

## PSAP Grant Program Grant Ranker

# View Application--54--Hopewell Building Footprints

**Grant Period:** 2009

**Tier:** Strengthen current equipment and service delivery capability by upgrading existing wireless E-911 related equipment or services (**STRENGTHEN**)

**Grant Program:** Continuity and Consolidation **Grant Type:** Individual PSAP

**Priority:** Structural addressing (**ADDRESS**)

**Primary PSAP Applicants:** Hopewell Police Communications

**Jurisdictions Served:** Hopewell

### **Project Director:**

Kimberly M. Parson  
Administrative Services Manager  
Hopewell Bureau of Police 300 N. Main Street Hopewell, VA 23860  
804-541-2272 (phone)  
804-541-2345 (fax)  
kparson@ci.hopewell.va.us

### **Project Description:**

In cooperation with the City of Hopewell GIS Coordinator, Hopewell Communications will initiate a project of identifying building "footprints" or "rooflines". These "footprints" or rooflines" allow for the positive identification of buildings as houses, businesses, sheds, etc. This data will directly support the mapping feature in our CAD system. Additionally, GIS will work towards the development of a Street Map book for the City of Hopewell. This book will be an atlas of the city with an index of streets showing high/low block ranges and cross-streets. Hopewell, like many jurisdictions, suffers from regular turnover of staff. At present, there are four new dispatchers in the PSAP; each has a limited knowledge of the city streets. While the mapping feature is a great teaching tool, these books will reinforce dispatchers' familiarity with the city streets.

**Total Project Cost** \$22,265.00

**Amount Requested:** \$17,812.00

**Matching Funds:** \$4,453.00

**Additional Local Funds:**

### **Statement of Need:**

Having four new dispatchers and the pending hire of three new part time dispatchers, Hopewell has a sincere need to train dispatch staff on the layout of city streets using current, accurate street addressing (specifically building) information. New residential subdivisions and businesses are being developed and are not on the current mapping system. Their identification is necessary for the effective functioning of Police, Fire, and EMS.

### **Project Impact:**

Building "footprints" or "rooflines" will enhance the dispatchers' knowledge of the type of building (residential or commercial) from which a call for service originates. Knowing the type of building can signal the need for some service entity other than Police, Fire, or EMS on the scene of a call; i.e. public works might be needed to cordon off the street near a business or Va Power might be needed to shut off power. Early dispatch of a non public safety entity might assist in securing or safeguarding a scene.

### **Consequence of Not Receiving:**

If funding isn't received, dispatchers will continue to rely on Police, Fire, and EMS to report back to them the "on the street" status of a scene prior to the dispatch of a needed service. Another consequence of not receiving this funding would be the need for the dispatcher to attempt to call back a caller to request more specific information about their location, i.e. color of house, order of the house on the block, etc.

**Part of Long Term or Strategic Plan?:** No

**Likelihood of Completion Unfunded?:** 40%

**Other Available Funding Sources?:** No

**Percent of Grant Funding Requested To Total Funding Cost?:** 80%

**Is Project Locally Sustainable?:** Yes

### **Comprehensive Project Description:**

In cooperation with the City of Hopewell GIS Coordinator, Hopewell Communications will initiate a project of identifying building "footprints" or "rooflines". These "footprints" or "rooflines" will allow for the positive identification of buildings as houses, businesses, sheds, etc. New residential subdivisions and businesses are being developed and are not on the current mapping system. Their inclusion will make accurate the CAD mapping functionality. Additionally, GIS will work towards the development of a Street Map book for the City of Hopewell. This book will be an atlas of the city with an index of streets showing high/low block ranges and cross-streets. Hopewell, like many jurisdictions, suffers from regular turnover of staff. At present, there are four new dispatchers in the PSAP; each has a limited knowledge of the city streets. While the mapping feature is a great teaching tool, these books will reinforce dispatchers' familiarity with the city streets. The books are a hold in your hand document that dispatchers can study as their work schedule permits and use during ride-alongs with patrol officers as they learn the city.

### **What type of interface or compatibility solution will be used between existing equipment and/or software and that which you intend to purchase?:**

The existing interface that updates our maps (a combination of ArcGIS and OSSI Geofile Converter) will be used. No interface/compatibility solution is necessary for the creation of the map books.

### **What is the overall relationship of your project to your PSAP or locality's established long-range future plans?:**

The building footprints/rooflines project is a continuous, maintenance project inherent in our CAD system. To remain efficient, updates will be regularly necessary.

### **How will the equipment purchased will support future technologies for PSAP readiness?:**

The additions to mapping made with this project will serve as building blocks for future mapping updates in CAD.

### **Budget and Budget Narrative:**

The total cost for this project is \$22,265. Cost for the building rooflines is \$12,015; the flat fee for the flight processing and planimetrics. The work will be done by Sanborn Map Company Inc as coordinated by VGIN. Hopewell building planimetrics updates to the 2007 VGIN Project will be delivered. The cost for the street map books is \$10,250. The work will be done by WorldView Solutions. Cost to develop the book is \$7,750 and includes ArcMap template development, database integration and labeling development, map book software development, and on-site map book maintenance training. The cost of printing 50 books is \$2500.

### **Ongoing Expenses:**

Funding for future map updates will be requested annually in the GIS service contracts portion of the City of

Hopewell's Annual Budget process.

**Evaluation:**

The availability of the CAD map display with clear delineation of City of Hopewell streets, street ranges, cross-streets, and buildings identified in text or icon as business or residential is the result for the building footprints portion of this project that will be evaluated. The availability of a map book with clear delineation of City of Hopewell streets, street ranges, cross-streets, and buildings is the result of the street map books portion of this project that will be evaluated.

**What are the short term, intermediate, and/or long-term outcomes desired for this project?:**

The desired outcome for this project is dispatch's access to an accurate, detailed map of the City of Hopewell. This outcome is short term, intermediate, and long term.

**What measures will be used to determine outcomes?:**

The receipt of the CAD map, an accurate and finished product, is a quantitative measure of the outcome. The receipt of the street map book, a reference tool, is a quantitative measure of the outcome. The number of times the map is used by the dispatcher is a quantitative measure of the outcome. The usefulness of the map to the dispatcher is a qualitative measure of the outcome.

**How will data be collected and how will evaluations be conducted?:**

The number of times the map is used by the dispatcher can be captured via self report. Should the project receive funding, dispatchers will be directed to enter use of the CAD map into the CAD notes field for tracking. The usefulness of the map to the dispatcher can be captured via self report. Should the project receive funding, dispatchers will be asked to comment on the usefulness of the CAD map in the self assessment of the annual performance evaluation.

**How will data be presented?:**

Data on the number of times the CAD map is used and the usefulness of the CAD map to dispatch will be added to the annual state of the department report given by Police to the City Manager. The information will also be given to GIS for inclusion in their annual report to the City Manager.

**Attachments**

<a href="#">HopeComFY09.pdf</a>
---------------------------------

**Orthophotography Vendor - Sanborn Map Company Inc.**  
**Coordinated by Virginia Geographic Information Network (VGIN)**  
**2006 Virginia Base Mapping Program**  
**Upgrade Cost Calculation Worksheet**

Jurisdiction: City of Hopewell

**2006 Optional "Upgrade" Calculation and COST**

Fill in the blank based on the "number" of "contiguous" SIX inch tiles to be acquired

#	<u>0</u> six inch tiles	100 scale tiles X \$85.25 =	\$0	(1)
		Data Setup Fee	<u>\$0</u>	(2)
		<b>Sum [Line 1 + Line 2]</b>	<b>\$0</b>	<b>(3)</b>

**Fill in the number of 1 FOOT tiles that will be completely replaced by six inch tiles**

#	<u>0</u>	200 scale tiles X \$115.43 =	\$0	(4)
---	----------	------------------------------	-----	-----

**LOCAL Government Optional Resolution Upgrade COST (calculation)**

	Total Cost of the Resolution Upgrade [Line 3]	\$0	(5)
	<b>Minus</b>		
	1 FOOT tiles replaced by SIX inch tiles	\$0	(6)
	Jurisdiction 6 inch Upgrade Responsibility [Line 5 - Line 6]	\$0	(7)

**LOCAL Government Optional "Contour" COST (calculation)**

Fill in the blank based on the "number" of six inch tiles to develop contours

#	<u>0</u> six inch tiles	100 scale tiles X \$23.11 =	\$0	(8)
---	-------------------------	-----------------------------	-----	-----

**LOCAL Government Optional "Building Rooflines" COST**

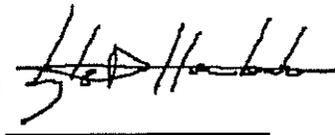
#	<u>NA</u> six inch tiles	Flat Fee	\$9,015	(9)
		After Flight Processing Setup Fee	\$3,000	(10)
		<b>TOTAL Jurisdiction Upgrade Responsibility [Sum 7, 8, 9 and 10]</b>	<b>\$12,015</b>	<b>(11)</b>

This quote summarizes Hopewell building planimetrics upgrades to the 2007 VGIN Project and includes only building planimetrics from said photography.

Payment due to VGIN at delivery. Send payment to:

VBMP Upgrades  
 Virginia Geographic Information Network  
 11751 Meadowville Lane  
 Chester, VA 23836

Quoted by:



Lyle D. Hornbaker  
 Local Government Manager.



101 South 15<sup>th</sup> Street  
Suite 104  
Richmond, Virginia 23219

(804) 915-7628 (p)  
(804) 545-0792 (f)

Info@worldviewgis.com  
www.worldviewsolutions.com

## QUOTE

January 8, 2008

David Thompson  
GIS Coordinator  
City of Hopewell  
300 North Main Street  
Hopewell, VA 23860

Dear Mr. Thompson:

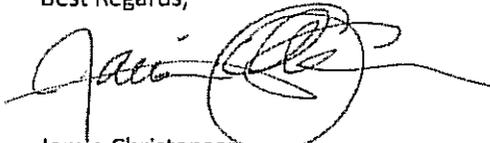
The following is a quote for development of a Street Map Book for the City of Hopewell:

• ArcMap Template Development	\$2,000
• Database Integration / Labeling Development	\$3,000
• Map Book Software Development	\$2,000
• <u>On-Site Map Book Maintenance Training</u>	<u>\$750</u>
Total Project Cost:	\$7,750

Map Book Printing and Binding (optional)      \$50 / Book

This quote is valid for a period of 180 days.

Best Regards,



Jamie Christensen  
WorldView Solutions Inc