



## Conservation Management Institute Outreach and Education

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VIRGINIA POLYTECHNIC INSTITUTE  
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### Final Report for Online Metadata Training Tools

**Agreement Number:** 05HQAG0112-Online Metadata Training Tools

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#### Project Narrative

Through a combined effort, CMI and the NBII Metadata Program Coordinator created an online metadata training course to aid with the National Spatial Data Infrastructure's goal of establishing a sustained resource of metadata creators. Traditionally, attendees of NBII metadata training courses have been largely agency data managers. These individuals typically are not intimately involved with the original creation of data, but are charged with the task of distributing it on behalf of their agency. Since metadata is a federally mandated requirement, data managers are also often asked to create a record to accompany the completed data set. This online training course allows the NBII and NSDI to target primary metadata/data creators in an effort to generate a larger audience for metadata creation.

Through the creation of the online metadata training web page problems associated with traditional training such as, funding limitations, travel permission, time restraints, and the number of spaces available are no longer issues for the data creator. The web based training module allows the data creator to learn the information necessary to create and publishing compliant FGDC Content Standard for Geospatial Metadata records from their office PC.

The educational web site consists of more than static information for the user to download or read. The pages utilize Flash technology to walk the student through the standards and programs associated with the creation of metadata by incorporating voiceover Flash technology. This allows the user to watch and listen to the NBII



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PowerPoint presentations previously created for their metadata training as opposed to simply viewing them statically online.

The online metadata training web page will reside on the new NBII web portal. All the information is divided into logical chapters to aid in the ease of learning. Throughout the course the student can play, pause, fast forward, and reverse any of the Flash presentations much like if they were watching a movie on their VHS or DVD player.

### **Metadata training and outreach assistance**

The online metadata training project is outside of the normal scope for traditional CAP grants. It is difficult to determine actual numbers or who is actually using the online training. Traditionally, CAP grants have gone towards providing training at numerous sites to a limited number of students, the online metadata training course was designed to provide continuous training over the internet. The end result of having an online metadata training course is that many individuals can be trained on proper metadata creation and the course continues to serve as a training tool after the project completion date.

The main limitation of the online metadata training course is the lack of a course instructor. While the online course is modeled after the exceptional NBII metadata training course, it does lack the student-teacher interaction that is found in traditional training. While the absence of a course instructor is not ideal since the student can not ask questions in areas where they need further assistance, the online course does provide links to email list serves and discussion lists that the student can join to ask questions on areas that they may need further clarification.

### **Status of Metadata Service**

Due to the nature of the web course and not being able to track users, this section is not applicable to this project.

### **Next Step**

One of the unique advantages of a web based training module over a traditional instructor-led course is that it continues to serve as a training tool after the project completion date. With traditional instructor-led courses, funding resources are needed to continue training for future dates. The web-based course requires no additional funding past the project completion date to continue educating individuals about the importance of metadata. The courses will reside on the NBII web portal indefinitely to allow individuals to take the NBII metadata training course as needed for their organization or agency.



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If there was to be an update to the course it would be to update training materials to address future standard changes. Due to the courses being laid out in chapters it would not be necessary to redo the entire course rather a new chapter could be created to address standard changes and added to the existing course.

### **Feedback on Cooperative Agreements Program**

I believe that the CAP is a valuable asset for encouraging the creation of metadata. Unfortunately metadata creation is often overlooked as a requirement for federal projects. The CAP provides a valuable service to educate individuals about metadata and the proper procedure for creating compliant metadata. The program's educational component goes beyond simply stating that metadata is a requirement and therefore must be done. The educational initiative stresses showing why metadata is important and how it will enhance the dataset. Despite Geographic Information Systems being a common tool, it is still a relatively new technology. Many individuals are realizing what a valuable tool a GIS is; unfortunately metadata is an often overlooked step or process that is forgotten with the creation of data. The CAP is a valuable resource for educating large data creators, unfortunately there are many agencies and offices that are creating data that overlook the metadata creation step due to their lack of knowledge about metadata or even the fact that metadata exist.

While the CAP does a good job of education large data developers I believe that many of the smaller data creators are not aware of metadata and its importance. While this group of small data creators may not create many datasets individually, collectively they comprise a large portion of the data that is being created. Unfortunately this is a hard group to educate. Since these individuals are not well informed about metadata they are unlikely to seek training pertaining to metadata creation.

Another weakness of the CAP is the required matching funds. Match funds can be obtained relatively easy for educating those that realize a need for training. Unfortunately the match requirement makes it difficult to provide programs for those that do not yet realize they need to create metadata. This weakness relates back to the previously mention weakness of education the small data creators. Large data creators recognize the need for training and are more willing to help with matching funds for the education. The problem lies in obtaining matching funds for general education initiatives such as educating those that are not aware of metadata compliance. Those that are not aware of metadata requirements are not likely to help with matching funds. Additionally they are often associated with smaller agencies or offices so they can not contribute much towards the match. This will be a major difficulty in educating the small data creators. When creating an education initiative for the greater good; who do you target for matching funds?



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Overall I believe the CAP is a valuable tool with very competent administrators. I hope to see the continued support and funding for the Cooperative Agreement Program since it is an invaluable resource that provides a knowledge foundation for data creators on the importance of metadata.