## NSDI Cooperative Agreements Program
## Metadata Training and Outreach Assistance Project
## Interim Report

**Date: 11/1/2011**
**Agreement Number:** G11AC20058
**Project title:** Central Florida Metadata Training Initiative
**Interim report**
**Organization:** Central Florida GIS Workshop, Inc
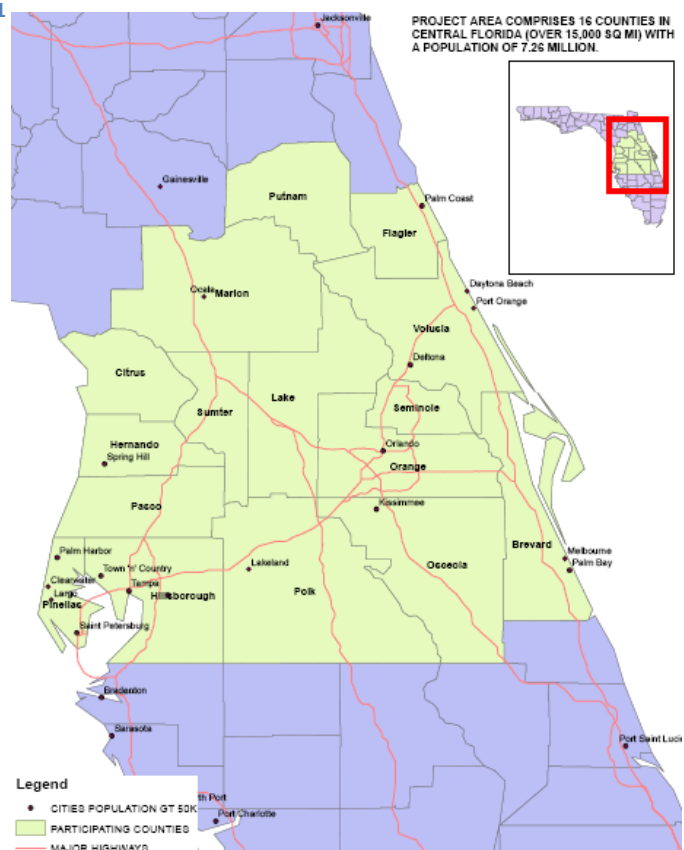**Principal Investigator:** Stanimira Bourova, 407-341-6908, mbourova@cfgisworkshop.org

## Executive Summary

The Central Florida GIS Workshop is providing metadata training for local city, county, regional and state organizations within the project area, which encompasses the counties of Orange, Osceola, Seminole, Volusia, Flagler, Putnam, Lake, Marion, Citrus, Sumter, Fernando, Pasco, Brevard , Polk, Hillsborough, and Pinellas comprising all of  the Central Florida Region and including the Daytona, Orlando, Tampa, St Petersburg urban corridor. (See figure 1)

**Figure 1**



The organization will assist with their efforts for metadata publishing and implementation of their in house metadata programs. This is being accomplished through 3 one day and 4 half day metadata training sessions in the Central Florida region, 3 one hour metadata presentations for managers conducted at each of the three regional user conferences in Florida and  three 1 ½ hour introduction to metadata blocks to be inserted into the curriculums of two University of Central Florida courses, PAD 4712 and PAD 6716 (Information Technology in Public Administration) and one GIS 2040 course at Daytona State College. All training is conducted at no cost to the participating organizations, but the one day training sessions will require an agreement from participants to generate and provide metadata to regional, state, and federal data portals. The procedures for publishing metadata are part of the training and each participating agency will commit to a  letter of support to publish and keep up to date the information about their publicly available data. All training materials as well as helpful links will be posted in the training section of the CFGIS Workshop web site.

## Project Narrative

In the beginning of the grant performance period, the project team started by reviewing, collecting and developing the materials for the curriculum of the one day training classes, the Metadata for Managers presentations planned for the CFGIS Workshop, SHRUG, and the SFGIS Expo, and for the planned 1 ½ hour metadata training proposed for local college students participating in GIS courses. The primary goal for the one day training sessions was to provide participants an opportunity for hands-on metadata creation up to the adopted National and International standards. The training team planned to use the latest version of the GIS software by ESRI to create, export and import the metadata. The first challenge to overcome was the complete change of the metadata interface with version 10 of Esri's ArcGIS software. With this version the software vendor added compatibility with the ISO and the North America Profile metadata standard and also added a short ArcGIS metadata version for quick access and data description but initially abandoned the (VB based) FGDC editor. Up to this point the metadata files would have been created with this well known FGDC metadata editor and then exported for distribution in XML format, but the new version of the software would not read XML files well and successfully import only part of the information stored in them from earlier FGDC compliant metadata. The project team decided to evaluate other methods for creating metadata using other software, including some of the free metadata editors available on the web. During the research period we found that ESRI had rethought their approach and made available tools to address the issues within the version 10 Metadata editor via a patch and also with additional improvements via Service Pack 1 to their software. After some comparison and discussion with the local user community it was decided to employ the tools provided by ESRI in the exercises for the one day training class but to also provide guidance in successful conversion of existing FGDC compliant metadata created in earlier versions for use in ArcGIS v10.

Another challenge was the change of the Geodata.gov portal page that made the use of the presentation materials from the National Spatial Data Infrastructure Training Program difficult without modification and update. The new training slides on that subject were prepared using the same presentation flow but with updated content and snapshots from the new web page.

The last challenge faced to date is the arrangement for the one day training class dates. The initial plan was to hold the first one day training in May 2011, but with all the changes brought about by the release of ArcGIS 10, extra time was required to prepare the materials. Subsequently, the plan was to conduct the first metadata training class as part of the CFGIS pre-workshop training in September. However, this time the choice of dates proved to be a problem. The Metadata training class was scheduled for Saturday and our potential students primarily work for governmental organizations and it was reported that no compensation was to be expected if they took a class during the weekend. The enrollment was exceptionally low as a result and it was decided once again to postpone the one day training session. A renewed focus was placed on leveraging free training facilities (if possible) throughout the region and to plan for training during the work week.

Most of the back-ground work for the project has already completed and we are optimistic that by the end of the grant performing period we will have the following goals accomplished:
- Individuals and organizations will have been trained and be competent in creating FGDC and ISO - NAP compliant metadata.
- Resultant completed metadata generated by participating agencies will pass the parser test and will be posted to NSDI clearinghouses (CFGIS, FGDL, Geodata.gov).
- Letters of understanding will be sought from participants in the one day training classes to sustain metadata relationships beyond the performance period of the grant.
- Registration in the NSDI Trainer Registry of the instructors involved to provide for additional regional metadata training opportunities in the future.

- The student names, customer satisfaction results via a student survey and a listing of the agencies / organizations receiving training will be submitted
- Links to metadata training materials placed on www.cfgisworkshop.org as well as links to www.fgdc.gov

## Training and outreach assistance:

Two of the three planned one hour Metadata for Managers presentations have already taken place. The first was on September 20th, at the 5th Annual Central Florida GIS Workshop in Daytona Beach, Florida and the second at the South Florida GIS Expo in W. Palm Beach, Florida on October 7th. The third presentation is scheduled for November 10th at the Seven Hill Regional user Group (SHRUG) Conference in Tallahassee, Florida.

The 1 ½ hour "Introduction to Metadata" has been inserted into the curriculums of two courses in University of Central Florida, PAD 6716 and PAD 4712 (Information Technology in Public Administration) in Orlando.  A third block has also been added into the curriculum for the GIS 2040 course offered at Daytona State College in Daytona Beach.

The first of the planned four half day local training sessions has been scheduled for December 7th in Volusia County at the Library Support Center in Daytona Beach.

Due to the challenges discussed in the previous section, the first of the three planned day long training sessions is now scheduled for January 11th, 2012. The training will take place at the Lyonia Environmental Center in Deltona, Florida. Two additional facilities, one in Tampa and one in Kissimmee are currently being investigated for use. We are tentatively looking at a date in late February and another in late March for one day training classes if these facilities can be secured.

All materials prepared for the classes conducted under this initiative follow the FGDC metadata Core Curriculum for training content. All training materials are supported with local metadata examples and the 3 one day workshops will include hands on exercises for developing metadata using the tools provided with Esri's ArcGIS 10 software package. Step by step procedures for metadata publishing at the listed NSDI clearinghouses (CFGIS, FGDL, and Geodata.gov) are part of the training materials.

The major tasks accomplished to this point are listed below:
I.  The curriculum and training materials have been prepared by the instructors. The 1 hour Metadata for Managers presentation is added as an appendix to this report (Metadata for Managers.ppt).
    The training materials reflect closely the content suggested in the FGDC metadata training curriculum and will be posted at the CFGIS Workshop web site before the end of the project. Draft agendas for the seminars and the hands-on class are added to the appendix (Appendix B).
II.  The proposed training opportunity was presented to the counties and other local, regional and state agencies in the area.
    1. The training opportunity was discussed at the quarterly Central Florida County GIS Manager's Forum that took place October 28th. The training materials were prepared to address some of the organizational needs identified at that meeting.
    2. The Central Florida GIS Workshop used the organization web site and mailing list (over 500 contacts) to advertise the training
III.  The project team has determined the best locations for each one day training class based on input by the GIS users in Central Florida. The goal is to use existing training facilities with already installed software to support the demonstrations and/or the hands-on exercises. The existing computer labs with colleges or universities or similar training facilities available for the county governments are already utilized for this training
IV.  Conduct the training using the materials developed in step 1

## Status of Metadata Service

The metadata will be served as part of each the one day metadata training classes. As part of the curriculum each student will create a profile with the GeoData.gov clearing house and will work on publishing metadata for a dataset available for distribution by their organization. Approximately 20 students are expected for each of the one day classes. This will take place in the second half of the grant performing period.

## Next Steps:

The training material will be published on the organization web site and provided to participating students and other interested parties.

Metadata training will be added as part of the class materials for annual training events conducted by the CFGIS Workshop staff.

The metadata materials and presentation will remain a part of the curriculum for the three GIS related classes at University of Central Florida and Daytona State College discussed earlier.