



VGIN Coordinator Report to the VGIN Advisory Board  
April, 2008

**Final General Assembly Budget – Impacts upon VGIN**

Information was reported at the January 2008 VGIN Board Meeting regarding proposed budget changes to the E911 program and potential impacts to VGIN. Language within the Governor's budget had proposed to move the Enhanced 911 program from VITA to the Department of Emergency Management. However, during the budget process the language was dropped by the Governor's office and not included in the overall budget. Thus, there no impacts upon VGIN are foreseen.

**2006/2007 Orthophotography Status**

The orthophotography project remains on track with completion of statewide delivery from contractor to VGIN in May of 2008. As of the end of March, 2008, 92% of the 2007 imagery processing has been completed (including passing QA/QC) and approximately 70% of the 2007 jurisdictions have received their data. Information on the progress of the jurisdiction deliveries as well as other useful ortho project information can be found on the VGIN ortho web page at

<http://www.isp.virginia.gov/vbmporthophotography.shtml>

The delivery schedule for state agencies remains on schedule as well. This information is available on our website at <http://www.isp.virginia.gov/stateactivities.shtml>

**2009 Orthophotography Request For Proposals**

VGIN is in the process of drafting a new RFP for the 2009 aerial imagery acquisition. Highlights of this RFP include:

- Request a digital solution (versus film based products of the past)
- Request pricing for several levels of resolution (e.g. 2', 1", 6")
- Institute a two year, half state cycle of imagery acquisition, with half the state captured starting in 2009 and the remainder in 2011
- Offer a "cafeteria style" suite of optional upgrades that include LiDAR, color IR, contours, structures and planimetrics

We expect to release the RFP in May 2008. This will be the earliest VGIN has ever done this for the VBMP, allowing ample time to select a vendor and for localities to make their decisions about upgrades.

**2008 National Aerial Imagery Program (NAIP) – USDA Farm Services Agency**

For the first time, the Commonwealth of Virginia is partnering with the US Department of Agriculture Farm Services Agency to enhance the summertime orthophotography

being captured by the USDA as a part of the NAIP. This product will provide valuable one meter resolution “leaf on” imagery that can be used for a variety of applications, particularly in the natural resource arena. Because of the partnership, Virginia will also receive a color infrared product that helps, for example, determine forest health conditions and detect wetlands. The ground control from the VBMP ortho program will be utilized to enhance the accuracy of the final product. Total cost of the 2008 NAIP is \$740,246 with Virginia providing \$90,000 plus VBMP control points. Commonwealth support is being provided by the Department of Forestry, the Department of Transportation, and VGIN.

### **Strategic Planning**

VGIN has begun the planning process targeted towards the development of a 5 year Strategic Plan for GIS in the Commonwealth. The plan’s vision is that it will be driven by the capture and identification of user needs across the Commonwealth. The intended high level goals and objectives will be to a) establish a maintainable state spatial data infrastructure for all framework base map layers and b) identify commonly used and needed enterprise geospatial services and tools that will promote efficiencies and economies of scale. In addition, tactical level pathways for achieving these goals and objectives will be identified. Multiple opportunities for outreach and input will be established to all sectors of users utilizing multiple forms of media and in-person meetings.

### **Metadata Outreach and Training**

VGIN continues to provide ample metadata training opportunities for creators of geospatial data in the Commonwealth. Now that the initial push of the last nine months has transpired, VGIN has established a recurring quarterly training schedule for those who may have not been able to attend the many sessions previously held. Next training date is May 7 – 8 in Richmond.

VGIN continues to coax state agencies through friendly persuasion, reminders and offers to provide custom training classes so metadata is reported. An example of a special training class is the one held for DCR Natural Heritage on April 1. Response by state agencies is slowly improving. We will be persistent in reminding them to report their metadata.

### **Emergency Management Mapping Application (EMMA)**

The EMMA project formally closed as of March 31, 2008. The Virginia Emergency Operations Center (VEOC), the City of Richmond, and the Albemarle County Emergency Communications Center now have working installations of EMMA. The VEOC and Albemarle County installations are also integrated with WebEOC. A white paper outlining a technical and administrative solution for enabling interoperability between the disparate installations of EMMA and to enable other localities and organizations to access, use, and contribute to EMMA is under currently under development.

## **Project Homeland**

VGIN is coordinating Virginia's participation in a pilot project under a federal program called Project Homeland. The primary goal of Project Homeland is to demonstrate the sharing of homeland security GIS data between local, state, and federal government GIS applications. Project Homeland is funded by the National Geospatial-Intelligence Agency (NGA) and all project services are delivered by ESRI, NGA's partner, at no cost to VGIN (other than staff time). The City of Alexandria has agreed to participate in the pilot. The project is scheduled to be complete by June 30, 2008.

The expected outcomes of the project are:

1. Create a geocoding service to allow users to locate points on a map using street address, intersection, mile marker, latitude/longitude, or place name using VGIN road centerline data and other available data.
2. Create a routing service to allow users to get directions from one place to another. The service will initially use commercial data, but will eventually use the VGIN road centerline data.
3. Create a demographic reporting service to allow users to access demographic information in a specified area of interest.
4. Share parcel and point addressing data from the City of Alexandria.
5. Convert key Alexandria and Commonwealth geospatial data into the Homeland Security Geospatial Data Model.
6. Develop a "suspicious activity" reporting form for use by the Virginia Fusion Center that would allow the locations of reported suspicious activity to be viewed in a geographic context with other key homeland security data.
7. Acquire the Homeland Security Infrastructure Program (HSIP) Freedom dataset, from the U.S. Department of Homeland Security.

## **LiDAR Cost Benefit Analysis**

Progress has been made to document the business needs for elevation data, the current state of elevation data, and the benefits to be derived from LiDAR data across the Commonwealth. VGIN has created a webpage for the LiDAR cost/benefit analysis effort at <http://www.isp.virginia.gov/lidar.shtml>. This site includes background information about LiDAR technology, a link to a Virginia LiDAR blog, links to information about other state's LiDAR efforts, links relating to Virginia's August 2007 LiDAR summit, and a link to an online survey. This survey ran from February 1 through March 31, 2008 and was designed to gather information from Virginia local governments, universities, non-governmental organizations, and state agencies. The results of the survey will be posted on the LiDAR webpage by mid-April.

As the effort has progressed, it has become clear that examining a LiDAR acquisition of this scope is a complex process. VGIN needs to make an effort to present the process and related issues and questions to the stakeholders. To that end, VGIN has created a PowerPoint presentation that highlights our findings to date and presents questions and issues that must be resolved in order to move forward. The presentation will be available

## *VGIN Coordinator Report*

from the LiDAR webpage by mid-April and will be presented to key stakeholders in future face-to-face and web-based meetings.

The desired outcome of the background information gathering phase of the CBA process is to clearly document what data we need, where we need it, why we need it, and the quantifiable benefits we'll receive. We'll use this information to create several alternative LiDAR specifications for Virginia that can be used to gather cost information from vendors.

### **Road Centerline (RCL)**

The transition from Timmons Group to VGIN was completed in December 2007. As maintenance has been established in-house, VGIN staff has been working through a variety of challenging data issues typical of large data maintenance programs. We now publish RCL updates on a quarterly basis. VDOT continues its effort to fully incorporate RCL data within its GIS, as well as providing regular updates to VGIN. Expected timeframe for full VDOT adoption is September 2008.