National Geodetic Survey - Positioning America for the Future

LiDAR and Height Modernization
Strategies and challenges tying LiDAR data to accurate vertical geodetic control

NOAA Science Center
1301 East West Highway
Silver Spring, MD 20910
August 18, 2011

Agenda

8:00 – 8:15 **Welcome, opening remarks, objectives of workshop**

Ms. Juliana Blackwell, Director, NGS
Ms. Renee Shields, Height Modernization Manager, NGS

8:15 – 9:00 **LiDAR 101 -** ***Introduction to LiDAR technology, its accuracy, importance of tying to geodetic control, and QA/QC***

Dr. Christopher Parrish, Remote Sensing Division Lead Physical Scientist, NGS

Strategies for tying to geodetic control and QA/QC procedures for specific applications:

9:00 – 9:20 **Accuracy requirement in coastal applications -** ***sea level rise and shoreline***

Dr. Kirk Waters, Coastal Remote Sensing Program Manager, Coastal Services Center

9:20 – 9:50 **Quality Control of LiDAR -** ***elevation data used in floodplain mapping***

Mr. Gary Thompson, Director, North Carolina Geodetic Survey

9:50 – 10:20 **Break**

10:20 – 10:40 **Control, Acquisition, and Post-processing of LiDAR Data for Corridor Work** ***-utility and transportation***

Mr. Ken Sorrels, Land Surveyor, Tuck Mapping Solutions, Inc.

10:40 – 11:00 **Green, Waveform LiDAR in Topo-Bathy Mapping**

Mr. Amar Nayegandhi, Project Manager, Jacobs Technology – US Geological Survey

11:00 – 11:45 **National Enhanced Elevation Assessment (NEEA) -** ***Introduction to NEEA effort, discussion of LiDAR applications and economic benefits***

Dr. David Maune, Senior Remote Sensing Project Manager, Dewberry
Mr. Greg Snyder, Manager, LiDAR Program Development, US Geological Survey

11:45 – 12:00 **Morning session wrap-up and overview of afternoon session**

Ms. Renee Shields, Height Modernization Manager, NGS

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12:00 – 1:30 **Lunch** *(Lunch on own; list of nearby restaurants will be provided)*

1:30 – 3:00 **Break-out Session:**

Participants will work in small groups to create a list of most important or most frequently encountered issues in acquiring or using LiDAR data. After reporting the problems out to the entire group, time will be spent to brainstorm solutions in a large group.

3:00 – 3:20 **Break**

3:20 – 4:30 **Panel Discussion:**

Opportunity for Participants to ask questions on issues that have been discussed throughout the day or that have not been addressed.

Panelists:
Mr. Dave Doyle, Chief Geodetic Surveyor, NGS
Dr. David Maune, Senior Remote Sensing Project Manager, Dewberry
Dr. Christopher Parrish, Remote Sensing Division Lead Physical Scientist, NGS
Mr. Gary Thompson, Director, North Carolina Geodetic Survey

4:30 – 5:00 **Wrap-up, finalize action items, and closing**

Ms. Renee Shields, Height Modernization Manager, NGS