NGAC

3DEP Subcommittee
Status Report

Gary Thompson, Chair

September 1, 2015
Session Agenda

- Program Update
- Review of Guidance & Study Questions
- Discussion
- Next Steps
Subcommittee Membership

- Chair: Gary Thompson
- Co-Chair: Harvey Thorleifson
- Members:
  - Jeff Lovin
  - Jason Warzinik
  - David Wyatt
- Federal Contacts: Vicki Lukas, Larry Sugarbaker (USGS)
1. NAPA Report Recommendation:
   - Advice on: Advancing the NAPA recommendation to coordinate among federal agencies
   - Lead: Harvey Thorleifson

2. 3DEP Acquisition:
   - Advice on: Improving coordination and communication on 3DEP partnerships among community stakeholders
   - Lead: Jason Warzinik

3. Emerging LiDAR Technology:
   - Advice on: Enhancing the coordination and outreach and for commercializing emerging LiDAR technologies
   - Lead: Jeff Lovin
#2 - 3DEP Acquisition

Map depicting the areal extent of the proposed body of work for the 3DEP in Fiscal Year 2015. The map shows areas in green that meet the base-level specifications for 3DEP data and are planned for acquisition. The map also highlights areas in blue that meet the specifications for LiDAR data in Alaska and are 8 years old or newer as of 2015. USGS data from March 2015.

For more information on 3DEP, visit:
http://www.geocountry.gov/3DEP
Visit the USGS at:
http://coast.noaa.gov/inventory/
#2 - 3DEP Acquisition

3DEP Data Acquisition Coordination - A Broad Agency Announcement (BAA) was announced by the USGS in July, 2014 in FedBizOpps as a visible, publicly accessible partnering opportunity for 3DEP data acquisition. Along with the BAA process comes new rules related to Federal contracting about how the USGS can communicate and coordinate partnership opportunities. As a result, Liaison roles have changed. Given the new approach, what advice and/or recommendations does NGAC have for improving coordination and communication on 3DEP partnerships among community stakeholders?
#2 - Summary:

- Coordination and Education of Partners and Associations
- Support Local Cost-Shares and Data Acquisition Coordination
#2 - Coordination and Education of Partners and Associations

- 3DEP’s BAA is still not very widely known or understood as a LiDAR partnership funding opportunity at the local government level.

- LiDAR is still a new technology and its day-to-day uses are still relatively unknown by most of the non-geospatial community. Even traditional geospatial practitioners are struggling to fully understand the utility of LiDAR to adequately justify the high cost of acquisition and processing to their administration.
#2 - Coordination and Education of Partners and Associations

**Draft Recommendations**

- Continue to promote and engage stakeholders through expanded in-person outreach such as the 3D Elevation Program Stakeholder meeting, national webinars, and in-person workshops to the traditional geospatial practitioner community.

- Expand engagement and promotion of 3DEP to the non-technical state and local executive community.

- Continue to promote the time savings for procurement of LiDAR using the USGS Geospatial Product and Service Contract (GPSC) and similar cooperative agreements.

- Continue to refine the BAA process schedule to align with the LiDAR spring flight season and continue to improve the application process.
#2 - Support Local Cost-Shares and Data Acquisition Coordination

- To be able to realize the goals of 3DEP substantial outreach, collaboration, and coordination efforts is needed between not only Federal, State, and Local government partners but also with non-traditional elevation users from academia, natural resources based organizations, utilities, and the private industry.
#2 - 3DEP Acquisition

## Draft Recommendations

- Enable the USGS National Map Liaisons to be more active in the upfront coordination effort while still adhering to the BAA protocols. This includes more in-person visits to network, cultivate, and maintain long-term relationships with participation in state level geospatial advisory councils, state GIO, or regional government meetings and activities.

- Further refine the 3DEP Public Areas of Interest Project Collector Tool mapping tool with improved project detail to include funding priority and fiscal year targets.
#2 - Support Local Cost-Shares and Data Acquisition Coordination

**Models of Successful Large Scale LiDAR Efforts**

- Tennessee, Indiana, Iowa, Minnesota, & North Carolina.
  - Variety of business drivers including floodplain mapping, transportation planning, environmental assessment, stormwater management, forestry, agriculture, and economic development.
  - Projects took between 3-5 years to complete.
  - Costs ranged from $2.7 – $8.3 million for 1.0m-1.4m.
  - All projects included federal funds; most included multiple state funding partners & local data; few included utilities & academia.
  - Most agreed that getting the data was the easy part; educating and training staff on appropriate uses & expectations of LiDAR continues to be a challenge.
#3 – Emerging LiDAR Technology

Our committee was in a position to recommend that USGS conduct a pilot project to test and showcase the latest single photon counting and Geiger mode LiDAR technologies.

USGS “beat us to the punch” by doing just that. They are inviting multiple vendors to fly their new LiDAR sensors over a test site that has conventional LiDAR and survey control to assess and evaluate these emerging technologies. We applaud USGS for their proactive response and willingness to look at the potential benefits of this new technology in regards to its application for 3DEP.