



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](mailto: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

Fairfax County Alternate Ten Digit Number Communications

### GRANT APPLICANT PROFILE/PROJECT CONTACT

PSAP/HOST PSAP NAME: Fairfax County Public Safety Communications

CONTACT TITLE: Fairfax County 9-1-1 Systems Administrator

CONTACT FIRST NAME: Steve

CONTACT LAST NAME: McMurrer

ADDRESS 1: 4890 Alliance Drive

ADDRESS 2: Department of Public Safety Communications

CITY: Fairfax, Virginia

ZIP CODE: 22030

CONTACT EMAIL: Steve.McMurrer@fairfaxcounty.gov

CONTACT PHONE NUMBER: 571-350-1779

CONTACT MOBILE NUMBER: 571-385-6144

CONTACT FAX NUMBER: 571-350-1669

REGIONAL COORDINATOR: Lewis Cassada

### HOST PSAP AND PARTICIPATING PSAPS/LOCALITIES

**Fairfax County**

_____	_____
_____	_____
_____	_____
_____	_____

### GRANT TYPE

Individual PSAP

Regional Initiative

Consolidation

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- Technically Outdated\*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**If technically outdated or non-vendor supported, application MUST include age and/or version of hardware/software.**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 FIXED BACK-UP

**If "Other" selected, please specify: 1T**

## FINANCIAL DATA

Amount Requested: \$ 40,000.00

Total Project Cost: \$ 40,000.00

## STATEMENT OF NEED

Fairfax County is seeking to provide a capability to provide continuous communications into the 9-1-1 Center even when interruptions occur in the Verizon network. The solution this grant addresses is to provide a continuous ten digit number capability into the 9-1-1 center even if the Verizon network is down or incapacitated to allow citizens more options to reach public safety officials. Fairfax County budgets have been tight and the Department of Public Safety Communications has been asked to reduce its budget by 5% during FY2013, FY2014 and FY2015. During the Derecho of June 2012, and again recently in October, communications capabilities in the Verizon network failed leaving DPSC without, or with diminished, methods of communicating via telephone. The capability anticipated through this grant solution would provide citizens constant multi-line ten digit number capability into the ACD call taker queue on the operations floor and would bypass the Verizon communications network.



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

Once the initial grant is approved and the solution successfully implemented it is anticipated that the ongoing costs of supporting the communications line charges and maintenance will be funded through the normal operating budgets of the Department of Public Safety Communications.

## **COMPREHENSIVE PROJECT DESCRIPTION**

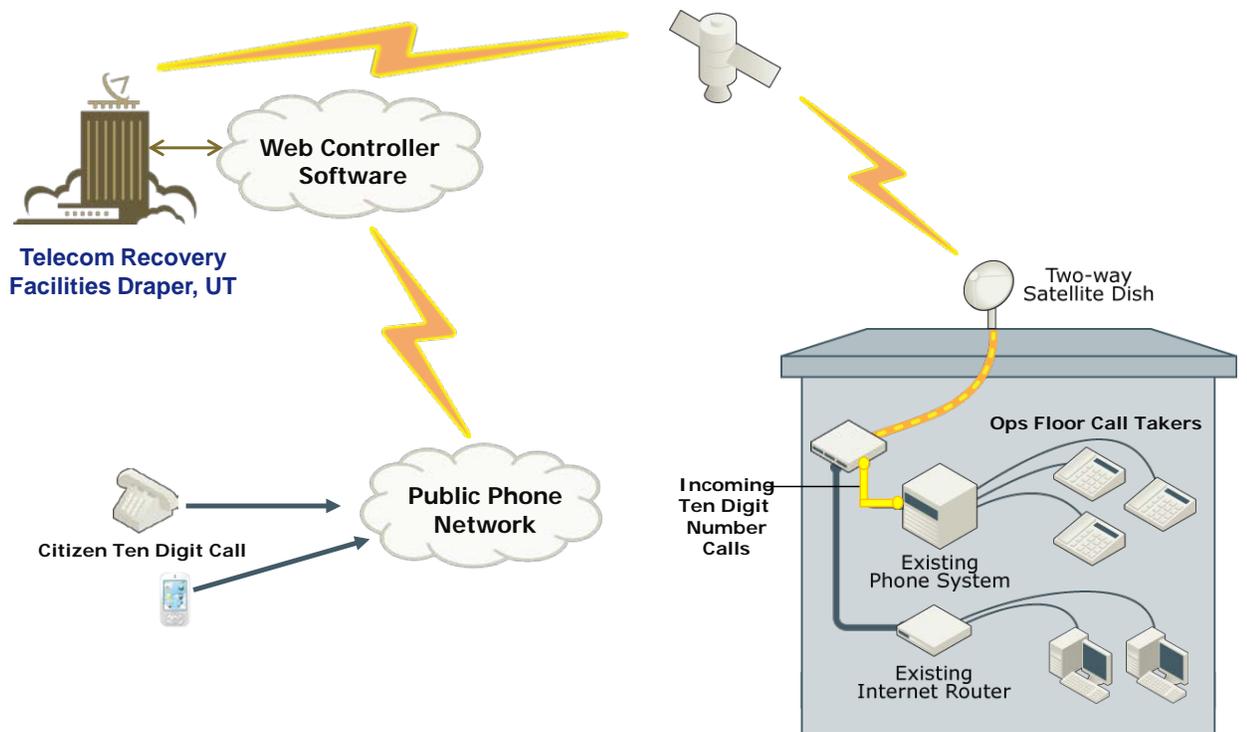
### **Description of the Fairfax County Alternate Ten Digit Number Communications Project:**

The project goal envisioned by this grant would provide an initial capability for Fairfax County DPSC to sustain ongoing operations in times where communications lines into the 9-1-1 center are hampered or not available. The project envisions providing supplemental communications lines into the 9-1-1 Operations Center from sources outside the local plant facilities of Verizon and Cox Communications and other local communications providers. The intent is to quickly provide the public with a ten digit number that can be used to call into the 9-1-1 center if the normal ten digit numbers are not operating. The need for this capability is real as events proved during the Derecho 2012 storm where communication outages occurred in many local Verizon Central Offices. Also in October 2012, the Fairfax 9-1-1 Center encountered another Verizon service disruption when an “all circuits busy” situation persisted for several hours rendering normal ten digit numbers into the center unavailable. To provide improved service to the public during times when natural or man-made disasters occur within and around the Metropolitan D.C. area, Fairfax County is looking to implement an additional redundant solution with communications capability provided from an area outside the local geographic area.



An overview of how the solution from the selected provider, Telecom Recovery, would work is depicted in Exhibit 1.

### Conceptual View of Fairfax County Alternate Ten Digit Communications Exhibit 1





## **How it Would Work**

Fairfax would contract with Telecom Recovery ([www.TelecomRecovery.com](http://www.TelecomRecovery.com)) for a ten digit number that could be used during “emergency” situations for incoming calls. The number would always be “on”, capable of receiving calls by the nature of how the equipment and software from Telecom Recovery would be installed. The number, however, would only be actively publicized to citizens to use during the emergency event. The numbers, because they are always “on”, could also be used for testing purposes and drill purposes without having to switch over to backup equipment if needed.

After a disaster or outage occurs, the Telecom Recovery solution (called 9-1-1 in the Sky™ ) delivers concurrent incoming calls, via satellite from their facility in Utah, directly to a receiving dish installed on the Fairfax County building. The calls would be routed from the dish through a proprietary Telecom Recovery device and into the existing telecommunications switch in the IT gallery at the Fairfax County Operations Center. This routing of the calls circumvents all regular Verizon connections and the calls would be placed into the ACD queue for immediate answer by call takers based on call priority assignment queuing under the control of Fairfax County personnel.

A person dialing the Fairfax County “emergency” ten digit number (assigned by Telecom Recovery) would be forwarded automatically from the Public Switched Network (Verizon, AT&T, Sprint, T-Mobile, etc.) into the Web Call Controller at Telecom Recovery’s facilities in UT leading to a downlink to the Fairfax County PSTOC rooftop dish (into a newly installed piece of equipment called a TRIAD). From the TRIAD, the citizen’s ten-digit dialed call would be forwarded internally into the ACD like any other incoming call at DPSC according to pre-selected associations between the ten digit number and the DPSC calling queues. The time element in making the call links would be small and not noticeable to the caller. The Telecom Recovery solution also provides a way to make outgoing calls as dial tone is available through the DPSC



implemented Telecom Recovery portal and there is some limited internet access made available for technician use.

### **Problems Telecom Recovery Solution Addresses:**

Several backup or recovery scenarios a Telecom Recovery solution could address are briefly described below.

- CO Isolation - For callers with dial tone, Telecom Recovery provides a way for DPSC to publish the ten digit number(s) and the calls citizens make using that ten digit number will connect with DPSC automatically from the Telecom Recovery facilities in UT and through the satellite feed at PSTOC and into our ACD queues.
- Isolation from Tandem Selective Router – If for some reason DPSC is isolated from both of the Tandems (Fairfax and Alexandria) the 9-1-1 calls being routed to the Tandem could be rerouted to come through the DPSC Telecom Recovery portal (satellite dish). Citizens making 9-1-1 calls in the isolated areas would have their 9-1-1 call with ANI/ALI forwarded to DPSC automatically.
- DPSC Isolation – If for some reason, the lines coming into the DPSC building are cut (by construction digging or some other event), the Telecom Recovery solution provides the same capabilities as described above for isolation from the Tandem Selective Router



**FOR CONTINUITY AND CONSOLIDATION OR ENHANCEMENT PROJECTS:**

PROJECT TIMELINE –

PROJECT PHASE	ESTIMATED COMPLETION DATE
<input type="checkbox"/> <b>ACQUISITION</b> (Selected system or solution is procured)	05 / 01 / 13
<input type="checkbox"/> <b>IMPLEMENTATION</b> (Selected system or solution is configured and installed)	06 / 30 / 13
<input type="checkbox"/> <b>TESTING/COMPLETION</b> (Selected system or solution is tested and put in production)	07 / 01 / 13

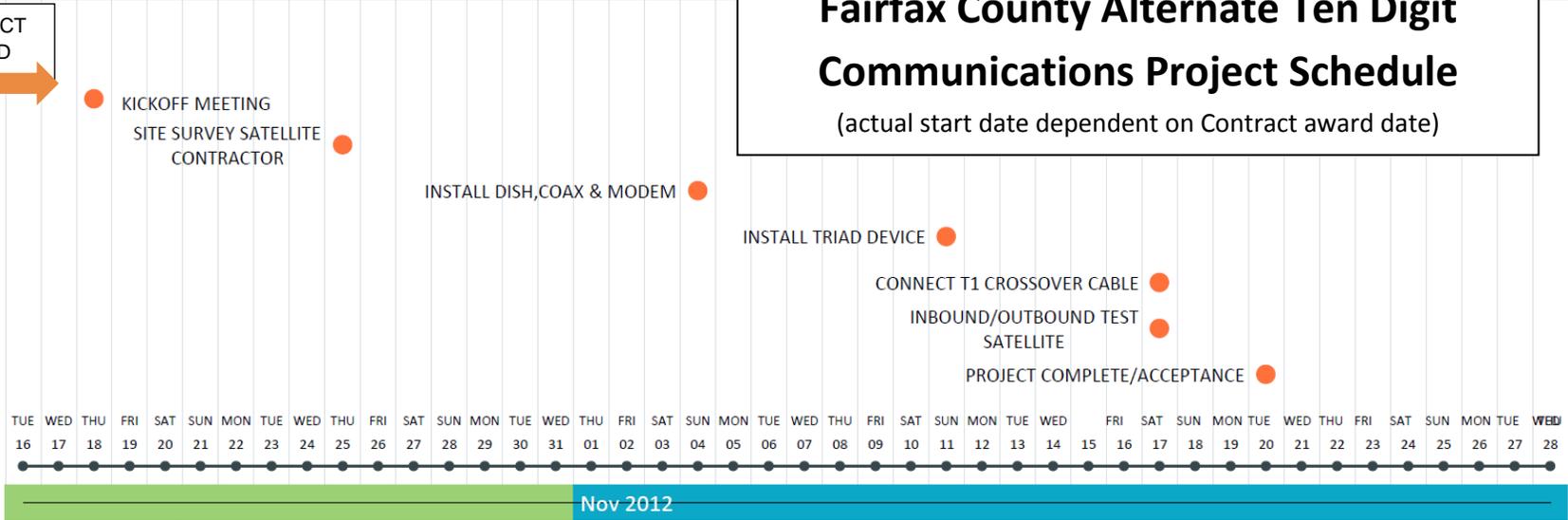
**A representative project schedule for the Fairfax County Alternate Ten Digit Number project is depicted on the next page. The dates would need to be adjusted to the actual start dates once the procurement steps are complete and a contract is signed and purchase order is issued.**



## Fairfax County Alternate Ten Digit Communications Project Schedule

(actual start date dependent on Contract award date)

CONTRACT AWARD



ENTER PROJECT START DATE:

ACTIVITY	PROJECTED START	HOURS	THOSE INVOLVED	COORDINATED BY
Start Project	10/15/2012		TR Receives signed agreement	
Kickoff meeting	10/18/2012	1 Hour	Your staff and TR Project Manager	TR Project Manager
Site Survey Satellite Contractor	10/25/2012	1-2 Hours	Your IT person and satellite contractor	TR Project Manager
Install Dish, Coax & Modem	11/4/2012	6-8 Hours	Your IT person (1HR) to show satellite contractor around	TR Project Manager
Install TRIAD Device	11/11/2012	1 Hour	Your IT person & TR Project Manager	TR Project Manager
Connect T1 Crossover cable	11/17/2012	1 Hour	Your IT person & switch technician & TR Project Manager	Facility Phone Tech
Inbound/Outbound Test Satellite	11/17/2012	1 Hour	Your IT person & switch technician & TR Project Manager	TR Project Manager
Project Complete/Acceptance	11/20/2012		Your IT person & TR Project Manager	TR Project Manager



Identify the longevity or sustainability of the project.

The project capability has considerable sustainability to provide an extra layer of redundancy to Fairfax County Department of Public Safety communications capabilities in times where Verizon service is interrupted. The project provides an initial backup capability at the main Operations Center for Fairfax County. If the implementation is successful, consideration can be given to provide a similar capability at the Alternate PSAP for Fairfax County located at the Pinie Ridge Facility on Woodburn Road. A successful implementation of the capability will allow the county to include operational and maintenance support into future budget planning to sustain the capabilities on an ongoing basis.

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

This project supports the comprehensive plan for 9-1-1 in that it is not carrier specific and can interoperate with any carrier. The equipment is also ready for NG9-1-1 and operates on SIP connections and has portability for management using broadband internet access.

**REGIONAL INITIATIVE (if applicable)**

N/A

The relationship of the initiative to the participating PSAPs:

N/A

Intended collaborative efforts:

N/A



Resource sharing:

N/A

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

N/A

**CONSOLIDATION (Primary or Secondary) - (if applicable)**

How would a consolidation take place and provide improved service:

N/A

How should it be organized and staffed:

N/A

What services should it perform:

N/A

How should policies be made and changed:

N/A

How should it be funded:

N/A



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

N/A

## **BUDGET AND BUDGET NARRATIVE**

List the planned expenditures to be made with grant funds.

See the attached quote from Telecom Recovery for the cost estimate. The estimated cost for equipment set-up, installation, and line communications charges with annual support is \$34,693.00. The estimated annual charges are expected to be \$19,903. The total estimated amount for the grant request was rounded to \$40,000 to cover any incidental charges from Verizon technicians to assist in making connections to the 9-1-1 primary and Admin switch from the TRIAD device.



## 911 in the Sky™ Quote

Telecom Recovery  
 11778 Election Rd., Suite 140  
 Draper, UT 84020  
 Phone: 1-877-777-3520 Fax: 1-866-479-0977  
[www.telecomrecovery.com](http://www.telecomrecovery.com)

Date: October 19, 2012  
 Prepared by: Mark Spiers  
 Contact Info: 1-866-353-8402  
[mspiers@telecomrecovery.com](mailto:mspiers@telecomrecovery.com)

**Quote Prepared For:**

Steve McMurrer  
 Fairfax County 911  
 12000 Government Center Parkway  
 Fairfax, VA 22035

**This Quote expires on: December 1, 2012**

<b>Agreement Term:</b>	<b>3 Years</b>	<b>Payment Option:</b>	<b>Annual Payment</b>
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Annual Charges*			
	Qty	Each	Subtotal
VoiceShield 50-line Service	1	\$ 7,711	\$ 7,711
Lines	50	included	\$ 0
Access Numbers	10	included	\$ 0
Monthly voice minutes included**	2,000	included	\$ 0
Web Call Controller™ (Admin. Access)	1	included	\$ 0
VoiceCast Mass Notification	1	included	\$ 0
Toll-Free Information Hotline	1	included	\$ 0
24/7/365 Outage Support	1	included	\$ 0
Net PRI™	0	\$ 1,650	\$ 0
VoiceShield™ satellite service <sup>1</sup>	1	\$ 12,192	\$ 12,192
<b>Annual Recurring Total:</b>			<b>\$ 19,903</b>

One-Time Charges			
	Qty	Each	Subtotal
WCC, Configuration, Test, ECP	1	\$ 3,995	\$ 3,995
1.2 Meter Dish (inc. 4W BUC, modem, NPRM)	1	\$ 5,995	\$ 5,995
TRIAD License (incl. 1 T1)	1	\$ 1,900	\$ 1,900
Additional TRIAD T1 Licenses, each	0	\$ 700	\$ 0
Channel Bank(s) (including 66 block) <sup>2</sup>	0	\$ 1,900	\$ 0
PRI-Sky Freight, On-site Install, Test	1	\$ 2,900	\$ 2,900
Net PRI Freight, Remote Install, Test	0	\$ 1,295	\$ 0
<b>One-Time Total:</b>			<b>\$ 14,790</b>

\*Discounts on Monthly Charges are available for annual pre-payment (10%) and 3-year or longer agreements (5%)(REFLECTED)  
 \*\*Additional voice minutes (domestic, includes long distance, including conferencing) billed at \$0.03 per minute  
<sup>1</sup>Data throughput allowance 3GB per month; additional throughput billed at .20 cents per Mb.  
<sup>2</sup>Channel bank and 66 block installation should be performed by the equipment vendor or telecom department.



## EVALUATION

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

The project will be evaluated as a success if test calls can be made using the supplied ten digit number and it is determined that the call was answered on the operations floor through the Automatic Call Distribution queues. Success will also be determined by making test outbound calls and performing some volume related calls using the ten digit number.