2/1999	6/4/1999	07/24/1997	05/14/1998
Marietta City Police Department	(770) 794-5332	(770) 794-5301	6/2/1999	7/26/1999	07/24/1997	07/14/1998
Atlanta City Fire Department (Emergency	404-853-7000	404-853-7094	7/23/1999	8/19/1999	07/25/1997	07/29/1997
DeKalb County Sheriff Office	(404) 294-2858	(404) 294-2003	6/1/1999	6/2/1999	07/24/1997	07/25/1997
East Point City Police Department	(404) 765-1105	(404) 765-1108	6/2/1999	6/11/1999	07/24/1997	08/07/1997
DeKalb County Fire Department	(404) 294-2858	(404) 294-2003	6/1/1999	6/2/1999	07/24/1997	07/25/1997
Gwinnett County Fire Department	(770) 513-5675	(770) 513-5655	6/2/1999	6/10/1999	07/25/1997	05/14/1998
Decatur City Police Department	(404) 370-4122	(404) 370-4117	6/2/1999	6/11/1999		
Gwinette County Water Rescue	(770) 513-5675	(770) 513-5655	5/24/1999	6/1/1999	07/25/1997	05/14/1998
Gwinette County Emergency Medical & Hazmat	(770) 513-5675	(770) 513-5655	5/26/1999	6/1/1999	07/25/1997	05/14/1998
Cherokee County Sheriff's Department	(770) 928-0239	(770) 924-0866	6/2/1999	6/3/1999	07/24/1997	05/13/1998
Rockdale County Fire Department	(770) 929-1150	(770) 785-5917	6/2/1999	6/2/1999	07/24/1997	09/15/1997
Rockdale County Sheriffs Department	(770) 918-6700	(770) 785-2494	6/2/1999	6/10/1999	07/24/1997	07/29/1997
Roswell City Fire & Rescue	(770) 641-3730	(770) 641-3843	6/3/1999	6/3/1999	07/25/1997	07/31/1997
Roswell City Police Department	(770) 640-4100	(770) 640-4170	6/2/1999	7/28/1999	07/24/1997	07/13/1998
DeKalb County Emergency Medical Services	(404) 294-2858	(404) 294-2003	6/1/1999	6/2/1999	07/24/1997	07/25/1997
Freeway Management						
Georgia Department of Transportation	(404) 635-8009	(404) 635-8001	7/29/1999	10/18/1999	07/23/1997	09/09/1997
MPO						
Atlanta Regional Commission	(404) 364-2500	(404) 364-2599	7/15/1999	7/28/1999		
Transit Management						
Metropolitan Atlanta Rapid Transit Authority	(404) 848-5402	(404) 848-5321	8/18/1999	11/10/1999		
Douglas County Rideshare	(770)920-7516	(770)920-7515	8/9/1999	10/23/1999	07/21/1997	08/05/1997

Appendix C
Freeway Management Components

Freeway Management
Agencies for Metropolitan Area: Atlanta

	Georgia Department of Transportation	
	1999	**2005**
Agency Returned Survey?	Yes	
FREEWAY MANAGEMENT SECTION		
Number of freeway centerline miles that agency owns or maintains	NR	
Number of freeway centerline miles that is used for planning	NR	
Number of freeway entrance ramps that agency owns, operates or maintains	NR	
Number of freeway entrance ramps that is used for planning	NR	
Type of facilities used to conduct freeway/incident management activities		
Activities housed in a free-standing dedicated building?	No	
Activities housed in a building shared with other activities?	No	
Activities conducted in a dedicated control room?	No	
Control room contains operator console(s)?	No	
Control room contains electronic wall map?	No	
Control room contains CCTV display(s)?	No	
Activities conducted in a room containing workstations or PCs that manage traffic?	No	
Facilities are electronically linked to other transportation mgt facilities?	No	
Staffing and hours of operation of freeway/incident management activities		
Number of full-time agency staff members	NR	
Number of full time contractor staff members	NR	
Number of part-time agency staff members	NR	
Number of part-time contractor staff members	NR	
Staffed 24 hours day by agency staff or by others	NR	
Staffed during peak hours only by agency staff or by others	NR	
Staffed by others during off-peak hours	No	
Agency staff perform transportation management as an ancillary duty	No	
Agency staff dedicated to transportation management duty	No	
Types of operations conducted for freeway/incident management		
Incident detection and management?	No	
This metropolitan area?	No	
Other metropolitan area?	No	
Statewide?	No	
Monitoring and troubleshooting status of system components?	No	
Manual override of ramp metering rates at freeway on-ramps?	No	
Operating transportation management roadside devices?	No	
Radio communications with other agencies?	No	
Exchange of electronic data with other agencies such as computer aided dispatch?	No	

Freeway Management
Agencies for Metropolitan Area: Atlanta

	Georgia Department of Transportation	
	1999	**2005**
Real-Time Traffic Data Collection Technologies		
Total number of miles under surveillance with real-time data collection tech.	38	100
Number of Stations with data collection technologies		
Loop detectors	0	0
Video imaging detectors	0	0
Probe readers (elec. toll tags, transit vehicles, other technology)	0	0
Microwave radar	0	0
Other (e.g., acoustic detectors)	0	0
Number of Miles covered with data collection technologies		
Loop detectors	0	0
Video imaging detectors	0	0
Probe readers (elec. toll tags, transit vehicles, other technology)	0	0
Microwave radar	0	0
Other (e.g., acoustic detectors)	0	0
Variable Message Signs (VMS) on Freeways		
Candidate locations for deployment of VMS where VMS has been deployed	41	70
Candidate locations for deployment of VMS	NR	NR
Roadside Technologies used to Distribute Traveler Information		
Total number of miles where information is distributed	38	100
Number deployed		
Highway advisory radio	NR	NR
In-vehicle signing	0	0
Portable variable message signs	0	0
Other	0	0
Miles covered		
Highway advisory radio	0	0
In-vehicle signing	0	0
Portable variable message signs	0	0
Other	0	0
Ramp Meters on Freeways		
Number of entrance ramp meters operated under isolated control	NR	NR
Number of entrance ramp meters operated under central control	NR	NR
Number of entrance ramp meters that provide preemption for emergency vehicles	NR	NR
Number of entrance ramp meters that provide priority for transit vehicles	NR	NR
Total number of metered ramps	5	30
Freeway centerline miles under lane control	NR	NR
Communication Links		
Freeway centerline miles covered by the following type of communication		
Twisted pair cable	0	0
Coaxial cable	0	0
Fiber-optic cable	0	0
Microwave radio	0	0

Freeway Management
Agencies for Metropolitan Area: Atlanta

	Georgia Department of Transportation	
	1999	**2005**
Other	0	0
ITS Standards Used Related to Freeway Management		
ATMS Data Dictionary Sections 1 and 2 (ITE TM 1.01)	No	
ATMS Data Dictionary Sections 3 and 4 (ITE TM 1.02)	No	
Message Set for External TMC Communication (ITE-9604-1)	No	
NTCIP Class B Profile (AASHTO TS 3.3)	No	
NTCIP Data Collection and Monitoring Devices (AASHTO TS 3.DCM)	No	
NTCIP Object Definitions for Environmental Sensor Stations (AASHTO TS 3.7)	No	
NTICP Object Definitions for Dynamic Message Signs (AASHTO TS 3.6)	No	
NTICP Object Definitions for Highway Advisory Radio (AASHTO TS 3.HAR)	No	
NTICP Object Definitions for Ramp Meter Control (AASHTO TS 3.RMC)	No	
NTICP Object Definitions for Transportation Sensor Systems (AASHTO TS 3.TSS)	No	
NTICP Object Definitions for Video Camera Control (AASHTO TS 3.VCC)	No	
Would agency be willing to participate in testing of ITS Standards?	NR	
Have agreements in place with other agencies to use similar hardware		
and software to aid maintenance and interoperability?	NR	
INCIDENT MANAGEMENT SECTION		
Use of Service Patrols to Assist in Detection and Response to Incidents		
Publicly operated service patrol vehicles	Yes	
Privately operated service patrol vehicles operated under public contract	No	
Total number of freeway miles patrolled by these services	250	400
Miles Covered by Methods to Detect and Verify Incidents		
Free cellular phone call to a dedicated phone number other than 911	NR	NR
Police patrols	NR	NR
Computer algorithms linked to traffic surveillance equipment	38	100
CCTV	38	100
Private sector sources (e.g., Shadow Traffic, SmartRoutes)	NR	NR
Other (e.g., free cell phone call to an area radio system, etc.)	NR	NR
Procedures in place for Freeway Incident Response?		
Working agreement(s)/arrangement(s) with other agencies	No	
Inter-agency incident management admin. team that meets regularly	No	
Major incident response team that responds to major incidents	No	
Set of goals/objectives for incident mgt that has been adopted by agencies in region	No	
Central focal point for facilitating the two-way flow of information		
among agencies responding to an incident?		
The central focal point is a Freeway or Traffic Management Center	No	
The central focal point is a Police, Fire or joint dispatch center	No	
The central focal point is another center	No	

	Georgia Department of Transportation	
	1999	**2005**
Methods of Communication Used On-Site at an Incident		
Police		
Two-way radio	No	
800 MHz trunked radio	No	
Cellular telephone	No	
Hand-held (i.e., walkie-talkie)	No	
Automated data systems (i.e., CAD)	No	
Fire		
Two-way radio	No	
800 MHz trunked radio	No	
Cellular telephone	No	
Hand-held (i.e., walkie-talkie)	No	
Automated data systems (i.e., CAD)	No	
DOT		
Two-way radio	No	
800 MHz trunked radio	No	
Cellular telephone	No	
Hand-held (i.e., walkie-talkie)	No	
Automated data systems (i.e., CAD)	No	
Towing		
Two-way radio	No	
800 MHz trunked radio	No	
Cellular telephone	No	
Hand-held (i.e., walkie-talkie)	No	
Automated data systems (i.e., CAD)	No	
Which police agencies typically respond to incidents on freeways?		
State Police	No	
County Police or Sheriff	No	
City Police	No	
Who provides on-site emergency medical response?		
Fire	No	
Emergency Management Service Agency	No	
Private hospital	No	
Has a multi-agency contact list been developed in area containing the		
names, phone numbers, etc. for the appropriate response personnel?	NR	
Is the Incident Command System used to manage incident scenes?	NR	
Is there a legal specification by state law or formal agreement as to who		
is "in charge" at the incident scene?		
Specified by state law?	No	

Freeway Management
Agencies for Metropolitan Area: Atlanta

	Georgia Department of Transportation	
	1999	**2005**
Formal agreement?	No	
Not specified or don't know?	No	
On-scene command post used to manage activities of responding agencies?	NR	
Are there communication linkages to a communications traffic/freeway mgt center?	NR	
Plan developed and adopted by responding agencies for staging and parking		
response vehicles and equip. at incident site that minimizes lane blockage		
and facilitates the re-opening of lanes?	NR	
Respondents protected through law or court opinion for liability claims		
for damages to vehicles or cargoes during clearance activities?	NR	
Are overturned tank trucks, which are intact and not leaking, uprighted		
without first off-loading?	NR	
Does your state or local jurisdiction have a law that requires drivers		
involved in property-damage-only accidents to move the vehicles		
from travel lanes to a safe location to exchange info and wait for police?	NR	
Have laws or policies regarding the removal of stalled/abandoned vehicles		
from freeway shoulders?	NR	
Hours abandoned vehicles are allowed to remain on a freeway shoulder?	NR	
Have policies or procedures for quick removal of vehicles?	NR	
Is Total Station equipment used to investigate major incidents?	NR	
Handling of Towing Responses to Incidents		
Formal contract based on qualifications?	No	
Rotation with companies under contract?	No	
Separate lists kept for light and heavy response and for specialty recovery?	NR	
Rotation list with minimal qualifications?	No	
In towing qualifications, do you require towers to be certified under the		
Towing and Recovery Ass. of America's National Drivers Cert. Program?	NR	
DK: Don't know		
NR: No Response		
Leg: Legislation or action being planned		

Appendix D
Freeway Management Integration

Freeway Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Georgia Department of Transportation	
	1999	**2005**
Agency Returned Survey?	Yes	
Freeway Management Section		
Agencies your agency provides freeway travel times, speeds, and		
conditions information, share infrastructure or coordinates operation		
Freeway Management Agencies		
Provide Information	None listed	None listed
Share Infrastructure	None listed	None listed
Coordinate Operation	None listed	None listed
Incident Management Agencies		
Provide Information	short survey	None listed
Share Infrastructure	None listed	None listed
Coordinate Operation	None listed	None listed
Arterial Management Agencies		
Provide Information	short survey	None listed
Share Infrastructure	None listed	None listed
Coordinate Operation	None listed	None listed
Public Transit Operators		
Provide Information	short survey	None listed
Share Infrastructure	None listed	None listed
Coordinate Operation	None listed	None listed
Receiving real-time information via electronic means from others		
Incident Management agencies from which your agency receives		
incident severity, location, and type information	None listed	None listed
Arterial Management agencies from which your agency receives		
arterial travel times, speeds, and conditions	short survey	None listed
Public Transit operators from which your agency receives		
freeway travel times derived from vehicle probes	None listed	None listed
Toll Collection agencies from which your agency receives freeway travel		
times derived from vehicles probes	short survey	None listed
Freeway Incident Management Section		
Agencies your agency provides incident severity, location, and type info.		
and/or shares infrastructure and/or coordinates operation		
Arterial Management Agencies		
Provide Information	short survey	None listed
Share Infrastructure	None listed	None listed
Coordinate Operation	None listed	None listed
Emergency Management Agencies		
Provide Information	short survey	None listed
Share Infrastructure	None listed	None listed

Freeway Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Georgia Department of Transportation	
	1999	**2005**
Coordinate Operation	None listed	None listed
Freeway Management Agencies		
Provide Information	None listed	None listed
Share Infrastructure	None listed	None listed
Coordinate Operation	None listed	None listed
Public Transit Operators		
Provide Information	short survey	None listed
Share Infrastructure	None listed	None listed
Coordinate Operation	None listed	None listed
Receiving real-time information via electronic means from others		
Emergency Management agencies from which your agency receives		
incident clearance and/or incident severity and type		
Receive Arterial Incident Clearance Information	short survey	None listed
Receive Arterial Incident Severity Information	short survey	None listed
Arterial Management agencies from which your agency receives		
arterial travel times, speeds, and conditions	None listed	None listed
Freeway Management agencies from which your agency receives		
freeway travel times, speeds, and conditions	None listed	None listed

*short survey: Agency responded using a short survey. The survey did not include names of individual agencies, but only identified whether integration exists.

Appendix E
Freeway Management Information Collection and Dissemination

Data Collection and Dissemination: Freeway Management
Agencies for Metropolitan Area: Atlanta

Agency Name	Georgia Department of Transportation	
	1999	**2005**
Agency Returned Survey?	Yes	
Freeway Management Section		
Data collected, archived, and/or transferred to another agency		
Collected by your agency	NR	NR
Archived by your agency	NR	NR
Transferred to another agency by your agency	NR	NR
Importance of making information available to the public		
Ranked High	NR	
Ranked Medium	NR	
Ranked Low	NR	
Groups that make requests for the data	NR	
What is the data used for?	NR	
Methods used to disseminate freeway information to the public		
Technologies your agency uses to disseminate:	Telephone system, Internet Web sites, Kiosks, In-vehicle navigation systems	Dedicated cable TV, Pagers or personal data assistants, Interactive TV, E-mail or other direct PC communication
Technologies your agency (through another agency or org.) uses to disseminate:	NR	NR
Internet web site reporting freeway conditions	NR	
Telephone system for reporting freeway information to the public	NR	
Organizations your agency sends information for dissemination to the public	NR	
Freeway Incident Management Section		
Methods used to distribute incident location and severity information		
to the public		
Technologies your agency uses to disseminate:	Telephone system, Internet Web sites, Kiosks, In-vehicle navigation systems	Dedicated cable TV, Pagers or personal data assistants, Interactive TV, E-mail or other direct PC communication
Technologies your agency (through another agency or org.) uses to disseminate:	NR	NR
Internet web site reporting incident information	NR	
Telephone system for reporting incident information to the public	NR	
Organizations your agency sends information for dissemination to the public	NR	

Appendix F
Arterial Management Components

Arterial Management
Agencies for Metropolitan Area: Atlanta

	Atlanta City		Cherokee County		Clayton County		Cobb County	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**	**1999**	**2005**
Agency Returned Survey?	Yes		Yes		Yes		Yes	
ARTERIAL MANAGEMENT SECTION								
Number of arterial miles that agency owns or maintains	NR		28		63		700	
Number of arterial miles that is used for planning	NR		NR		63		700	
Number of highway-rail intersections that agency maintains	NR		4		31		42	
Number of highway-rail intersections that is used for planning	NR		4		31		30	
Type of facilities used to conduct arterial management activities								
Activities housed in a free-standing dedicated building?	No		No		No		No	
Activities housed in a building shared with other activities?	No		No		Yes		No	
Activities conducted in a dedicated control room?	No		No		Yes		Yes	
Control room contains operator console(s)?	No		No		Yes		Yes	
Control room contains electronic wall map?	No		No		No		Yes	
Control room contains CCTV display(s)?	No		No		Yes		Yes	
Activities conducted in a room containing workstations or PCs that manage traffic?	No		No		Yes		No	
Facilities are electronically linked to other transportation mgt facilities?	No		No		Yes		No	
Staffing and hours of operation of arterial management activities								
Number of full-time agency staff members	NR		NR		2		2	
Number of full time contractor staff members	NR		NR		NR		NR	
Number of part-time agency staff members	NR		NR		NR		10	
Number of part-time contractor staff members	NR		NR		NR		NR	
Staffed 24 hours day by agency staff or by others	NR		NR		NR		NR	
Staffed during peak hours only by agency staff or by others	NR		NR		agency		agency	
Staffed by others during off-peak hours	No		No		No		No	
Agency staff perform transportation management as an ancillary duty	No		No		Yes		No	
Agency staff dedicated to transportation management duty	No		No		No		Yes	
Types of operations conducted for arterial management								
Incident detection and management?	No		No		No		Yes	
This metropolitan area?	No		No		No		No	
Other metropolitan area?	No		No		No		No	
Monitoring and troubleshooting status of system components?	No		No		Yes		Yes	
Radio communications with other agencies?	No		No		Yes		No	
Exchange of electronic data with other agencies such as computer aided dispatch?	No		No		No		No	
Manual override of traffic signal timing plans	No		No		Yes		Yes	
Operating transportation mgt roadside devices (e.g., VMS, CCTV, etc.)	No		No		Yes		Yes	
Describe agency's role in traffic signal control	NR		incorporated area		All roads in county		incorporated area	
Traffic Signals Operated by Agency								

Arterial Management
Agencies for Metropolitan Area: Atlanta

	Atlanta City		Cherokee County		Clayton County		Cobb County	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**	**1999**	**2005**
Number of signalized intersections operated and owned by agency	NR	NR	18	NR	195	NR	409	500
Number of signalized intersections operated by agency but owned by another	NR	NR	NR	NR	NR	NR	NR	NR
Total number of signalized intersections operated by agency	872	900	18	NR	195	NR	409	500
Characteristics of signalized intersections that agency operates								
Under closed loop or central system control	580	750	18	NR	105	NR	258	NR
Under real-time traffic adaptive control using advanced software	0	0	NR	NR	NR	NR	0	0
Using SCOOT	No		No		No		No	
Using SCATS	No		No		No		No	
Name of software	NR		NR		NR		NR	
Allow signal preemption for emergency vehicles	0	0	NR	NR	NR	NR	5	5
Allow signal priority for transit vehicles	0	100	NR	NR	NR	NR	0	20
Within 200 feet of a highway-rail intersection	0	0	NR	NR	19	NR	5	5
Within 200 feet of a highway-rail intersection that adjust signal timing	0	0	NR	NR	19	NR	5	5
Software used to control the signals agency operates								
Date of last upgrade to traffic signal control system software?	NR		will update before 12/31/99		June 1999		NR	
How often do you update signal timing?	NR		one time per year		Once per year		every four years	
Software used and number of signalized intersections under control (1999, 2005)	NR		TRANAST, NR, NR Bi-Tran 170, NR, NR MARC-EAGLE, NR, NR		MARC ver. 7.0, 10, NR SMARTWAYS ver. 3.0, 47, NR QuicNet ver. 4.0, 48, NR		PEEK SMARTWAYS, 242, 285	
Controllers used to control signals								
NEMA	0	0	7	NR	57	NR	409	300
170/179	0	0	11	NR	48	NR	0	0
2070 controller	0	0	0	0	0	0	0	200
Other	0	0	0	0	0	0	0	0
Technologies Associated with Highway-Rail Intersections								
Total number of highway-rail intersections under electronic surveillance	NR	NR	NR	NR	19	NR	NR	NR
Highway-Rail intersection capapbilities								
Video surveillance	0	0	0	0	4	NR	0	0
Electronic surveillance other than video	0	0	0	0	19	NR	0	0
Ability to predict train arrival electronically	0	0	0	0	0	0	0	0
Equipped with electronic traffic violator devices	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Real-Time Electronic Traffic Data Collection Technologies								
Total number of signalized intersections covered by electronic surveillance	NR	NR	NR	NR	NR	NR	409	500
Number of signalized intersections with data collection technologies								
Loop detectors	0	0	0	0	0	0	409	450
Video detection cameras	0	0	0	0	0	0	4	50
Probe readers reading toll tags	0	0	0	0	0	0	0	0

	Atlanta City		Cherokee County		Clayton County		Cobb County	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**	**1999**	**2005**
Probe readers reading license plates	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Roadside Technologies used to Distribute Traveler Information								
Number deployed								
Highway Advisory Radio	NR	NR	NR	NR	NR	NR	NR	NR
In-Vehicle Signing (IVS)	NR	NR	NR	NR	NR	NR	NR	NR
VMS controlling parking access	NR	NR	NR	NR	NR	NR	NR	NR
Miles covered								
Highway Advisory Radio	NR	NR	NR	NR	NR	NR	NR	NR
In-Vehicle Signing (IVS)	NR	NR	NR	NR	NR	NR	NR	NR
Variable Message Signs (VMS) on Arterials								
Candidate locations for deployment of VMS where VMS has been deployed	0	10	NR	NR	10	NR	4	15
Candidate locations for deployment of VMS	28	28	NR	NR	10	NR	20	20
Communication Technologies								
Signalized intersections communicated with by each type of communication								
Twisted pair cable	0	0	0	0	0	NR	146	51
Coaxial cable	0	0	0	0	0	0	0	0
Fiber-optic cable	0	0	0	0	105	NR	96	249
Other (e.g., wireless, dial-up modems, leased lines, etc.)	0	0	0	0	5	0	0	0
Does agency convey information on highway-rail intersection crossing								
status to travelers via roadside media such as VMS or HAR?	No		No		No		No	
ITS Standards Used Related to Traffic Signal Control								
Advanced Transportation Controller (ATC) Software Application Interface (ITE 9603-1)	No		No		No		No	
ATC Physical Cabinet Functional Design (ITE-9603-2)	No		No		No		No	
ATC Functionality and Interface Definitions (ITE-9603-3)	No		No		No		No	
Natl. Trans. Communications for ITS Protocol (NTCIP) Class B Profile (AASHTO TS 3.3)	No		No		No		No	
NTCIP Data Collection and Monitoring Devices (AASHTO TS 3.DCM)	No		No		No		No	
NTCIP Object Definitions for Video Camera Control (AASHTO TS 3.VCC)	No		No		No		No	
NTCIP Object Definitions for Actuated Traffic Signal Controller Units (AASHTO TS 3.5)	No		No		No		No	
Would agency be willing to participate in testing of ITS Standards?	NR		No		Yes		Yes	
Have agreements in place with other agencies to use similar hardware								
and software to aid maintenance and interoperability?	NR		No		Yes		Yes	
INCIDENT MANAGEMENT ON ARTERIAL STREETS								
Receive information on highway-rail intersection crossing blockages for								
the purpose of managing incident response?	No		No		No		No	
Use of Service Patrols to Assist in Detection and Response to Incidents								
Publicly operated service patrol vehicles	No		No		No		No	
Privately operated service patrol vehicles operated under public contract	No		No		No		No	
Total number of arterial miles patrolled by these services	NR	NR	NR	NR	NR	NR	NR	NR
Miles Covered by Methods to Detect and Verify Incidents								
Free cellular phone call to a dedicated phone number other than 911	0	0	0	0	NR	63	0	0
Free cellular phone call to an area radio station	0	0	0	0	0	0	0	0

Arterial Management
Agencies for Metropolitan Area: Atlanta

	Atlanta City		Cherokee County		Clayton County		Cobb County	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**	**1999**	**2005**
Police patrols	0	0	0	0	63	63	0	0
Computer algorithms linked to traffic surveillance equipment	0	0	0	0	0	0	0	0
CCTV	30	30	0	0	30	50	0	0
Private sector sources (e.g., Shadow Traffic, Smart Routes)	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Procedures in place for Arterial Incident Response?								
Working agreement(s)/arrangement(s) with other agencies	No		No		No		No	
Inter-agency incident management admin. team that meets regularly	No		No		No		No	
Major incident response team that responds to major incidents	No		No		No		No	
Set of goals/objectives for incident mgt that has been adopted by agencies in region	No		No		No		No	
Methods of Communication Used On-Site at an Incident								
Police								
Two-way radio	No		No		No		No	
800 MHz trunked radio	No		No		No		No	
Cellular telephone	No		No		No		No	
Hand-held (i.e., walkie-talkie)	No		No		No		No	
Automated data systems (i.e., CAD)	No		No		No		No	
Other	No		No		No		No	
Fire								
Two-way radio	No		No		No		No	
800 MHz trunked radio	No		No		No		No	
Cellular telephone	No		No		No		No	
Hand-held (i.e., walkie-talkie)	No		No		No		No	
Automated data systems (i.e., CAD)	No		No		No		No	
Other	No		No		No		No	
DOT								
Two-way radio	No		No		Yes		No	
800 MHz trunked radio	No		No		No		No	
Cellular telephone	No		No		Yes		No	
Hand-held (i.e., walkie-talkie)	No		No		No		No	
Automated data systems (i.e., CAD)	No		No		No		No	
Other	No		No		No		No	
Towing								
Two-way radio	No		No		No		No	
800 MHz trunked radio	No		No		No		No	
Cellular telephone	No		No		No		No	
Hand-held (i.e., walkie-talkie)	No		No		No		No	
Automated data systems (i.e., CAD)	No		No		No		No	
Other	No		No		No		No	
Which police agencies typically respond to incidents on arterials?								

Arterial Management
Agencies for Metropolitan Area: Atlanta

	Atlanta City		Cherokee County		Clayton County		Cobb County	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**	**1999**	**2005**
State Police	No		No		No		No	
County Police or Sheriff	No		No		Yes		No	
City Police	No		No		Yes		No	
Who provides on-site emergency medical response?								
Fire	No		No		No		No	
Emergency Management Service Agency	No		No		Yes		No	
Private hospital	No		No		No		No	
Has a multi-agency contact list been developed in area containing the								
names, phone numbers, etc. for the appropriate response personnel?	NR		NR		No		NR	
Is the Incident Command System used to manage incident scenes?	NR		NR		DK		NR	
Is there a legal specification by state law or formal agreement as to who								
is "in charge" at the incident scene?								
Specified by state law?	No		No		No		No	
Formal agreement?	No		No		No		No	
Not specified or don't know?	No		No		Yes		No	
On-scene command post used to manage activities of responding agencies?	NR		NR		DK		NR	
Are there communication linkages to a communications traffic/freeway mgt center?	NR		NR		NR		NR	
Plan developed and adopted by responding agencies for staging and parking								
response vehicles and equip. at incident site that minimizes lane blockage								
and facilitates the re-opening of lanes?	NR		NR		DK		NR	
Respondents protected through law or court opinion for liability claims								
for damages to vehicles or cargoes during clearance activities?	NR		NR		DK		NR	
Are overturned tank trucks, which are intact and not leaking, uprighted								
without first off-loading?	NR		NR		NR		NR	
Does your state or local jurisdiction have a law that requires drivers								
involved in property-damage-only accidents to move the vehicles								
from travel lanes to a safe location to exchange info and wait for police?	NR		NR		Yes		NR	
Have laws or policies regarding the removal of stalled/abandoned vehicles								
from freeway shoulders?	NR		NR		Yes		NR	
Hours abandoned vehicles are allowed to remain on a freeway shoulder?	NR		NR		DK		NR	
Have policies or procedures for quick removal of vehicles?	NR		NR		No		NR	
Is Total Station equipment used to investigate major incidents?	NR		NR		DK		Yes	
Handling of Towing Responses to Incidents								
Formal contract based on qualifications?	No		No		No		No	
Rotation with companies under contract?	No		No		No		No	
Separate lists kept for light and heavy response and for specialty recovery?	NR		NR		NR		NR	
Rotation list with minimal qualifications?	No		No		Yes		No	

Arterial Management
Agencies for Metropolitan Area: Atlanta

	Atlanta City		Cherokee County		Clayton County		Cobb County	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**	**1999**	**2005**
In towing qualifications, do you require towers to be certified under the								
Towing and Recovery Ass. of America's National Drivers Cert. Program?	NR		NR		DK		NR	
DK: Don't know								
NR: No Response								
Leg: Legislation or action being planned								

Arterial Management
Agencies for Metropolitan Area: Atlanta

	Douglas County		Fulton County		Georgia Department of Transportation		Gwinnett County	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**	**1999**	**2005**
Agency Returned Survey?	Yes		Yes		Yes		Yes	
ARTERIAL MANAGEMENT SECTION								
Number of arterial miles that agency owns or maintains	NR		NR		NR		NR	
Number of arterial miles that is used for planning	NR		NR		NR		NR	
Number of highway-rail intersections that agency maintains	NR		5		460		NR	
Number of highway-rail intersections that is used for planning	NR		NR		NR		NR	
Type of facilities used to conduct arterial management activities								
Activities housed in a free-standing dedicated building?	No		No		No		No	
Activities housed in a building shared with other activities?	No		No		No		No	
Activities conducted in a dedicated control room?	No		No		No		No	
Control room contains operator console(s)?	No		No		No		No	
Control room contains electronic wall map?	No		No		No		No	
Control room contains CCTV display(s)?	No		No		No		No	
Activities conducted in a room containing workstations or PCs that manage traffic?	No		No		No		No	
Facilities are electronically linked to other transportation mgt facilities?	No		No		No		No	
Staffing and hours of operation of arterial management activities								
Number of full-time agency staff members	NR		NR		NR		NR	
Number of full time contractor staff members	NR		NR		NR		NR	
Number of part-time agency staff members	NR		NR		NR		NR	
Number of part-time contractor staff members	NR		NR		NR		NR	
Staffed 24 hours day by agency staff or by others	NR		NR		NR		NR	
Staffed during peak hours only by agency staff or by others	NR		NR		NR		NR	
Staffed by others during off-peak hours	No		No		No		No	
Agency staff perform transportation management as an ancillary duty	No		No		No		No	
Agency staff dedicated to transportation management duty	No		No		No		No	
Types of operations conducted for arterial management								
Incident detection and management?	No		No		No		No	
This metropolitan area?	No		No		No		No	
Other metropolitan area?	No		No		No		No	
Monitoring and troubleshooting status of system components?	No		No		No		No	
Radio communications with other agencies?	No		No		No		No	
Exchange of electronic data with other agencies such as computer aided dispatch?	No		No		No		No	
Manual override of traffic signal timing plans	No		No		No		No	
Operating transportation mgt roadside devices (e.g., VMS, CCTV, etc.)	No		No		No		No	
Describe agency's role in traffic signal control	NR		NR		NR		NR	
Traffic Signals Operated by Agency								

Arterial Management
Agencies for Metropolitan Area: Atlanta

	Douglas County		Fulton County		Georgia Department of Transportation		Gwinnett County	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**	**1999**	**2005**
Number of signalized intersections operated and owned by agency	NR	NR	NR	NR	NR	NR	NR	NR
Number of signalized intersections operated by agency but owned by another	NR	NR	NR	NR	NR	NR	NR	NR
Total number of signalized intersections operated by agency	NR	NR	350	400	160	200	480	NR
Characteristics of signalized intersections that agency operates								
Under closed loop or central system control	NR	NR	105	240	95	115	200	NR
Under real-time traffic adaptive control using advanced software	NR	NR	0	0	0	20	0	NR
Using SCOOT	No		No		No		No	
Using SCATS	No		No		No		No	
Name of software	NR		NR		NR		NR	
Allow signal preemption for emergency vehicles	NR	NR	0	50	0	30	2	NR
Allow signal priority for transit vehicles	NR	NR	0	0	0	30	0	NR
Within 200 feet of a highway-rail intersection	NR	NR	5	7	10	12	2	NR
Within 200 feet of a highway-rail intersection that adjust signal timing	NR	NR	5	7	10	12	2	NR
Software used to control the signals agency operates								
Date of last upgrade to traffic signal control system software?	NR		NR		NR		NR	
How often do you update signal timing?	NR		NR		NR		NR	
Software used and number of signalized intersections under control (1999, 2005)	NR		NR		NR		NR	
Controllers used to control signals								
NEMA	0	0	0	0	0	0	0	0
170/179	0	0	0	0	0	0	0	0
2070 controller	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Technologies Associated with Highway-Rail Intersections								
Total number of highway-rail intersections under electronic surveillance	NR	NR	NR	NR	1	5	NR	NR
Highway-Rail intersection capapbilities								
Video surveillance	0	0	0	0	0	0	0	0
Electronic surveillance other than video	0	0	0	0	0	0	0	0
Ability to predict train arrival electronically	0	0	0	0	0	0	0	0
Equipped with electronic traffic violator devices	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Real-Time Electronic Traffic Data Collection Technologies								
Total number of signalized intersections covered by electronic surveillance	NR	NR	NR	NR	NR	NR	NR	NR
Number of signalized intersections with data collection technologies								
Loop detectors	0	0	0	0	0	0	0	0
Video detection cameras	0	0	0	0	0	0	0	0
Probe readers reading toll tags	0	0	0	0	0	0	0	0

	Douglas County		Fulton County		Georgia Department of Transportation		Gwinnett County	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**	**1999**	**2005**
Probe readers reading license plates	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Roadside Technologies used to Distribute Traveler Information								
Number deployed								
Highway Advisory Radio	NR	NR	NR	NR	NR	NR	NR	NR
In-Vehicle Signing (IVS)	NR	NR	NR	NR	NR	NR	NR	NR
VMS controlling parking access	NR	NR	NR	NR	NR	NR	NR	NR
Miles covered								
Highway Advisory Radio	NR	NR	NR	NR	NR	NR	NR	NR
In-Vehicle Signing (IVS)	NR	NR	NR	NR	0	50	NR	NR
Variable Message Signs (VMS) on Arterials								
Candidate locations for deployment of VMS where VMS has been deployed	NR	NR	0	10	61	105	NR	NR
Candidate locations for deployment of VMS	NR	NR	0	30	NR	NR	NR	NR
Communication Technologies								
Signalized intersections communicated with by each type of communication								
Twisted pair cable	0	0	0	0	0	0	0	0
Coaxial cable	0	0	0	0	0	0	0	0
Fiber-optic cable	0	0	0	0	0	0	0	0
Other (e.g., wireless, dial-up modems, leased lines, etc.)	0	0	0	0	0	0	0	0
Does agency convey information on highway-rail intersection crossing								
status to travelers via roadside media such as VMS or HAR?	No		No		No		No	
ITS Standards Used Related to Traffic Signal Control								
Advanced Transportation Controller (ATC) Software Application Interface (ITE 9603-1)	No		No		No		No	
ATC Physical Cabinet Functional Design (ITE-9603-2)	No		No		No		No	
ATC Functionality and Interface Definitions (ITE-9603-3)	No		No		No		No	
Natl. Trans. Communications for ITS Protocol (NTCIP) Class B Profile (AASHTO TS 3.3)	No		No		No		No	
NTCIP Data Collection and Monitoring Devices (AASHTO TS 3.DCM)	No		No		No		No	
NTCIP Object Definitions for Video Camera Control (AASHTO TS 3.VCC)	No		No		No		No	
NTCIP Object Definitions for Actuated Traffic Signal Controller Units (AASHTO TS 3.5)	No		No		No		No	
Would agency be willing to participate in testing of ITS Standards?	NR		NR		NR		No	
Have agreements in place with other agencies to use similar hardware								
and software to aid maintenance and interoperability?	NR		NR		NR		No	
INCIDENT MANAGEMENT ON ARTERIAL STREETS								
Receive information on highway-rail intersection crossing blockages for								
the purpose of managing incident response?	No		No		No		No	
Use of Service Patrols to Assist in Detection and Response to Incidents								
Publicly operated service patrol vehicles	No		No		No		No	
Privately operated service patrol vehicles operated under public contract	No		No		No		No	
Total number of arterial miles patrolled by these services	NR	NR	NR	NR	0	50	NR	NR
Miles Covered by Methods to Detect and Verify Incidents								
Free cellular phone call to a dedicated phone number other than 911	0	0	0	0	0	0	0	0
Free cellular phone call to an area radio station	0	0	0	0	0	0	0	0

Arterial Management
Agencies for Metropolitan Area: Atlanta

	Douglas County		Fulton County		Georgia Department of Transportation		Gwinnett County	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**	**1999**	**2005**
Police patrols	0	0	0	0	0	0	0	0
Computer algorithms linked to traffic surveillance equipment	0	0	0	0	0	0	0	0
CCTV	0	0	0	15	0	0	15	NR
Private sector sources (e.g., Shadow Traffic, Smart Routes)	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Procedures in place for Arterial Incident Response?								
Working agreement(s)/arrangement(s) with other agencies	No		No		No		No	
Inter-agency incident management admin. team that meets regularly	No		No		No		No	
Major incident response team that responds to major incidents	No		No		No		No	
Set of goals/objectives for incident mgt that has been adopted by agencies in region	No		No		No		No	
Methods of Communication Used On-Site at an Incident								
Police								
Two-way radio	No		No		No		No	
800 MHz trunked radio	No		No		No		No	
Cellular telephone	No		No		No		No	
Hand-held (i.e., walkie-talkie)	No		No		No		No	
Automated data systems (i.e., CAD)	No		No		No		No	
Other	No		No		No		No	
Fire								
Two-way radio	No		No		No		No	
800 MHz trunked radio	No		No		No		No	
Cellular telephone	No		No		No		No	
Hand-held (i.e., walkie-talkie)	No		No		No		No	
Automated data systems (i.e., CAD)	No		No		No		No	
Other	No		No		No		No	
DOT								
Two-way radio	No		No		No		No	
800 MHz trunked radio	No		No		No		No	
Cellular telephone	No		No		No		No	
Hand-held (i.e., walkie-talkie)	No		No		No		No	
Automated data systems (i.e., CAD)	No		No		No		No	
Other	No		No		No		No	
Towing								
Two-way radio	No		No		No		No	
800 MHz trunked radio	No		No		No		No	
Cellular telephone	No		No		No		No	
Hand-held (i.e., walkie-talkie)	No		No		No		No	
Automated data systems (i.e., CAD)	No		No		No		No	
Other	No		No		No		No	
Which police agencies typically respond to incidents on arterials?								

Arterial Management
Agencies for Metropolitan Area: Atlanta

	Douglas County		Fulton County		Georgia Department of Transportation		Gwinnett County	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**	**1999**	**2005**
State Police	No		No		No		No	
County Police or Sheriff	No		No		No		No	
City Police	No		No		No		No	
Who provides on-site emergency medical response?								
Fire	No		No		No		No	
Emergency Management Service Agency	No		No		No		No	
Private hospital	No		No		No		No	
Has a multi-agency contact list been developed in area containing the								
names, phone numbers, etc. for the appropriate response personnel?	NR		NR		NR		NR	
Is the Incident Command System used to manage incident scenes?	NR		NR		NR		NR	
Is there a legal specification by state law or formal agreement as to who								
is "in charge" at the incident scene?								
Specified by state law?	No		No		No		No	
Formal agreement?	No		No		No		No	
Not specified or don't know?	No		No		No		No	
On-scene command post used to manage activities of responding agencies?	NR		NR		NR		NR	
Are there communication linkages to a communications traffic/freeway mgt center?	NR		NR		NR		NR	
Plan developed and adopted by responding agencies for staging and parking								
response vehicles and equip. at incident site that minimizes lane blockage								
and facilitates the re-opening of lanes?	NR		NR		NR		NR	
Respondents protected through law or court opinion for liability claims								
for damages to vehicles or cargoes during clearance activities?	NR		NR		NR		NR	
Are overturned tank trucks, which are intact and not leaking, uprighted								
without first off-loading?	NR		NR		NR		NR	
Does your state or local jurisdiction have a law that requires drivers								
involved in property-damage-only accidents to move the vehicles								
from travel lanes to a safe location to exchange info and wait for police?	NR		NR		NR		NR	
Have laws or policies regarding the removal of stalled/abandoned vehicles								
from freeway shoulders?	NR		NR		NR		NR	
Hours abandoned vehicles are allowed to remain on a freeway shoulder?	NR		NR		NR		NR	
Have policies or procedures for quick removal of vehicles?	NR		NR		NR		NR	
Is Total Station equipment used to investigate major incidents?	NR		NR		NR		NR	
Handling of Towing Responses to Incidents								
Formal contract based on qualifications?	No		No		No		No	
Rotation with companies under contract?	No		No		No		No	
Separate lists kept for light and heavy response and for specialty recovery?	NR		NR		NR		NR	
Rotation list with minimal qualifications?	No		No		No		No	

Arterial Management
Agencies for Metropolitan Area: Atlanta

	Douglas County		Fulton County		Georgia Department of Transportation		Gwinnett County	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**	**1999**	**2005**
In towing qualifications, do you require towers to be certified under the								
Towing and Recovery Ass. of America's National Drivers Cert. Program?	NR		NR		NR		NR	
_____								
DK: Don't know								
NR: No Response								
Leg: Legislation or action being planned								

Arterial Management
Agencies for Metropolitan Area: Atlanta

	Henry County		**Totals**	
	1999	**2005**	**1999**	**2005**
Agency Returned Survey?	Yes		9	
ARTERIAL MANAGEMENT SECTION				
Number of arterial miles that agency owns or maintains	NR		791	
Number of arterial miles that is used for planning	NR		763	
Number of highway-rail intersections that agency maintains	17		559	
Number of highway-rail intersections that is used for planning	NR		65	
Type of facilities used to conduct arterial management activities				
Activities housed in a free-standing dedicated building?	No		0	
Activities housed in a building shared with other activities?	No		1	
Activities conducted in a dedicated control room?	No		2	
Control room contains operator console(s)?	No		2	
Control room contains electronic wall map?	No		1	
Control room contains CCTV display(s)?	No		2	
Activities conducted in a room containing workstations or PCs that manage traffic?	No		1	
Facilities are electronically linked to other transportation mgt facilities?	No		1	
Staffing and hours of operation of arterial management activities				
Number of full-time agency staff members	NR		0	
Number of full time contractor staff members	NR		0	
Number of part-time agency staff members	NR		0	
Number of part-time contractor staff members	NR		0	
Staffed 24 hours day by agency staff or by others	NR		0	
Staffed during peak hours only by agency staff or by others	NR		0	
Staffed by others during off-peak hours	No		0	
Agency staff perform transportation management as an ancillary duty	No		1	
Agency staff dedicated to transportation management duty	No		1	
Types of operations conducted for arterial management				
Incident detection and management?	No		1	
This metropolitan area?	No		0	
Other metropolitan area?	No		0	
Monitoring and troubleshooting status of system components?	No		2	
Radio communications with other agencies?	No		1	
Exchange of electronic data with other agencies such as computer aided dispatch?	No		0	
Manual override of traffic signal timing plans	No		2	
Operating transportation mgt roadside devices (e.g., VMS, CCTV, etc.)	No		2	
Describe agency's role in traffic signal control	NR			
Traffic Signals Operated by Agency				

Arterial Management
Agencies for Metropolitan Area: Atlanta

	Henry County		Totals	
	1999	**2005**	**1999**	**2005**
Number of signalized intersections operated and owned by agency	NR	NR	622	500
Number of signalized intersections operated by agency but owned by another	NR	NR	0	0
Total number of signalized intersections operated by agency	8	50	2,492	2,050
Characteristics of signalized intersections that agency operates				
Under closed loop or central system control	0	10	1,361	1,115
Under real-time traffic adaptive control using advanced software	0	12	0	32
Using SCOOT	No		0	
Using SCATS	No		0	
Name of software	NR		0	0
Allow signal preemption for emergency vehicles	0	50	7	135
Allow signal priority for transit vehicles	0	0	0	150
Within 200 feet of a highway-rail intersection	1	4	42	28
Within 200 feet of a highway-rail intersection that adjust signal timing	1	4	42	28
Software used to control the signals agency operates				
Date of last upgrade to traffic signal control system software?	NR			
How often do you update signal timing?	NR			
Software used and number of signalized intersections under control (1999, 2005)	NR			
Controllers used to control signals				
NEMA	0	0	473	300
170/179	0	0	59	0
2070 controller	0	0	0	200
Other	0	0	0	0
Technologies Associated with Highway-Rail Intersections				
Total number of highway-rail intersections under electronic surveillance	NR	NR	20	5
Highway-Rail intersection capapbilities				
Video surveillance	0	0	4	0
Electronic surveillance other than video	0	0	19	0
Ability to predict train arrival electronically	0	0	0	0
Equipped with electronic traffic violator devices	0	0	0	0
Other	0	0	0	0
Real-Time Electronic Traffic Data Collection Technologies				
Total number of signalized intersections covered by electronic surveillance	NR	NR	409	500
Number of signalized intersections with data collection technologies				
Loop detectors	0	0	409	450
Video detection cameras	0	0	4	50
Probe readers reading toll tags	0	0	0	0

	Henry County		Totals	
	1999	2005	1999	2005
Probe readers reading license plates	0	0	0	0
Other	0	0	0	0
Roadside Technologies used to Distribute Traveler Information				
Number deployed				
Highway Advisory Radio	NR	NR	0	0
In-Vehicle Signing (IVS)	NR	NR	0	0
VMS controlling parking access	NR	NR	0	0
Miles covered				
Highway Advisory Radio	NR	NR	0	0
In-Vehicle Signing (IVS)	NR	NR	0	50
Variable Message Signs (VMS) on Arterials				
Candidate locations for deployment of VMS where VMS has been deployed	NR	NR	75	140
Candidate locations for deployment of VMS	NR	NR	58	78
Communication Technologies				
Signalized intersections communicated with by each type of communication				
Twisted pair cable	0	0	146	51
Coaxial cable	0	0	0	0
Fiber-optic cable	0	0	201	249
Other (e.g., wireless, dial-up modems, leased lines, etc.)	0	0	5	0
Does agency convey information on highway-rail intersection crossing				
status to travelers via roadside media such as VMS or HAR?	No		0	
ITS Standards Used Related to Traffic Signal Control				
Advanced Transportation Controller (ATC) Software Application Interface (ITE 9603-1)	No		0	
ATC Physical Cabinet Functional Design (ITE-9603-2)	No		0	
ATC Functionality and Interface Definitions (ITE-9603-3)	No		0	
Natl. Trans. Communications for ITS Protocol (NTCIP) Class B Profile (AASHTO TS 3.3)	No		0	
NTCIP Data Collection and Monitoring Devices (AASHTO TS 3.DCM)	No		0	
NTCIP Object Definitions for Video Camera Control (AASHTO TS 3.VCC)	No		0	
NTCIP Object Definitions for Actuated Traffic Signal Controller Units (AASHTO TS 3.5)	No		0	
Would agency be willing to participate in testing of ITS Standards?	NR		2	
Have agreements in place with other agencies to use similar hardware				
and software to aid maintenance and interoperability?	NR		2	
INCIDENT MANAGEMENT ON ARTERIAL STREETS				
Receive information on highway-rail intersection crossing blockages for				
the purpose of managing incident response?	No		0	
Use of Service Patrols to Assist in Detection and Response to Incidents				
Publicly operated service patrol vehicles	No		0	
Privately operated service patrol vehicles operated under public contract	No		0	
Total number of arterial miles patrolled by these services	NR	NR	0	50
Miles Covered by Methods to Detect and Verify Incidents				
Free cellular phone call to a dedicated phone number other than 911	0	0	0	63
Free cellular phone call to an area radio station	0	0	0	0

Arterial Management
Agencies for Metropolitan Area: Atlanta

	Henry County		Totals	
	1999	**2005**	**1999**	**2005**
Police patrols	0	0	63	63
Computer algorithms linked to traffic surveillance equipment	0	1	0	1
CCTV	0	0	75	95
Private sector sources (e.g., Shadow Traffic, Smart Routes)	0	0	0	0
Other	0	0	0	0
Procedures in place for Arterial Incident Response?				
Working agreement(s)/arrangement(s) with other agencies	No		0	
Inter-agency incident management admin. team that meets regularly	No		0	
Major incident response team that responds to major incidents	No		0	
Set of goals/objectives for incident mgt that has been adopted by agencies in region	No		0	
Methods of Communication Used On-Site at an Incident				
Police				
Two-way radio	No		0	
800 MHz trunked radio	No		0	
Cellular telephone	No		0	
Hand-held (i.e., walkie-talkie)	No		0	
Automated data systems (i.e., CAD)	No		0	
Other	No		0	
Fire				
Two-way radio	No		0	
800 MHz trunked radio	No		0	
Cellular telephone	No		0	
Hand-held (i.e., walkie-talkie)	No		0	
Automated data systems (i.e., CAD)	No		0	
Other	No		0	
DOT				
Two-way radio	No		1	
800 MHz trunked radio	No		0	
Cellular telephone	No		1	
Hand-held (i.e., walkie-talkie)	No		0	
Automated data systems (i.e., CAD)	No		0	
Other	No		0	
Towing				
Two-way radio	No		0	
800 MHz trunked radio	No		0	
Cellular telephone	No		0	
Hand-held (i.e., walkie-talkie)	No		0	
Automated data systems (i.e., CAD)	No		0	
Other	No		0	
Which police agencies typically respond to incidents on arterials?				

Arterial Management
Agencies for Metropolitan Area: Atlanta

	Henry County		Totals	
	1999	**2005**	**1999**	**2005**
State Police	No		0	
County Police or Sheriff	No		1	
City Police	No		1	
Who provides on-site emergency medical response?				
Fire	No		0	
Emergency Management Service Agency	No		1	
Private hospital	No		0	
Has a multi-agency contact list been developed in area containing the				
names, phone numbers, etc. for the appropriate response personnel?	NR		0	
Is the Incident Command System used to manage incident scenes?	NR		0	
Is there a legal specification by state law or formal agreement as to who				
is "in charge" at the incident scene?				
Specified by state law?	No		0	
Formal agreement?	No		0	
Not specified or don't know?	No		1	
On-scene command post used to manage activities of responding agencies?	NR		0	
Are there communication linkages to a communications traffic/freeway mgt center?	NR		0	
Plan developed and adopted by responding agencies for staging and parking				
response vehicles and equip. at incident site that minimizes lane blockage				
and facilitates the re-opening of lanes?	NR		0	
Respondents protected through law or court opinion for liability claims				
for damages to vehicles or cargoes during clearance activities?	NR		0	
Are overturned tank trucks, which are intact and not leaking, uprighted				
without first off-loading?	NR		0	
Does your state or local jurisdiction have a law that requires drivers				
involved in property-damage-only accidents to move the vehicles				
from travel lanes to a safe location to exchange info and wait for police?	NR		1	
Have laws or policies regarding the removal of stalled/abandoned vehicles				
from freeway shoulders?	NR		1	
Hours abandoned vehicles are allowed to remain on a freeway shoulder?	NR		0	
Have policies or procedures for quick removal of vehicles?	NR		0	
Is Total Station equipment used to investigate major incidents?	NR		1	
Handling of Towing Responses to Incidents				
Formal contract based on qualifications?	No		0	
Rotation with companies under contract?	No		0	
Separate lists kept for light and heavy response and for specialty recovery?	NR		0	
Rotation list with minimal qualifications?	No		1	

	Henry County		Totals	
	1999	**2005**	**1999**	**2005**
In towing qualifications, do you require towers to be certified under the				
Towing and Recovery Ass. of America's National Drivers Cert. Program?	NR		0	
_____				
DK: Don't know				
NR: No Response				
Leg: Legislation or action being planned				

Appendix G
Arterial Management Integration

Arterial Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Atlanta City		Cherokee County	
	1999	**2005**	**1999**	**2005**
Agency Returned Survey?	Yes		Yes	
Arterial Management Section				
Arterial Mgt. agencies in metropolitan area with which you share info.				
Share Timing Plans Information	short survey	None listed	None listed	None listed
Coordinate Changes to Timing Plans	short survey	None listed	None listed	None listed
Turn over Control of Signals	None listed	None listed	None listed	None listed
Agencies your agency provides arterial travel times, speeds, and				
conditions information, share infrastructure or coordinates operation				
Freeway Management Agencies				
Provide Information	short survey	None listed	None listed	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Incident Management Agencies				
Provide Information	None listed	None listed	None listed	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Public Transit Operators Agencies				
Provide Information	None listed	None listed	None listed	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Arterial Management Agencies				

Arterial Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Atlanta City		Cherokee County	
	1999	**2005**	**1999**	**2005**
Provide Information	None listed	None listed	None listed	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Receiving real-time information via electronic means from others				
Freeway Management agencies from which your agency receives				
freeway travel times, speeds, and conditions	short survey	None listed	None listed	None listed
Public Transit operators from which your agency receives				
arterial travel times derived from vehicle probes	None listed	None listed	None listed	None listed
Incident Management agencies from which your agency receives				
incident clearance and/or incident severity, location, and type information				
Receive information on Incident Clearance	short survey	None listed	None listed	None listed
Receive information on Incident Severity, Location, and Type	None listed	None listed	None listed	None listed
Toll Collection agencies from which your agency receives arterial travel				
times derived from vehicles probes	None listed	None listed	None listed	None listed
Arterial Incident Management Section				
Agencies your agency provides incident severity, location, and type info.				
and/or shares infrastructure and/or coordinates operation				
Emergency Management Agencies				
Provide Information	None listed	None listed	None listed	None listed

Arterial Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Atlanta City		Cherokee County	
	1999	**2005**	**1999**	**2005**
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Freeway Management Agencies				
Provide Information	short survey	None listed	None listed	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Public Transit Operators				
Provide Information	None listed	None listed	None listed	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Receiving real-time information via electronic means from others				
Emergency Management agencies from which your agency receives				
arterial incident clearance and/or arterial incident severity				

Arterial Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Atlanta City		Cherokee County	
	1999	**2005**	**1999**	**2005**
Receive Arterial Incident Clearance Information	short survey	None listed	None listed	None listed
Receive Arterial Incident Severity Information	short survey	None listed	None listed	None listed
Arterial Management agencies from which your agency receives				
arterial travel times, speeds, and conditions	short survey	None listed	None listed	None listed
Freeway Management agencies from which your agency receives				
freeway travel times, speeds, and conditions	None listed	None listed	None listed	None listed

*short survey: Agency responded using a short survey. The survey did not include names of individual agencies, but only identified whether integration exists.

Arterial Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Clayton County		Cobb County	
	1999	**2005**	**1999**	**2005**
Agency Returned Survey?	Yes		Yes	
Arterial Management Section				
Arterial Mgt. agencies in metropolitan area with which you share info.				
Share Timing Plans Information	Henry County	None listed	None listed	Georgia Department of Transportation
Coordinate Changes to Timing Plans	Henry County	None listed	None listed	Atlanta City, Fulton County, Georgia Department of Transportation
Turn over Control of Signals	Henry County	None listed	None listed	None listed
Agencies your agency provides arterial travel times, speeds, and				
conditions information, share infrastructure or coordinates operation				
Freeway Management Agencies				
Provide Information	Georgia Department of Transportation	None listed	Georgia Department of Transportation	Georgia Department of Transportation
Share Infrastructure	Georgia Department of Transportation	None listed	Georgia Department of Transportation	None listed
Coordinate Operation	Georgia Department of Transportation	None listed	None listed	Georgia Department of Transportation
Incident Management Agencies				
Provide Information	Georgia Department of Transportation	None listed	Georgia Department of Transportation	None listed
Share Infrastructure	Georgia Department of Transportation	None listed	Georgia Department of Transportation	None listed
Coordinate Operation	Georgia Department of Transportation	None listed	None listed	Georgia Department of Transportation
Public Transit Operators Agencies				
Provide Information	None listed	None listed	None listed	CCT
Share Infrastructure	None listed	None listed	None listed	CCT
Coordinate Operation	None listed	None listed	None listed	CCT
Arterial Management Agencies				

Arterial Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Clayton County		Cobb County	
	1999	**2005**	**1999**	**2005**
Provide Information	Georgia Department of Transportation, Henry County	None listed	None listed	Atlanta City, Fulton County
Share Infrastructure	Georgia Department of Transportation, Henry County	None listed	None listed	None listed
Coordinate Operation	Georgia Department of Transportation, Henry County	None listed	None listed	Atlanta City, Fulton County
Receiving real-time information via electronic means from others				
Freeway Management agencies from which your agency receives				
freeway travel times, speeds, and conditions	Georgia Department of Transportation	None listed	Georgia Department of Transportation	None listed
Public Transit operators from which your agency receives				
arterial travel times derived from vehicle probes	None listed	None listed	None listed	CCT
Incident Management agencies from which your agency receives				
incident clearance and/or incident severity, location, and type information				
Receive information on Incident Clearance	Georgia Department of Transportation	None listed	Georgia Department of Transportation	None listed
Receive information on Incident Severity, Location, and Type	Georgia Department of Transportation	None listed	Georgia Department of Transportation	None listed
Toll Collection agencies from which your agency receives arterial travel				
times derived from vehicles probes	None listed	None listed	None listed	None listed
Arterial Incident Management Section				
Agencies your agency provides incident severity, location, and type info.				
and/or shares infrastructure and/or coordinates operation				
Emergency Management Agencies				
Provide Information	Clayton County Emergency Management Agency	None listed	None listed	Clayton County Fire Department, Clayton County Police Department, Marietta City Fire Department, Marietta City Police Department

Arterial Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Clayton County		Cobb County	
	1999	**2005**	**1999**	**2005**
Share Infrastructure	Clayton County Emergency Management Agency	None listed	None listed	Clayton County Fire Department, Clayton County Police Department, Marietta City Fire Department, Marietta City Police Department
Coordinate Operation	Clayton County Emergency Management Agency	None listed	None listed	Clayton County Fire Department, Clayton County Police Department, Marietta City Fire Department, Marietta City Police Department
Freeway Management Agencies				
Provide Information	Georgia Department of Transportation	None listed	Georgia Department of Transportation	None listed
Share Infrastructure	Georgia Department of Transportation	None listed	Georgia Department of Transportation	None listed
Coordinate Operation	Georgia Department of Transportation	None listed	None listed	Georgia Department of Transportation
Public Transit Operators				
Provide Information	None listed	None listed	None listed	CCT
Share Infrastructure	None listed	None listed	None listed	CCT
Coordinate Operation	None listed	None listed	None listed	CCT
Receiving real-time information via electronic means from others				
Emergency Management agencies from which your agency receives				
arterial incident clearance and/or arterial incident severity				

Arterial Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Clayton County		Cobb County	
	1999	**2005**	**1999**	**2005**
Receive Arterial Incident Clearance Information	None listed	None listed	None listed	Cobb County Fire Department, Cobb County Police Department, Marietta City Fire Department, Marietta City Police Department, Smyrna City Fire Department, Smyrna City Police Department
Receive Arterial Incident Severity Information	None listed	None listed	None listed	Cobb County Fire Department, Cobb County Police Department, Marietta City Fire Department, Marietta City Police Department, Smyrna City Fire Department, Smyrna City Police Department
Arterial Management agencies from which your agency receives				
arterial travel times, speeds, and conditions	None listed	None listed	None listed	Atlanta City, Cherokee County, Fulton County
Freeway Management agencies from which your agency receives				
freeway travel times, speeds, and conditions	Georgia Department of Transportation	None listed	Georgia Department of Transportation	Georgia Department of Transportation

*short survey: Agency responded using a short survey. The survey did not include names of individual agencies, but only identified whether integration exists.

Agency Name	Douglas County		Fulton County	
	1999	**2005**	**1999**	**2005**
Agency Returned Survey?	Yes		Yes	
Arterial Management Section				
Arterial Mgt. agencies in metropolitan area with which you share info.				
Share Timing Plans Information	None listed	None listed	short survey	None listed
Coordinate Changes to Timing Plans	None listed	None listed	short survey	None listed
Turn over Control of Signals	None listed	None listed	short survey	None listed
Agencies your agency provides arterial travel times, speeds, and				
conditions information, share infrastructure or coordinates operation				
Freeway Management Agencies				
Provide Information	None listed	None listed	None listed	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Incident Management Agencies				
Provide Information	None listed	None listed	None listed	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Public Transit Operators Agencies				
Provide Information	None listed	None listed	None listed	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Arterial Management Agencies				

Arterial Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Douglas County		Fulton County	
	1999	**2005**	**1999**	**2005**
Provide Information	None listed	None listed	None listed	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Receiving real-time information via electronic means from others				
Freeway Management agencies from which your agency receives				
freeway travel times, speeds, and conditions	None listed	None listed	None listed	None listed
Public Transit operators from which your agency receives				
arterial travel times derived from vehicle probes	None listed	None listed	None listed	None listed
Incident Management agencies from which your agency receives				
incident clearance and/or incident severity, location, and type information				
Receive information on Incident Clearance	None listed	None listed	None listed	None listed
Receive information on Incident Severity, Location, and Type	None listed	None listed	None listed	None listed
Toll Collection agencies from which your agency receives arterial travel				
times derived from vehicles probes	None listed	None listed	None listed	None listed
Arterial Incident Management Section				
Agencies your agency provides incident severity, location, and type info.				
and/or shares infrastructure and/or coordinates operation				
Emergency Management Agencies				
Provide Information	None listed	None listed	None listed	None listed

Arterial Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Douglas County		Fulton County	
	1999	**2005**	**1999**	**2005**
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Freeway Management Agencies				
Provide Information	None listed	None listed	None listed	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Public Transit Operators				
Provide Information	None listed	None listed	None listed	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Receiving real-time information via electronic means from others				
Emergency Management agencies from which your agency receives				
arterial incident clearance and/or arterial incident severity				

Arterial Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Douglas County		Fulton County	
	1999	**2005**	**1999**	**2005**
Receive Arterial Incident Clearance Information	None listed	None listed	short survey	None listed
Receive Arterial Incident Severity Information	None listed	None listed	short survey	None listed
Arterial Management agencies from which your agency receives				
arterial travel times, speeds, and conditions	None listed	None listed	None listed	None listed
Freeway Management agencies from which your agency receives				
freeway travel times, speeds, and conditions	None listed	None listed	None listed	None listed

*short survey: Agency responded using a short survey. The survey did not include names of individual agencies, but only identified whether integration exists.

Agency Name	Georgia Department of Transportation		Gwinnett County	
	1999	**2005**	**1999**	**2005**
Agency Returned Survey?	Yes		Yes	
Arterial Management Section				
Arterial Mgt. agencies in metropolitan area with which you share info.				
Share Timing Plans Information	short survey	None listed	None listed	None listed
Coordinate Changes to Timing Plans	short survey	None listed	None listed	None listed
Turn over Control of Signals	short survey	None listed	None listed	None listed
Agencies your agency provides arterial travel times, speeds, and				
conditions information, share infrastructure or coordinates operation				
Freeway Management Agencies				
Provide Information	None listed	None listed	short survey	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Incident Management Agencies				
Provide Information	None listed	None listed	None listed	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Public Transit Operators Agencies				
Provide Information	short survey	None listed	None listed	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Arterial Management Agencies				

Arterial Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Georgia Department of Transportation		Gwinnett County	
	1999	**2005**	**1999**	**2005**
Provide Information	None listed	None listed	None listed	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Receiving real-time information via electronic means from others				
Freeway Management agencies from which your agency receives				
freeway travel times, speeds, and conditions	None listed	None listed	short survey	None listed
Public Transit operators from which your agency receives				
arterial travel times derived from vehicle probes	None listed	None listed	None listed	None listed
Incident Management agencies from which your agency receives				
incident clearance and/or incident severity, location, and type information				
Receive information on Incident Clearance	None listed	None listed	None listed	None listed
Receive information on Incident Severity, Location, and Type	None listed	None listed	None listed	None listed
Toll Collection agencies from which your agency receives arterial travel				
times derived from vehicles probes	short survey	None listed	None listed	None listed
Arterial Incident Management Section				
Agencies your agency provides incident severity, location, and type info.				
and/or shares infrastructure and/or coordinates operation				
Emergency Management Agencies				
Provide Information	short survey	None listed	None listed	None listed

Arterial Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Georgia Department of Transportation		Gwinnett County	
	1999	**2005**	**1999**	**2005**
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Freeway Management Agencies				
Provide Information	None listed	None listed	short survey	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Public Transit Operators				
Provide Information	short survey	None listed	None listed	None listed
Share Infrastructure	None listed	None listed	None listed	None listed
Coordinate Operation	None listed	None listed	None listed	None listed
Receiving real-time information via electronic means from others				
Emergency Management agencies from which your agency receives				
arterial incident clearance and/or arterial incident severity				

Arterial Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Georgia Department of Transportation		Gwinnett County	
	1999	**2005**	**1999**	**2005**
Receive Arterial Incident Clearance Information	short survey	None listed	short survey	None listed
Receive Arterial Incident Severity Information	short survey	None listed	short survey	None listed
Arterial Management agencies from which your agency receives				
arterial travel times, speeds, and conditions	None listed	None listed	None listed	None listed
Freeway Management agencies from which your agency receives				
freeway travel times, speeds, and conditions	None listed	None listed	None listed	None listed

*short survey: Agency responded using a short survey. The survey did not include names of individual agencies, but only identified whether integration exists.

Arterial Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Henry County	
	1999	**2005**
Agency Returned Survey?	Yes	
Arterial Management Section		
Arterial Mgt. agencies in metropolitan area with which you share info.		
Share Timing Plans Information	short survey	None listed
Coordinate Changes to Timing Plans	short survey	None listed
Turn over Control of Signals	short survey	None listed
Agencies your agency provides arterial travel times, speeds, and		
conditions information, share infrastructure or coordinates operation		
Freeway Management Agencies		
Provide Information	None listed	None listed
Share Infrastructure	None listed	None listed
Coordinate Operation	None listed	None listed
Incident Management Agencies		
Provide Information	None listed	None listed
Share Infrastructure	None listed	None listed
Coordinate Operation	None listed	None listed
Public Transit Operators Agencies		
Provide Information	None listed	None listed
Share Infrastructure	None listed	None listed
Coordinate Operation	None listed	None listed
Arterial Management Agencies		

Agency Name	Henry County 1999	Henry County 2005
Provide Information	None listed	None listed
Share Infrastructure	None listed	None listed
Coordinate Operation	None listed	None listed
Receiving real-time information via electronic means from others		
Freeway Management agencies from which your agency receives		
freeway travel times, speeds, and conditions	None listed	None listed
Public Transit operators from which your agency receives		
arterial travel times derived from vehicle probes	None listed	None listed
Incident Management agencies from which your agency receives		
incident clearance and/or incident severity, location, and type information		
Receive information on Incident Clearance	None listed	None listed
Receive information on Incident Severity, Location, and Type	None listed	None listed
Toll Collection agencies from which your agency receives arterial travel		
times derived from vehicles probes	None listed	None listed
Arterial Incident Management Section		
Agencies your agency provides incident severity, location, and type info.		
and/or shares infrastructure and/or coordinates operation		
Emergency Management Agencies		
Provide Information	short survey	None listed

Agency Name	Henry County 1999	Henry County 2005
Share Infrastructure	None listed	None listed
Coordinate Operation	None listed	None listed
Freeway Management Agencies		
Provide Information	None listed	None listed
Share Infrastructure	None listed	None listed
Coordinate Operation	None listed	None listed
Public Transit Operators		
Provide Information	None listed	None listed
Share Infrastructure	None listed	None listed
Coordinate Operation	None listed	None listed
Receiving real-time information via electronic means from others		
Emergency Management agencies from which your agency receives		
arterial incident clearance and/or arterial incident severity		

Arterial Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Henry County	
	1999	**2005**
Receive Arterial Incident Clearance Information	None listed	None listed
Receive Arterial Incident Severity Information	None listed	None listed
Arterial Management agencies from which your agency receives		
arterial travel times, speeds, and conditions	None listed	None listed
Freeway Management agencies from which your agency receives		
freeway travel times, speeds, and conditions	None listed	None listed

*short survey: Agency responded using a short survey. The survey did not include names of individual agencies, but only identified whether integration exists.

Appendix H
Arterial Management Information Collection and Dissemination

Data Collection and Dissemination: Arterial Management
Agencies for Metropolitan Area: Atlanta

Agency Name	Atlanta City		Cherokee County	
	1999	**2005**	**1999**	**2005**
Agency Returned Survey?	Yes		Yes	
Arterial Management Section				
Data collected, archived, and/or transferred to another agency				
Collected by your agency	NR	NR	NR	NR
Archived by your agency	NR	NR	NR	NR
Transferred to another agency by your agency	NR	NR	NR	NR
Importance of making information available to the public				
Ranked High	NR		NR	
Ranked Medium	NR		NR	
Ranked Low	NR		NR	
Groups that make requests for the data	NR		NR	
What is the data used for?	NR		NR	

Data Collection and Dissemination: Arterial Management
Agencies for Metropolitan Area: Atlanta

Agency Name	Atlanta City		Cherokee County	
	1999	**2005**	**1999**	**2005**
Methods used to disseminate arterial information to the public				
Technologies your agency uses to disseminate:	Dedicated cable TV, Internet Web sites, Pagers or personal data assistants, Kiosks, E-mail or other direct PC communication	NR	NR	NR
Technologies your agency (through another agency or org.) uses to disseminate:	NR	NR	NR	
Internet web site reporting arterial conditions	NR		NR	
Telephone system for reporting arterial information to the public	NR		NR	
Organizations your agency sends information for dissemination to the public	NR		NR	
Arterial Incident Management Section				
Methods used to distribute incident location and severity information				
to the public				
Technologies your agency uses to disseminate:	Dedicated cable TV, Internet Web sites, Pagers or personal data assistants, Kiosks, E-mail or other direct PC communication	NR	NR	NR
Technologies your agency (through another agency or org.) uses to disseminate:	NR	NR	NR	NR
Internet web site reporting incident information	NR		NR	
Telephone system for reporting incident information to the public	NR		NR	
Organizations your agency sends information for dissemination to the public	NR		NR	

Data Collection and Dissemination: Arterial Management
Agencies for Metropolitan Area: Atlanta

Agency Name	Clayton County		Cobb County	
	1999	**2005**	**1999**	**2005**
Agency Returned Survey?	Yes		Yes	
Arterial Management Section				
Data collected, archived, and/or transferred to another agency				
Collected by your agency	Traffic volumes, Traffic speeds, Vehicle classification, Probe vehicles, Turning movements, Phasing/cycle lengths, Current work zones, Scheduled work zones, Emergency/evacuation routes and procedures	NR	Weather conditions, Incidents, Current work zones, Scheduled work zones	NR
Archived by your agency	Traffic volumes, Traffic speeds, Vehicle classification, Probe vehicles, Turning movements, Phasing/cycle lengths, Current work zones, Scheduled work zones, Emergency/evacuation routes and procedures	NR	NR	NR
Transferred to another agency by your agency	Traffic volumes, Traffic speeds, Vehicle classification, Probe vehicles, Turning movements, Phasing/cycle lengths, Current work zones, Scheduled work zones, Emergency/evacuation routes and procedures	NR	NR	Weather conditions, Incidents, Current work zones, Scheduled work zones
Importance of making information available to the public				
Ranked High	Current work zones, Scheduled work zones, Emergency/evacuation routes and procedures		Weather conditions	
Ranked Medium	Traffic volumes, Traffic speeds, Turning movements, Phasing/cycle lengths		Incidents, Current work zones, Scheduled work zones	
Ranked Low	Vehicle classification, Probe vehicles		NR	
Groups that make requests for the data	Media (I.e., TV stations, radio stations), Consultants		Universities, Consultants	
What is the data used for?	Traffic analysis, Planning, Dissemination to the public		Do not know	

Data Collection and Dissemination: Arterial Management
Agencies for Metropolitan Area: Atlanta

Agency Name	Clayton County		Cobb County	
	1999	**2005**	**1999**	**2005**
Methods used to disseminate arterial information to the public				
Technologies your agency uses to disseminate:	Internet Web sites	NR	Dedicated cable TV	NR
Technologies your agency (through another agency or org.) uses to disseminate:	Internet Web sites	Dedicated cable TV	Internet Web sites	NR
Internet web site reporting arterial conditions	www.georgia-navigator.com		NR	
Telephone system for reporting arterial information to the public	NR		NR	
Organizations your agency sends information for dissemination to the public	GA DOT		GDOT/video images	
Arterial Incident Management Section				
Methods used to distribute incident location and severity information				
to the public				
Technologies your agency uses to disseminate:	Internet Web sites	Dedicated cable TV	NR	NR
Technologies your agency (through another agency or org.) uses to disseminate:	Internet Web sites	Dedicated cable TV	NR	NR
Internet web site reporting incident information	www.georgia-navigator.com		NR	
Telephone system for reporting incident information to the public	NR		NR	
Organizations your agency sends information for dissemination to the public	NR		NR	

Data Collection and Dissemination: Arterial Management
Agencies for Metropolitan Area: Atlanta

	Douglas County		Fulton County	
Agency Name	**1999**	**2005**	**1999**	**2005**
Agency Returned Survey?	Yes		Yes	
Arterial Management Section				
Data collected, archived, and/or transferred to another agency				
Collected by your agency	NR	NR	NR	NR
Archived by your agency	NR	NR	NR	NR
Transferred to another agency by your agency	NR	NR	NR	NR
Importance of making information available to the public				
Ranked High	NR		NR	
Ranked Medium	NR		NR	
Ranked Low	NR		NR	
Groups that make requests for the data	NR		NR	
What is the data used for?	NR		NR	

Data Collection and Dissemination: Arterial Management
Agencies for Metropolitan Area: Atlanta

Agency Name	Douglas County		Fulton County	
	1999	**2005**	**1999**	**2005**
Methods used to disseminate arterial information to the public				
Technologies your agency uses to disseminate:	NR	NR	NR	NR
Technologies your agency (through another agency or org.) uses to disseminate:	NR	NR	NR	NR
Internet web site reporting arterial conditions	NR		NR	
Telephone system for reporting arterial information to the public	NR		NR	
Organizations your agency sends information for dissemination to the public	NR		NR	
Arterial Incident Management Section				
Methods used to distribute incident location and severity information				
to the public				
Technologies your agency uses to disseminate:	NR	NR	NR	NR
Technologies your agency (through another agency or org.) uses to disseminate:	NR	NR	NR	NR
Internet web site reporting incident information	NR		NR	
Telephone system for reporting incident information to the public	NR		NR	
Organizations your agency sends information for dissemination to the public	NR		NR	

Data Collection and Dissemination: Arterial Management
Agencies for Metropolitan Area: Atlanta

Agency Name	Georgia Department of Transportation		Gwinnett County		Henry County	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**
Agency Returned Survey?	Yes		Yes		Yes	
Arterial Management Section						
Data collected, archived, and/or transferred to another agency						
Collected by your agency	NR	NR	NR	NR	NR	NR
Archived by your agency	NR	NR	NR	NR	NR	NR
Transferred to another agency by your agency	NR	NR	NR	NR	NR	NR
Importance of making information available to the public						
Ranked High	NR		NR		NR	
Ranked Medium	NR		NR		NR	
Ranked Low	NR		NR		NR	
Groups that make requests for the data	NR		NR		NR	
What is the data used for?	NR		NR		NR	

Data Collection and Dissemination: Arterial Management
Agencies for Metropolitan Area: Atlanta

Agency Name	Georgia Department of Transportation		Gwinnett County		Henry County	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**
Methods used to disseminate arterial information to the public						
Technologies your agency uses to disseminate:	Internet Web sites, Kiosks	Dedicated cable TV, Pagers or personal data assistants, E-mail or other direct PC communication	NR	NR	NR	NR
Technologies your agency (through another agency or org.) uses to disseminate:	NR	NR	NR	NR	NR	NR
Internet web site reporting arterial conditions	NR		NR		NR	
Telephone system for reporting arterial information to the public	NR		NR		NR	
Organizations your agency sends information for dissemination to the public	NR		NR		NR	
Arterial Incident Management Section						
Methods used to distribute incident location and severity information						
to the public						
Technologies your agency uses to disseminate:	Internet Web sites, Kiosks	Dedicated cable TV, Telephone system, Pagers or personal data assistants, E-mail or other direct PC communication	NR	NR	NR	NR
Technologies your agency (through another agency or org.) uses to disseminate:	NR	NR	NR	NR	NR	NR
Internet web site reporting incident information	NR		NR		NR	
Telephone system for reporting incident information to the public	NR		NR		NR	
Organizations your agency sends information for dissemination to the public	NR		NR		NR	

Appendix I
Transit Management Components

Transit Management
Agencies for Metropolitan Area: Atlanta

	Douglas County Rideshare		Metropolitan Atlanta Rapid Transit Authority MARTA		**Totals**	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**
Agency Returned Survey?	Yes		Yes		2	
Number of vehicles used in revenue service						
Fixed Route Bus	NR	NR	703	703	703	703
Heavy or Rapid Rail	NR	NR	238	338	238	338
Light Rail	NR	NR	NR	NR	0	0
Demand Responsive	20	30	NR	NR	20	30
Commuter Rail	NR	NR	NR	NR	0	0
Ferry Boat	NR	NR	NR	NR	0	0
Have of plan to have an Automated Vehicle Location System?	No		Yes		1	
Primary and Secondary Location Technologies Used						
Primary Technologies						
GPS	No	No	No	No	0	0
Sign/Odometer	No	No	No	No	0	0
Dead-Reckoning	No	No	No	No	0	0
LORAN C	No	No	No	No	0	0
Other	No	No	Yes	No	1	0
Backup Technologies						
GPS	No	No	No	No	0	0
Sign/Odometer	No	No	Yes	No	1	0
Dead-Reckoning	No	No	No	No	0	0
LORAN C	No	No	No	No	0	0
Other	No	No	No	No	0	0
Number of Vehicles Equipped with AVL						
Fixed Route Bus	NR	NR	242	703	242	703
Heavy or Rapid Rail	NR	NR	NR	NR	0	0
Light Rail	NR	NR	NR	NR	0	0
Demand Responsive	NR	NR	NR	NR	0	0
Commuter Rail	NR	NR	NR	NR	0	0
Ferry Boat	NR	NR	NR	NR	0	0
Motor Buses Operated as Vehicle Probes						
Number of Motor Buses equipped as probes on freeways?	NR		NR		0	
Number of Motor Buses equipped as probes on arterials?	NR		NR		0	
Have Organized Regional Incident Management Program?	No		Yes		1	

Transit Management
Agencies for Metropolitan Area: Atlanta

	Douglas County Rideshare		Metropolitan Atlanta Rapid Transit Authority MARTA		**Totals**	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**
Have Automated Traveler Information System?	Yes		Yes		2	
Services Automated Traveler Info. System Applies:						
Fixed Route	No		Yes		1	
Heavy Rail	No		Yes		1	
Light Rail	No		No		0	
Demand Responsive	Yes		No		1	
Commuter Rail	No		No		0	
Ferry	No		No		0	
Locations where traveler information is displayed to public						
Number of bus stops on fixed transit routes	NR	NR	12,000	NR	12,000	0
Bus stops on fixed transit routes that display traveler info to the public	NR	NR	NR	NR	0	0
Number of rail stations	NR	NR	41	NR	41	0
Number of rail stations that display traveler information	NR	NR	0	41	0	41
Number of other locations that display traveler information to public	NR	8	0	NR	0	8
Number of vehicles the traveler information system has available						
Fixed Route Bus	NR	NR	100	700	100	700
Heavy or Rapid Rail	NR	NR	NR	NR	0	0
Light Rail	NR	NR	NR	NR	0	0
Demand Responsive	NR	NR	NR	NR	0	0
Commuter Rail	NR	NR	NR	NR	0	0
Ferry Boat	NR	NR	NR	NR	0	0
Deployment of Communications Technology						
Attributes of Radio System:						
Digital?	No		No		0	
Analog?	No		Yes		1	
Trunked?	No		No		0	
Regular?	No		Yes		1	
Services that use a Digital or Trunked Radio System						
Digital Only						
Fixed Route Bus	No	No	No	No	0	0
Heavy or Rapid Rail	No	No	No	No	0	0
Light Rail	No	No	No	No	0	0
Demand Responsive	No	No	No	No	0	0
Commuter Rail	No	No	No	No	0	0
Ferry Boat	No	No	No	No	0	0
Trunked Only						

Transit Management
Agencies for Metropolitan Area: Atlanta

	Douglas County Rideshare		Metropolitan Atlanta Rapid Transit Authority MARTA		**Totals**	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**
Fixed Route Bus	No	No	No	Yes	0	1
Heavy or Rapid Rail	No	No	No	Yes	0	1
Light Rail	No	No	No	No	0	0
Demand Responsive	No	No	No	No	0	0
Commuter Rail	No	No	No	No	0	0
Ferry Boat	No	No	No	No	0	0
Have of plan to have Automatic Passenger Counters (APCs)?	No		Yes		1	
Methods used to count passengers						
Treadle Mats	No		No		0	
Infrared Beams	No		Yes		1	
Primary and Secondary Location Technologies Used						
Primary Technologies						
GPS	No	No	No	No	0	0
Differential GPS	No	No	Yes	No	1	0
Signpost/Odometer	No	No	No	No	0	0
Dead_Reckoning	No	No	No	No	0	0
LORAN C	No	No	No	No	0	0
Other	No	No	No	No	0	0
Backup Technologies						
GPS	No	No	No	No	0	0
Differential GPS	No	No	No	No	0	0
Signpost/Odometer	No	No	Yes	No	1	0
Dead_Reckoning	No	No	No	No	0	0
LORAN C	No	No	No	No	0	0
Other	No	No	No	No	0	0
Number of Vehicles with APCs						
Fixed Route Bus	NR	NR	75	135	75	135
Heavy or Rapid Rail	NR	NR	NR	NR	0	0
Light Rail	NR	NR	NR	NR	0	0
Demand Responsive	NR	NR	NR	NR	0	0
Commuter Rail	NR	NR	NR	NR	0	0
Ferry Boat	NR	NR	NR	NR	0	0
Remote Real-Time Monitoring and Computer Assisted Dispatching						
Remote Real-Time Monitoring						
Fixed Route Bus	NR	NR	242	703	242	703
Heavy or Rapid Rail	NR	NR	NR	NR	0	0
Light Rail	NR	NR	NR	NR	0	0

Transit Management
Agencies for Metropolitan Area: Atlanta

	Douglas County Rideshare		Metropolitan Atlanta Rapid Transit Authority MARTA		**Totals**	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**
Demand Responsive	NR	NR	NR	NR	0	0
Commuter Rail	NR	NR	NR	NR	0	0
Ferry Boat	NR	NR	NR	NR	0	0
Automated Dispatching or Control Software						
Fixed Route Bus	NR	NR	703	703	703	703
Heavy or Rapid Rail	NR	NR	NR	NR	0	0
Light Rail	NR	NR	NR	NR	0	0
Demand Responsive	NR	NR	NR	NR	0	0
Commuter Rail	NR	NR	NR	NR	0	0
Ferry Boat	NR	NR	NR	NR	0	0
Coordinate or plan to coordinate travel request and vehicle						
dispatching for multiple agencies?	No		No		0	
Is there or will there be a Transportation Management Center						
(TMC) in the region that controls transit and highway modes?	NR		Yes		1	
Modes that TMC currently controls:						
Highways	No	No	Yes	No	1	0
Fixed Route Bus	No	No	No	No	0	0
Heavy or Rapid Rail	No	No	No	No	0	0
Light Rail	No	No	No	No	0	0
Demand Responsive	No	No	No	No	0	0
Commuter Rail	No	No	No	No	0	0
Ferry Boat	No	No	No	No	0	0
Other	No	No	No	No	0	0
Priority at Traffic Signals and Ramp Meter Priority						
Priority at Traffic Signals						
Fixed Route Bus	NR	NR	NR	NR	0	0
Light Rail	NR	NR	NR	NR	0	0
Demand Responsive	NR	NR	NR	NR	0	0
Ramp Meter Priority						
Fixed Route Bus	NR	NR	NR	NR	0	0
Demand Responsive	NR	NR	NR	NR	0	0
Number of Vehicles Equipped with Navigation Aids						
Fixed Route Bus	NR	NR	NR	NR	0	0
Heavy or Rapid Rail	NR	NR	NR	NR	0	0
Light Rail	NR	NR	NR	NR	0	0

Transit Management
Agencies for Metropolitan Area: Atlanta

	Douglas County Rideshare		Metropolitan Atlanta Rapid Transit Authority MARTA		**Totals**	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**
Demand Responsive	NR	NR	NR	NR	0	0
Commuter Rail	NR	NR	NR	NR	0	0
Ferry Boat	NR	NR	NR	NR	0	0
ITS Standards Used Related to Transit Management						
TCIP On Boad Objects (TCIP-OB)	No		No		0	
TCIP Traffic Management Objects (TCIP-TM)	No		No		0	
TCIP Common Public Transportation Objects (TCIP-CPT)	No		No		0	
TCIP Passenger Information Objects (TCIP-PI)	No		No		0	
TCIP Incident Management Objects (TCIP-IM)	No		No		0	
TCIP Fare Collection Objects (TCIP-FC)	No		No		0	
TCIP Spatial Representation Objects (TCIP-SP)	No		No		0	
TCIP Control Center Objects (TCIP-CC)	No		No		0	
TCIP Scheduling/Runcutting Objects (TCIP-SCH)	No		No		0	
Send data communication between micro computer and heavy duty						
vehicle applications (SAE J1708)	No		No		0	
Would agency be willing to participate in testing of ITS Standards?	Yes		Yes		2	
Have agreements in place with other agencies to use similar hardware						
and software to aid maintenance and interoperability?	No		NR		0	
Electronic Fare Payment						
Have full operational Electronic Fare Payment System?	No		Yes		1	
Methods of Fare Payment						
Stored value card with fare deducted for each trip						
Magnetic Stripe	No		No		0	
Smart Card	No		No		0	
Debit Card	No		No		0	
Billed by the month for trips taken						
Magnetic Stripe	No		No		0	
Smart Card	No		No		0	
Credit Card	No		No		0	
Monthly Pass						
Magnetic Stripe	No		No		0	
Smart Card	No		No		0	
Vehicles/Stations Equipped with Automated Payment Mechanism						
Magnetic Stripe Readers						
Fixed Route Bus Vehicles	NR	NR	NR	NR	0	0

Transit Management
Agencies for Metropolitan Area: Atlanta

	Douglas County Rideshare		Metropolitan Atlanta Rapid Transit Authority MARTA		**Totals**	
	1999	**2005**	**1999**	**2005**	**1999**	**2005**
Heavy or Rapid Rail Stations	NR	NR	NR	NR	0	0
Light Rail Stations	NR	NR	NR	NR	0	0
Demand Responsive Vehicles	NR	NR	NR	NR	0	0
Commuter Rail Stations	NR	NR	NR	NR	0	0
Ferry Boat Landings	NR	NR	NR	NR	0	0
Smart Card Readers						
Fixed Route Bus Vehicles	NR	NR	NR	NR	0	0
Heavy or Rapid Rail Stations	NR	NR	NR	NR	0	0
Light Rail Stations	NR	NR	NR	NR	0	0
Demand Responsive Vehicles	NR	NR	NR	NR	0	0
Commuter Rail Stations	NR	NR	NR	NR	0	0
Ferry Boat Landings	NR	NR	NR	NR	0	0
Credit Card						
Fixed Route Bus Vehicles	NR	NR	NR	NR	0	0
Heavy or Rapid Rail Stations	NR	NR	NR	NR	0	0
Light Rail Stations	NR	NR	NR	NR	0	0
Demand Responsive Vehicles	NR	NR	NR	NR	0	0
Commuter Rail Stations	NR	NR	NR	NR	0	0
Ferry Boat Landings	NR	NR	NR	NR	0	0
Debit Card						
Fixed Route Bus Vehicles	NR	NR	NR	NR	0	0
Heavy or Rapid Rail Stations	NR	NR	NR	NR	0	0
Light Rail Stations	NR	NR	NR	NR	0	0
Demand Responsive Vehicles	NR	NR	NR	NR	0	0
Commuter Rail Stations	NR	NR	NR	NR	0	0
Ferry Boat Landings	NR	NR	NR	NR	0	0
_____						
NR: No Response						

Appendix J
Transit Management Integration

Transit Management Integration
Agencies for Metropolitan Area: Atlanta

Agency Name	Douglas County Rideshare		Metropolitan Atlanta Rapid Transit Authority MARTA	
	1999	**2005**	**1999**	**2005**
Agency Returned Survey?	Yes		Yes	
Transit operators in the region that use the same electronic payment system	None listed		Georgia 400	
Toll operators from whom you accept electronic payment of transit				
fare through the use of ETC media	None listed		None listed	
Receiving real-time information via electronic means from others				
Freeway Management agencies from which your agency receives				
freeway travel times, speeds, and conditions				
Receive Information	None listed	None listed	Georgia Department of Transportation	None listed
Share Infrastructure	None listed	None listed	Georgia Department of Transportation	None listed
Arterial Management agencies from which your agency receives				
arterial travel times, speeds, and conditions				
Receive Information	None listed	None listed	Gwinnett County, DeKalb County, Clayton County, Atlanta City, Cherokee County, Cobb County	None listed
Share Infrastructure	None listed	None listed	Gwinnett County, DeKalb County, Clayton County, Atlanta City, Cherokee County, Cobb County	None listed
Incident Management agencies from which your agency receives				
incident severity, location, and type				
Receive Information	None listed	None listed	Georgia Department of Transportation, Gwinnett County, DeKalb County, Clayton County, Atlanta City, Cobb County	None listed
Share Infrastructure	None listed	None listed	Georgia Department of Transportation, Gwinnett County, DeKalb County, Clayton County, Atlanta City, Cobb County	None listed

Appendix K
Transit Management Information Collection and Dissemination

Data Collection and Dissemination: Transit Management
Agencies for Metropolitan Area: Atlanta

Agency Name	Douglas County Rideshare		Metropolitan Atlanta Rapid Transit Authority MARTA	
	1999	**2005**	**1999**	**2005**
Agency Returned Survey?	Yes		Yes	
Methods used to disseminate transit information to the public				
Technologies your agency uses to disseminate:				
Transit routes, schedules and fares	Facsimile, Cell phone/voice, E-mail or other direct PC communication, Telephone System, Dedicated cable TV	Internet Web Sites	Facsimile, Audible Enunciators, Monitors/VMS (not in vehicle), Variable Message Signs (in vehicle), In-vehicle navigation systems, Kiosks, Internet Web Sites, Telephone System	NR
Real-time transit schedule adherence or arrival and departure times	NR	NR	Audible Enunciators, Monitors/VMS (not in vehicle), Variable Message Signs (in vehicle)	Kiosks, Internet Web Sites, Telephone System
Technologies employed by other organization receiving your data				
Transit routes, schedules and fares	Brochures, Schedules	NR	Kiosks, Internet Web Sites, Telephone System	NR
Real-time transit schedule adherence or arrival and departure times	NR	NR	NR	NR
Internet web site reporting transit routes, schedules and fare, etc.	NR		www.itsmarta.com	
Telephone system for reporting transit information to the public	NR		404-848-4711	
Organizations your agency sends information for dissemination to the public	Commute Connections of the Atlanta Regional Commission		GA Net	
Data collected, archived, and/or transferred to another agency				
Collected by your agency	Incidents, Passenger informa	NR	NR	NR
Archived by your agency	Incidents, Passenger informa	NR	NR	NR
Transferred to another agency by your agency	NR	NR	NR	NR
Importance of making information available to the public				
Ranked High	Incidents, Passenger information (e.g., surveys, O/D), Trip itinerary planning records, Passenger count		NR	
Ranked Medium	NR		NR	
Ranked Low	NR		NR	
Groups that make requests for the data	MPOs, Federal DOT personnel, State DOT personnel		NR	
What is the data used for?	Dissemination to the public, Planning		NR	

Appendix L
Emergency Management

Emergency Management Agencies for Metropolitan Area: Atlanta

Agency Name	Total Vehicles		Navigation Capabilities		AVL		CAD		CAD Equipped with Mobile Data Terminal		Vehicles Equipped with Preemption		Participate in Formal Incident Mgt Program	Send Incident Info to other agencies	List of agencies receiving data
	1999	2005	1999	2005	1999	2005	1999	2005	1999	2005	1999	2005			
Atlanta City Fire Department	66	66	NR	10	NR	NR	66	66	NR	NR	NR	NR	Yes	No	None listed
Atlanta City Fire Department (Emergency Medical)	37	37	0	0	0	0	37	37	0	0	0	0	Yes	No	None listed
Atlanta City Police Department	275	275	0	0	0	0	0	0	0	0	0	0	Yes	Yes	Georgia Department of Transportation
Cherokee County Sheriff's Department	36	NR	0	NR	0	NR	10	NR	NR	NR	0	0	Yes	No	None listed
Clayton County Fire Department	61	61	0	0	0	0	61	61	NR	NR	0	6	Yes	Yes	Department of Human Resources
Clayton County Police Department	130	140	0	NR	0	0	0	0	NR	NR	0	0	NR	NR	None listed
Cobb County Fire Department	58	65	0	0	0	0	0	46	NR	NR	0	0	Yes	Yes	NFIRS, Georgia Emergency Management Agency (GEMA)
Cobb County Police Department	283	303	0	0	0	0	283	303	NR	NR	0	0	No	No	None listed
Decatur City Fire Department	7	7	0	0	0	0	0	7	0	0	0	0	No	No	None listed
Decatur City Police Department	17	20	0	0	0	0	0	20	NR	NR	0	0	No	No	None listed
DeKalb County Emergency Management Agency	2	3	0	0	0	0	1	2	NR	NR	0	0	Yes	No	None listed
DeKalb County Emergency Medical Services	32	35	0	35	0	35	32	35	NR	NR	0	0	Yes	No	None listed
DeKalb County Fire Department	75	80	0	80	0	80	75	80	NR	NR	0	0	Yes	Yes	Atlanta City Fire Department, Fulton County Fire Department, Gwinnett County Fire Department, Marietta Fire
DeKalb County Police Department	220	250	0	250	0	250	220	250	NR	NR	0	0	Yes	Yes	Atlanta City Police Department, Gwinette Police Department, Fulton Police Department
DeKalb County Sheriff Office	35	40	0	40	0	40	35	40	NR	NR	0	0	Yes	No	None listed
Douglas County Fire Department	16	16	0	0	0	0	0	0	NR	NR	3	8	NR	NR	None listed
Douglas County Sheriff Department	39	50	0	0	0	50	0	50	NR	NR	0	0	Yes	No	None listed
East Point City Fire Department	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Yes	No	None listed
East Point City Police Department	47	77	0	0	0	0	0	0	NR	NR	0	0	Yes	Yes	State of Georgia
Fayette County Sheriffs Department	88	107	0	10	0	107	0	107	0	54	0	0	Yes	Yes	Georgia Emergency Management Agency (GEMA), Georgia Department of Transportation
Fulton County Fire Department	40	50	0	0	0	0	0	0	NR	NR	1	50	No	No	None listed
Fulton County Sheriff Department	185	200	0	5	0	5	24	35	9	25	0	5	Yes	No	None listed
Georgia Emergency Management Agency (GEMA)	15	23	0	23	0	0	0	0	0	0	0	0	Yes	Yes	None listed
Gwinette County Emergency Medical & Hazmat	20	22	0	0	0	0	20	22	NR	NR	0	0	NR	NR	None listed
Gwinette County Water Rescue	2	2	0	0	0	0	2	2	NR	NR	0	0	NR	NR	None listed
Gwinnett County Fire Department	36	40	0	0	0	0	36	40	NR	NR	0	0	NR	NR	None listed

Emergency Management Agencies for Metropolitan Area: Atlanta

Agency Name	Total Vehicles		Navigation Capabilities		AVL		CAD		CAD Equipped with Mobile Data Terminal		Vehicles Equipped with Preemption		Participate in Formal Incident Mgt Program	Send Incident Info to other agencies	List of agencies receiving data
	1999	2005	1999	2005	1999	2005	1999	2005	1999	2005	1999	2005			
Gwinnett County Police Department	365	515	0	NR	0	NR	352	506	352	506	0	NR	NR	NR	None listed
Henry County Police Department	123	123	0	0	0	0	123	123	NR	NR	0	0	No	No	None listed
Marietta City Fire Department	15	16	0	12	0	12	15	16	NR	NR	0	12	No	Yes	Georgia Emergency Management Agency (GEMA), Georgia Mutual Aid Group, Cobb County Emergency Management Agency
Marietta City Police Department	75	85	0	65	0	65	15	85	NR	NR	0	0	Yes	Yes	None listed
Rockdale County Fire Department	22	24	0	22	0	24	22	24	NR	NR	0	24	Yes	Yes	State of Georgia Fire Marshals Office
Rockdale County Sheriffs Department	100	142	0	NR	0	0	0	0	NR	NR	0	0	Yes	Yes	G.C.I.C.
Roswell City Fire & Rescue	39	41	0	0	0	0	39	41	NR	NR	0	41	Yes	No	None listed
Roswell City Police Department	73	111	0	0	0	0	36	100	NR	NR	0	0	No	NR	None listed
Smyrna City Fire Department	14	15	1	15	14	15	1	15	NR	NR	14	15	Yes	Yes	Georgia Emergency Management Agency (GEMA)
Smyrna City Police Department	60	72	0	40	60	72	60	72	NR	NR	0	0	No	No	None listed
Union City Fire Department	7	9	0	0	0	0	0	9	NR	NR	0	0	No	No	None listed

Appendix M
Electronic Toll Collection

Electronic Toll Collection
Agencies for Metropolitan Area: Atlanta

	Georgia Federal Highway Administration	
	1999	**2005**
Agency Returned Survey?	Yes	
Number of toll Collection Plazas operated	1	1
Number of toll collection plazas with dedicated ETC	1	1
Number of toll collection plazas with both manual and ETC	0	0
Number of toll collection lanes operated	18	18
Number of toll collection lanes with dedicated ETC	4	4
Number of toll collection lanes with both manual and ETC	14	14
Number of toll collection tags issued	80,000	82,500
Antennae Location Technologies		
In-Pavement?	No	
Focused Beam?	No	
Distributed Overhead?	Yes	
In-Vehicle Equipment Technologies		
Tag-based?	No	
Integrated circuit card-based?	Yes	
Are toll tags used by other toll operations in metro area?	No	
List of toll operators that use tags	None	
Are toll tags used by operators of public transit to pay transit fares		
in metro area?	No	
List of transit operators that use tags	None	
_____		
NR: No Response		