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Final Report

**Metadata Training and Outreach for Virginia:
A Comprehensive Approach**

CAP 2006 Metadata Training Grant

Submitted to the Federal Geographic Data Committee

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Project Narrative

Background and Project Narrative

The Virginia Geospatial Extension Program, in partnership with Old Dominion University, and with the support of the Virginia Information Technologies Agency (VITA, formally called the Virginia Geographic Information Network [VGIN]) was provided funding through an FGDC 2006 CAP Grant to support the development of six metadata training workshops in the Commonwealth. These workshops were designed to support the efforts of local governments, as well as state agencies, the private sector, and federal agencies working in Virginia. This document provides a summary and final outcomes associated with the project.

Between July 2006 – April 2007, seven metadata workshops were provided to local, regional, and state government personnel, as well as the private sector. Workshop locations are listed below:

July 24th, 2006	Harrisonburg, VA (JMU, ISAT/CS Room 336)
July 27th, 2006	Richmond, VA (VCU Center for Environmental Studies)
July 28th, 2006	Norfolk, VA (ODU)
August 9th, 2006	Blacksburg, VA (VT)
August 15th, 2006	Abingdon, VA (Southwest VA Higher Edu. Center)
August 16th, 2006	Danville, VA (Regional Center for Applied Technology [RCATT])
January 11th, 2007	Richmond, VA (Virginia Department of Transportation Training Facility)

The metadata training was very well received by all stakeholders in Virginia. Impacts from this grant can be measured in several ways. However, the most measurable impact associated with this project can not yet be quantified. This impact is associated with the metadata “buzz” that has been created in Virginia. Local governments and state agencies have requested additional metadata training opportunities. It almost seems as though there has been interest within these organizations to develop and implement metadata, but there they just needed a push and some encouragement to pull the pieces together. The workshops provided an important push.

This is clearly reflected in many of the evaluations from the workshop. Examples of responses include:

- “Need to keep doing these workshops...”

- “The workshop was very informative and helpful in knowing where our county needs to go from here.”

In addition, the Virginia Geographic Information Network (VGIN) has undergone significant restructuring over the past year. They have added new positions, and are under new leadership. VGIN recently conducted a general priority needs assessment of geospatial services that require updating, support, or development. Metadata was identified as a high priority. There are several factors that contributed to this decision. Certainly, the “metadata buzz” that has been created through the workshop circuit did not hurt.

One major outcome of VGIN’s strategic planning process, is the implementation of a state of the art and sustainable NSDI compliant metadata clearinghouse. The lack of a sustainable, state run metadata clearinghouse was identified as an impediment by workshop participants during informal discussions. Approximately 67% of metadata workshop participants who responded to our informal evaluation maintained that they would be interested in posting their metadata on a state maintained metadata clearinghouse.

In addition, metadata workshop participants expressed their ideas, concerns, and needs to help shape the development of a metadata clearinghouse. This feedback has proven to be invaluable in the design and implementation of a statewide metadata clearinghouse. It is fully anticipated that this input from the “bottom up” will help to support organizational practices and will generate an atmosphere of ownership once Virginia’s metadata clearinghouse has been implemented.

One participant mentioned on her workshop evaluation form, that she would, for example: “...investigate other states’ (metadata) repositories and (will) forward comments along to VGIN”.

Funded and supported by the leadership at VGIN, and based on feedback from Virginia’s geospatial community, the Virginia Metadata Clearinghouse (<http://gisdata.virginia.gov>) came online in July of 2007. The Virginia Metadata Workshop participants, in essence, served to pilot this resource. Instructors took full advantage of this resource, and provided an overview of the design of the Virginia Metadata Clearinghouse. In addition, workshop participants were encouraged to become authorized Virginia Metadata Clearinghouse Publishers, and were provided with instruction on how to publish metadata to the Clearinghouse. See Figure 1 for an illustration of the Virginia Metadata Clearinghouse.

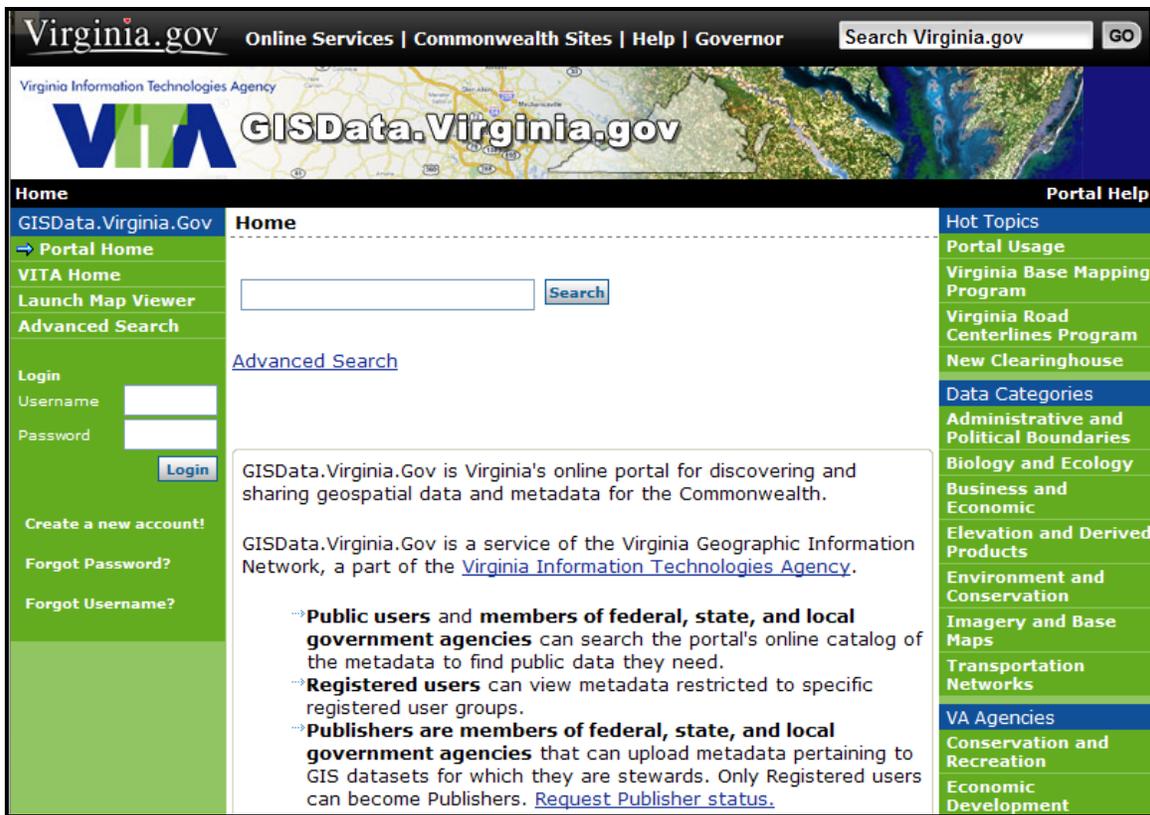


Figure 1: The Virginia Metadata Clearinghouse – <http://www.gisdata.virginia.gov>

Over 100 individuals received metadata training through Virginia’s 2006 CAP grant. A breakdown of workshop attendees is as follows:

- Local government employees: 61%
- State government employees:26%
- Planning District Commission employees: 4%
- Private Sector employees:9%

At the time that the metadata workshops were being conducted, VGIN started exploring metadata clearinghouse implementation options. We therefore did not encourage participants to develop metadata records at the workshop, as we wanted them to become familiar with one system , but to refrain from publishing these records until the statewide metadata clearinghouse was completed. It is difficult to estimate how many metadata records were either developed, updated, or improved through this workshop circuit. However, I was informed that the Virginia Department of Transportation had approximately 150 metadata records ready to publish (or nearly so) after this workshop concluded. It should also be noted that the Virginia Geographic Information Network (VGIN) is mandated to “Develop maintain and provide in the most cost effective manner

access to the catalogue of Virginia geographic data and governmental data users”. VGIN has determined that metadata and a functional metadata clearinghouse is the most efficient vehicle to support this mandate.

It is fully anticipated that FY 2007 will provide some measure impacts as related to metadata development and the publishing of metadata records. We anticipate that as soon as the metadata clearinghouse becomes operational, that state agencies, local governments, and others will begin utilizing this resource to publish metadata records.

Next Steps

As soon as the Virginia Metadata Clearinghouse comes on line, we will initiate the next circuit of metadata workshops. The next circuit of metadata workshops are associated what we are calling the “Virginia Metadata Academy”. This approach was developed in recognition that not all government entities (and the private sector) are not created equal when it comes to technical metadata training and user needs. When it comes to metadata training, “one size does not fit all”. We will therefore be offering three metadata training options through the Virginia Metadata Academy. These options will include:

1. Virginia Metadata Creator Workshops (similar to the 2006 circuit, with an added element that will cover the Virginia Metadata Clearinghouse)
2. Metadata Creator Retreats (will provide constituents with an opportunity to extract themselves from daily tasks, to promote metadata development and generation)
3. Metadata Clearinghouse Implementation Options Workshop (will provide an overview and summary of different metadata clearinghouse options).

A vast majority of responses associated with the metadata workshop evaluation stated that they would like to have additional time to develop and create metadata, and would like additional “one on one” time. The *Virginia Metadata Academy* (specifically, the *Metadata Creator Retreat* workshop) was developed in response to these requests. Participants will be fully encouraged to bring spatial files with them to the metadata retreat, and will generate metadata records for these files.

One area that was consistently identified as a limitation in the metadata development process was available metadata tools. Workshop participants suggested that geospatial data software (and software in general) has evolved tremendously. However, metadata tools, while they may have a new look and feel, are still relatively clunky, and unintuitive to the casual user.

Feedback on Cooperative Agreements Program

The Metadata Creators workshops have been extremely well received in Virginia. Certainly, the FGDC CAP grant has, to date, basically served as a seed grant to help Virginia get some momentum in respect to metadata training and encourage implementation measures.

The strengths of the CAP program are that the program remains flexible enough to accommodate the variety of needs of different states. Another strength of the program is that there are already some tremendous resources available that can be easily customized and applied to support the variety of contexts and needs of the participating organizations. Another strength of the metadata workshop, is that the FGDC has contact people in place that are familiar with the participant's work. These contact people are able to provide additional support and exposure to the latest metadata news and innovations through conference calls. In addition, the point of contact is also very responsive to email and phone inquiries. Our program felt as though there was a support structure available to us when we required it.

One of the strengths that was identified by participants, was the fact that the instructors bring a variety of different experiences and areas of expertise with them to each workshop.

The main limitation is not associated with a limitation of the CAP program, but with the metadata development tool options. Both participants and workshop leaders agree that metadata development tools are not "as far along" as they could be.

This program will have tremendous (and tangible) impacts in Virginia. I anticipate that once the Virginia Metadata Clearinghouse has been implemented, Virginia will likely have 100's of metadata records posted to the clearinghouse.

The one item that I might conduct differently, would be to eliminate the private sector sponsorship (the private sector provided lunches). It took quite a bit of time to pull this together, and to invoice companies, etc.