Questions and Answers from the May 19th CTP Webinar: Elevation Data Collection using LiDAR

Can federal money be used as match for the BAA for Lidar acquisition?

Yes; Some restrictions apply to federal funds used as match in request for financial assistance by states; regulations defined within BAA. Many of our BAA projects come in with a combination of Federal, State and Local funding collectively representing the partner contribution.

Can you provide that partnership website?

http://nationalmap.gov/3DEP/

Comment: It would have been helpful to give an explanation or definition of some of the acronyms used.

Most acronyms were at some point spelled out but we concur that a full listing of acronyms with definitions would be useful.

Does the Lidar data need to be collected in metric units?

No; Refer to Lidar Base Specifications (http://pubs.usgs.gov/tm/11b4/)

Does the USGS provide a viewer of the Lidar data? Or are their USGS approved 3rd party vendors to view the Lidar data?

No. USGS does not provide a viewer. They also did not provide a list of 3rd party vendors.

FYI - FEMA has dropped NSRS 2007 from its data submittal requirements, but they still haven't gotten all the guidance documents updated.

FEMA is in the process of updating guidance documents to make that change.

Is Geiger Lidar acceptable or preferred or of no consequence?

Lidar data delivered must meet USGS specifications regardless of the technology used. 3DEP is in the process of evaluating data from new sensors. 3DEP supported a limited number of Geiger Mode projects in FY16 to continue to determine how to best integrate these data into 3DEP. The data do not currently meet Lidar Base Specification.

How about the existing data in the gray area, which didn't meet the specs. Are those available too?

Yes. USGS will continue to serve the best available data. Older data will be replaced as data meeting the new specifications are acquired and made available. The National Map Viewer and Download platform (http://viewer.nationalmap.gov/basic/) shows availability for each product.

How is Lidar useful for alternative energy?

Elevation data derived using Lidar technology is useful for alternative energy applications by determining sites with exposure to the sun (e.g. not on the north side of hills) and wind (e.g. areas on hill tops vs. valleys).

How much does open topography cost?

$25 to $30,000 per year.

If FEMA is 100% funding a CTP Lidar project, can the local/state government turn that around for USGS 3DEP funds through a BAA?

Because all situations are unique, it would be best to contact the 3DEP program to discuss your particular situation. Contact for 3DEP Data Acquisition is Diane Eldridge at deldridge@USGS.gov.

Illinois State Geological Survey does a lot of QA/QC for Illinois counties.

Nice service to Illinois counties.

Is it possible to fund a 3DEP project that does not include hydroflattening? This is a significant buy-up and is not useful for floodplain mapping.

Hydroflattening is important for hydrologic modeling. If a state is not interested in hydroflattening Diane indicated that the state should contact USGS. USGS may be able to cover that cost separately. Send inquiries to 3DEP@usgs.gov.

Is the licensed professional certifying just the point cloud & bare earth DEM or does there have to be certified contours included?

The Lidar Base Specifications dictate the minimum deliverables required by 3DEP. Many projects include additional products specific to the needs of the project. The licensed professional should be certifying all of the deliverables.

Is the seasketch website live yet?

Yes; Seasketch is continually updated to share current and potential areas of interest.

Is there a template SOW available for CTP's to use as we write up the Lidar grants? Or how do we get those requirements/deliverable standards so we ensure we capture what is needed?

It is suggested that people considering a Lidar project should contact USGS (e-mail 3dep@usgs.gov) for assistance in drafting contract language.

Please review the 18 month timeline. How long from data acquisition to release of data and products?

The timeline between acquisition to the release of data products and services through the 3DEP National Map Viewer and Download Platform is 18 to 24 months. A number of factors influence the flow of data through the process. For example, unsatisfactory ground conditions (influenced by weather) can delay flights; significant delays can occur if ground conditions require acquisition to be postponed to the next flight season. Note that USGS may make the source data available to funding partners as soon as it passes the USGS QA/QC. The source data would include the raw and classified point cloud data but not the 1M DEM. Source data may be available 12 to 18 months after initial acquisition. Funding partners may indicate their desire for this data at any point during the project cycle.

If Lidar can be used to determine bare earth - why can't the Lidar determine structures within the flood zone - would allow for easy "out as shown" determinations?

Feature Extraction software is available. Partners can generally request this deliverable as a buy-up. Experienced users may be able to generate this information with appropriate vendor software. Lewis Graham suggested that entities interested in Lidar data develop their "wish list" of deliverables and request quotes. People that then decide which of the items can be funded.

The Data that has been acquired per your map, is it currently available via the portal?

The National Map Viewer and Download Platform (http://viewer.nationalmap.gov/basic/) shows the availability for all 3DEP products and services. Data shown in the grey and dark green on the graphic are most likely available. The data shown in the light green represent FY16 acquisitions, this data is not yet available. There is an 18 to 24 month delay between acquisition and products being released on the National Map.

What needs to be certified? The vertical accuracy?

What needs to be certified is that the data delivered meets USGS Lidar Base Specifications and ASPRS standards.

Will FEMA then allow for LOMC using a DEM? Currently they have been insisting on contours.

The answer to this question depends on the type of LOMC being requested:

Typically for LOMAs and LOMR-Fs (MT-1) an elevation certificate or elevation information form certified by a licensed professional is required. Generally, MT-1s are not granted based on submitting elevation data without an elevation certificate or elevation information. FEMA has piloted mass-processing of MT-1s using lidar, but there is currently no process in place to do this routinely.

For LOMRs / MT-2, the data requirements vary depending on the type of submission as described in 44 CFR Part 65 and the MT-2 instructions.

Generally, a work map showing the revised delineation of the floodplain and other information is required. This work map must be supported accurate elevation data. Contours are not required on the work map, but are typically shown to support the new delineation. The MT-2 package may be certified by a licensed professional, and/or the package components may separately be certified. Details of the certification requirements are described in the regulations and the MT-2 instructions. The source data used to compile the supporting artifacts are not required to be separately certified, if the MT-2 package is certified.

Will the new FEMA maps still be on NAVD88?

Yes.

Would you commonly give coordinates to the Lidar contractor for targets if they are in an already georeferenced coordinate system, and then have additional QA/QC targets to check the overall accuracy and precision?

Yes, that is correct.

You mentioned earlier that you provided an example of the spec data needs before an acquisition. Would you be able to share that with the group?

All 3DEP Acquisitions adhere to the current Lidar Base Specifications (http://pubs.usgs.gov/tm/11b4/). Acquisitions projects utilizing the suite of vendors available through the USGS Geospatial Products and Services Contracts(GPSC) are assured of meeting this specification. Partners wishing to manage their own contract can contact the USGS (email 3DEP@usgs.gov) for assistance in assuring the language in their contracts and SOW will result in 3DEP quality data.