



State of Tennessee  
Department of Finance and Administration  
Office For Information Resources  
GIS Services

## FGDC CAP Grant Category 3: Final Report

**Date:** February 14, 2012

**Agreement Number:** G11AC20052

**Project Title:** Tennessee Enhanced Elevation Business Plan

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## **Executive Summary**

The State of Tennessee, OIR GIS Services, in conjunction with Applied Geographics and AECOM, has completed our work to develop a business plan for enhanced elevation data. This business plan builds upon the success of the initial data production efforts of the Tennessee Base Mapping Program and identifies the specific business needs of enhanced elevation GIS data for the state. The flood events of 2010 and 2011, and the need to improve planning and mitigation for future flood events, are highlighted as primary business drivers in the plan.

Outreach activities were crucial for developing the broad based support for this effort. Twenty interviews were conducted and 5 regional workshops were held that provided the stakeholders with an opportunity to provide suggestions and comments on why and how a statewide mapping effort of enhanced elevation data would benefit their interests and goals.

## **Project Narrative**

The ultimate goal for this project is to develop a statewide GIS dataset of enhanced elevation for Tennessee. To achieve this goal we are first developing a business plan that will identify the benefits, costs, and potential funding sources to develop this statewide dataset.

## **Summary of project activities**

1. With the help of AppGeo/AECOM, the project activities included:
  - a. Project Planning
  - b. Regional Workshops and Interview Sessions
  - c. Develop Draft Business Plan
  - d. Deliver Business Plan and Executive Summary Presentation
  - e. Submit Enhanced TN LiDAR Technical Specifications
  - f. Submission of Final Business Plan
2. **Key accomplishments to date**
  - a. The State issued an RFP and the contract was awarded to Applied Geographics on May 1, 2011.
  - b. AppGeo completed the Project Planning section of the project activities and concluded 20 interview sessions on June 30, 2011
  - c. The State, AppGeo and AECOM completed 5 regional workshops (Chattanooga, Alcoa, Blountville, Murfreesboro, and Jackson) on Sept 1, 2011.



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- d. A draft version of the business plan was delivered to the State in conjunction with a presentation at the Middle TN GIS Users Forum on November 2, 2011.
  - e. A final version of the business plan was delivered to the State on January 6, 2012.
- 3. How inclusive is your effort? What have you done to bring new stakeholder groups or organizations into statewide coordination?**
- a. The interview sessions were conducted over a two week period and included several Federal, State, and local government officials. Working with our USGS liaison, we were also successful in coordinating our State/local government workshop on the National Enhanced Elevation Assessment and including AppGeo as observers. This perspective allowed AppGeo staff to gain additional insight into the national vision for collecting enhanced elevation data.
  - b. We have also promoted our efforts with the Tennessee Stormwater Association, Tennessee Association of Floodplain Managers, Tennessee Association of Assessing Officers, Tennessee Solar Institute, Austin Peay University, Tennessee Association of Utility Districts, US Army Corps of Engineers, Tennessee Valley Authority, among others.
- 4. What practices or activities led to success? What practices or activities have not?**
- a. We've created a Steering Committee and a Technical Committee for this effort. The Steering Committee has guided the development of the business plan, while the Technical Committee has focused on the specific data requirements to support the statewide acquisition. This has helped create additional motivation and "buy-in" from a larger perspective. It has also created a forum to share ideas and help distribute the promotional efforts of our regional workshops.
  - b. The educational component of this effort cannot be underestimated. There was a wide range of experience and understanding of "enhanced elevation" and LiDAR technology among GIS practitioners and other professionals. This effort provided a significant opportunity for success from an awareness and conceptual understanding perspective. There were several people who identified a need for additional educational opportunities regarding LiDAR technology, which has led to a focus on 'enhanced elevation' LiDAR data/technology at this year's TNGIC conference.

### **Next Steps**

#### **Describe the next steps in your project.**

The week of February 13, we will have internal discussions in OIR GIS Services with the Deputy CIO regarding the marketing and outreach required within the GIS community and the political leadership in the State of Tennessee. The ultimate goal is to identify funding sources for a one county (or HUC8 watershed) pilot project in spring of 2013, and more importantly, secure funding for FY2014-17 for the statewide acquisition efforts. In addition to the marketing



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efforts, in the summer of 2012, OIR GIS Services will begin the development of an RFP, with the intent of securing a contractor in Fall/Winter of 2012.

The immediate marketing and outreach efforts will continue with Dennis Pedersen presenting at the Tennessee Association of Utility Districts (TAUD) on March 15, 2012. Mr. Pedersen will also be delivering a status update and project planning outline at the Tennessee Geographic Information Council (TNGIC) annual conference at Montgomery Bell State Park, March 28-29, 2012. Additional opportunities may present themselves to speak with the Information Systems Council at a future date in 2012. The ISC is the political body that governs IT and GIS policy within Tennessee State government, and OIR serves as staff to the ISC. The goal for this effort is to solicit support from the Commissioner of Finance and Administration, and to include funding for the statewide LiDAR effort in the Governor's 2014 budget. The FY2014 budget hearings will not take place until October/November of 2012.

**Where do you need assistance?**

We could use assistance in promoting/funding this effort with the federal agencies that are already acquiring LiDAR data in Tennessee (USDA-NRCS, USGS, USACE). Our intent is that federal agencies would be in a position to help fund a portion of the standard and/or all of the upgrade data products.

**Revised Timeline**

Is your project proceeding on its original timeline?

Yes.

Do you expect to complete your project on the scheduled completion date?

Yes.

**Feedback on Cooperative Agreements Program**

The CAP Program has been a wonderful opportunity for OIR GIS Services to continue its role in leading/coordinating statewide geospatial activities as it relates to developing statewide enhanced elevation data. The team of AppGeo/AECOM provided a knowledge base and professionalism that was critical in the stakeholder interviews, regional workshops, and development of the product deliverables (business plan and technical specs). In light of several other GIS projects and initiatives within OIR GIS Services, I would not have been able to complete this work on my own. The grant funding of \$50,000 was sufficient from my perspective and was necessary for us to complete this work, and wouldn't have been able to complete the business plan without federal funding. We were on an aggressive timetable, and were attempting to complete our work prior to the start of the FY2013 budget hearings, but in light of several factors, it was good that we methodically completed our work in the projected timeframe identified by FGDC and our contract with AppGeo.

I can't say enough positive comments about the CAP program and the work that AppGeo/AECOM did on development of the business plan and technical specs. Mr. Grady and



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Mr. Nagy are true professionals and have laid a foundation for us to be successful in our development of enhanced elevation LiDAR data for Tennessee.

This is the most valuable program that FGDC/NSGIC has developed and supported over my seven years serving as Director of GIS Services. As other opportunities present themselves, I will be applying for additional CAP grants in the future.