

## **Final Report for 2010 CAP – Category 1: Metadata Trainer and Outreach Assistance**

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**Project title:** Hit the Ground Running with Metadata Training and Support for West Virginia

**Report Type:** Final Report

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### **Executive Summary**

The Nick J. Rahall, II Appalachian Transportation Institute (RTI) staff at Marshall University developed a 2-day training workshop focused on GIS metadata in collaboration with the GIS community. Throughout the grant year, 2 workshops were held November 9-10 and December 7-8 at the Marshall University Graduate College campus and 1 workshop was held January 19-20 at the West Virginia GIS Technical Center. The announcement of the workshop schedule was emailed to the members of the West Virginia Association of Geospatial Professionals. The workshop was open to anyone who uses GIS and would like to learn about metadata. The central aim of these workshops was to give participants a new appreciation and understanding of the importance of metadata. The overall evaluation of all workshops was very positive. For metadata outreach assistance and continuous commitment, RTI created a Metadata Wiki website dedicated

to metadata news and resources. The site will help form a collaborative online metadata community.

### **Project Narrative**

In collaboration with the West Virginia GIS Technical Center, RTI developed a 2-day GIS metadata training workshop using training materials from the FGDC metadata workshop development resources and other organizations. The workshop was designed to have lectures, demonstrations and hands-on exercises to provide the participants with a better understanding and appreciation of GIS metadata, metadata standards and how metadata helps an agency with their data management. In the hands-on exercises, participants worked with data to learn how to write quality metadata. ArcCatalog and its metadata management tools was the primary focus for this workshop, but the National Park Service Metadata Tools Extension was also demonstrated and used

The 2 day workshop was scheduled for 3 times throughout the grant year. In collaboration with the West Virginia Office of the GIS Coordinator, West Virginia GIS Technical Center, and the USGS West Virginia Office of Geospatial Liaison, great efforts were made to promote the workshop to all GIS users across West Virginia and surrounding areas through all possible channels. The announcement of the workshops was emailed to federal, state, regional/local organization, education and research, private sector and other GIS users via various email lists (over 400 people). To attract more participants, two of the workshops at the Marshall University Graduate College campus (located in south central WV) were held November 9, 10 and December 7, 8 of 2010, and a third one at the West Virginia GIS Technical Center (located in northern WV) was held January 19, 20 of 2011.

The training began with a course anticipation survey and ended with a course reflection survey and evaluation. Any positive and negative feedback from participants were used for course revisions. For example, there was great interest from the first workshop participants to learn ArcGIS 10 metadata tools and transition from the FGDC to the ISO standard. As a result of the evaluation, new material was created and added to the following workshops. The overall evaluations of the workshop were positive and attendees were happy to have an opportunity to learn about metadata.

RTI has created a metadata wiki website dedicated to metadata news and resources for continuous assistance and outreach. After a discussion with IT staff and careful consideration, a wiki hosting service was chosen instead of internal hosting. This will ensure continuous existence of a site even after FGDC funding ends and to establish a community-driven collaborative wiki. A wiki was published in two different hosting services, [wvmetadata.wikidot.com](http://wvmetadata.wikidot.com) and [wvmetadata.wikispaces.com](http://wvmetadata.wikispaces.com). Each hosting service provides

different features and tools to build a site, publish content, and share. RTI will ask GIS professionals to test and two sites will be consolidated into one based on feedbacks.

**Training and Outreach Assistance:**

The workshop was designed to be a hands-on training and participants worked with actual data to learn how to write quality metadata. A workbook containing class presentations and exercises was provided to participants. In addition, a workbook and exercise data are available on the wiki website. The workshop was an Instructor Led-Participant Centered class and attendees had one-on-one interaction time with RTI staff who have extensive metadata experience as well as overall GIS knowledge.

**Sample Class Schedule**

<p>Day 1</p> <p>Introduction to Metadata I              Exercise 1: Getting Started &amp; ArcCatalog Basics</p> <p>Introduction to Metadata II</p> <p>Understanding Metadata I              Activity 1: Making a Title</p> <p>Understanding Metadata II              Exercise 2: Exploring Online Resources              Activity 2: Using the FGDC Workbook (Part 1)              Exercise 3: In Depth Metadata Editing (Part 1)</p> <p>Creating and Editing Metadata              Exercise 3: In Depth Metadata Editing (Part 2)              Exercise 3: In Depth Metadata Editing (Part 3)              Activity 2: Using the FGDC Workbook (Part 2)</p>	<p>Day 2</p> <p>Creating and Editing Metadata I              Exercise 4: Create a Metadata Template from a list              Exercise 5: Creating your own template</p> <p>Creating and Editing Metadata II              Exercise 6: Importing Metadata              Exercise 7: Exporting Metadata</p> <p>Advanced Metadata Tools              Exercise 8: Utilizing a Metadata Parser (MP) in NPS              Exercise 9: Metadata Template Creation</p> <p>Preparing for Transitions              Activity 3: Assigning Organization and Standard</p> <p>Managing and Sharing Metadata I              Exercise 10: Updating Metadata with NPS              Exercise 11: Exporting with NPS              Activity 4: Metadata Workflow</p> <p>Managing and Sharing Metadata II              Exercise 12: Utilizing a State-level Geospatial Clearinghouse              Exercise 13: Utilizing a Federal Geospatial Clearinghouse</p>
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The first workshop was held at the Marshall University Graduate College campus on Nov 9, 10 of 2010. 16 people had registered for the training and 15 people attended. The attendees were from West Virginia Division of Highways, City of Charleston Sanitary Board, West Virginia Department of Environmental Protection, Raleigh County E-911, Chapman Technical Group, and West Virginia Division of Homeland Security and Emergency Management. Most participants agreed or strongly agreed that the overall experience of the training was positive and

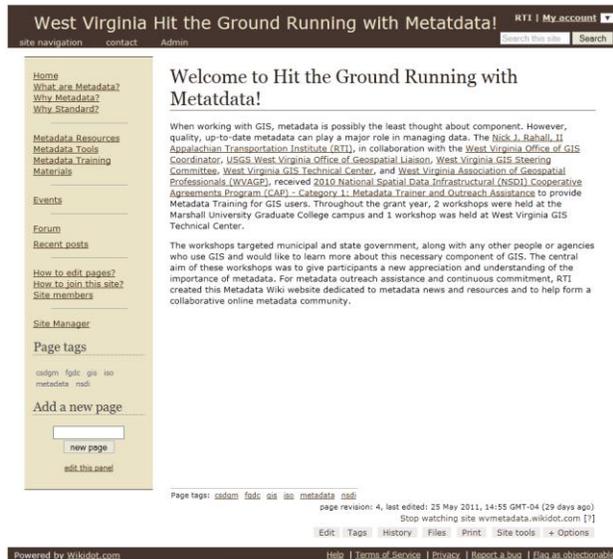
all participants agreed or strongly agreed that their knowledge of metadata has improved after the workshop. Some of the major strengths of the course included knowledgeable instructor and workbook. Some of the weaknesses and suggested improvements listed by the attendees included: remote desktop interface, more real-world examples and exercises, and ArcGIS 10 metadata training.

The second workshop was also held at the Marshall University Graduate College campus on Dec 7, 8 of 2010. 17 people had registered for the training and 14 people attended. The attendees were from West Virginia Division of Highways, WV Department of Tax and Revenue - Property Tax Division, Allegheny Surveys Inc, U.S. Army Corps of Engineers, and West Virginia Department of Environmental Protection - Office of Surface Mining, Reclamation, and Enforcement and Information Technology Office. Most participants agreed or strongly agreed that the overall experience of the training was positive and their knowledge of metadata has improved after the workshop. Some of the major strengths of the course included metadata overview, knowledgeable instructor, and workbook. Some of the weaknesses and suggested improvements listed by the attendees included: remote desktop interface and shorter exercises.

The third workshop was held at the West Virginia GIS Technical Center (located in northern WV) on Jan 19, 20 of 2011. 22 people had registered for the training and 14 people attended. The attendees were from West Virginia University Natural Resources Analysis Center, Federal Bureau of Investigation, West Virginia Geological and Economic Survey, Preston County Assessor Office, West Virginia Army National Guard, City of Bridgeport, West Virginia GIS Technical Center, and Wirt County 911 Addressing and Mapping. Most participants agreed or strongly agreed that the overall experience of the training was positive and their knowledge of metadata has improved after the workshop. Some of the major strengths of the course included hands-on exercises (especially metadata template exercise) and workbook content. Some of the weaknesses and suggested improvements listed by the attendees included: long exercises and length of workshop.

For metadata outreach assistance and continuous commitment, RTI created a metadata wiki website dedicated to metadata news and resources for a GIS community. Initially RTI had considered hosting a website internally and explored different wiki platforms such as Mediawiki, Drupal, and ScrewTurn Wiki. After discussing pros and cons with IT staff, a wiki hosting service was chosen to set up a wiki site. This will ensure unrestricted access and continuous existence of a website even after FGDC funding ends and to establish a true community-driven collaborative wiki website. Initial content of a website is based on workshop training material: What are Metadata, Why Metadata, Why Standard, Metadata Resources, Metadata Tools, and Metadata Training Materials. The site also moderates discussion forum and publishes GIS events.

A wiki was published in two different hosting services, [wvmetadata.wikidot.com](http://wvmetadata.wikidot.com) and [wvmetadata.wikispaces.com](http://wvmetadata.wikispaces.com). Each hosting service provides different features and tools to build a site, publish content, and share. RTI will consolidate into one site based on feedback from users.



[wvmetadata.wikidot.com](http://wvmetadata.wikidot.com)



[wvmetadata.wikispaces.com](http://wvmetadata.wikispaces.com)

## Next Steps:

While the FGDC funding has ended, it has provided us with additional opportunities. The West Virginia Association of Geospatial Professional asked RTI to perform a workshop on metadata for their members as part of their training series. We will continue to look for opportunities to present our training materials either at conferences or collaboration with other organizations.

RTI has created and been maintaining a Metadata Wiki website dedicated to metadata news and resources. The site will be served as a central place for metadata for WV GIS community and help form a collaborative metadata community.

## Feedback on Cooperative Agreements Program:

RTI had a very positive experience with the CAP program. Working with members of FGDC including Sharon Shin, Linda Wayne, Brigitta Urban-Mathieux was nothing less than professional and positive. The program offered a much needed metadata training opportunities for the fast growing GIS professional community in WV. RTI was encouraged to apply another CAP program and was awarded Category 4 - Statewide Cadastral Layer Business Plan for West Virginia.