

**National Geospatial Advisory Committee Webinar Meeting
October 27-28, 2020
Minutes**

The National Geospatial Advisory Committee (NGAC) held a public meeting on October 27th and 28, 2020 from 1:00 p.m. to 5:00 p.m. each day. 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:

Mark Reichardt, NGAC Chair
Sarah Battersby, NGAC Vice Chair
Douglas Adams
Frank Avila
Chad Baker
Byron Bluehorse
Gar Clarke
Garet Couch
Jack Dangermond
William Haneberg
Sanjay Kumar
Tony LaVoi
Roberta Lenczowski
Mark Meade
Siva Ravada
Felicia Retiz
Vasit Sagan
Amber Shultz
Cy Smith
Gary Thompson
Tim Trainor
May Yuan

Ivan DeLoatch, Executive Director of the Federal Geographic Data Committee and Designated Federal Officer (DFO) for the NGAC, and John Mahoney, Alternate DFO, were also in attendance.

NGAC Members not in attendance:

Mike Hussey

Other Attendees:

Charlotte Abel (NAPSG Foundation), John Byrd (NSPS), David Carter (DOI), Pat Cummins (ESRI), Mike Donnelly (DHS), Libby Duban (FGDC), Julie Eckert (FGDC Support), Doug Gevert (Department of Education), Travis Hardy (FGDC Support), Emma Heth (Western Governors Association), Tommy Hicks (NAPSG Foundation), Justin Kates (City of Nashua, NH), Tricia Lawson (NAPSG Foundation), Phil Letowt (DHS), Steve Lewis (Department of Transportation), Dan Maxwell (KaDSci), Tim Newman (USGS), Anna Normand (CRS), Edward O'Brien (Green International Affiliates), Glenn O'Grady (URISA), John Palatiello (U.S. GEO), Eliana Perlmutter (Lewis-Burke), Tim Petty (DOI), Ash Richter (In-Q-Tel), Dan Roman (NOAA),

Barb Ryan (WGIC), Jill Saligoe-Simmel (ESRI), Lorna Schmid (FGDC), Lee Schwartz (State Department), Ward Scott (Western Governors Association), Ken Shaffer (FGDC), Vaishal Sheth (FGDC Support), Julie Sokol (DHS), Tony Spicci (State of Missouri), Tim Stiles (San Bernardino County, CA), Carrie Stokes (USAID), Mike Tischler (USGS), John Wertman (ESRI)

Tuesday, October 27, 2020 NGAC Public Meeting:

Welcome & Brief Introductions:

NGAC Chair Mark Reichardt called the meeting to order at 1:00 p.m. and welcomed members and public attendees. Member introductions were made. The Chair introduced Sarah Battersby, the NGAC Vice Chair. An overview of the agenda was provided.

Review and Adoption of Minutes from June NGAC meeting

The draft minutes of the June 2020 NGAC meeting were reviewed, and the Chair called for approval.

DECISION: The NGAC adopted the minutes of the June 9-10, 2020 NGAC meeting.

Leadership Dialogue:

Dr. Tim Petty, Assistant Secretary for Water and Science, welcomed the group. Dr. Petty expressed thanks to the NGAC for their engagement on the GDA Report to Congress and advised that the NGAC is well suited to help educate Congress on the mission of geospatial in the digital age. With delays and workplace changes associated with COVID, there have been challenges in completing the reports to Congress in a timely manner and the team is dealing with this creatively. Dr. Petty mentioned the recent executive order on water in which “state of the art geospatial tools” were specifically mentioned. This shines a light on the interest in geospatial at a national level.

FGDC Update:

Ivan DeLoatch provided a brief overview of recent activities within the FGDC. Highlights included the following:

Geospatial Data Act

- To address implementation requirements, an interagency FGDC GDA Working Group was established, chaired by Tony LaVoi of NOAA and Amy Nelson of DOT. Over a dozen agencies meet bi-weekly to identify approaches and mechanisms to coordinate agency GDA reporting requirements.
- FGDC is reviewing the GDA Inspectors General audit reports. The initial audit reports reflect varying IG approaches from agency to agency.
- NSDI Strategic Plan has been distributed to the FGDC Steering Committee for final approval vote. Votes are due by November 5, 2020.
- Mr. DeLoatch thanked the NGAC members for their efforts in reviewing the GDA Report to Congress. The comments and suggestions will be helpful in revising the report.
- Covered Agency Reports – aligned to Section 759 of GDA identifying 13 annual reporting requirements for covered agencies.
 - Trying to standardize approaches to measure progress
 - Reviewing the comparisons across agencies
 - Draft distributed for FGDC approval vote – October 2020
 - Agency Reports due December 2020

- Lead Covered Agency Reports – aligns to Section 756 identifying responsibilities for agencies managing NGDAs
 - Interagency team developing template
 - Baseline report will document NDGA data themes along with GDA requirements
- NDGA Baseline standards inventory
 - Geospatial standards related to 173 NGDA datasets
 - Data content standards and metadata content standards
 - Data collection through Survey 123 tool on GeoPlatform, with dashboards and data analysis to assist agencies
- October 29 FGDC Steering Committee Meeting
 - Topics will include NGAC Report, GDA, GeoPlatform, Federal Data Strategy

In response to a question posed inquiring if the baseline standards collection survey tool may be missing some of the users who do not currently utilize the GeoPlatform, Mr. DeLoatch clarified that the survey is targeting FGDC agencies managing NGDA datasets. This initial baseline is to support agency GDA reporting requirements and is being sent to GDA Covered Agencies and Lead Covered Agencies.

ACTION: The FGDC is completing guidance to agencies for the Covered Agency and Lead Covered Agency annual reports required by the Geospatial Data Act (GDA). FGDC staff will keep the NGAC members apprised of the status of these processes.

NSDI Strategic Plan

John Mahoney provided an overview of the NSDI strategic planning process, thanking both the NGAC NSDI Subcommittee and the FGDC Core Team for their efforts in developing the plan. He noted that it has been a positive collaborative process involving both groups. He also noted that the NSDI plan is a critical component of the GDA, identifying shared goals and objectives and providing a basis for follow on plans from the FGDC agencies.

May Yuan, Chair of the NSDI Subcommittee, provided an overview of the subcommittee’s efforts since the last meeting. The group provided significant input to 2020 strategic plan, particularly the vision, mission and guiding principles, and also through providing ongoing input to the Core Team on the goals and objectives in the plan. The first draft of the plan was reviewed by NGAC June 2020. The group received comments and provided revisions. Dr. Yuan detailed the final version of the mission, vision, and guiding principles, elaborating on the mission and broader perspective for the NSDI.

Carries Stokes, Co-Chair of the FGDC Core Team, provided an overview of the final draft NSDI strategic plan. She noted that in developing the plan, the team worked to align the NSDI plan with related data initiatives, including the Evidence Act/OPEN Government Data Act, the Federal Data Strategy, and the UN-GGIM Integrated Geospatial Information Framework (IGIF).

Ms. Stokes provided highlights of the NSDI plan development process, including the following:

- Initial Comment Period – May/June (FGDC and NGAC members) 110 comments. Public comment period (August/September) 62 comments and 16 organization and individuals.
- The comments emphasized the need for improved State-Federal engagements and collaboration with partners. Comments also focused on overall language/reducing acronyms/jargon, editorial changes, improving references to protection of PII, need for resources, performance metrics/measuring progress via dashboards, and engagement and collaboration with private sector.

- Final Draft NSDI Plan – provided to the FGDC Steering Committee for approval vote on October 22. The votes are due by November 6.
- Implementation next steps: include final approval during October meeting; target March for final implementation.

Following the presentations, the NGAC discussed the NSDI plan and next steps. The discussion touched on the following topics:

- Comments regarding emphasis on data collection/acquisition. Members alluded to improvements during the revision process and inclusion of this concept and a number of references to the importance of data acquisition within the NSDI plan.
- Funding for this effort is agency-by-agency, and not through coordinated national funding. The NGAC discussed possible approaches to communicate the importance of the NSDI and to promote enhanced funding to achieve national goals.

Following discussion of the strategic plan, the NGAC agreed on the following action:

DECISION: The NGAC approved a resolution endorsing the 2021-2024 NSDI Strategic Plan. The Strategic Plan has also been submitted to the FGDC Steering Committee for final adoption.

Lightning Talks

Bill Haneberg: KGS, GIS, and More*

Bill Haneberg provided an overview of the history and mission of the Kentucky Geological Survey. They are both users and providers of geospatial data. They promote non-traditional stakeholder dialogue and have found improved success with seeking out input and feedback from the community. He promoted making GIS a social science, a two-way conversation, and engaging in ongoing dialogue to improve GIS programs for the State. Members may visit the following URL for more information: <https://www.uky.edu/KGS/>

Siva Ravada: Geospatial AI-ML and NGAC.

AI/ML is being used to solve many common problems and there is a strong opportunity for NGAC to take initiative and define uses among the GIS community. Lessons learned, best practices, developing ML models is time consuming. These tools should be used to help shape public policy. The goal of AI applications should be to create value for a society and to use the technology to build public trust.

Pandemic GIS Task Force & COVID-19 Technology Briefing

Charlotte Abel, NAPSG Foundation, and Justin Kates, NAPSG Foundation & Director of Emergency Management, City of Nashua, NH provided a briefing on the activities of the Pandemic GIS Task Force. The task force is a coalition of NSGIC, NAPSG, and URISA.

Primary goals:

- Increase pandemic preparedness and unity of efforts
- Define the role of geospatial resources, technology, data, and long-term recovery
- Leverage lessons learned from first waves
- Coordinate and connect across interagency and community on related efforts
- Make changes to future waves and potentially future pandemic at a strategic level

Meetings began in April and the Task Force identified 5 main areas of focus:

1. Capture challenges, success, and lessons learned
2. Facilitate development of technology and GIS AAR and improvement plan (draft)
3. Coordinate across disciplines in advancing consistent use of technology
4. Develop standardized national playbook to integrate GIS in response & recovery
5. Contributing to and promulgating out a community portal for curation and sharing of technology and GIS best practices.

With their approach of questionnaires and hotwashes over the summer, the Task Force identified the following key points:

- Relatively low rate of use of data-driven technology - outside of case reporting.
- Data Sharing agreements and best practices must be identified and improved upon. In most cases, sharing of data was impacted by undefined requirements. Most agencies/locales erred on the side of caution and this affected the amount of critical data being shared.
- Prevalence of Technology-Related Challenges
- restricted data access and sharing, duplicative manual reporting data entry, lack of reliable data

Four Actions were identified by the Task Force as the Path Forward:

- Action 1: COVID-19 tech and GIS AAR and improvement plan
- Action 2: PrepResponse Community Portal
- Action 3: National Playbook
- Action 4: Further Coordination

Following the presentation and discussion, the NGAC agreed on the following action:

ACTION: NGAC and FGDC leadership will work with Pandemic GIS Task Force members to identify opportunities for collaboration between NGAC and Task Force related to the Task Force's identified actions/next steps.

Wrap-up

The Chair summarized the events for day one of the meeting and provided a brief overview of day two.

Wednesday, October 28, 2020 NGAC Public Meeting:

The second day of the meeting was called to order at 1:00 PM by NGAC Vice Chair Sarah Battersby. She provided a brief synopsis of Day 1 events and reviewed the agenda for Day 2.

Congressional Report Subcommittee

Byron Bluehorse, Chair of the NGAC Congressional Report Subcommittee, provided a brief overview of the subcommittee's activities. The purpose of the subcommittee has been to develop materials and messages about geospatial data in support of the GDA report to Congress. During 2020, the subcommittee compiled a set of geospatial use cases to supplement the report to Congress, facilitated the development of the NGAC resolution on the GDA that was adopted at the June 2020 NGAC meeting, and also provided input on key messages to Congress regarding the GDA.

GDA Report to Congress – FGDC Update

Ivan DeLoatch provided an update on the status of the GDA Report to Congress. He thanked the subcommittee for their additions and edits in on the first draft of the plan. The FGDC received over 400 comments on the draft Phase 1 report to Congress. Mr. DeLoatch noted the following key points:

- FGDC is still waiting on revisions to OMB Circular A-16, which will provide additional direction on the reporting requirements and responsibilities.
- There are significant reporting requirements in the implementation of the GDA and agencies have been very active in developing background materials.
- The initial round of IG Audits has been completed. The GDA reports from agencies will help inform future iterations of the IG GDA audits.
- FGDC is continuing to pursue a two-phase approach to the GDA report to Congress:
 - Phase 1 – High level summary. NGAC has reviewed and provided comments on the draft of this report. Planned delivery by Fall 2020.
 - Phase 2 – More detailed summary of agency reports. Intended to provide a summaries of status of each NGDA data theme and activities of Covered Agencies. Planned delivery by April 2021.

NGAC discussion of the Report to Congress touched on the following topics:

- Curious how involved OMB was/is in providing guidance to help shape the development of this report. Given the needs of the GDA may necessitate budgeting across the individual agencies.
- Consider making a concerted effort to communicate with key staffers on relevant Congressional committees

ACTION: The FGDC is revising the draft GDA Report to Congress to address comments from NGAC members and FGDC agencies. FGDC staff will keep the NGAC members apprised of the status of the report.

ACTION: NGAC will designate a small group of members to coordinate with FGDC on establishing a process for providing NGAC comments on lead/covered agency annual reports regarding compliance with the GDA.

Landsat Advisory Group:

Frank Avila and Bobbi Lenczowski, LAG co-chairs, provided an update on the recent activities of the LAG. They reviewed the current LAG tasks and membership and asked Tim Newman from USGS to provide a program update. Mr. Newman discussed multiple Landsat items including the following:

- Landsat Next RFI was released on October 13. USGS is seeking input from users and industry providers on a set of mission requirements for Landsat Next.
- Congressional Research Service (CRS) report on the future of Land Remote Sensing was issued on October 9..
- Due to Covid impacts, the launch date for Landsat 9 is being moved to September 2021. Space and ground segment teams are progressing to this timeline. Landsat 7 is running low on fuel and its orbit will be lowered in the Summer/Fall 2021 timeframe

Frank Avila provided updates on the three tasks papers the subcommittee is addressing:

Task 1: Report on Landsat data as a community standard for data calibration.

- Layperson's level report that captures the essence of Landsat as a gold standard for calibration.
- Goal is to have NGAC adopt report during this meeting.

Task2: Formulating a Big Data Science challenge for land imaging time-series data.

- Discussed framework and intent. The paper's intent is to provide general procedural guidance for a USGS science challenge; still exploring more direct options for guidance and recommendations related to challenge. Target due date is December NGAC meeting approval.

Task 3: Modernized interpretation of the Land Remote Sensing Policy Act of 1992

- Document new technology trends in space/P3 opportunities/evolving user needs.
- Target due date is December NGAC meeting approval.

Bobbi Lenczowski then provided additional details on the Task 1 paper, providing an overview of the paper's goals and outline. The paper aims to better communicate the fundamental importance of Landsat in making Earth observation data more accessible and interoperable for global users. The NGAC Chair and others complimented the team on the great work. One recommendation was to format the paper to highlight key sentences with definitions of critical terms. Following NGAC discussion of the paper, the group agreed on the following actions:

DECISION: The NGAC approved the paper, "Landsat Data: Community Standard for Data Calibration" pending minor formatting changes.

ACTION: The LAG will continue working on the tasks outlined in the 2020 guidance provided by the USGS National Land Imaging Program:

- **Task 2:** Formulating a Big Data Science challenge for land imaging time-series data (target completion: December 2020)
- **Task 3:** Modernized interpretation of the Land Remote Sensing Policy Act of 1992 (target completion: December 2020)

Public-Private Partnerships Subcommittee

Mark Reichardt and Sanjay Kumar, co-chairs of the Public-Private Partnerships Subcommittee, provided an update on the subcommittee's activities, focusing on the current status of the subcommittee's draft paper and use cases. Highlights included:

- Update on current status of recommendations paper.
- Outlined the use cases in development and other use cases in work/review
- Tasks ahead: Call to NGAC Members: Feedback is needed on the paper and use cases, as well suggestions on other examples of P3 or emerging partnerships. The subcommittee will finalize document for NGAC approval consideration December 2020.
- Graphics Review: The paper includes an updated P3 graphic illustrating risk/innovation and a second graphic depicting characteristics of P3 against maturity scale of true P3s. A third graphic depicts a use case maturity assessment.
- NGAC should provide comments back by November 6 in preparation for adoption during December 2020 meeting.

- It was suggested that the subcommittee should remain in place after paper approval to continue to identify use cases and monitor recommendations.

Comments from members:

- There is a need for P3 approaches at State and local levels to build components of NSDI. States and locals can help get datasets built nationally – we need a collaborative national approach that will guide P3 development.
- Potentially explore NOAA Digital Coast project and 3DEP activities cited as best practice models for P3, may be closer to innovative partnerships to include in paper.
- Would this be an opportunity to engage the WGA on priorities for parcels and address database with P3 partnerships?

ACTION: NGAC members should submit comments on the draft public-private partnerships recommendations paper and use cases by November 6, 2020.

ACTION: The subcommittee will provide NGAC members with a final draft version of the P3 recommendation paper and case studies prior to December 2020 NGAC meeting.

Cultural and Historical Resources Subcommittee

Garet Couch provided an overview of the activities of the subcommittee. Since the subcommittee’s report was adopted by the NGAC, the group briefed the NPS data theme lead and the FGDC cultural resources subcommittee. The NGAC report was also referenced extensively in the Advisory Council on Historic Preservation’s Digital Information Task Force report.

Following these briefings, the NPS and the FGDC cultural resources subcommittee developed a prioritization of the NGAC recommendations and is working to address them. Mr. Couch noted that the NGAC subcommittee has now reached a monitoring phase.

Mr. Couch also addressed some possible future study topics:

- Obfuscation of Lidar data in areas that contain cultural and/or historical resources. If released publicly, could use these datasets be used to identify sites on large scale outside the scope of what law enforcement can keep pace with? Does this lend itself to some further research and recommendations?
- National authoritative dataset defining boundaries for addressing authorities: Where does authority start and stop for addressing boundaries? Homes don’t have physical addresses assigned.

ACTION: The subcommittee will continue to monitor progress on implementation of the recommendations included in the NGAC paper, “Protecting Federal Cultural and Historical Geospatial Resources.”

NGAC Bylaws Update:

Cy Smith provided an update on the status of the NGAC bylaws. The NGAC bylaws were initially adopted in 2008, some after the establishment of the NGAC. With the passage of the GDA, both the NGAC Charter and Bylaws needed to be updated. The NGAC Charter was updated in April 2020. The NGAC established an Operations Subcommittee in 2019 to review the Bylaws and make recommendations for

updates. The draft Bylaws were reviewed by DOI Solicitors office and FACA committee management staff, which made several suggestions for revisions. The suggested changes included the following:

- Clarified that all NGAC meetings should be fully open to the public.
- Clarified that meetings should always include opportunity for public comment.
- Noted that subcommittee appointments should be made by NGAC chair, in consultation with DFO.
- Suggested removal of provision for proxy voting.

The NGAC discussed the revised bylaws. Felicia Retiz recommended that the bylaws include a version summary at the beginning of the document to track changes and updated over time. Following discussion, the NGAC agreed on the following action:

DECISION: The NGAC approved a resolution adopting the revised NGAC bylaws, pending the addition of a version summary. The updated bylaws will be posted on the NGAC website.

Lightning Talks

Cy Smith: Coalition of Geospatial Organizations (COGO) Activity Report

Key points:

- COGO has published two reports of the NSDI and 2015 and 2018
- Have started to organize and plan for the next NSDI report card with plan to release 2022
- Discussed past NSDI report card recommendations
- Have formed a work group to study procurement issues – 4 COGO member firms are participating

Tim Trainor – The Need for Integrating Up-to-Date Statistical Data with Small Area Geography

Key points:

- COVID has uncovered holes in statistical data
- Missing impact on population and business resilience, i.e., expected loss of employment income
- Encouraged a reconstitution of the Geospatial Platform to host and serve this kind of data

Vasit Sagan – AI, Ethics, and Standards in Geospatial Big Data

Key points:

- Make a case for addressing some of the issues we are facing in big data and imagery.
- Redefining remote sensing by AI/ML – efficient management of bid data from calibration to applications.
- Harnessing big data for generalizing patterns and extracting useful information.
- There is a requirement for training and to build more extensive reference datasets
- Things to think about as we move forward with these new technologies: Do we have standards and effective governing policies? How to balance the advantage of increased data with potential for misuse?

Public Comment Period:

Glenn O'Grady (URISA)

Mr. O'Grady noted that previous versions of the Pandemic Playbook made no mention of GIS capabilities. As new documents replace this, he suggests introducing GIS capabilities for assisting in prevention, response, and recovery.

Planning for 2021 NGAC activities:

Sarah Battersby led a discussion of potential future topics for NGAC consideration. She noted that the NGAC has several current subcommittees and activities, including the Landsat Advisory Group, the NSDI Subcommittee, the Cultural/Historical Resources Subcommittee, and the Public-Private Partnerships Subcommittee.

The NGAC also has ongoing responsibilities related to the GDA. Under the GDA, the NGAC will review and provide comments on the annual reports from covered agencies and lead covered agencies. It was suggested that the NGAC stand up a small team to begin addressing the approach to response for GDA.

Based on inputs from NGAC members, several potential study topics have been identified:

- Privacy & protection of PII
- AI/ML – Approaches/ considerations for geospatial community
- Stakeholder engagement – stewardship programs/models
- Future of GeoPlatform
- 2022 Datum Modernization
- Power of Geospatial in Context – Reopening of economy, geospatial data and technology for decision making
- U.S. Geospatial Strategy on Global Front – SDG initiatives, location data/mobility datasets, Open platforms for international collaboration

Following discussion of the potential study topics, the NGAC agreed on the following action:

ACTION: Based on the discussion this week, the NGAC Chair and Vice-Chair will develop short summaries for each of the potential future study topics and will reach out to NGAC members for additional insight.

Meeting Wrap-up & Next Steps

The Chair reviewed and summarized the meeting actions. Mr. Reichardt thanked the members for their work and dedication to the group. The next NGAC meeting is planned for December 2020.

ADJOURN

The Chair adjourned the meeting at 5:00 p.m.

Certification

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

Mr. Mark Reichardt, Chair, National Geospatial Advisory Committee

Mr. Ivan DeLoatch, 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 minutes of that meeting

Note – these minutes were approved by the NGAC on December 9, 2020

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/october-2020/index_html

FGDC Report

- FGDC Update

NSDI Strategic Plan

- NSDI Strategic Planning Presentation
- 2021-2024 NSDI Strategic Plan

Pandemic GIS Task Force Session

- Pandemic GIS Task Force and Covid-19 Technology & GIS Findings

GDA Report to Congress

- GDA Report to Congress Presentation

Landsat Advisory Group

- Landsat Advisory Group Update
- NGAC Paper: Landsat Data: Community Standard for Data Calibration

Public-Private Partnerships Subcommittee

- Public-Private Partnerships Subcommittee Update

Cultural & Historical Geospatial Resources Subcommittee

- Cultural & Historical Geospatial Resources Subcommittee Update

NGAC Bylaws

- NGAC Bylaws Presentation
- Revised NGAC Bylaws

Planning for 2021 NGAC Activities

- NGAC Potential Future Topics Dialogue

Lightning Talks

- KGS, GIS, and more* – Haneberg
- GeoSpatial AI-ML and NGAC – Ravada
- COGO Activity Report - Smith
- The need for integrating up-to-date statistical data with small area geography – Trainor
- AI, Ethics, and Standards in Geospatial Big Data – Sagan