

3DEP Subcommittee Update



National Geospatial Advisory Committee Meeting
December 4, 2024

3DEP Subcommittee – Timeline / Next Steps

- Promotion of 3DEP
 - Provide a 3DEP transportation panel presentation to state DOT's
 - Next steps

Milestone	Date
Provide panel presentation to U.S. DOT	?
Schedule a webinar for state DOT's	Working with FGDC to schedule the panel presentation

3DEP Subcommittee – Timeline / Next Steps

- Determine which will be the next sector the subcommittee will focus on to promote 3DEP.

Milestone	Date
Focus on promoting the use of 3DEP products for agriculture applications	Agenda item at next subcommittee meeting

3DEP Subcommittee – Timeline / Next Steps

- 3DEP research priorities

Milestone	Date
Reviewed 3DEP research priorities and developed recommendations	In progress.
Present recommendations at 3DEP meeting	December 4, 2024

3DEP Subcommittee– Recommendations

The 3DEP Subcommittee reviewed and provided comments for the 3DEP Research Plan. From those comments, the following recommendations were developed:

Potential Academic Collaboration with the 3DEP Research Program

The 3DEP Subcommittee recommends that USGS engage with the research community to hold a Community Meeting related to further advancement of the 3DEP research plan and to explore common interests and opportunities.

Read More: [Potential Academic Collaboration with 3DEP Research Program.pdf](#)

3DEP Subcommittee– Recommendations

The 3DEP Subcommittee reviewed and provided comments for the 3DEP Research Plan. From those comments, the following recommendations were developed:

Theme 3: Engage and Leverage the Changing 3D Industry, read more:

[Recommendation - Engage and Leverage the Changing 3D Industry.pdf](#)

Recommendations:

- 1. USGS should participate with ASPRS, JALBTCX, and NOAA on the evolution of Total Propagated Uncertainty Modeling.** The result will provide the 3DEP Program with specific data elements to assess existing technologies, and potential innovative technologies. The data elements should be reviewed annually for effectiveness.

3DEP Subcommittee– Recommendations

3DEP Research Plan Recommendations, cont.:

2. Full 3D accuracy testing provides a more complete and concrete understanding and assessment of Total Propagated Uncertainty and the enhanced ability for Change Detection between data sets. The methodology implemented should be a survey grade 3D scanner data capture of a large object which corresponds to a 3D airborne Lidar data capture of the same object. The 3D laser scanner operator will have the data registered to Survey Control for effective analysis of the two data sets. **USGS should determine a schedule of regular review including a random check of data.**
3. Since the inception of 3DEP the Base Specification has provided consistency and clarity to the data acquisition process. **USGS should consider a Benchmarking Process for the “Base Specification”.**
4. **USGS should collaborate with Academia, Government Agencies, and the private sector to identify streamlined approaches to QA/QC.**