

DEPARTMENT OF TRANSPORTATION

PROCUREMENT REQUEST PROCESS RAPIDLY

PROCUREMENT REQUEST NO.

DATE RECEIVED

1. NAME, PHONE NUMBER, AND ROUTING SYMBOL OF PERSON TO CONTACT

Chung P. Eng (202)366-8043 HOTM-1

3. ORIGINATING OFFICE DATA

USDOT, FHWA, HOTM-1 Office of Travel Management

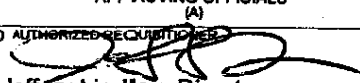
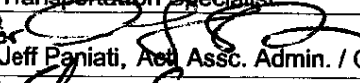
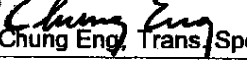
4. ADDITIONAL INFORMATION (Suggested supply sources, security data, etc.)

USDOT, ITOP Special Project Office, Transportation Administrative Service Center (TASC), 400 7th St., S.W., SVC-182, Washington, D.C. POC: Mark Welch Tel: (202)366-4971; Fax: (202)366-9848

2. TYPE OF REQUEST (Check one)

- A. ☒ NEW REQUEST
- B. ☐ CHANGE TO PENDING PR NO.
- C. ☐ MODIFICATION TO CONTRACT OR ORDER NO.

5. APPROVALS

APPROVING OFFICIALS (A)	ROUTING SYMBOL (B)	DATE (C)	INTERNAL ROUTING	
			INITIALS (D)	ROUTING SYMBOL (E)
(1) AUTHORIZED REPRESENTATIVE  Jeffery Lindley, Director Office of Travel Management	HOTM-1	6/20/02		
(2) ACCOUNTING CERTIFICATION OFFICER Lillian Chapman Transportation Specialist	HOST-1			
(3)  Jeff Paniati, Asst. Assc. Admin. / Op	HOP-1	6/20/02		
(4)  Chung Eng, Trans. Specialist	HOTM-1	6/20/02		

6. CONSIGNEE AND DESTINATION

Mr. Chung Eng
Federal Highway Administration
Office of Travel Management, HOTM-1
400 7th St., S.W. Room 3404
Washington, D.C. 20590

7. DATE(S) REQUIRED

As soon as possible

8. GOVERNMENT FURNISHED PROPERTY

☐ YES ☒ NO (If "YES," see par. 8 of Instructions on reverse.)

9. DESCRIPTION OF ITEMS OR SERVICES

ITEM NO. (A)	ITEM OR SERVICE (Include Specifications and Special Instructions) (B)	QUANTITY (C)	UNIT (D)	ESTIMATED COST	
				UNIT (E)	AMOUNT (F)
1	<p>Please issue Task Order T020013 to Contract No. DTT59-99-D-00445 as specified in the attached Statement of Work.</p> <p>NOTE: A total of \$350,000 is for the ITOP administrative fee and a net of \$50,000,000.00 is for the actual task order work. (Spending Plan Line Item: IX - \$49,890,000.00) (Spending Plan Line Item: V.A.1 - \$460,000.00)</p> <p>PROCUREMENT INTEGRITY STATEMENT: The individuals affecting this procurement have executed the required "Procurement Integrity Certification for Procurement Officials."</p> <p>STATEMENT OF ESSENTIAL NEED: This Task Order is being issued pursuant to Section 5117(b)(3) of TEA-21; Section 378 of the FY 2001 Transportation Appropriations Act; and Section 1101 of the FY 2002 Defense Appropriations Act.</p>	1	Lump Sum	50,350,000.00	50,350,000.00
				TOTAL ESTIMATED COST	
				\$	50,350,000.00

10. ACCOUNTING DATA

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1 34

IMPORTANT : Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 06/20/2002		2. CONTRACT NO. (If any) DTTS59-99-D-00445		6. SHIP TO:	
3. ORDER NO. T020013		4. REQUISITION/REFERENCE NO. 70-77-2002		a. NAME OF CONSIGNEE SEE SECTION G	
5. ISSUING OFFICE (Address correspondence to) US DEPT OF TRANSPORTATION TASC - SVC-180 400 - 7TH STREET, SW, 5106 WASHINGTON DC 20590				b. STREET ADDRESS	
				c. CITY	d. STATE e. ZIP CODE
7. TO: KELLY DAVIDSON				f. SHIP VIA	
a. NAME OF CONTRACTOR SIGNAL CORPORATION				8. TYPE OF ORDER	
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE <input checked="" type="checkbox"/> b. DELIVERY	
c. STREET ADDRESS 3040 WILLIAMS DRIVE SUITE 200				REFERENCE YOUR: Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheets, if any, including delivery as indicated.	
d. CITY FAIRFAX		e. STATE VA	f. ZIP CODE 22031-4624		
9. ACCOUNTING AND APPROPRIATIONS DATA See Section G				10. REQUISITIONING OFFICE Federal Highway Administration	

11. BUSINESS CLASSIFICATION (Check appropriate box(es))			
<input type="checkbox"/> a. SMALL	<input checked="" type="checkbox"/> b. OTHER THAN SMALL	<input type="checkbox"/> c. DISADVANTAGED	<input type="checkbox"/> d. WOMEN-OWNED
12. F.O.B. POINT Destination		14. GOVERNMENT BAL. NO.	15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date) 01/12/2012
13. PLACE OF		16. DISCOUNT TERMS Net 30	
a. INSPECTION Destination	b. ACCEPTANCE Destination		

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	Tax ID Number: 541400723 DUNS Number: 181986670 Accepted By: <i>Kelly M. Davidson</i> <i>Kelly Davidson</i> Date: 6/21/02 vs, Contracts/Proc.					
Continued ...						
18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		
21. MAIL INVOICE TO:						17(h). TOT. (Cont. pages)
a. NAME SEE SECTION G						50,000,000.00
b. STREET ADDRESS (or P.O. Box)						
c. CITY						
d. STATE e. ZIP CODE						50,000,000.00
						17(i). GRAND TOTAL

22. UNITED STATES OF AMERICA BY (Signature) <i>Mark T. Welch</i>	23. NAME (Typed) MARK T. WELCH TITLE: CONTRACTING/ORDERING OFFICER
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Task Order T020013 to Contract DTTS59-99-D-00445 is hereby issued as follows

1. Section B, "Supplies or Services and Prices/Costs":

<u>Item</u>	<u>Supply or Service</u>	<u>Qty.</u>	<u>Unit Price</u>	<u>Total Firm Fixed Price</u>
0101AA	Intelligent Transportation Infrastructure Program (ITIP) Support	25 cities/ metropolitan areas	\$2,000,000	\$50,000,000

2. Section C, "Description/Specifications/Statement of Work":

Item 0101AA - The Contractor shall support the Intelligent Transportation Infrastructure Program (ITIP) in accordance with the attached Statement of Work (Attachment J.1), and in accordance with the applicable executed local metropolitan area partnership agreement (reference SOW section 2.3).

3. Section D, "Packaging and Marking":

Packaging and marking for the effort called for hereunder shall be performed in accordance with the instructions of the basic contract.

4. Section E, "Inspection and Acceptance":

Inspection and Acceptance of the services called for hereunder shall be performed in accordance with the instructions of the basic contract.

5. Section F, "Deliveries or Performance":

A. The Contractor shall comply with the terms and conditions as cited in the basic contract in paragraphs F.1, F.3(b), (c), and (d). In addition, the following apply:

Item 0101AA – Reference the delivery schedule outlined under paragraph B below. The obligation of the Consortium Members to provide the Government services under this task order will end ten (10) years from date of system acceptance in each metropolitan area, or January 1, 2012, whichever is the earlier of the two dates. However, after this period, Mobility Technologies is expected to continue to provide services to public agencies and commercial clients on an ongoing basis. The continued services for public agencies will be consistent with that provided under the task order and will be provided at no cost to the public agencies.

B. Deliverables:

Deliverables	Due Date
Task 1 – Negotiation & Execution of Local Partnership Agreement	Upon Execution of Agreement
Task 2 – Sensor Map Development & Mobilization	ATP + 30 days
Task 3 – Network Planning	ATP + 90 days
Task 4 – Software Development	ATP + 120 days
Task 5 – System Design	ATP + 150 days
Task 6 – System Development & Implementation	ATP + 270 days
Task 7 – System Acceptance	ATP + 300 days
Task 8 – Training	ATP + 360 days
Task 9 – Systems Operations & Maintenance	ATP + 360 days
Task 10- Data Reports and Data Quality Template (First data report to be provided not more than 4 weeks following the first full month after system acceptance.)	ATP + 480 days

6. Section G, "Contract Administration Data":

The Contractor shall comply with the terms and conditions of the basic contract. In addition:

(A) Contracting Officer's Technical Representative (COTR):

The Task Order COTR for this Task Order is:

Chung Eng
US Department of Transportation
Federal Highway Administration Code HTV-3
400 7th Street, S.W., Room 3404
Washington, D.C. 20590

(B) Contracting Office:

The Contracting Office for this Task Order is:

US Department of Transportation
TASC, SVC-180
400 7th Street, S.W., Room 5106
Washington, D.C. 20590

(C) Billing Instructions:

An original and one (1) copy of the invoice shall be submitted to the following address:

US Department of Transportation
Federal Highway Administration, Code HFS-20
400 7th Street, S.W., Room 4306
Washington, D.C. 20590

Invoices shall contain the information required by FAR 52.232-25, Prompt Payment, including the contract number, task order number, and applicable contract line item numbers.

(D) Appropriation Data

The funding for the individual basic CLINs cited under the Section B of this Task Order is as follows:

CLIN	Appropriation Code	Amount
0101AA	X433-060-700-R43060-700177-2523	\$ 110,000
0101AA	X45A-45B-700-45A45B-700177-2523	\$49,890,000
		\$50,000,000

(E) Performance Based Payments

The Contractor shall submit invoices based on the following schedule upon completion of the applicable milestone. Details of the milestone payments are included in Attachment J.2.

Milestones	Payment
Task 1 – Negotiation & Execution of Local Partnership Agreement	\$100,000
Task 2 – Sensor Map Development & Mobilization	\$645,000
Task 3 – Network Planning	\$100,000
Task 4 – Software Development	\$150,000
Task 5 – System Design	\$120,000
Task 6 – System Development & Implementation (include 4 sub milestones at 25% increments)	\$645,000
Task 7 – System Acceptance	\$50,000
Task 8 – Training	\$20,000
Task 9 – Systems Operations & Maintenance	\$130,000
Task 10 – Data Reports and Data Quality Template	\$40,000

7. Section H, "Special Contract Requirements":

The Contractor shall comply with the terms and conditions of the Basic contract. In addition:

(A) Under H.14, KEY PERSONNEL, paragraph (b), the following personnel are determined to be key personnel within the meaning of the provision:

NAME	POSITION
Barry Kane	ITOP Program Manager
Joe Reed	Technical Leader
Terri Johnson, P.E	Technical Systems Expert
David L. Jannetta	Business Operations Manager

(B) In accordance with H.25, SUBCONTRACTORS, the Contractor has identified the following as critical subcontractors for this Task Order. The requirement for advance notification and/or consent with these subcontractors (if applicable) in the amounts proposed for this task order has been satisfied pursuant to FAR 52.244-2.

COMPANY NAME	ADDRESS	TYPE OF EFFORT
Mobility Technologies, Inc.	851 Duportail Road Suite 220 Wayne, PA 19087	2.2 Network Support

(C) MARKETING PROGRAM

The contractor shall market ITS Integrated Surveillance and Data Management Infrastructure Services with approval from the COTR. In accordance with the marketing strategy, the contractor will have the ability to market ITIP Services to private sector organizations. The contractor may be required to develop marketing strategies and action plans which involve identifying contacts, tasks, and potential users of traveler and roadway performance information/data. It may involve frequent contact with users, development of user profiles and reports on progress of the marketing strategy. It is to the contractor's advantage to prospect new business opportunities.

(D) REVENUE SHARING

In the event that the Contractor performs marketing activities or receives revenues from the sale/marketing of information obtained under this task order to other private sector organizations, the Government shall not be liable for any additional costs (i.e., in excess of the amounts provided under this task order) resulting from this marketing effort (e.g., marketing costs, advertising, operations, distribution, liability costs, etc). The Government and the Contractor agree that such revenues will be shared by the Contractor with U.S. DOT and the affected state or local agencies in accordance with the following formula/arrangement per metropolitan area:

- 0% for gross revenue up to \$250,000
- 5% for gross revenue between \$250,000 and \$1M
- 10% for gross revenue above \$1M

(E) INSURANCE AND BONDING REQUIREMENTS

The Contractor shall comply with all applicable insurance and bonding requirements of each locality (i.e., city, town, county, or state) where the Contractor will be performing work under this task order. The Contractor shall be financially responsible for the costs of compliance with these requirements.

(F) LIQUIDATED DAMAGES

If the contract is terminated for cause in any deployment area within the first 10 years after system acceptance in that deployment area and before January 1, 2012, as described further below, Mobility Technologies shall, in place of actual damages, pay/provide to the Government liquidated damages as follows for each metropolitan area found to be in default:

- All system hardware and software, as well as any components resulting from system upgrades, shall be made available to the local public agency partner(s) at fair market value. The local partner(s) will have the first right of refusal for any ITIP-project related hardware, software license, or component.
- All databases developed with public agency funds for the ITIP project and any ITIP project software developed with public agency funds shall be made available to the local public agency partner(s) for their own internal use on a non-exclusive basis at no cost.
- Make payment to the Government in accordance with the following. Furthermore, it is understood that no liquidated damages will be assessed beyond 1 January 2012.
 - Defaults within year 1 - pay \$960,000
 - Defaults within year 2 - pay \$864,000
 - Defaults within year 3 - pay \$768,000
 - Defaults within year 4 - pay \$560,000
 - Defaults within year 5 - pay \$480,000
 - Defaults within year 6 - pay \$400,000
 - Defaults within year 7 - pay \$320,000
 - Defaults within year 8 - pay \$240,000
 - Defaults within year 9 - pay \$160,000
 - Defaults within year 10 - pay \$ 80,000

SIGNAL's Responsibilities – (1) For the terms and conditions on the initial task order, SIGNAL will be held responsible to ensure that Mobility Technologies deploys the required Intelligent Transportation Infrastructure Systems (ITIS) to all areas authorized by the Government under this order. (2) In the event of default of the terms of SIGNAL's subcontract with Mobility by Mobility or bankruptcy or receivership by Mobility, SIGNAL's responsibility shall be limited to the good-faith identification of a replacement subcontractor acceptable to the Government. Should the approved replacement subcontractor's proposed cost be more or less than the costs contained in SIGNAL's subcontract with Mobility, SIGNAL and the Government agree to renegotiate these costs accordingly. SIGNAL shall not be held liable for procurement costs or any other damages. (3) In connection with the application of liquidated damages, SIGNAL's responsibility for payment to the Government is limited to the amount SIGNAL actually recovers from Mobility. SIGNAL will, in turn, submit all liquidated damages recovered from Mobility Technologies to the Government.

Mobility Technologies Responsibilities – (1) Upon deployment of the ITIS, Mobility Technologies will be held responsible for any liquidated damage costs as reflected in Paragraph F at no additional cost to the Government.

(G) SECTION 508 STANDARDS

The Rehabilitation Act of 1973, as amended, insures that Federal employees with disabilities will be able to use information technology to do their jobs and that members of the public who are seeking information from Federal sources will be able to use information technology to access the information on equal footing with people who do not have disabilities. Information on the Section 508 standards can be viewed at www.section508.gov. Work performed under Item 0101AA under this task order will be subject to compliance with the standards in effect as of the date of this task order.

(H) AVAILABILITY OF ADDITIONAL FUNDS

Any excess funds from areas opting not to participate will be made available for expanding the scope of work in participating metropolitan areas through a selection process to be determined. Additional funds from the excess may be provided for expanded data services in any metropolitan area that is the beneficiary of funding under this program, as provided in section 5117(b)(3)(C)(ii) of TEA-21 (P.L. 105-178, as amended by P.L. 107-117). After the Government has deducted any funds necessary for administrative costs of the program, the remainder of the funds will be provided for the area or areas that demonstrate the greatest opportunity to expand performance monitoring and commercial use of the data. Any additional funds awarded must be used strictly for the expansion/enhancement of services and not to pay for services provided by the initial \$2 million deployment.

(I) AUTHORIZATION TO PROCEED

The Government shall issue a limited authority to proceed for the contractor to enter discussions with a local metropolitan area with the purpose of negotiating and executing a local partnership agreement. This limited authority to proceed is conditioned upon a commitment letter from the local metropolitan area. Should the local metropolitan area decide not to participate for any reason, the Government's liability for negotiation and related efforts per area shall not exceed the lesser of the contractor's actual costs incurred in performing these efforts or 1) \$50,000 for each metropolitan area declining to participate in its calculation year (reference Attachment 3, e.g., Orlando in CY02, Miami in CY03, or St. Louis in CY04); 2) \$25,000 for each metropolitan area declining to participate while in current year plus one status (e.g., San Francisco declining to participate during CY02 or St. Louis declining to participate during CY03); or 3) \$10,000 for each metropolitan area declining to participate while in current year plus two status (e.g., St. Louis or Las Vegas declining to participate during CY02). For the metropolitan areas where negotiations are successful in reaching and executing a local agreement, the cost considerations for negotiations are already included in the \$2M being provided for each metropolitan area, and no additional funds beyond the \$2M will be provided for the purposes of negotiations and related efforts.

The Government shall separately issue a notification granting full authority to proceed with the task order requirements for each metropolitan area. Issuance of full authority is conditioned upon execution of a local partnership agreement (reference SOW section 2.3), which shall include a satisfactory local implementation strategy.

Issuance of both limited and full authority shall be done by an electronic mail message from the Contracting Officer to the contractor. The Government is not liable for any costs incurred by the contractor in performance absent the authorizations called for herein. Costs that are incurred after limited authority is granted that are otherwise eligible are eligible for payment according to the Milestone Payments (Attachment 2), if and after full authority is given.

8. Section I, "Contract Clauses":

The Contractor shall comply with the applicable terms and conditions of the basic contract. In addition, the following applies:

A) The below listed clauses are hereby made applicable to this task order:

- FAR 52.227-14 Rights in Data – General (JUN 1987) and Alternates II and III
- FAR 52.227-15 Representation of Limited Rights Data and Restricted Computer Software, (JUN 1987)
- FAR 52.227-16 Additional Data Requirements (JUN 1987)

B) FAR 52.217-6 Option for Increased Quantity (Mar 1989)

The Government may increase the quantity of units called for in the Schedule at the unit price specified. The Contracting Officer may exercise the option by written notice to the Contractor within three years from the date of this order. Delivery of the added items shall be in accordance with the schedule called for under the task order.

9. "Section J, "List of Attachments":

- A. Attachment 1 – Statement of Work Intelligent Transportation System Integrated Surveillance and Data Management Infrastructure Services (TEA-21 – 5117(b)(3))
- B. Attachment 2 – Milestone Payment Details
- C. Attachment 3 – ITIP Expansion Schedule.

10. Within sixty (60) days from the executed date of this task order, Mobility Technologies will submit any updates to its previously submitted business/financial plan based on the terms of this task order. The Government will treat this information as proprietary and confidential information and protect it from disclosure. Full authority to proceed will not be provided in any area prior to receipt of the updates.

11. The terms and conditions of Contract DTTS59-99-D-00445 are applicable to this task order and are incorporated herein.

Statement of Work

Intelligent Transportation Infrastructure Program (ITIP)

TEA-21: 5117(b)(3)

1.0 Introduction

The U.S. DOT is interested in developing an ability to measure the operating performance of the roadway system at a national level. The U.S. DOT is also interested in State and local transportation agencies having access to roadway system performance data to assist in their planning, evaluation, and management activities. The ITIP provides Federal funding for the integration of intelligent transportation infrastructure in major metropolitan areas with a population exceeding 300,000. The U.S. DOT's perspective is that the ITIP will enhance existing surveillance infrastructure through integration, along with strategic deployment of supplemental surveillance infrastructure. In some areas, the infrastructure deployed as part of this program may be the area's primary traveler information system.

In addition, the U.S. DOT is interested in facilitating public/private partnerships and the commercialization of traveler information data to create the opportunity for self-sustained systems that attract private capital. To be useful for the purposes described, roadway system performance data must be measured continuously, and be available in both real-time and archived formats. There is consensus within the transportation community that travel time and travel time reliability are among the best measures for these purposes. These and other desired measures are described in further detail within this statement of work.

The path to achieving these objectives presents an opportunity to serve public agency needs in true public/private partnerships. It is recognized that the same data that is useful to the public transportation agencies also has value for commercial traveler information applications. Thus, the potential exists for a public/private partnership that would collect system performance data to serve national and local public agency needs and, at the same time, use the same data for commercial traveler information purposes.

Such a partnership was envisioned in section 5117(b)(3) of the Transportation Equity Act for the 21st Century (TEA-21), Pub. L. 105-178, as amended by title IX of Pub. L. 105-206, which requires the provision of private technology commercialization initiatives as part of a program to "advance the deployment of an operational intelligent transportation infrastructure system for the measurement of various transportation system activities to aid in the transportation planning and analysis while making a significant contribution to the ITS program." To that end, the U.S. DOT has retained a private sector Consortium led by the Signal Corporation and Mobility Technologies (formerly Traffic.com) to enhance the collection and archiving of performance monitoring data that will ultimately be used to measure national system performance while also using this data for commercial traveler information purposes.

To date, the U.S. DOT and the Consortium have tested this public/private partnership in two metropolitan areas: Pittsburgh, PA and Philadelphia, PA. Briefly, the deployments in the two initial metropolitan areas feature the following:

1. Over one hundred (100) sensors deployed in each metropolitan area along freeways and other major arterials capable of providing data on volume, speed, lane occupation, and limited vehicle classification;
2. Archived database function;
3. Free web-based access to basic real-time as well as archived data for public agency stakeholders;
4. Free web-based traffic condition information to the general public for personal use;
5. Additional value-added commercial services on a fee basis;
6. Firm, fixed price contract where the private partner owns, operates, and maintains the system;
7. Integration of at least one legacy system ;
8. Private funding contribution toward infrastructure; and
9. Sharing of gross revenues derived from the project to support system enhancements.

The FY 2002 Defense Appropriations Act that was signed into law (P.L. 107-117) on January 10, 2002 included additional provisions for expansion of ITIP. This included identification of the specific metropolitan areas that are eligible to participate in ITIP as follows:

Baltimore, Birmingham, Boston, Chicago, Cleveland, Dallas/Ft. Worth, Denver, Detroit, Houston, Indianapolis, Las Vegas, Los Angeles, Miami, New York/Northern New Jersey, Northern Kentucky/Cincinnati, Oklahoma City, Orlando, Philadelphia, Phoenix, Pittsburgh, Portland, Providence, Salt Lake, San Diego, San Francisco, St. Louis, Seattle, Tampa, and Washington, D.C.

2.0 Statement of Needs

The goal of this effort is to accommodate the expansion of ITIP into all eligible areas that choose to participate. Lessons from the initial deployments as well as additional elements of national interest are incorporated in this statement of work. This includes an increased emphasis on integrating existing data, and added requirements for calculating reliability performance measures using the data to be collected, and the provision of monthly data and calculated performance measure reports to the U.S. DOT. This data and reports may be provided over the Internet. The U.S. DOT's focus in these expansion metropolitan areas is to enhance existing surveillance infrastructure through integration, along with strategic deployment of supplemental surveillance infrastructure. In some areas, the infrastructure deployed as part of this program may be the area's primary traveler information system. The enhanced surveillance infrastructure and performance data generated will be used to: 1) aid the public sector partner in carrying out system management activities including operations, planning, analysis, and maintenance; 2) support the provision of free basic traveler information to the public for personal use; 3) provide opportunities for commercialization of other Advanced Traveler Information Services (ATIS);

and 4) support provision of data and system performance measure reports to the U.S. DOT on a monthly basis.

2.1 Objectives

This effort addresses the program provided for under section 5117(b)(3) of the TEA-21. The U.S. DOT is providing funding to:

- Accelerate the integration and enhancement of intelligent transportation infrastructure in major metropolitan areas to enable and help manage the continuous monitoring of the roadway system for purposes of providing real-time as well as archived data to aid in the operation, planning, analysis, and maintenance activities of the U.S. DOT and State and local agencies;
- Enhance the quality, availability, and accessibility of transportation system performance data to enable the calculation of mobility performance and system reliability measures while satisfying system operational needs at the same time;
- Provide to the U.S. DOT performance data and reports outlined in section 2.3 below;
- Provide a traveler information service that includes free public access to basic traveler information, and supports provision of a 511 based telephone service; and
- Realize and publicize the benefits of regionally integrated and interoperable intelligent transportation infrastructure capable of supporting regional as well as national needs, including homeland security.

As stated in section 5117(b)(3) of TEA-21, additional program objectives include:

- Providing private technology commercialization initiatives to generate revenues which will be shared with the U.S. DOT and the public partners;
- Collecting data primarily through wireless transmission along with some shared wide area networks;
- Aggregating data into reports for multipoint data distribution techniques; and
- Utilizing an advanced information system designed and monitored by an entity with experience with the U.S. DOT in the design and monitoring of high reliability, mission critical voice and data systems.

2.2 Funding

The U.S. DOT will provide \$2 million in Federal funds for each eligible metropolitan area that chooses to participate in this expansion of the ITIP. Any excess funds from areas opting not to participate will be made available for expanding the scope of work in participating metropolitan areas through a selection process to be determined. Additional funds from the excess may be provided for expanded data services in any metropolitan area that is the beneficiary of funding under this program, as provided in section 5117(b)(3)(C)(ii) of TEA-21 (P.L. 105-178, as

amended by P.L. 107-117). After the Secretary has deducted any funds necessary for administrative costs of the program, the remainder of the funds will be provided for the area or areas that demonstrate the greatest opportunity to expand performance monitoring and commercial use of the data. Any additional funds awarded must be used strictly for the expansion/enhancement of services and not to pay for services provided by the initial \$2 million deployment. It is anticipated that the participating metropolitan areas will be phased in over the next three years in groups of five at six-month intervals. The deployment groups will be determined based on local readiness and preference. Public agency partners and the Consortium are encouraged to establish and maintain schedules whereby the proposed deployment will be fully operational within one year from the date of granting of full authority to proceed.

The Federal view of this effort is that it is a data services contract that provides a guaranteed delivery of information in each location for a period of ten years, but which comes with lifetime access rights to the data generated without further cost. The Federal funding provided is payment for the management and provision of data, for the ten-year life of the task order and beyond, as specified in section 2.3 below. No Federal funding provided may be used for the purchase of any equipment. Payments will be linked to expenditures related to the project milestones as outlined in Section G of the task order.

There is an 80/20 Federal/non-Federal match requirement for all Federal funds provided (\$500,000 non-Federal match required for the initial \$2M in Federal funds). The non-Federally derived funding may come from State, local government, or private sector partners. Note that funding identified to support continued operations, maintenance, and management of the system beyond the terms of the contract will not be considered as part of this 20% requirement.

Mobility Technologies will maintain documentation to separate public agency funds and private funds. All funds expended (Federal and non-Federal) under this contract shall be reported to the Government on a quarterly basis. The financial information shall be broken down in detail to include all contract revenue and costs, including direct and indirect costs, expended on a quarterly basis. The breakout of revenue and costs shall include a summary of total revenue generated and costs incurred to date under this contract. Federal, other public agency, and private costs shall be differentiated. **Should it be determined at any time by the Government that Mobility Technologies' documentation is insufficient, mutually agreed to remedies shall be implemented within 30 days after such remedies are proposed.**

In addition, after contract award, Mobility Technologies shall provide the following information for each year that the contract is in effect:

- Cash flow statements presenting changes in company cash flows which occurred within the first six months of the company's fiscal year ended December 31 should be provided by August 31, and cash flow statements for the complete fiscal year by February 28;
- By February 28th, provide projected company cash flow statements for the six month period ending the following June 30 and by August 31, provide cash flow statements for the following six month period ending December 31;

- An income statement for the company fiscal year to date through June 30 should be provided by August 31 and an income statement for the company fiscal year through December 31 should be provided by February 28;
- A company balance sheet as of the end of June 30 should be provided by August 31, and a balance sheet as of December 31 should be provided by February 28.

Mobility Technologies shall also provide the Government by April 30 of each year the contract is in effect, financial statements audited by an independent accounting firm. The audit shall be performed in accordance with Generally Accepted Auditing Standards (GAAS) and include the expression of an audit opinion on the financial statements. Mobility Technologies will sign a release allowing the Government to request access to the working papers developed by the independent auditor as deemed necessary by the Government. The Government agrees to keep this information confidential and protect it from disclosure to any third parties.

2.3 Requirements

Federal funding for the ITIP may be used to support:

- Creation of a process and mechanism to collect, integrate, archive, manage, distribute and report new and existing transportation and related weather and security data for mobility and performance monitoring, planning, evaluation, and other similar purposes;
- Creation of a data repository of new and existing real-time traveler and related information for dissemination to the traveling public through a variety of delivery mechanisms, including support for a 511 based telephone service, provision of free basic traveler information to the public for personal use, and commercial traveler information services;
- Creation of a regional transportation information and communications system that integrates and supplements existing surveillance infrastructure, including traffic, traffic related video, weather and homeland security data, to support public sector transportation management needs and private sector commercialization; and
- Accommodation/integration of existing transportation data collection, archiving, and dissemination mechanisms.

No Federal funding provided may be used for the purchase of any equipment.

The provision of free basic traveler information to the public for personal use shall include, as a minimum, the provision of a web-site that is accessible to the general public over the Internet. Basic traveler information is defined as:

- Construction/Maintenance Information
- Road Closures/Major Delays
- Major Special Events
- Weather (where available) and Road Conditions
- Incidents/Crashes
- High Level (red, yellow, green coding) Congestion Information

Support for a 511 based telephone service shall include the provision of basic traveler information to the providers of the 511 based telephone service. The basic traveler information may be used by a public agency, or its agent, to support the provision of free basic traveler information to the general public via a 511 based telephone service. In areas where the 511 based telephone service is operated as a commercial service, a licensing fee may be required to use information provided by the Consortium. The Consortium may recover any additional operating expenses it incurs to support the 511 based telephone service.

Data aggregated by the system and made available to the U.S.DOT may be used by the U.S.DOT for its own public purposes. The U.S.DOT may share aggregated data with third parties that are engaged specifically for the purpose of fulfilling non-commercial public agency functions. The U.S.DOT agrees not to provide directly or indirectly aggregated data to third party commercial interests.

The U.S. DOT and the Comptroller General of the United States have the right to access all documents pertaining to the use of Federal ITS funds and non-Federal contributions for this contract. Non-Federal partners must maintain sufficient documentation to substantiate these costs. Such items as direct labor, fringe benefits, material costs, consultant costs, public involvement costs, subcontractor costs, and travel costs should be included in that documentation.

Implementation Strategy and Local Agreement

The Consortium must negotiate and establish a separate partnership agreement with each participating metropolitan area. A limited authorization to proceed will be provided to accommodate the initial negotiations in areas that have indicated an interest in the program. As part of the initial negotiation effort, the Consortium must work with each participating metropolitan area to help develop a local implementation strategy. This implementation strategy must outline the proposed partnership, technical, management and staffing, and financial approaches to satisfy the objectives and requirements of the ITIP. The implementation strategy is subject to review by the U.S. DOT prior to granting a full notice to proceed in any metropolitan area. In addition, full notice to proceed in any metropolitan area will not be granted until the local agreement for that metropolitan area has been successfully negotiated and executed. The implementation strategy shall address the following:

- Proposed working relationship, cooperation, and information-sharing among participating public agencies and the Consortium;
- How the proposed deployment will operate when fully implemented, including coexistence with existing infrastructure/systems, data sharing and use, quality assurance, and delineation of roles and responsibilities;
- Consistency with the Regional or National ITS Architecture and consideration of appropriate ITS standards;

- Project management and staffing, including delineation of responsibilities and communications; and
- Financial commitments for the partnership

C. Data and Performance Measures

1. Data Specifications

The data elements to be collected shall be as identified in the table below and shall meet the acceptable attributes specified. However, data attributes exceeding acceptable is encouraged.

Data Specifications for Mobility Monitoring

Primary Data Element:	Attributes:		Supplemental Data Elements:
	Preferred	Acceptable	
Vehicle Travel Times (preferred)	<ul style="list-style-type: none"> - for individual vehicles - for defined roadway links up to 1 mile in length - coverage on freeways and arterial streets 	<ul style="list-style-type: none"> - 5 to 15-minute summary average - for defined roadway links 1-3 miles in length - coverage on freeways only 	<ul style="list-style-type: none"> - date of measurement - start time of travel time - "anonymous" vehicle ID
Vehicle Spot Speeds (acceptable)	<ul style="list-style-type: none"> - 1 to 5-minute averages by lane - speeds obtained every 1/2-mile - coverage on freeways and arterial streets 	<ul style="list-style-type: none"> - 1 to 5-minute averages by direction - speeds obtained every 1-3 miles - coverage on freeways only 	<ul style="list-style-type: none"> - date of measurement - start and end time for speed summary statistics - detector location ID (milepost or other location reference)
Vehicle Volumes	<ul style="list-style-type: none"> - 1 to 5-minute totals by lane - volumes obtained every 1/2-mile - coverage on freeways and arterial streets 	<ul style="list-style-type: none"> - 1 to 5-minute totals by direction - volumes obtained every 1-3 miles - coverage on freeways only 	<ul style="list-style-type: none"> - date of measurement - start and end time for volume summary statistics - detector location ID (milepost or other location reference)
Roadway Link and "Corridor" Identification	<ul style="list-style-type: none"> - definition of roadway links up to 1 mile in length 	<ul style="list-style-type: none"> - definition of roadway links of 1-3 miles in length 	<ul style="list-style-type: none"> - corresponding detector ID - milepost or location reference - roadway name and direction - sequence of link along a corridor - link length - number of lanes

Vehicle Classification(on a corridor basis)	- the 13 vehicle classes defined in the Traffic Monitoring Guide (http://www.fhwa.dot.gov/ohim/tmguid/index.htm)	- passenger vehicles (cars and light pickups) - single unit trucks - combination trucks (tractor-trailers)	- date of measurement - start and end time for volume summary statistics - detector location ID (milepost or other location reference)
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2. *Data Integration*

Traffic data from major highways that are currently being collected electronically by a participating public agency and being used for real time ATIS and/or ATMS purposes will be integrated with Consortium data, archived and used to calculate performance measures as described below. Traffic data from these and other highways that become available in the future will also be considered for similar integration, archiving and use. The data to be used for performance measures are: volume, speed and occupancy at a granular level (minute-by-minute, lane-by-lane). Vehicle classification data will also be integrated as part of this process.

The public agency will be responsible for assuring quality of its data. The Consortium will perform continuous screening of the integrated data for quality purposes. For non-ITIP generated data, the Consortium shall flag data anomalies to the public agency and the U.S. DOT. Data will conform to the "acceptable" level presented in the Data Specifications table above. During the System Requirements process, the Consortium and the public agency will review the data type and quality of agency data and determine the suitability for integrating and using for the purpose of calculating performance measures. Should problems be found with the data quality or quantity, the problems will be described to the public agency and the U.S.DOT. Every effort will be made to integrate agency data to the extent practical.

3. *Performance Measures*

Performance measures to be calculated include the following:

Measures of Transportation Performance

Annual Person Hours of Delay	= Daily Vehicle Hours of Delay x 250 Working Days per Year x 1.25 Person per Vehicle
Percent Congested Travel	= (VMT Traveled Under Congested Conditions)/(Total VMT for the Area)
Travel Rate Index	= (Travel Time Under Congested Conditions)/(Travel Time Under Uncongested Conditions)
Travel Time Buffer Index	$\frac{95\% \text{ Confidence Travel Rate} - \text{Average Travel Rate}}{(\text{in minutes per mile}) (\text{In minutes per mile})} \times 100\%$

	Average Travel Rate (in minutes per mile)
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4. *Data Formats and Granularity for ITIP Products*

The archived data to be provided to the U.S. DOT on a monthly basis shall be grouped into 3 levels as follows for each metropolitan area:

- Level 1. Base or foundation level data (5-minute level)
- Level 2. Intermediate level data (15-minute level)
- Level 3. Summary data (60-minute level)

Data for each metropolitan area shall be made downloadable via the Internet monthly, not more than four weeks following the end of the month. The required formats and granularity are defined below. The U.S.DOT will have the right to request modifications to the specified format and granularity that are agreed to bilaterally once within two years of the first data submittal with no additional costs.

Format for All Levels

The format used to exchange all levels of data should be **delimited ASCII-text files**. At a minimum, time and location references should be provided for each data record (date can optionally be provided with each data record or the data set as a whole). The summary data level retains an option to use FHWA Card C or 3 formats (see this section for more detail).

Level 1. Base or Foundation Level Data

Granularity – The granularity of base level data should be **5-minute by lane (preferred)** or 5-minute for all measured lanes in the same direction at a specified location (acceptable). If the 5-minute data has been aggregated up from more detailed data (e.g., 1-minute data records), the percent of detailed records passing quality control and the percent of total possible detailed records used in aggregation calculations should be included with each 5-minute record.

Level 2. Intermediate level data

Granularity – The granularity of intermediate level data should be **15-minute for all measured lanes in the same direction at a specified location (preferred)** or 15-minute by measured lane (acceptable). If the 15-minute data has been aggregated up from more detailed data (e.g., 1-minute data records), the percent of detailed records passing quality control and the percent of total possible detailed records used in aggregation calculations should be included with each 15-minute record.

Level 3. Summary data sets

Format – The FHWA Card C format (for vehicle classification) or Card 3 format (for traffic volumes) is the preferred data exchange format (see the Traffic Monitoring Guide for more information). In addition **delimited ASCII-text files** are acceptable. A format similar in structure to Card 3 can be utilized for reporting traffic speeds or travel times.

Granularity – The granularity of summary level data should be **60-minute for all measured lanes in the same direction at a specified location**. If the 60-minute data has been aggregated up from more detailed data (e.g., 1-minute data records), the percent of detailed records passing quality control and the percent of total possible detailed records used in aggregation calculations should be included with each 60-minute record.

Archived data will be stored by the Consortium in perpetuity and be made available upon demand.

5. *Performance Measure Reports*

Performance measure reports are to be provided to the U.S. DOT on a monthly and annual basis. The monthly reports shall be provided along with the monthly data. The monthly reports for each metropolitan area will be based on monthly data and will be presented with similar content, and in a format, consistent with the “city summary reports” that are part of the “Monitoring Urban Roadways in 2000” report prepared by the Texas Transportation Institute and Cambridge Systematics, Inc. An annual report summarizing each metropolitan area’s annual data shall be delivered on compact disk (CD-ROM) and made downloadable via the Internet annually, not more than two months following the end of each calendar year. The annual reports for each metropolitan area will be based on annual data and will be presented with similar content, and in a format, consistent with the “city summary reports” that are part of the “Monitoring Urban Roadways in 2000” report prepared by the Texas Transportation Institute and Cambridge Systematics, Inc. The U.S.DOT will have the right to request modifications to the specified format and granularity that are agreed to bilaterally once within two years of the first performance measure report submittal with no additional costs. These reports are for use by public agencies only and not for distribution for commercial uses.

The required **granularity in space** for performance measure reports is **by major roadway section**, such as between major interchanges (e.g., freeway-to-freeway) or major activity centers. The operating conditions within this roadway section should be fairly similar and homogenous. The length of roadway sections can vary based upon freeway network design and land use patterns.

The required **granularity in time** used to calculate for performance measure reports is **by 5 minutes**. The 5-minute values can be averaged across all non-holiday weekdays within the month or year, depending on whether it is a monthly or annual summary. Alternatively, the 5-minute values can be combined into peak hour or peak period statistics and reported for each individual weekday of the month/year.

6. *Data Quality and Quality Assurance*

The data for each area from the Consortium’s sensors shall meet the “better” traffic sensor data quality levels for “Nature”, “Accuracy”, “Delay, and “Availability” as defined in the document “Closing the Data Gap: Guidelines for Quality Advanced

Traveler Information System (ATIS) Data, Version 1.0, September 2000". Local agency data that meets the "good" quality level as defined in the same document shall be integrated unless it can be shown that doing so would not be appropriate and/or practical.

The Consortium will be responsible for assuring the quality of its own data, and will perform continuous screening of the integrated data for quality purposes. For non-ITIP generated data, the Consortium shall flag data anomalies to the public agency and the U.S. DOT. The owners of the integrated data will be notified if their data falls below the "good" quality level.

Quality control procedures must address the identification of faulty data; include procedures to correct the cause once faulty data is detected; indicate the percentage of faulty data, and include appropriate treatment of faulty or missing values. Documentation of faulty data detected and treatment given must be included in the monthly reports. During the 10-year period of the contract, the U.S. DOT reserves the right to perform, or cause to be performed, quarterly audits to verify the data quality in each metropolitan area using its own contractors at its expense.

7. *Performance Assurances*

If after notice and an opportunity of 30-days to cure, the data quality is found to be less than the minimum specified for two consecutive quarters in any single metropolitan area, this will be grounds for considering the contract in default in that metropolitan area.

If the Consortium fails to provide the monthly data and/or performance measure reports required for three consecutive months in any metropolitan area, this will be grounds for considering the contract in default in that metropolitan area. If the Consortium fails to provide the monthly data and/or performance measure reports on time (within 4 weeks following the end of each month) more than twelve times for any single metropolitan area during the 10-year life of the contract, this will be grounds for considering the contract in default in that metropolitan area.

If the Consortium (Mobility Technologies) is sold during the life of the contract, all the terms of the contract shall convey with the sale.

3.0 Additional Contractor Responsibilities

3.1 Training

The Consortium shall provide an effective, creative, and committed training program for system partners, users, or others in need of training. These training activities have as their goal the effective utilization of the implemented system.

3.2 Right-of-Way Access

The Consortium is subject to all applicable local permitting requirements for access to local rights-of-way, subject to the provisions of section 5204(k) of TEA-21 (23 U.S.C. 502 note; 112 Stat. 453-455).

3.3 *Privacy*

The Consortium shall provide specific techniques, as appropriate, with respect to data acquisition and collection, and to storage and dissemination of information that may be confidential or private to prevent unauthorized dissemination.