

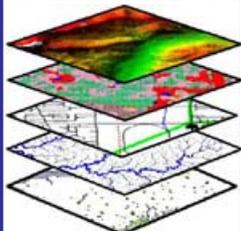
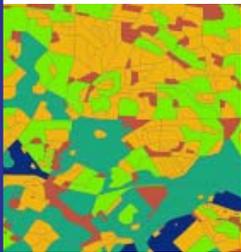
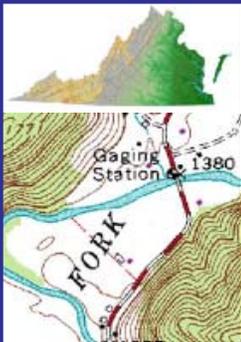
The Virginia Geospatial Newsletter

Showcasing GIS, Remote Sensing and GPS Supported Products and Services in the Commonwealth

Volume 5, Number 1

Winter, 2007

The Virginia Geospatial Extension Program is a partnership between the Virginia Space Grant Consortium and Virginia Cooperative Extension



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Enhancing Virginia Cooperative Extension's Reach with GIS

by:
John McGee
Virginia Geospatial Extension Specialist
Virginia Tech

Virginia Cooperative Extension (VCE) recently launched a new in-service training program that provides intensive GIS training to Extension agents and specialists. Several two-day hands-on GIS workshops have been conducted to support the day to day application and research demands of agents and specialists. These workshops are intended to provide VCE stakeholders with access to better data and information to support the planning and management efforts of Virginians.

...in Virginia, the adoption of geospatial tools by the Extension community has already saved lives.

This program was designed to overcome some of the historic barriers associated with GIS implementation by casual users. In the past,

implementation barriers have included: software complexity (i.e. too complicated, unintuitive, feature overload, etc.); lack of data that can be used to support the implementation of GIS applications at the local or district levels, difficulty accessing software, and a lack of understanding of how these tools can support the day to day application demands of VCE and the needs of the citizens of Virginia.

The GIS Workshop represents a strategic "second phase" in the geospatial implementation process at VCE. Through previous programs, the Extension community has been introduced to geospatial tools. VCE agents and specialists have, for

example, already received intensive training in Global Positioning Systems (GPS). Recently,

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The Virginia Geospatial Newsletter is a quarterly publication developed through the Virginia Geospatial Extension Program, a partnership between the Virginia Space Grant Consortium (VSGC) and Virginia Cooperative Extension (VCE). The newsletter is published in conjunction with The Virginia Geographic Information Network (VGIN).

The purpose of the Virginia Geospatial Newsletter is to highlight innovative geospatial products and services throughout the commonwealth and to widely disseminate geospatial knowledge and awareness throughout Virginia.

If you have suggestions or comments, or if you would like to contribute to the newsletter, please contact John McGee at the Virginia Geospatial Extension Program (jmcg@vt.edu or [540] 231-2428).

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The Geospatial Semester: Connecting GIS and Virginia's High Schools

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What would make high school students get out of bed and come to school 45 minutes before the start of the day? What would make them stay after school and beg to work on weekends and during their spring vacation? What would get high school seniors to engage in challenging work in their final semester? The answer, believe it or not, is GIS. The students described above are participating in a unique joint effort between Virginia high schools and James Madison University (JMU) called the Geospatial Semester.

The Geospatial Semester is a dual-enrollment program where students can earn JMU credit as they earn their final high school credits. However, it is much more than just taking a college course early. Students must engage in an extended GIS-based local research

Students must engage in an extended GIS-based local research project and learn how to work as part of a team....

project and learn how to work as part of a team (with all the challenges that teams present) in order to complete the course. Students commit 1-2 periods per day for either a single semester or for a full year. They can earn from 3 to 12 credit hours from JMU (most students earn 3 to 6 credit hours). We offer the credit hours at a steep discount (70% off) to encourage as many students as possible to participate.

Why GIS? Geographic Information System (GIS) software is a fundamental tool for many businesses and government agencies. Its influence is pervasive in a variety of industries and academic fields of study, and yet only a very small percentage of high school students ever hear about GIS, let alone have a chance to learn about the tool or spatial thinking and problem solving. "Learning to Think Spatially", a recent study from the National Research Council (National Research Council, 2005), reinforces this point and makes the case for why spatial thinking needs to be an important part of the K-12 curriculum. Furthermore, many high school students do not seriously engage in their final semester of high school (think back to your own experience!). The Geospatial Semester is an attempt to address both of these issues (and perhaps kill two birds with one stone).

This is not a typical dual-enrollment program. In most dual-enrollment situations, the high school teacher

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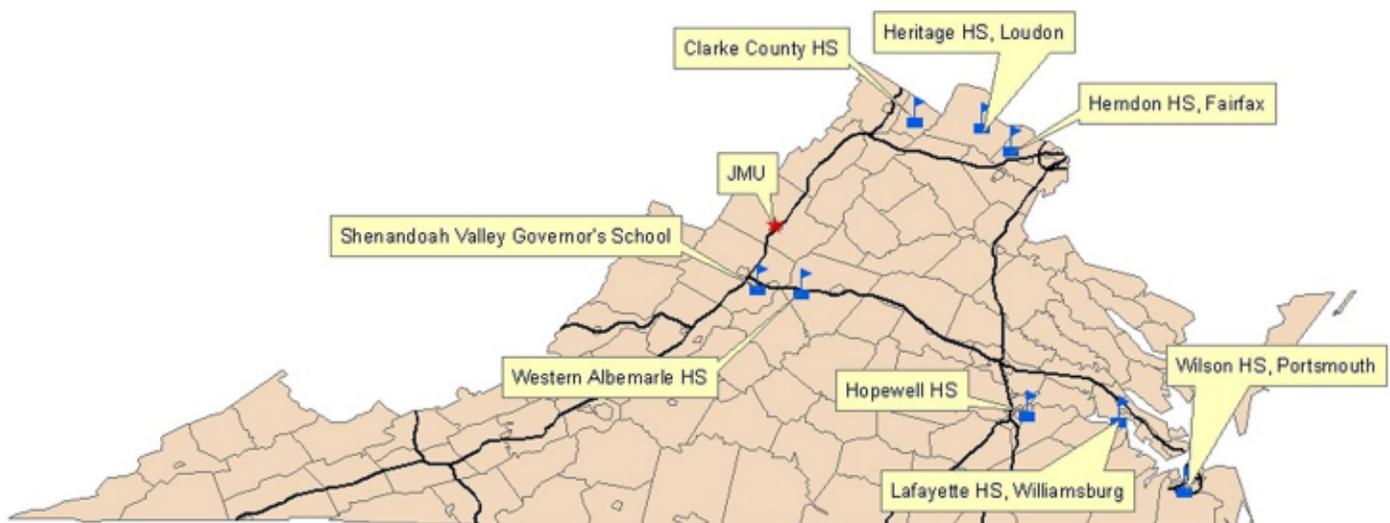


Figure 1: Geographic distribution of schools participating in the Geospatial Semester in the 2006-2007 school year.

Map produced by Dr. Bob Kolvoord

GIS Education at Virginia Western Community College

by:
David E. Webb
Assistant Professor
Virginia Western Community
College

GIS education is experiencing the start of a golden age at Virginia Western Community College. GIS courses have been offered at the college for several years with limited enrollment success until the courses were made a part of an associate degree program in the Civil/Architectural Technology area. The additional enrollment of curricula students and those needed updating has resulted in strong GIS offerings. Virginia Western has created a GIS career pathway, increased course offerings, and is actively seeking participation in GIS related grant opportunities.

A Virginia Community College Tech Prep supplementary grant was used to support the creation of career pathways in Geospatial resulted in the creation of a high school targeted career exploration certificate, a career studies certificate and a specialization in GIS for the Civil/Architectural Associate



degree offered at the college. The college is currently investigating articulation opportunities for transfer to senior institutions such as ODU and ETSU.

Virginia Western is the lead community college partner in a National Science Foundation Planning proposal to develop and deliver training opportunities and resource materials to community college and high school faculty across the commonwealth. The \$150,000 grant will allow the four participating community colleges, the Virginia Space Grant Consortium and the Virginia Tech Geospatial Extension Program to plan for the development of GIS curriculum and the trial implementation of statewide community college faculty training. An additional NSF application to implement the results statewide is planned for the Spring 2008.

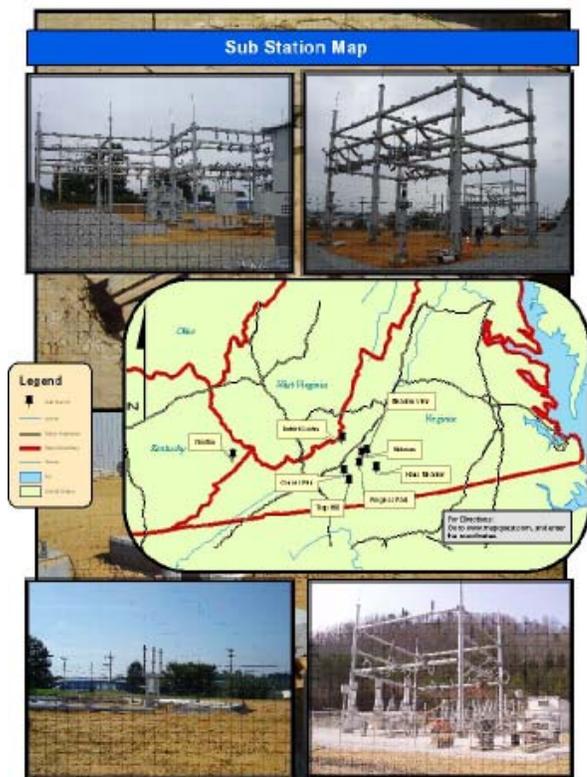
of students to complete the GIS career pathways. VWCC connects to the local schools by providing career advising, dual enrollment classes, and sharing equipment with high schools. Middle school students were also targeted with a GIS camp last summer to expose them to the technology through fun activities. Almost 250 high school seniors attended a Tech Summit program in the Fall 2006 to learn from both educators and employers the need for technology graduates. Technology counselors, aka *career coaches* were installed in residence at three local high schools. These career coaches provide on-going counseling and aid to students in making decisions regarding technology careers as they emphasize the GIS and other technical pathways available at the college.

A group of 25 local rising eighth graders attended a two day GIS/GPS Tech Prep Career Pathways Summer camp last summer as a part of the grant activities. Students teamed together to find geocaches and mark locations and directions to landmarks around the world. The early exposure of students to career opportunities in GIS is seen as a means of helping to insure enrollment in the GIS career pathway.

This year marks the first opportunity for students to complete a statewide GIS course for dual enrollment credit. Two local high schools, Glenvar and William Byrd are offering the GIS 200 class as dual enrollment for the first time this year. The local governor's school continues to offer this course as an articulated dual enrollment offering as it has for the past several years.

Virginia Western recognizes the need for a steady stream

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Students at Virginia Western CC have been active in a variety of GIS projects

The Geospatial Semester

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simply teaches from the college syllabus with little to no support from the higher education institution. However in the Geospatial Semester, we provide regular technical support and GIS and project mentoring, along with periodic classroom visits. This ongoing support is critical to the success of the program.

In our second year of the Geospatial Semester, we are in eight schools and working with approximately 140 students (we started with four schools and 40 students last year). Figure 1 shows the geographic distribution of participating schools in Virginia.

Students learn the basics of GIS, working with ArcGIS 9.1. They learn about vector and raster data and use the Spatial and 3-D Analyst extensions. They work through a variety of exercises of increasing complexity as they move towards their capstone project. In fact, many teachers give the students smaller-scale projects to help them build their project management and team-building skills in advance of the final project. The software is provided as a part of the Virginia Geospatial Instructional Application Initiative, sponsored by the Virginia Department of Education, at no cost to the schools.

The scope of the capstone projects varies depending on the length of the class (one or two periods, single semester or full-year). Students in Hopewell last year completely redid the school district's bus transportation map in the wake of the tragic death of the Hopewell City School's Transportation Director. There was little information written down and the district was faced with either hiring consultants or

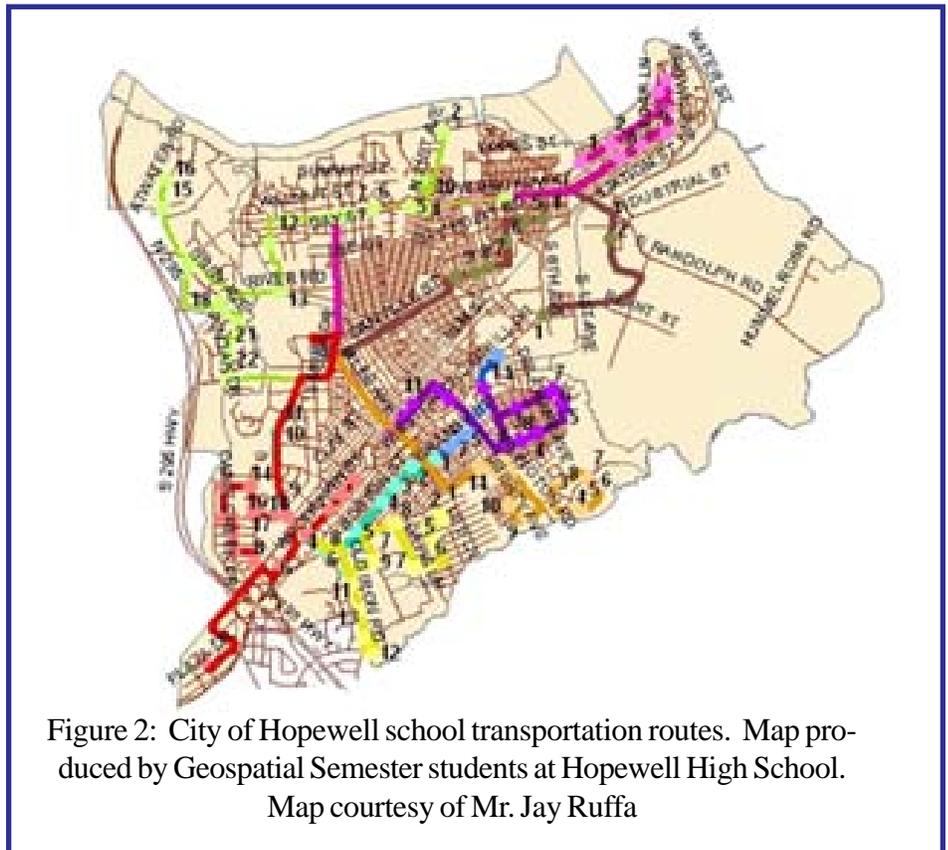
engaging the Geospatial Semester students. They chose the students and the students did a fabulous job, working tirelessly (nights, weekends, and vacations) to complete the task. In fact at Hopewell High School this year, due to a scheduling quirk, the students actually come during 0 period, 45 minutes before the nominal start of the school day to take the Geospatial Semester class. A primary reason for the success of the Geospatial Semester is a corps of outstanding high school teachers. Jay Ruffa, an Earth Science instructor at Hopewell High School, is one of those teachers and he led his group of students to their extraordinary success last year. Figure 2 shows an example of the Hopewell students' handiwork.

Stephen Tatum and Richard Aadahl are Career and Technology Education (CTE) teachers at Lafayette High School in Williamsburg and they're also participating in the Geospatial Semester. Stephen Tatum led the class last year

and his students pursued a variety of projects, including an attempt to track down the perpetrators of the Mississippi church burnings last spring. The students predicted the home county of the arsonists based on the spatial array of the crimes and were quite pleased to discover that they had been spot on when the criminals were finally apprehended.

Administrative support at the high school level has been critical to the success of the project and Portsmouth City Schools administrators Laura Nelson and Dan Lewandowski have ensured the success of the project in Portsmouth. This year, students from three different high schools come together to participate at Wilson High School. With 30 students, Portsmouth

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Development of a Common Operating Picture: Integrating GIS and Emergency Management in Virginia

by: Brian Crumpler
GIS Manager

Virginia Department of Emergency
Management

Common Operating Picture

The FEMA National Incident Management System Course (NIMS – IS-700) addresses the necessity for “a common operating picture that is accessible across jurisdictions and agencies.” NIMS also states that “a common operating picture helps to ensure consistency at all levels, among all who respond to or manage incident response.” In Virginia, we are all too familiar with natural and manmade disasters. Since Hurricane Bonnie in 1998, the Commonwealth has been impacted by a total of 16 events that have received Federal Disaster Declarations. After Hurricane Isabel in 2003, it was determined that a Statewide Incident Management Tool was needed, and WebEOC was selected.

At approximately the same time, a proof of concept application began to be developed for Emergency Management. The Virginia Readiness, Response, and Recovery (VR3) project was initiated. At the same time, the Maryland Emergency Management Agency (MEMA) and National Capital Region (NCR) selected Towson University’s Emergency Management Mapping Application (EMMA) as their tool of choice to integrate WebEOC and GIS. Based on the successful deployments of EMMA in the NCR and at MEMA, VDEM decided in 2006 to pursue deployment of EMMA at the Virginia Emergency Operations Center (VEOC). At the same time, the localities of Charlottesville, Richmond and Virginia Beach approached VDEM about their interest in deploying EMMA

in their localities, to compliment their local instances of WebEOC.

The deployment of EMMA at the VEOC, and the concurrent locality pilot project will build on the successes of EMMA in Maryland and the NCR. The deployment will have several highly visible results:

- Leveraging the VGIN Geospatial Enterprise Platform (GEP).
- Creating a geospatially-enabled common operating picture in Virginia for emergency management that is accessible by local, state, and federal partners,

even those without GIS software or WebEOC.

- Communicating event-specific information with a geospatial component across jurisdictional boundaries and between levels of government.
- Providing a centralized tool for maintaining and viewing key statewide datasets.

EMMA Functionality

EMMA is based on ArcIMS software and includes the following abilities:

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Virginia Emergency Operations Center (EOC) activities during Tropical Depression Ernesto

http://www.vaemergency.com/newsroom/photos/resp_rec/ernesto06.cfm

The Geospatial Semester

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has the largest class of any Geospatial Semester school and in fact, the administrators report that they could have filled 60 seats. They hope to have the program in all 3 high schools next year. Portsmouth is further distinguished by their ongoing efforts to weave GIS and spatial thinking throughout the curriculum from elementary to high school.

The project is not without challenges. Technical support and software installation and upkeep are critical to the students' success. Teachers need to have both good professional development and access to quality data. We're still working to connect Geospatial Semester teachers with public- and private-sector resources in their areas to help provide data and project possibilities. We're also working with other higher education institutions in Virginia to help them understand how to transfer the JMU credit.

We continue to look for opportunities to grow the program into school districts that are ready to share this kind of experience with their students. Please contact Dr. Bob Kolvoord at kolvoora@jmu.edu for more information or to consider participating or supporting efforts in your area.

References

National Research Council (2005)
Learning to Think Spatially.
Geographical Sciences
Committee, *National Academy
Press*, Washington, DC.

Update from VGIN

By Dan Widner,
VGIN Coordinator

VGIN has undergone significant organizational and staff changes over recent months. Here is a quick summary of the current VGIN organization.

VGIN has joined the Public Safety/911 staff into a new division within the Virginia Information Technologies Agency that is called the Integrated Services Program (ISP). ISP is headed by Steve Marzolf. The VGIN group is headed up by Dan Widner - VGIN Coordinator and includes Stu Blankenship - Geospatial Projects Manager; Sam Hall - Geospatial Projects Manager; Lyle Hornbaker - Local Government GIS Manager; John Owens - Technical Services Manager.

Below is a status (as of March 1, 2007) for our current large scale initiatives.

The 2006/2007 VBMP Orthophotography Project will provide updated high resolution imagery for the entire Commonwealth. For this image acquisition project, VGIN offers true color imagery at a base scale of 1"=200' with 1 foot pixels. Optional upgrades offered include 1":100' photography with 6 inch pixels, 2 or 4 foot contours, and planimetrics. Many localities have chosen to take advantage of these upgrades. Approximately 14% of the state was captured during the spring of 2006, and this imagery will be delivered to VGIN by the end of April. The imagery will be available in GeoTiff and MrSID formats. VGIN will be working with local governments and other customers to deliver the product in a timely manner. The imagery will also be loaded onto VGIN's Geospatial Enterprise Platform (GEP) and will be available to our customers as in internet

map service. The remainder of the state is being flown this year and will be delivered to VGIN during the spring of 2008.

VGIN is managing a project to deploy the Emergency Management Mapping Application (EMMA) to the Virginia Emergency Operations Center (VEOC). EMMA is a product of Towson University's Center for Geographic Information Sciences. The project is funded through a Department of Homeland Security (DHS) grant. VGIN is also facilitating a separate but closely related project to deploy EMMA to the cities of Charlottesville, Richmond, and Virginia Beach. EMMA is based on ESRI ArcIMS software and is designed to integrate with WebEOC, the Commonwealth's Crisis Information Management System. For more information on the deployment of EMMA in Virginia, see Brian Crumpler's article in this edition of the newsletter.

VGIN is also in the midst of deploying the Virginia GIS Metadata Portal to hold information about GIS data available in the Commonwealth (The Code of Virginia mandates that VGIN provide a geospatial metadata catalog for the Commonwealth). The portal will be available for data population and use beginning in the May 2007 timeframe. VGIN, in conjunction with the Virginia Geospatial Extension Program at Virginia Tech, will develop training for the system and provide outreach to potential metadata producers. This site will allow state and local government producers of geospatial data across Virginia to register and maintain metadata records about their available datasets, with public access for search and viewing and restricted access for updating. *This will become the primary location to browse and discover available GIS data in the Commonwealth.* The metadata site will be based on ESRI's GIS Portal

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Virginia Western Community College

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VWCC leverages the value of its GPS equipment by loaning it out to local high schools. Over twenty Garmin handheld units and seven Trimble XM units have been used by local high school students. The local governors' school is currently using the Trimble units while William Byrd High School used the Garmin units on an educational field trip to the Peaks of Otter to georeference the hiking trail.

Three of the students in this semester's GIS 201 class are currently using GIS in their jobs. One enrolled in the Civil/Architectural associate degree program is working for a Franklin County engineering consulting firm and has used the technology to map wetlands for development projects. Another student in the program is working for a local water authority and has used the technology in updating maps of current equipment locations. A student enrolled to update her skills was able to apply the technology to a health grant application targeting an at risk population identified with GIS mapping. She was able to move a public health sector job as a result of her GIS experience and is currently applying the technology to disaster planning for the local community.

Contact David Webb at (540)857-7379 or dwebb@vw.vccs.edu for more information regarding VWCC offerings in GIS.



Virginia Cooperative Extension

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agents identified ~30 applications where GPS is being used to support their day to day business needs. Extension agents and specialists have utilized GPS in innovative ways, that may be the outside of their traditional Extension agent roles. For example, many of VCE's agents serve as first responders in their local communities. Several agents have been associated with rescue operations for individuals who have been injured in very remote locations (hunting accidents, etc.), and have utilized their GPS training and VCE's GPS receivers to acquire coordinates for remote transfer sites / safe helicopter landing zones for emergency response operations. It is safe to say that in Virginia, the adoption of geospatial tools by the Extension community has saved lives.

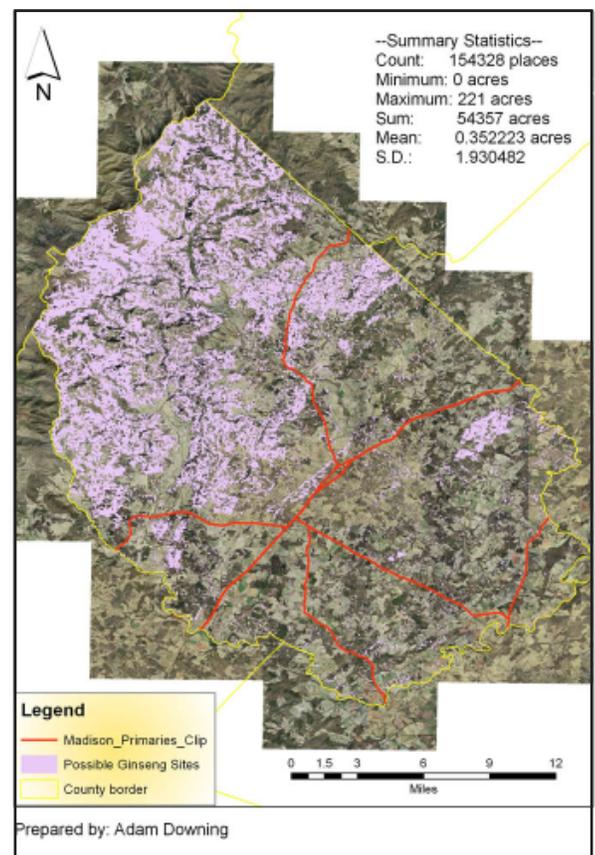
After facilitating the development of GPS skills, an initial workshop was held in December 2006 to provide GIS training to agriculture and natural resource (ANR) Extension agent lead adopters. Based on feedback provided by these lead adopters, modifications were made to the curriculum, and an additional workshop was held in February, 2007 to other lead ANR, Community Viability (CV), and 4-H agents and specialists.

Through this program, agents and specialists gain an understanding of the

potential applications of GIS, and the interconnectedness of GIS, GPS, and remote sensing. They learn how to make maps, conduct basic analysis, and generate their own data. In addition, participants also are introduced to the power of address geocoding, and compare the results of geocoding using both TIGER and locally derived centerline files.

One of the unique characteristics of the program, is that the workshop does not only provide hands-on application

Intersection of suitable slope aspect, slope percent and forest cover for possible Wild-Simulated Ginseng Plots in Madison County, VA.



(Above) Class project example showing potentially suitable areas for wild ginseng based on slope, forest cover, and aspect.

(Adam Downing, District Forester, Northern District)

training for Extension Specialists and Agents. The workshop also provides each participant with approximately 3 Gigabytes of GIS data through the Virginia GIS County Data Series. The Virginia County Data Series is a county data resource that includes "foundation"

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Emergency Management Application

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- Identify incident locations using GPS data, a street address, or a point identified on a map.
- Generate location-specific reports, summarizing information from real-time and static datasets.
- Visualize incident locations via a common map viewer.

EMMA will incorporate several real-time and static datasets. Some key layers include:

- Statewide hospitals and real-time hospital status
- VGIN Road Centerline database (combination of VDOT and locality datasets)
- VBMP 2002 and 2006/07 imagery and rail dataset
- National Hydrography Dataset (NHD)
- Storm Surge Zones as developed for the Virginia Hurricane Evacuation Study
- Real-time weather and stream gauge reports and river forecasts.

EMMA will also benefit emergency managers by providing a tool that can

be used not only for response and recovery, but also to help coordination preparedness and mitigation activities.

Geospatial Data Manager (GDM)
The GDM is a web-based application that provides the ability to create and modify geometry and attribution of features in the EMMA ArcSDE database. The GDM has an interactive map, a geocoding tool, the ability to import and export data, and it is highly customizable. The GDM has incredible implications for the development and maintenance of datasets such as those found in state and local Emergency Operations Plans, and in the Regional Hazard Mitigation Plans.

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A preview of Virginia's GIS-based Emergency Management Mapping Application (EMMA)

Virginia Cooperative Extension

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data layers including soils, slope, aspect, digital topographic maps (DRG's), contours, TIN's, Farm Service Agency CLU boundaries, high resolution aerial photography, hydrography, and infrastructure layers for each county and locality in Virginia. Data resources associated with the Virginia County Data Series were acquired from public data sources, or were generated by the Virginia Geospatial Extension Program.

Each workshop participant is expected to work with the geospatial data that are unique to their locality while they are going through various exercises in the workshop. By working in a geographical context that is familiar to each participant, workshop participants are more likely to identify with the functionality and applications of the software. In addition, each participant leaves the workshop with a data, specific to their locality "in hand" to support the implementation of the technology when they return to the office.

In addition, workshop participants also leave the workshop with ArcGIS 9.2 software "in hand", and step by step instructions on how the software should be installed. The ArcGIS software is available to VCE faculty through the statewide higher education license agreement with ESRI.

The Virginia Geospatial Extension Program continues to provide follow-up support (via phone or email) for participants in the event that they have any questions when they return to their office. In addition, both the Virginia Geospatial Extension Program and Virginia Cooperative Extension fully

recognize that GIS training, especially to new users, is not a one-time event. Both the Virginia Geospatial Extension Program and VCE are committed to holding follow-up topical and refresher

workshops on a consistent basis to facilitate the integration of geospatial tools to support the needs of Virginia Cooperative Extension.

For additional information about GIS, GPS, and remote sensing training opportunities, contact:
John McGee at the
Virginia Geospatial Extension Program
(540) 231-2428 / jmcg@vt.edu



Walter Robinson, Extension agent from Smyth county, concentrates intently as he downloads waypoints into ArcMap



Brian Jones, Extension agent from Augusta county, shares valuable knowledge and experience with fellow agents and specialists.

Crash Mapping On Virginia's Eastern Shore: Outcomes and Solutions

by:

Elaine Nachtrieb Meil,
Director of Planning
Accomack-Northampton Planning
District Commission

For years, the Eastern Shore has had a problem with too many car crashes and too many deaths for the number of crashes that occur. U.S. Route 13 in Accomack and Northampton Counties is one of the most dangerous roads in Virginia. It runs the entire length of the peninsula and is a popular road for tourists to use to go to Virginia Beach or beaches in North Carolina. Between 1998 and 2005, 117 people lost their lives on the roads. In the Commonwealth, 1 in 121 accidents result in a fatality, on the Eastern Shore 1 in 43 accidents result in a fatality.

In November 2005, First Sergeant J-P Koushel, head of the local State Police Barracks, attended the Accomack-Northampton Planning District Commission's Technical Transportation Advisory Committee meeting. This committee brings together all the transportation agencies on the Eastern Shore and local officials. He was prompted to come after working with a reporter who had found information showing that a person in Tennessee was selling license plates to unlicensed drivers illegally. These plates were turning up in our area. A number of these unlicensed drivers had been involved in accidents both fatal and non-fatal. First Sergeant Koushel wondered if other information might be found in the official accident reports.

He requested assistance with making a map of where all crashes were occurring. He wanted this map to help identify high-risk areas, bad road

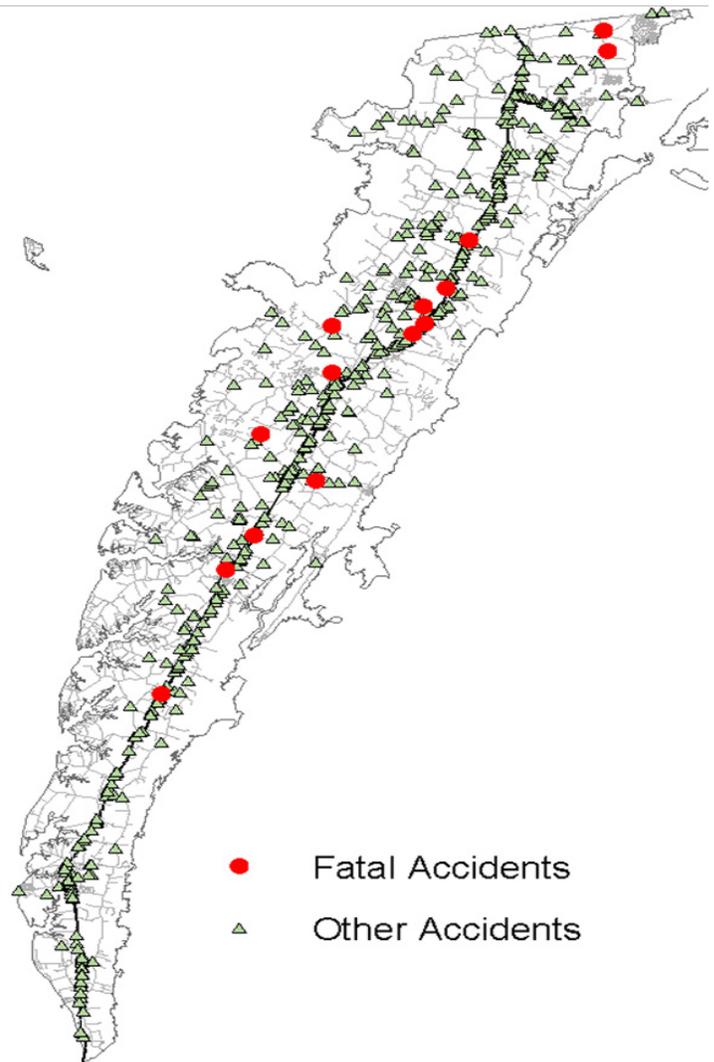
conditions and dangerous human behavior. The map also serves as a baseline to measure whether enforcement actions are effective and documents our situation to justify more resources.

The Planning District Commission staff compiled the paper accidents reports and hand located each accident based on distance from intersection. Information was gathered from the reports and joined to this location data making it possible not only to show where fatal accidents occurred but where accidents were caused by deer and whether the drivers were Eastern Shoreman or out of state or other Virginia locale drivers.

One thing that is very apparent from the maps is there are so many accidents that hot spots take a few moments to visually become recognizable. One area where fatalities were occurring is in the vicinity of the Town of Parkesley,

mostly along U.S. Route 13. This was one area of the Shore that had had a problem with the illegal Tennessee plates. Some times its what you don't see that helps too. There is a lack of deer strikes along a portion of Route 175, the road that leads to Chincoteague Island. This part of the road was included in a pilot project to reduce deer strikes. Although the study didn't show

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Map of the accidents on the Eastern Shore of Virginia in 2005

Accomack-Northampton PDC

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that other localities had much success with reducing deer strikes it worked very well in this area and the map



First Sergeant Koushel points out a crash hot spot near the Town of Parksley.

reflects it. One of the most intriguing finds of the project was the fact that 29% of all accidents in Accomack involve an out of state driver while 31% of all accidents in Northampton involve an out of state driver.

First Sergeant Koushel has already used the maps to plan 30 special enforcement projects. One of these projects between April 9th and May 20th caught 1,040 traffic violations. The maps have already inspired new ideas. He is working with the Planning District Commission and his own headquarters to obtain GPS units so that crashes can be mapped closer to the time they occur and trends can be spotted quickly.

VDOT is evaluating road conditions and has started to remove unsafe median crossings in U.S. Route 13. Delegate Lynwood Lewis is working on obtaining funding for more Troopers to add to the 17 that are responsible for patrolling 953 miles of roadway seven days a week 24 hours a day. Planning District Commission staff are preparing to map all of the 2006 crashes. The local State Police do not want to stop at mapping

traffic crashes. First Sergeant Koushel wants to map sex offenders next.



Emergency Mangement Application

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Remote Interoperability Connector Kit (RICK®)

RICK is a toolkit of methods for processing real-time data services such as XML/CAP feeds, remote and local datasets, and webpages. RICK can be run in real-time or at scheduled intervals, and the processed information

Since Hurricane Bonnie in 1998, the Commonwealth has been impacted by a total of 16 events that have received Federal Disaster Declarations. After Hurricane Isabel in 2003, it was determined that a Statewide Incident Management Tool was needed....

is stored in the ArcSDE database. RICK will serve as a tool for incorporating real-time data

Other Resources

Please feel free to contact either Brian Crumpler, GIS Manager for VDEM (brian.crumpler@vdem.virginia.gov) or Sam Hall, Geospatial Projects Manager for VGIN (samuel.hall@vita.virginia.gov) with any questions relating to EMMA or integrating GIS with emergency management. EMMA will also be discussed at a pre-conference session at the 2007 Virginia Emergency Management Conference (April 17), and at the 2007 VAMLIS Conference in Richmond (May 7-8). Virginia is on the cutting edge with much of this technology, and with your help, we can continue to be on the forefront of emerging technology and ideas.

VGIN Update

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Toolkit suite of software, which utilizes ArcIMS and ArcSDE as backend software components.

Road Centerline Project (VBMP-RCL). The RCL project will be moving to steady state maintenance the spring of 2007. RCL offers statewide road centerlines as the framework roadway transportation base map layer. Localities and state agencies will have access to regional and statewide geocoding for emergency response and GIS purposes. VBMP RCL is based upon locality updates of streets and address ranges of local roads and statewide updates from VDOT for the Interstate and Primary roads. The vision of a common roadway basemap for state and local government is being realized. It will facilitate access to additional business data from VDOT as well as current and accurate local road centerline data.



Free Software Reminder!

ESRI has announced a promotion to offer free copies of ArcGIS (ArcView) software to any student enrolled at a college or university in Virginia that is part of a state-wide or campus-wide site license.

This is a one year license that will expire 365 days from the day it was installed. It includes Spatial, Network, Geostatistical and 3D Analyst extensions.

To find out more about the program go to:

http://www.esri.com/industries/university/education/student_faqs.html



Save the Date

Remote Sensing for Spatial Analysts and Coastal Resource Managers
March 27-28 2007, Richmond, VA

Registration Fee: None

For additional information:
<http://www.virginiaview.net/workshops.html>

The Virginia Tech Office Geographic Information and Remote Sensing (OGIS) Reseach Symposium will be held on April 20th from 8:30 - noon on April 20th.

Registration Fee: None

For additional information:
<http://www.ogis.org.vt.edu>

The Virginia Association for Mapping and Land Information Systems (VAMLIS) Spring Conference will be held May 7-8th at the Richmond Convention Center.

Registration Fee: \$185

For additional information:
<http://www.vamlis.org/vamlis>

The ESRI Education User Conference will be held June 16-19 in San Diego, CA.

Registration Fee: \$150

For additional information:
<http://www.esri.com/events/educ>

The ESRI Education User Conference will be held June 16-19 in San Diego, CA.

Registration Fee: \$1,295

For additional information:
<http://www.esri.com/events/uc>

Movin' On

We wish you the best...

Stuart Blankenship, formally the GIS Manager with the Virginia Economic Development Partnership (VEDP), now serves as the geospatial projects manager at the Virginia Geographic Information Network (VGIN).

Minda Brown, who has served as the GIS Manager for the Virginia Department of Forestry (VDOP), is heading for sunnier and sandier pastures in Florida.

Sam Hall, formally served as the Fish and Wildlife Information Services Manager with the Virginia Department of Game and Inland Fisheries (DGIF) now serves as the geospatial projects manager at the Virginia Geographic Information Network (VGIN).



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