

FY14

PSAP GRANT PROGRAM APPLICATION



VIRGINIA INFORMATION
TECHNOLOGIES AGENCY
Integrated Services Division



FY14 PSAP GRANT PROGRAM APPLICATION

HOW TO APPLY/DEADLINE

The grant application is available and accessible from VITA's Integrated Services Program's website

(<http://www.vita.virginia.gov/isp/default.aspx?id=8578>). Upon completion of the application, it is to be submitted to the PSAP Grant Manager, Lisa Nicholson, at lisa.nicholson@vita.virginia.gov. Any supporting documentation must also be submitted along with the application, including mandatory budgets for projects (if applicable).

After submission, the PSAP Grant Manager will assign a Grant ID and send an e-mail notification to the project contact e-mail address listed on the application received.

All funding requests must be submitted using the grant application. Technical assistance is available from VITA's Public Safety Communications (PSC) staff throughout the grant process. The FY14 PSAP Grant Application Cycle starts July 1, 2012 and concludes on October 31, 2012 at 5:00 pm.

ALL APPLICABLE SECTIONS MUST BE COMPLETED IN ITS ENTIRETY OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE AND NOT ACCEPTED FOR CONSIDERATION.



FY14 PSAP GRANT APPLICATION

PROJECT TITLE

Fredericksburg AVL Implementation

GRANT APPLICANT PROFILE/PROJECT CONTACT

PSAP/HOST PSAP NAME: Fredericksburg Police Department

CONTACT TITLE: Chief of Police

CONTACT FIRST NAME: David

CONTACT LAST NAME: Nye

ADDRESS 1: 2200 Cowan Blvd

ADDRESS 2: [Click here to enter text](#)

CITY: Fredericksburg

ZIP CODE: 22401

CONTACT EMAIL: dnye@pd.fredericksburgva.gov

CONTACT PHONE NUMBER: (540)654-5707

CONTACT MOBILE NUMBER: [Click here to enter text](#)

CONTACT FAX NUMBER: (540)372-1108

REGIONAL COORDINATOR: Sam Keys

HOST PSAP AND PARTICIPATING PSAPS/LOCALITIES

Fredericksburg Police Department

Fredericksburg Fire Department

Fredericksburg Rescue Squad

GRANT TYPE

Individual PSAP

Consolidation

Regional Initiative

Secondary Consolidation



GRANT PROGRAM TYPE

Continuity and Consolidation

Enhancement

TIER

Out of Service

Non-Vendor Supported*

Technically Outdated*

Strengthen

Not Applicable

If technically outdated or non-vendor supported, application MUST include age and/or version of hardware/software.

VERSION:

YEARS of HARDWARE/SOFTWARE:

PROJECT FOCUS GIS: LOW PRIORITY

If "Other" selected, please specify: [Click here to enter text](#)

FINANCIAL DATA

Amount Requested: \$ 113,215

Total Project Cost: \$ 113,215



STATEMENT OF NEED

Introduction

The City of Fredericksburg is 11 square miles located on Interstate Route 95 midway between the Nation's Capital and the State Capital of Richmond. The City is surrounded by two of the fastest growing counties in Virginia and has grown to be the hub of a region that boasts a quarter million residents.

With a permanent population of 24,286 residents (2010 Census), daytime commuting results in an increase of 50%, to nearly over 34,000 people. Over 1.5 million visitors from the expanding counties, surrounding areas, and throughout the country enjoy Fredericksburg shopping, dining and nightlife, which also effectively increases both population and activity on any, given day.

Identification of Funding Priorities

The Fredericksburg Police Department (FPD) is requesting \$113,215 to install Automatic Vehicle Locator (AVL) in thirty-eight police cruisers and seventeen Fire Department and Rescue Squad units. Funding is being requested under the Enhancement Program, Number 8: GIS Low Priority (Strengthen). This category is the appropriate selection for this request, as AVL is specifically reliant on GIS/GPS technology- utilizing longitudinal and latitudinal coordinates to pinpoint exact vehicle location and relay this information back to the PSAP dispatcher. The function of AVL is to extend GIS capability to the field and provide real-time data back to dispatchers so they may make the best possible decisions regarding resource allocation.

Likelihood of Completing Project without Grant Funding

For the last three years, FPD has recognized that the current radio signal fluctuations and not fully equipped GIS/GPS components places officers at unnecessary risk due to dead spots and negatively impacts dispatchers' ability to allocate resources effectively. At the core of this issue is inactive GIS/GPS based technology- a problem that will be eliminated with the introduction of AVL.

With grant funding provided by the Wireless E-911 Services Board during the FY10 grant cycle, the City of Fredericksburg built the foundation of a functional GIS system that is now fully integrated with the Computer Aided Dispatch system in the PSAP. The available funding allowed for the purchase of a dedicated server and the creation of structure addressing and parcel mapping in the digital format, as well as for the assembly of completely updated map books. However, activating and allocating for a dormant AVL component is required to augment the project and develop a comprehensive GIS system. FPD has approached the idea of securing funding for this technology for approximately three years through internal budget allocation, but had to sideline projects such as AVL out of operational necessity. From the City Manager's Budget memorandum for FY2012: "The City's overall revenue base is forecasted to improve slightly from the prior two budget cycles. However, there is much in the way of deferred maintenance that must be addressed, and all of these needs cannot be met in one budget cycle." With no internal financial assistance available, FPD is seeking funding for this critical technology through this grant program. Without the requested funding, FPD service delivery will continue to face risks to quality service delivery and officer safety that are entirely preventable.

Percentage of grant funding request to total project costs

FPD is requesting grant funding to cover 100% of the project costs for this proposed project. However, the money requested in the FY2014 budget of \$20,000 for another GPS product could be utilized for AVL, if this grant is awarded.



Describe how the grant will be maintained and supported in the future, if applicable.

FPD requests grant funding for the initial implementation of AVL and maintenance fees during the twenty-four month grant period. FPD will cover the annual maintenance fee in subsequent years by incorporating this expense into its annual budget. In accordance with the signs of economic recovery slowly emerging, particularly increasing home sales and decreasing unemployment rates, FPD anticipates a rebound of tax revenues for the City. This expected scenario gives FPD all reason to believe that funding will be available to cover the maintenance expense, though not the entire purchase of AVL should this grant request not be approved.



COMPREHENSIVE PROJECT DESCRIPTION

Provide a thorough, concise, and complete description of the project, including an outline of the goals and objectives, implementation strategy, and a work plan.

Goals & Objectives

AVL is a field-based product that relays critical information back to the PSAP, empowering dispatchers to make informed decisions that improve response and resource allocation. The overarching goal of FPD's proposed AVL project is to ensure continuity in quality, service delivery by eliminating communication lapses resulting from out-of-service technology. The coordinating objectives are numerous, reflecting the power of AVL to affect operational success.

Project Goal: Ensure continuous, quality service delivery by eliminating communication lapses resulting from out-of-service technology.

Objective 1: Eliminate radio communication dead spots by introducing redundant signal with AVL.

Objective 2: Improve resource allocation by deploying closest available police, fire, and/or rescue unit(s).

Objective 3: Utilize AVL-collected data to inform long-term strategic planning.

Implementation Strategy

The success of this project will be high priority to FPD. In order to ensure project success, FPD will commit dedicated, skilled personnel to ensure timely and cost-effective project implementation. Assigned project personnel will include:

Suzanne Goodman, Director of Information Technology

Patrol Captain Richard Pennock

Services Captain Brian Layton

Fire Chief Edwin Allen

Deputy Fire Chief Michael Jones

Communications Manager Melissa Wood



FOR CONTINUITY AND CONSOLIDATION OR ENHANCEMENT PROJECTS:

PROJECT TIMELINE – Select each applicable phase of the project and indicate the estimated completion date. Sample activities for each phase can be found in the PSAP Grant Program Guidelines as well as on the addendum to this form.

PROJECT PHASE	ESTIMATED COMPLETION DATE
<input checked="" type="checkbox"/> INITIATION (Project approved by appropriate stakeholders)	07 / 31 / 13
<input checked="" type="checkbox"/> DESIGN/PLANNING (Project, system, or solution requirements are developed)	07 / 31 / 13
<input checked="" type="checkbox"/> ACQUISITION (Selected system or solution is procured)	10 / 31 / 13
<input checked="" type="checkbox"/> IMPLEMENTATION (Selected system or solution is configured and installed)	04 / 30 / 14
<input checked="" type="checkbox"/> TESTING/COMPLETION (Selected system or solution is tested and put in production)	06 / 30 / 14

Identify the longevity or sustainability of the project.

FPD is not alone in its support of this project. The Fredericksburg Fire Department has committed to cooperating in this project as well, ensuring that dispatchers are able to allocate the closest available police, fire, and rescue units to an emergency. The Fire Department's partnership in this project reflects the collective agreement that AVL will have a positive impact in continuing quality service delivery. The 24 month project period will provide enough time for the AVL technology to be implemented and verify its value. After this period, FPD will cover the annual maintenance fee for the AVL licenses by incorporating this expense into its annual budget.



Describe how this project supports the Virginia Statewide Comprehensive 9-1-1 Plan.

The objectives contained in this grant proposal support the following goal stated in the Virginia Statewide E-911 Strategic Comprehensive Plan:

Goal B: Position 911 Centers to continuously meet the public’s expectations.

Impact of Operational Services

FPD has always prided itself on protecting “the right of all citizens to live in peace and safety” and its PSAP has been instrumental in carrying out this mission. Nevertheless, the current PSAP operational capabilities have notable weaknesses that compromise continuous service delivery and officer safety. These weaknesses can be eliminated by updating out-of-service technology through grant funding provided by VITA. One of the most notable, and potentially life threatening, weaknesses is the prevalence of “dead spots” throughout the area. When officers are out in the field they too frequently encounter the loss of high-band VHF radio communication with each other and PSAP dispatchers. Compliance with FCC’s narrowbanding requirement will be met on time. In the event of an emergency, they cannot be dispatched for lack of communication, even if they may be the closest unit available. Far more ominous is the possibility they come upon or are involved in a life-threatening emergency and cannot communicate the situation nor is their location known. In the past and as of today, when officers cannot be reached via radio, FPD dispatchers have had to redirect other officers from their beats to locate the “missing” unit based on the last known location. This is an inefficient use of both time and valuable resources yet cannot be avoided due to risk of officer safety and the current available technology. AVL will eliminate these instances by providing a redundant communication pathway, strengthening radio signals to ensure consistent contact. AVL capability will also empower dispatchers to quickly and easily identify and dispatch the closest available resources to a call for service, reducing the time it takes for units to respond.

In addition to these short term operational advantages, AVL provides invaluable data back to the existing Computer Aided Dispatch (CAD) and Records Management System (RMS). AVL transmits data regarding routes taken, time elapsed, and unit speed among other important data that can be analyzed to inform long-term strategic planning. The data collected by AVL can reveal hidden trends that can aid in determining where to stage units for quicker response, where to establish substations, and even the need for additional units.

The Virginia Statewide Comprehensive 9-1-1 Plan aims to “provide a consistent level of 9-1-1 emergency dispatch services...and contribute to excellent public safety capabilities that maintain secure communities”. FPD’s current situation prevents its PSAP from achieving these goals. The implementation of AVL will rectify this and ensure consistent dispatch services and the security of the Fredericksburg community.



REGIONAL INITIATIVE (if applicable)

The relationship of the initiative to the participating PSAPs:

[Click here to enter text](#)

Intended collaborative efforts:

[Click here to enter text](#)

Resource sharing:

[Click here to enter text](#)



How does the initiative impacts the operational or strategic plans of the participating agencies:

[Click here to enter text](#)

CONSOLIDATION (Primary or Secondary) - (if applicable)

How would a consolidation take place and provide improved service:

[Click here to enter text](#)

How should it be organized and staffed:

[Click here to enter text](#)



What services should it perform:

Click here to enter text

How should policies be made and changed:

Click here to enter text

How should it be funded:

Click here to enter text

What communication changes or improvements should be made in order to better support operations:

Click here to enter text



BUDGET AND BUDGET NARRATIVE

FPD's project plan aims to replace inactive technology with software that eliminates the current dead-spot issues by employing field-based AVL technology. In order to successfully eliminate the current service delivery issues, FPD will install AVL in all thirty-eight of its police cruisers and 17 fire and rescue units. The costs associated with this effort include the **AVL Server Host License** that will allow CAD and AVL to exchange information. This data exchange will have a vital impact in both the short-term through immediate improvement in resource allocation and the long-term through strategic planning efforts. The **CAD Client AVL Licenses** will provide FPD's six dispatchers access to the GIS technology necessary to view, track, and find units deployed in the field. The **MCT-Client-AVL** software licenses provide access to GIS-related data to the officers in the field, providing them access to a moving map display that shows them their location and possible routes in real-time. These licenses also communicate the units' locations back the dispatcher at the PSAP center. All of the software licenses necessary for this project to be successful require annual maintenance to remain operable and supportable by the selected vendor. The maintenance costs for the two year grant period are included in the associated budget table (Table 1). The **Trimble Placer Gold GPS Bundle** includes the GPS receiver, antenna, and 12-foot USB cable necessary for AVL to function properly in the field. The bundle has been selected for its minimal installation issues, its ruggedized nature, and positive reviews by other public safety users.

The successful implementation of the requested software and success of the project in general, is of the highest priority to FPD. In order to ensure success is achieved, FPD will allocate sufficient resources to project management. FPD is committed to assigning six existing personnel to this project and recognizes that additional resources are needed to ensure this project achieves its goals and objectives within the stated timeline. The selected AVL vendor will provide **Project Implementation Services** by managing the project through oversight and coordinating FPD's involvement, the vendor's internal resources, and any third party vendors. The vendor will also provide **AVL Installation and Training**. Training includes instruction for system administrators (4-6 people) on setting up and maintaining AVL, as well as instruction for end users (10 people) on using the application. The **Living Expenses for Implementation Services and Travel Expenses for Implementation Services** reflect the estimated number of trips and total number of on-site professional services provided by the selected vendor. Though an estimate, FPD will only be billed for the actual cost of travel and living expenses per the terms of the vendor contract.

See attached vendor quote and referenced tables



EVALUATION

How will the project be evaluated and measured for achievement and success:

A performance plan for the successful completion of this project will measure and guarantee that the AVL is purchased, installed, evaluated for quality and control, and that appropriate training is conducted for all relevant personnel. The performance plan will include the phases of the project:

INITIATION

- Project concept is documented
- City Council approval received
- PSAP grant application is filed
- Local budgets are obtained
- Appropriated grant funds are approved
- Budgetary estimates are obtained

DESIGN/PLANNING

- Requirements are documented
- Components to be purchased are identified
- General design is documented

ACQUISITION

- RFP (or other bid related processes) are drafted
- Proposals are evaluated
- Contract is signed
- Purchase orders are issued
- Quotes are obtained/grant funds draw down

IMPLEMENTATION

- Purchased components are delivered and installed
- Training is performed

TESTING/COMPLETION

- Performance of system/solution validated
- System goes live

See attached Implementation Plan Matrix



FINANCIAL AND PROGRAMMATIC REPORT

PROJECT PHASES

SAMPLE ACTIVITIES

PHASE

SAMPLE ACTIVITIES

INITIATION

(Project approved by appropriate stakeholders)

- Project concept is documented
- Local Board or governing authority approval or endorsement is received
- PSAP grant application is filed
- Local budgets are obtained
- Appropriated grant funds are approved
- Budgetary estimates are obtained

DESIGN/PLANNING

(Project, system, or solution requirements are developed)

- Requirements are documented
- Components to be purchased are identified
- General design is documented

ACQUISITION

(Selected system or solution is procured)

- RFP (or other bid related processes) are drafted
- Proposals are evaluated
- Contract is signed
- Purchase orders are issued
- Quotes are obtained/grant funds draw down

IMPLEMENTATION

(Selected system or solution is configured and installed)

- Purchased components are delivered and installed
- Training is performed

TESTING/COMPLETION

(Selected system or solution is tested and put in production)

- Performance of system/solution is validated
- System/solution goes "live"

PSAP Grant Program GIS-Related Grant Request Priority Matrix

	Data Production			Data Transfer	9-1-1 Mapping Display
Priority	Enterprise Software / Hardware	GIS Tools	Data	Map Data Transfer to / from the PSAP	9-1-1 Mapping Display Software / Hardware
High	<p>ESRI 10.x or newer supporting the PSAP/PSAP with enterprise considerations (C)</p> <p>ESRI 9.x or newer supporting the PSAP/PSAP with enterprise considerations for additional licenses (C)</p>	Maintenance Field/Office Tools for 9-1-1 applications, supporting the PSAP/PSAP with enterprise considerations (C).	<ul style="list-style-type: none"> • Format Conversion to ESRI 9.x or newer (C) • Data Manipulation of (C): <ul style="list-style-type: none"> - Road Centerlines (MSAG Valid) - Address Building Polygons (MSAG Valid) - Address Building Points (MSAG Valid) - Emergency Service Zones (MSAG Valid) - County / Municipal Boundaries (MSAG Valid) 	<ul style="list-style-type: none"> • Real-Time (E) • Scheduled/On Demand (C) 	<ul style="list-style-type: none"> • Dispatch Mapping (Hosted Services) (E) • Dispatch Mapping (Supports Geodatabase) (C) <ul style="list-style-type: none"> - (CAD, CPE or Stand-alone) • Software interfaces between Dispatch Mapping System and CAD/CPE (C)
Medium	Large-scale printers/plotters primarily for PSAP use (E)		<ul style="list-style-type: none"> • Data Manipulation of (C): <ul style="list-style-type: none"> - Police Beats, Fire Zones/Boxes, EMS Boundaries - Fire Hydrants - Hydrography • Map Books / Atlases for PSAP use (E) • Large Format Maps for PSAP use (E) • Data Manipulation of (E): <ul style="list-style-type: none"> - Directionality and Routing (MSAG Valid) 		<ul style="list-style-type: none"> • Dispatch Mapping (Supports only Shapefile formats) (C) <ul style="list-style-type: none"> - (CAD, CPE or Stand-alone)
Low			<ul style="list-style-type: none"> • Data Manipulation of (E): <ul style="list-style-type: none"> - Parcels (MSAG Valid Addresses Applied) - Oblique Imagery (e.g., Pictometry, MultiVision USA) - Other MSAG valid data layers 		<ul style="list-style-type: none"> • PSAP portion of Automatic Vehicle Location (AVL) (E) • Historical/Statistical Reporting (Pin Mapping) (E)
Program Code	Red = (E) = Items funded through the Enhancement Program; Blue = (C) = Items funded through the Continuity and Consolidation Program				
In-Cell Priority Order	Items are listed in priority order in each cell				
Notes	<p>"ESRI 10.x or newer Supporting the PSAP/PSAP with Enterprise Considerations" refers to the use of ESRI 10.x or newer versioned data production software being used to benefit the locality's PSAP or the PSAP and other local government departments as well. ESRI 9.x or newer will apply for additional licenses with an enterprise consideration.</p>	<p>"GIS Field/Office Tools" refers to those tools that would be used as extensions of, or in conjunction with, standard ESRI software. These tools provide features and functionality that are specifically for the maintenance of public safety map data sets.</p>	<p>"Format Conversion" refers to the conversion of one map data format to a different map data format.</p> <p>"MSAG Valid" refers to map data attributes and spatial relationships existing in the map data so that the map data is an accurate representation of the records contained in the 9-1-1 Database Provider's Master Street Address Guide (MSAG) (e.g., map data attributes are consistent with naming standards in the MSAG; road centerlines broken, and common nodes exist, at emergency service zone boundaries).</p> <p>"Data Manipulation" refers to the creation, enhancement, verification, or maintenance of map data.</p> <p><u>Creation</u> = creating a map data set for the first time</p> <p><u>Verification</u> = audit of spatial or attribute accuracy of a map data set</p> <p><u>Enhancement</u> = applying non-existent spatial or attribute information to a map data set</p> <p><u>Maintenance</u> = when a map data set reaches an acceptable level of spatial and attribute accuracy, the addition of features to the map data set</p>	<p>"Real-Time" refers to the primary data used in an emergency services mapping application having a live and continuous map data connection to the map data source; such that when map data is edited by the GIS editing entity, it can be seen immediately in the emergency services mapping application.</p> <p>"Scheduled/On Demand" refers to a process by which map data is distributed from a map data source to an emergency services mapping application on a predetermined recurring time period or via a software command.</p>	<p>"Dispatch Mapping (Hosted Services)" refers to the dispatch mapping application being served from some remote location to each telecommunicator workstation in the PSAP.</p> <p>"Dispatch Mapping (Supports Geodatabase)" refers to the primary data format of the application being ESRI geodatabase, whether the geodatabase format be personal, file, or enterprise.</p> <p>"Dispatch Mapping (Supports only Shapfiles data formats)" refers to the primary data format of the application being in a shapefile data format.</p> <p>All 9-1-1 mapping software generally recommended for funding must reside within the virtual PSAP. The virtual PSAP is that area that encompasses the function of 9-1-1 call taking. For example, "Dispatch Mapping" refers to the mapping application that resides in the PSAP. Likewise, "Automatic Vehicle Location" refers to the portion of the AVL system (mapping module) that resides in the PSAP, not the RF infrastructure and/or software or hardware that resides on or within the vehicle.</p>
<ul style="list-style-type: none"> • Creation of entire road centerlines files (or datasets) or ortho photography already funded as statewide project will not be funded. (Verification, enhancement and maintenance of road centerlines is permissible.) • Addressing projects without GIS elements do not constitute GIS projects. For example, a project to verify addressing without a GIS element is not a GIS project and the priority for such a project would not be evaluated using the GIS prioritization matrix • Projects involving the verification of various E-911 databases such as the MSAG and the Automatic Location Information (ALI) database without GIS elements do not constitute GIS projects. For example, a project to verify address ranges in the MSAG without a GIS element is not a GIS project and the priority for such a project would not be evaluated using the GIS prioritization matrix. If, however, the MSAG verification project involves conversion or manipulation of GIS data (most projects such as this will), the GIS prioritization matrix should be used in determining project priority. • Non-MSAG valid projects will not be funded. 					

Fredericksburg Police Department (FPD), Fredericksburg, Virginia

GOAL	Ensure continuous, quality service delivery by eliminating communication lapses resulting from out-of-service technology.
-------------	---

Table 1: Equipment

Category	Item	Description	Unit Price	Number of Units	Annual Maintenance Fee	Total Price
Equipment	AVL Server Host License	CAD server license so AVL software can query back to CAD system and exchange data.	\$ 35,000	1	\$ 6,300	\$ 41,300
	CAD Client AVL License	AVL software for the CAD workstation allows the communicator to view/track/find mobile units in the field.	\$ 2,000	6	\$ 2,160	\$ 14,160
	MCT-Client- AVL	AVL software for te mobile computer allows the user to have a "moving map display" in the vehicle and transmit their location back to CAD.	\$ 150	55	\$ 1,320	\$ 9,570
	Trimble Placer Gold GPS Bundle	Bundle includes GPS receiver, antenna, and 12-foot USB cable.	\$ 703	55	\$ -	\$ 38,665
	Estimated Hardware Shipping		\$ 200	1	\$ -	\$ 200
<i>Sub-Total</i>						\$ 103,895

Table 2: Contractual

Contractual	Project Implementation Services	Professional services provided by vendor for management oversight and coordination with FPD's project management, vendor's internal resources, and any third pary vendors.	\$ 5,120	1	\$ -	\$ 5,120
	AVL Installation and Training	One day on-site installation and training of AVL.	\$ 2,800	1	\$ -	\$ 2,800
	Living Expenses for Implementation Services	Living expenses are budgeted for one travel day per trip and each day on site.	\$ 700	1	\$ -	\$ 700
	Travel Expenses for Implementation Services	Living expenses are budgeted for one travel day per trip and each day on site.	\$ 700	1	\$ -	\$ 700
<i>Sub-Total</i>						\$ 9,320
TOTAL						\$ 113,215

Table 3

Equipment	\$ 103,895
Contractual	\$ 9,320
TOTAL	\$ 113,215

GOAL		Ensure continuous, quality service delivery by eliminating communication lapses resulting from out-of-service technology.						
Objective		Impact	Evaluation Plan	Actions to Success	Timeline	Reoccurring? Y/N	Action Reoccurrence	Objective Manager
1	Eliminate radio communication dead spots by introducing redundant signal with AVL.	Deadspot incidence rate of 0.	Compare pre-AVL benchmark/dead spot incidence with post-project rate of incidence.	1. Establish benchmark by reporting and evaluating pre-AVL dead spot incidence(s).	Mar-2013	N	N/a	Manager Wood
				2. Install AVL.	Apr-2014	N	N/a	Suzanne Goodman
		Improvement in officer safety by ensuring reliable real-time location identification.	Regular testing of randomly selected unit to verify location identification utilizing AVL technology.	3. Train AVL users on proper utilization of technology.	May-2014	N	N/a	Captain Layton
				4. Compare pre- and post-project rates of dead spot incidence.	Jun-2014	Y	Quarterly	Manager Wood
				5. Conduct searches of randomly selected unit(s) to determine location identification.	Jun-2014	Y	Monthly	Manager Wood
2	Improve resource allocation by deploying closest available police and/or fire unit(s).	Reduce average response time by 1 minute.	Compare pre-AVL average response time for both police and fire.	1. Establish benchmark by reporting and evaluating pre-AVL average response time.	Mar-2013	N	N/a	Captain Pennock/ Fire Chief Allen
				2. Train dispatchers on AVL utilization so they have understanding of how to read the GIS maps and deploy the closest available unit(s).	May-2014	N	N/a	Manager Wood
				4. Compare pre- and post-project response times.	Jun-2014	Y	Quarterly	Manager Wood
3	Utilize AVL-collected data to inform long-term strategic planning.	AVL-collected data will reveal hidden trends and needs that can be used to inform long-term strategic strategies and direction.	Analyze AVL data for trends related to most frequent routes taken, frequency of service calls in certain areas, speeds, and average miles driven from unit location to service call.	1. Install AVL.	Apr-2014	N	N/a	Suzanne Goodman
				2. Train authorized RMS users to run and create reports for selected AVL data.	May-2014	N	N/a	Captain Pennock
				3. Analyze data for hidden trends.	Jun-2014	Y	Quarterly	Captain Layton
				4. Discuss analysis results in regular meetings of FPD decision-makers.	Jun-2014	Y	Quarterly	Captain Pennock



Add-on Hardware Quote

Date	Quote #	Acct Mgr
09/11/12	MCKBQ2175	Matt Bartell

Quote Prepared For:

Fredericksburg, VA
 Melissa Wood
 2200 Cowan Blvd.
 Fredericksburg, VA 22401
 Phone: (540)654-5933

Qty	Part Number	Product Description	Unit Price	Extended Price	Annual Maintenance
Auto Vehicle Locator					
1	MCT-AVL-HOST	AVL SERVER HOST LICENSE This is the CAD Server License of SunGard OSSI's Automatic Vehicle Locator (AVL) software.	\$35,000.00	\$35,000.00	\$6,300.00
6	MCT-AVL-CAD	CAD CLIENT AVL LICENSE SunGard OSSI's Automatic Vehicle Locator (AVL) software for the CAD workstation allows the communicator to view/track/find mobile units in the field. This product requires that the customer purchase maps.	\$2,000.00	\$12,000.00	\$2,160.00
55	MCT-AVL-CLIENT	MCT CLIENT - AVL SunGard OSSI's Automatic Vehicle Locator (AVL) software for the mobile computer allows the user to have a "moving map display" in the vehicle and transmit their location back to CAD. CAD users are able to display and track vehicles equipped with SunGard OSSI's AVL.	\$150.00	\$8,250.00	\$1,320.00
				SubTotal:	\$55,250.00
Implementation Services					
1	MCT-PROJ-MGNT	PROJECT MANAGEMENT SERVICES Includes professional services from SunGard for management oversight and coordination with the Customer's project management, SunGard's internal resources and any third party vendors. Includes coordinating with the Customer's Project Manager all SunGard related deliveries such as application software, implementation services, and scheduling of SunGard's resources with the Customer.	\$5,120.00	\$5,120.00	\$0.00
1	MCT-AVL-SERV	AVL INSTALLATION AND TRAINING One day on-site for installation and training of AVL. Training includes instruction for system administrators (4-6 people max.) on setting up and maintaining AVL, as well as instruction for end-users (10 people max.) on using the application.	\$2,800.00	\$2,800.00	\$0.00
				SubTotal:	\$7,920.00
3rd Party Hardware					

Qty	Part Number	Product Description	Unit Price	Extended Price	Annual Maintenance
55	HWR-TRIMBLE-PKG-USB	Trimble Placer Gold GPS Bundle (USB)	\$703.00	\$38,665.00	\$0.00
Trimble Placer Gold GPS Receiver Bundle includes GPS receiver, antenna and 12-foot USB cable.					
Unless otherwise specified, installation of GPS hardware is not included in this pricing.					

SubTotal: \$38,665.00

Estimated Travel & Living Expenses

1	MCT-LE	LIVING EXPENSES FOR MCT IMPLEMENTATION SERVICES	\$700.00	\$700.00	\$0.00
Estimated Travel and Living expenses.					
Living expenses are budgeted for one travel day per trip and each day on site.					
The listed travel and living expense costs are a budget quote based on an estimate of the number of trips and the total number of days of on-site professional services that SunGard provides. The Customer will be billed only for the actual cost of travel and living expenses per the terms of the contract.					
Changes or modifications to the project would be appropriately reflected in the travel and living.					

1	MCT-TE	TRAVEL EXPENSES FOR MCT IMPLEMENTATION SERVICES	\$700.00	\$700.00	\$0.00
Estimated Travel and Living expenses.					
Living expenses are budgeted for one travel day per trip and each day on site.					
The listed travel and living expense costs are a budget quote based on an estimate of the number of trips and the total number of days of on-site professional services that SunGard provides. The Customer will be billed only for the actual cost of travel and living expenses per the terms of the contract.					
Changes or modifications to the project would be appropriately reflected in the travel and living.					

SubTotal: \$1,400.00

Shipping: \$200.00

Total: \$103,435.00 \$9,780.00

This quote is valid until 12/30/12

This Quote constitutes a Supplement to the Contract and Agreement by and between the parties hereto. Except as otherwise provided herein, all terms and conditions of the Contract and Agreement shall remain in full force and effect. As applicable for certain customers, the term "Contract and Agreement" is defined as the Software License & Services Agreement and the License Program Support Agreement between the parties hereto.

Should Customer terminate this agreement per the "Term of Contract" Section of the Contract and Agreement, the Customer agrees to pay, immediately upon termination, the remaining balance for all hardware, software, and services delivered prior to the termination date together with travel reimbursements, if any, related to the foregoing. Notwithstanding any language in the Contract and Agreement to the contrary, the purchase of support services is NOT necessary for the continuation of Customer's License.

Licensed Program(s) are provided in and may be used in machine-readable object code form only. SunGard Public Sector offers the Customer, through a third party escrow agent, a Source Code Escrow Agreement that provides for release of the source code version of the Licensed Program(s) from escrow upon the occurrence of certain release events, such as SunGard Public Sector's failure to provide required maintenance services as agreed.

Applicable taxes are not included, and, if applicable, will be added to the amount in the payment of invoice(s) being sent separately. Travel and living expenses are in addition to the prices quoted above and shall be governed by the SunGard Public Sector Corporate Travel and Expense Reimbursement Policy.

The SunGard Public Sector application software warranty shall be for a period of one (1) year after Delivery. There is no Testing and Acceptance period on the Licensed Program(s) herein.

Any interfaces listed above are interfaces only. Customer shall be responsible for obtaining the applicable software, hardware and system software from the appropriate third party vendor.

Preprinted conditions and all other terms not included in this Quote or in the Contract and Agreement, stated on any purchase order or other document submitted hereafter by Customer are of no force or effect, and the terms and conditions of the Contract and Agreement and any amendments thereto shall control unless expressly accepted in writing by SunGard Public Sector to Customer.

Third party hardware/software maintenance and/or warranty will be provided by the third party hardware and software manufacturer(s). SunGard Public Sector makes no representations as to expected performance, suitability, or the satisfaction of Customer's requirements with respect to the hardware or other third party products specified in this Quote. The return and refund policy of each individual third party hardware/software supplier shall apply.

This Agreement is based on the current licensing policies of each third party software manufacturer as well as all hardware manufacturers. In the event that a manufacturer changes any of these respective policies or prices, SunGard Public Sector reserves the right to adjust this proposal to reflect those changes.

This Quote shall be effective notwithstanding any provisions as to non-availability of funds contained in the Contract and Agreement.

The date of delivery is the date on which SunGard Public Sector delivers, F.O.B. SunGard Public Sector's place of shipment, the Licensed Program(s) to Customer.

For training and on-site project management sessions which are cancelled at the request of Customer within fourteen (14) days of the scheduled start date, Customer is responsible for entire price of the training or on-site project management plus incurred expenses.

Payment Terms are as Follows:

License, Conversion, Project Planning, Project Management, Hardware and Third Party Software Fees are due upon execution of this Quote. Training, Professional Services and Travel/Living expenses are due as incurred monthly. Installation is due upon completion. Additional services, if requested, will be invoiced at then-current rates. Any shipping charges shown are estimated only - actual shipping charges will be due upon delivery. Hardware and Third Party Software Implementation is due 50% on execution of this Quote, and 50% due upon invoice, upon completion.

SunGard Public Sector Application Annual Support - the initial term of Maintenance and Support Services is included in License Fees and begins upon execution of this Quote and extends for a twelve (12) month period. Subsequent terms of support will be for twelve (12) month periods, commencing at the end of the initial support period. Support fees shown for the second term of support shall be due prior to the start of that term. Fees for subsequent terms of support will be due prior to the start of that term at the then prevailing rate. Third Party Application Annual Support Fees - payment terms shall be as provided by the Third Party to Customer with the exception that any fees listed above for the initial term of support are due upon execution of this Quote.

Accepted:

Fredericksburg, VA		
_____	_____	_____
Signature	Date	Printed Name