National Geospatial Advisory Committee Webinar Meeting December 4, 2024 Draft Minutes

The National Geospatial Advisory Committee (NGAC) held a public meeting on December 4, 2024 from 1:00 p.m. to 4:15 p.m. The meeting was held via webinar and teleconference. In accordance with the requirements of the Federal Advisory Committee Act, the meeting was open to the public.

NGAC members present:

Maggie Cawley, NGAC Chair Bert Granberg, NGAC Vice Chair

Clio Andris

Frank Avila

Chad Baker

Jack Dangermond

Holli Howard

Leslie Jones

Ryan Mattke

Mark Meade

Curtis Pulford

Siva Ravada

Vasit Sagan

Kathleen Stewart

Phil Thiel

Gary Thompson

Josh Delmonico, Executive Director of the Federal Geographic Data Committee (FGDC) and Designated Federal Officer (DFO) for the NGAC, and Kenneth Shaffer, Alternate DFO, were also in attendance.

NGAC Members not in attendance:

Nadine Alameh

Byron Bluehorse

Lynn Dupont

Tony LaVoi

Devaki Raj

Breece Robertson

Tim Trainor

Other Attendees:

Hafsa Aasi (HUD), Dierdre Bevington Attardi (U.S. Census), Gale Blackmer (Dept. of Conservation and Natural Resources, Pennsylvania), Earl Burkholder (Global COGO, Inc.), Valerie Butler (GSA), John "JB" Byrd (National Society of Professional Surveyors (NSPS)), Julie

Carter (USGS Support), Megan Compton (Indiana Geographic Information Office), Pat Cummens (Esri), Elizabeth "Libby" DuBan (FGDC Office of the Secretariat), Derald Dudley (Department of Transportation (DOT) Bureau of Transportation Statistics (BTS)), Douglas Geverdt (Dept. of Education), Tiffany Gibby (Tennessee Valley Authority), Robin Hoban (ArdentMC), James Irvine (ArdentMC), Michelle Jaeger (USGS Support), John Mahoney (FGDC Office of the Secretariat), Suzette Manduley (USDA), Tim McCrosson (USDA), Caroline Murphy (U.S. Geological Survey), Matthew Resnick (Citizen), Steven Rosenberg (Federal Communications Commission (FCC)), Jill Saligoe-Simmel (Esri), Ronald Sequeira (USDA OCIO), Vaishal Sheth (USGS Support), Debbie Sinmao (NOAA), Cyril Smith (Exec. Office of Technology Services and Security, Massachusetts), Meagan Snow (Library of Congress), Scott Thompson-Buchanan (National Park Service), Kim Valentine (NOAA), Elena Zassypkina (HUD).

Wednesday, December 4, 2024 NGAC Public Meeting:

Welcome & Brief Introductions:

NGAC Chair, Ms. Maggie Cawley, called the meeting to order at 1:00 p.m. and welcomed members and public attendees. An overview of the agenda was provided by Ms. Julie Carter.

FGDC Workplan and Priorities

Mr. Josh Delmonico provided FGDC updates. Highlights included the following:

- FGDC aims to finalize the onboarding process for new NGAC members and integrate them by the February meeting.
- Ongoing efforts to establish a Tribal-Federal Data Governance Subcommittee under FGDC were highlighted, requiring significant time for setup and consultation.
- FGDC Executive Committee focus areas for 2025 include the GeoPlatform audit response and NSDI implementation plans.
- Upcoming changes in Administration leadership and the release of <u>Policy | OMB Circular A-16 and Supplemental Guidance</u> updates were discussed, with anticipated impacts on geospatial policy and standards.
- FGDC plans to complete onboarding and orientation for new members and prepare for transitions in leadership.
- Potential upcoming FGDC vote on whether or not to establish a Tribal-Federal Data Governance Subcommittee and initiate consultation processes in 2025.

Housekeeping

Once a quorum of NGAC members was established, the committee prioritized agenda items requiring formal motions and collective agreement.

Addition of Non-NGAC Members to Subcommittees

Proposed additions of non-NGAC subject matter expert members to subcommittees were reviewed, and the Chair called for approval.

• **DECISION**: NGAC approved the addition of specific subject matter experts to subcommittees.

Review and Adoption of Minutes from October NGAC meeting

The draft minutes of the October 2024 NGAC meeting were reviewed, and the Chair called for approval.

• **DECISION**: The NGAC adopted the minutes of the October 16-17, 2024 meeting.

Coalition of Geospatial Organizations (COGO) Update

Cy Smith (NSGIC), provided Coalition of Geospatial Organizations (COGO) updates.

- COGO's periodic NSDI evaluations assess the condition of the nation's geospatial infrastructure, with the most recent report published in October 2024.
- The assessment grades for data themes improved to a B+, but the overall NSDI grade remains at a C-.
- Recommendations include:
 - Ensuring sufficient funding to meet future needs.
 - O Developing strategic and implementation plans for framework data themes.
 - Facilitating partnerships and enhancing governance structures.
- Challenges persist in identifying authoritative framework data and achieving an interconnected NSDI.
- COGO plans to address recommendations, including governance improvements and data standardization efforts.

NGAC + FGDC Standards Update

Holli Howard provided an overview of FGDC and NGAC standards initiatives. Highlights included the following:

- The FGDC Standards Task Team is transitioning to a formal working group in January 2025, focusing on endorsing interoperability and content standards.
- Challenges in metadata standards and tool support were highlighted, with a need to align emerging standards with practical applications and tool capabilities. For example:
 - O A federal agency was using an ISO metadata variant that was not supported by the tools (aka ArcGIS Pro) used at DOT. It may be helpful to list emerging, current, and sunsetting standards to give the tools time to be updated.
 - O The <u>Geospatial Metadata Tools</u> listed on the FGDC webpage are often using out of date standards such as CSDGM and are not actively maintained. This makes their use problematic from an IT perspective. Recommendations were made to outline emerging standards to ensure tool developers can adapt proactively.
- NGAC will continue to track FGDC's activities as it finalizes and implements the charter for the Standards Working Group and continues work on identifying interoperability standards.

Revisiting the Roadmap

The session, co-facilitated by Maggie Cawley and Ryan Mattke, focused on refining the NGAC Roadmap as a continuation from the October 2024 meeting.

• Discussions centered on clarifying roles, streamlining onboarding, and increasing the committee's impact as advisors.

- Long-term goals include addressing systemic geospatial issues, supporting innovation, and engaging with emerging technologies.
- Proposals included piloting collaborative governance models for national data themes and defining practical, impactful initiatives (e.g., high-resolution imagery and LiDAR data integration).
- **ACTION**: Draft roadmap updates are to be reviewed at the February meeting, with an emphasis on collaborative governance and prioritization of impactful projects.

Public Comment

The floor was opened for comments. Earl F Burkholder, a retired surveyor and engineer, shared his thoughts on 3D spatial data and standards development.

- Part I: Focused on the current landscape of 3D spatial data and time as the fourth dimension to include ideas based on convergence of technology, policy, and practice. ("3-D Digital Spatial Data, Time is 4th Dimension" April 14, 2024, Link)
- Part II: Explored the benefits of standardization for spatial data and discusses concepts and development of various spatial data standards. ("Benefits of a Standard," November 22, 2024, Link)
- Part III: Outlined plans to discuss challenges and opportunities, including process transparency and data integrity. ("Challenges and opportunities," this item is being written, draft link)
- Earl's links to related documents and presentations were shared in the chat for participant reference and copied above for convenience.

Subcommittee Updates

The NGAC Subcommittee Chairs and Vice-Chairs provided an update on the subcommittee activities.

3D Elevation Program (3DEP) Subcommittee

Mr. Gary Thompson (Chair) and Ms. Gale Blackmer (Vice-Chair) provided an update on subcommittee activities.

- The subcommittee continues to promote the 3DEP program, focusing on its application in transportation and agriculture sectors. Recent activities include:
 - o Transportation:
 - 1. A planned webinar to introduce LiDAR data applications to state Departments of Transportation (DOTs).
 - 2. Efforts to consolidate LiDAR imagery from multiple agencies to reduce duplication and improve data accessibility.
 - O Agriculture:
 - 1. Proposed panel discussions to highlight precision agriculture applications of LiDAR data.
- Recommendations for advancing the 3DEP program include:
 - Engaging the academic and private sectors through community meetings to support USGS's research priorities.
 - Collaborating on uncertainty modeling to assess and refine measurement

standards.

- Streamlining QA/QC processes and improving data delivery efficiency.
- The subcommittee shared a resource for a common "meeting" point for the exchange of 3-D data, http://www.globalcogo.com/archive-format.pdf
- **DECISION**: The NGAC endorsed the following recommendations for 3DEP research priorities and industry engagement:
 - RECOMMENDATION 1: 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.
 - Theme 3: Engage and Leverage the Changing 3D Industry, read more:
 - 1. RECOMMENDATION 2: 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.
 - 2. RECOMMENDATION 3: 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.
 - RECOMMENDATION 4: 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. RECOMMENATION 5: USGS should collaborate with Academia, Government Agencies, and the private sector to identify streamlined approaches to QA/QC.
 - RECOMMENDATION 6: At the NGAC's April 2-4, 2024 meeting, the following session was held: 3DEP for Transportation Panel Discussion – Gary Thompson (NGAC Chair).

Focus: Benefits of the usage of 3DEP data for Transportation efforts

- Dr. David Maidment, University of Texas, Austin
- Brad Doucet, Louisiana Dept. of Transportation
- Matt Lauffer, North Carolina Dept. of Transportation
- Q&A with audience.

A number of NGAC members commented that the session would be beneficial to State Departments of Transportation (DOT), to showcase the benefits of utilizing 3DEP data for state transportation projects.

The NGAC recommended that the US Department of Transportation and the USGS, 3D Elevation Program host a similar panel, or two, with an overview of the USGS 3DEP program for State DOTs. The primary audience should be State DOT personnel. NGAC members will provide assistance in outreach to potential attendees, making sure that at least 25 State DOTs are in attendance.

Geospatial Data Act of 2018 (GDA) Subcommittee

Mr. Chad Baker (Chair) provided an update on subcommittee activities.

- The subcommittee refined its focus on three key areas:
 - o Improving reporting templates for the 13 GDA requirements to ensure clarity and consistency across agencies.
 - Defining evaluation metrics for compliance categories ("Meets," "Progress,"
 "Fails to Meet").
 - O Developing recommendations for template improvements, with feedback sessions scheduled for early 2025.
- **ACTION**: The GDA Subcommittee to finalize their topics for report recommendations and prepare it for NGAC review in February 2025.

National Spatial Data Infrastructure (NSDI) Subcommittee

Mr. Bert Granberg (Chair) provided an update on subcommittee activities.

- The subcommittee outlined its "Quick Wins" paper, which includes recommendations for metadata standards (Minimum Viable Product and Best Practices) and strategies to improve data discoverability on the GeoPlatform.
- Papers on data accessibility and standards alignment are being finalized for adoption in February 2025.
- **ACTION**: NGAC subcommittee members will work with FGDC to review their draft "Quick Wins" paper and provide feedback by early January.

Landsat Advisory Group (LAG)

Mr. Frank Avila (Chair) and Dr. Vasit Sagan (Vice-Chair) provided an update on subcommittee activities.

- The subcommittee is focused on drafting a paper titled *Beyond the Water's Edge: Future Data Products and National Land Imaging Opportunities*:
 - O The paper explores next-generation Landsat data products, including Level 5 datasets for climate resilience, disaster response, and agriculture.
 - O Recommendations include improving data integration, expanding public-private partnerships, and enhancing cloud-based analytics.
- Timeline for paper development:
 - O December: Outline finalization and member task assignments.
 - O January: Draft review and revisions.
 - February: Submission for adoption at the next NGAC meeting.
- **ACTION**: The NGAC subcommittee will submit their draft paper titled, *Beyond the Water's Edge: Future Data Products and National Land Imaging Opportunities*, to NGAC with ample time to review in advance of the next meeting.

Adjourn

Julie Carter expressed gratitude to all participants in attendance and confirmed our next meeting for February.

Certification

I hereby certify that, to the best of my knowledge, the foregoing minutes are accurate and complete.

Ms. Maggie Cawley, Chair, National Geospatial Advisory Committee Mr. Josh Delmonico, Designated Federal Officer, National Geospatial Advisory Committee

These minutes will be formally considered by the Committee at its next meeting, and any corrections or notations will be incorporated in the meetings of that meeting.

Summary of Presentations and Handouts

The following is a list of the presentations and handouts from the meeting. These meeting materials are posted along with the minutes at:

https://www.fgdc.gov/ngac/meetings/December-2024

COGO NSDI Assessment

• COGO NSDI Assessment

FGDC Workplan and Priorities

• NGAC and FGDC Standards Update

NGAC + FGDC Standards Update

• NGAC + FGDC Standards Update

Revisiting the Roadmap

• Revisiting the Roadmap

Subcommittee Updates

- 3DEP Subcommittee
- GDA Subcommittee
- NSDI Subcommittee
- Land Advisory Group