

**National Geospatial Advisory Committee Webinar Meeting
December 9-10, 2020
Minutes**

The National Geospatial Advisory Committee (NGAC) held a public meeting on December 9-10, 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:

Dierdre Bevington-Attardi (Census), Sky Bischoff-Mattson (NASA), Matthew Bobo (BLM), David Carter (DOI), Sara Cassidy (USGS), Pat Cummins (ESRI), Peter Doucette (USGS), Libby Duban (FGDC), Julie Eckert (FGDC Support), Doug Geverdt (Department of Education), Susan Gidley (USAC), Noah Goodman (ArdentMC), Raha Hakimdavar (USFS), Travis Hardy (FGDC Support), Emma Heth (Western Governors Association), Steve Lewis (DOT), Dan Maxwell (KaDSci), Amy Nelson (DOT), 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), Tony Spicci (State of Missouri), Tim Stiles (San Bernardino County, CA), Hayley Thompson (FGDC Support), Mike Tischler (USGS), Brigitta Urban-Mathieux (USGS), Kim Valentine (NOAA), John Wertman (ESRI), Sylvia Wilson (USGS)

Wednesday, December 9, 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 Dr. Sarah Battersby, the NGAC Vice Chair. An overview of the agenda was provided.

Review and Adoption of Minutes from October NGAC meeting

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

DECISION: The NGAC adopted the minutes of the October 27-28, 2020 NGAC meeting.

FGDC Update:

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

FGDC GeoPathways:

- The GeoPathways initiative seeks to provide mentorship for the next generation of geospatial analysts and professionals.
- In 2020, the program selected 25 students representing 16 universities and one high school. Students from 3 countries and 8 sponsors were represented.
 - The AmeriGEOSS 2020 America's Symposium was successful in part due to the significant efforts of the students working behind the scenes.
 - The AmeriGEOSS Inter-American Academy worked with 30 partners across the Americas to support geosciences and applications.
 - The GeoScience Workbench provided participants an opportunity to work collaboratively on developing opensource tools and other GeoScience research.

GeoPlatform:

- The GeoPlatform will continue to be a cornerstone of the work within FGDC.
- Requirements for the Federal GeoPlatform are addressed in GDA Section 758 and NSDI Strategic Plan Goal 3.
- Current activities include:
 - Ongoing enhancements with a planned 2020 holiday release and GeoPlatform 3.0 beta testing.

- 2021 goals include: improving operations, improving user engagement, and increasing data content and integration.
- There is a need to reassess the GeoPlatform business case, address user needs, and coordinate with related data initiatives.

2020 NGAC Nominations:

- The next NGAC call for nominations will be issued the week of January 4-7, 2021, will be open for a 45-day period, and will be used to fill vacancies in 2021 and 2022.
- 10 current NGAC appointments expire December 2021. Current members whose terms expire in 2021 who wish to reapply may submit nominations in January.
- An interagency review panel will evaluate nominations and develop recommendations.
- Final decisions are made by Secretary of the Interior's office. Decisions are expected prior to the end of 2021.

December 11 FGDC Steering Committee:

- The agenda for the December 2020 FGDC Steering Committee meeting was shared with the NGAC members. Speakers/topics include the following:
 - Tim Petty (DOI) and Maria Roat (OMB) will provide opening remarks.
 - Sarah Battersby (NGAC Vice Chair) will provide a report on the outcomes of the NGAC meeting.
 - Ivan Deloatch (FGDC) will discuss GDA reporting to Congress.
- The FGDC is making a concerted effort to improve communications and relationships with the Chief Data Officers Council. Tony LaVoi has agreed to serve as the liaison between the NGAC/FGDC and CDO Council.

It was suggested that students in the GeoPathways program provide an overview of their work during future NGAC meetings.

Regarding capacity for the GeoPathways program, Mr. Deloatch clarified an estimated 50% of applicants are accepted into the program (approximately 25-28 participants). This level corresponds to current resourcing available from FGDC to support these students. It was suggested that the FGDC/NGAC might discuss alternative forms of sponsorship to expand this number.

Leadership Dialogue:

Dr. Tim Petty, DOI Assistant Secretary for Water and Science, discussed critical FGDC activities:

- NSDI Strategic Plan was adopted during the October 2020 Steering Committee meeting.
- Voting on the approval of first phase of the 2020 GDA Report to Congress will take place on December 11.
- OMB Circular A-16 update is pending, which will be critical to ongoing FGDC activities.
- Planned conversations with House and Senate committees on response to GDA.

Dr. Petty noted that public-private partnerships will be critical going into the future. In response to a question on the status of the Digital Coastal Act, Dr. Petty noted that the Act has significant support on the Hill. Inquiries were raised related to the administration transition. Dr. Petty suggested FGDC and NGAC should educate OMB regarding resources needed to successfully implement the GDA.

Dr. Petty also discussed his tenure with the NGAC and thanked the group for its active. He also thanked Mark Reichardt and Sarah Battersby for their leadership of the group, and announced that Mr. Reichardt and Dr. Battersby have agreed to serve again as Chair and Vice Chair in 2021. He received kudos from the NGAC members for his support over the years.

ACTION: FGDC announced that Mark Reichardt and Sarah Battersby have agreed to serve for another year (2021) as Chair and Vice Chair of the NGAC.

ACTION: The FGDC is planning to issue the next call for nominations for appointment to the NGAC in early January 2020. The announcement will be open for a period of 45 days. The nominations received will be used to fill NGAC vacancies in 2021 and 2022.

Public-Private Partnerships:

Mark Reichardt reviewed the purpose, membership, and accomplishments of the subcommittee to date including a list of interviews and case studies completed. An overview of the P3 paper included the following points:

- This version incorporates feedback and comments from the NGAC members on the initial draft.
- P3s involve shared responsibility, risk, and reward among parties.
- The subcommittee used a graphic approach to display the maturity levels of various P3s.
- The P3 paper includes a set of 5 recommendations.

Mr. Reichardt also provided a brief overview of 7 use case documents, which had been distributed to the NGAC members prior to the meeting. On behalf of the P3 subcommittee, Mr. Reichardt requested approval for publication of the paper as well as the associated case studies.

DECISION: The NGAC adopted the P3 Paper: “National Spatial Data Infrastructure through Public-Private Partnerships and other Innovative Partnerships”.

DECISION: The NGAC adopted the following use case documents, developed by the Public-Private Partnerships Subcommittee, pending minor editorial changes:

- Alberta Data Partnerships (Alberta, Canada)
- National Geospatial-Intelligence Agency (NGA) Partnership Intermediary Agreement
- Geospatial Insurance Consortium; India State Level Property Tax Program
- 3D Elevation Program (3DEP)
- GPS on Benchmarks Initiative (NOAA National Geodetic Survey)
- California Public Safety Power Shutoff (PSPS) Innovative Partnership
- States / TomTom Cooperative Geospatial Data Collection and Maintenance

Landsat Advisory Group:

Frank Avila and Bobbi Lenczowski (the LAG Chair and Vice Chair, respectively) provided an update on the recent activities of the LAG including mission, tasks, and membership. Tim Newman (Program Coordinator of the USGS National Land Imaging Program) provided a program update which included the following highlights:

- Europe made their Copernicus DEM open to the public. This would not have happened without international collaboration efforts.
- Landsat Collection 2 has been publicly released. It is cloud-hosted on Amazon Web Services and available through Earth Explorer website. Collection 1 is to be maintained in parallel for 1 year.
- Landsat Next - recent developments:
 - NASA and USGS are addressing Pre-Phase A studies for Landsat Next mission.
 - First steps are to refine spectral bands, spatial resolution, and radiometric quality.
- Discussed RFI on proposed Landsat Next architecture options.
- Discussed the RFI Draft SLI “Superspectral” requirements and spectral band comparisons.
- Discussed ideas for potential 2021 LAG tasks.

Mr. Avila provided status updates on the two current LAG task papers:

- Task 2: Formulating a Big Data Science challenge for land imaging time-series data
- Task 3: Modernized interpretation of the Land Remote Sensing Policy Act of 1992

Peter Doucette provided updates on USGS EROS and Continuous Change Detection and Classification.

- Discussed Version 1 LCMAP products from 1984 to 2017 in annual increments and understanding drivers and impacts of land surface change.
- Discussed long-term projection scenarios: FOREcasting SCEnarios of Land-use changes (FORE-SCE).

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: Spring 2021)
- **Task 3:** Modernized interpretation of the Land Remote Sensing Policy Act of 1992 (target completion: Spring 2021)

Geospatial Data Act (GDA) Reporting:

Ivan DeLoatch provided an update on GDA reporting which included the following topics:

GDA Phase 1 Report to Congress – Status:

- Provided for FGDC/NGAC comment—over 400 comments were received.
- Draft has been revised to focus on main themes, currently in DOI review process.
- Final version for Steering Committee/DOI/OMB approval expected in December 2020.

GDA Phase 2 Report to Congress – Status:

- GDA Reporting Appendix will include:
 - Summary of Covered Agency and Lead Covered Agency Annual Reports.
 - NGAC will provide comments on Summary Report.
 - Current planned completion date is April 2021. A request to the FGDC Steering Committee will be made this week to shift the planned completion date to June 2021.

NGAC GDA Team:

John Mahoney provided introductory remarks related to the newly organized NGAC GDA Team.

- Current members are: Doug Adams, Felicia Retiz, Cy Smith, and Tim Trainor
 - Roles will be to: Work with FGDC staff and NGAC Leadership to plan and coordinate NGAC's role in the GDA Reporting Process (access utility of reports), Collect/synthesize NGAC's comments on GDA reports, and document lessons learned.

Discussion Points related to the GDA Reporting and NGAC GDA Team:

- This effort can help provide performance information to support future geospatial activities. How can we turn the reporting requirements and the effort it takes to respond to these requirements into a net benefit to the Geospatial Community at large?
- We need to create a detailed system of records, but also need to be able to package it into usable summaries.

ACTION: The FGDC is finalizing the Phase 1 GDA Report to Congress, which will be considered for approval at the December 2020 FGDC Steering Committee meeting. FGDC staff will keep the NGAC members apprised of the status of the report.

ACTION: The NGAC GDA Reporting Team will coordinate with FGDC on establishing a process for providing NGAC comments on the Phase 2 GDA Report to Congress, which will include summaries of covered agency and lead covered agency annual reports. The Phase 2 report is scheduled to be completed in Q3 FY 2021.

Adjourn

Mr. Reichardt made closing remarks and provided an overview of the Day 2 agenda.

Thursday, December 10, 2020 NGAC Public Meeting:

NGAC Vice-Chair Sarah Battersby called the meeting to order at 1:00 p.m. and welcomed members and public attendees and provided the day's agenda.

Study Topics Survey

Travis Hardy provided a brief update on the NGAC 2021 future topics priority survey, as a preview of the future topics discussion later in the meeting.

NSDI Strategic Plan Implementation Discussion:

John Mahoney provided an overview of NSDI Strategic Plan implementation activities. Recent activities included approval of the NSDI Strategic Plan by the FGDC and endorsement by the NGAC. The final plan can be accessed at: www.fgdc.gov/nsdi-plan.

Other topics included:

Covered Agency Geospatial Strategies:

As a follow-on to the NSDI strategic plan, all GDA covered agencies are required to develop geospatial strategies that support the goals in the NSDI plan. This requirement is included in Section 759 of the GDA.

- FGDC NSDI Core Team developed a high-level template for agency strategies, with the final version approved by the FGDC Steering Committee in November 2020.
- The target date for completion of agency geospatial strategies is December 31, 2020, though approval may take longer in some agencies.

NSDI Strategic Plan Implementation – Next Steps:

- Initial Implementation Milestones:
 - October 2020: NSDI strategic plan approved by the FGDC Steering Committee/endorsed by NGAC.
 - December 2020 FGDC covered agencies complete geospatial strategies required by the GDA (in support of the NSDI strategic plan).
 - March 2021: NSDI implementation plan target completion date.
- The NSDI strategic plan has four strategic goals, all of which have a clear relationship to the GDA. Many also have a strong alignment to the NGAC's objectives.

ACTION: The NGAC NSDI Subcommittee will continue working with the FGDC NSDI Core Team on collaborative approaches to the implementation of the 2021-2024 NSDI Strategic Plan.

Lightning Talks

Gary Thompson: Flood Inundation Mapping Alert Network (FIMAN)

Gary Thompson provided an overview of the Flood Inundation Mapping Alert Network (FIMAN). FIMAN has three dashboards for Current, Scenario, and Forecast information. This data is collected using a P3. FIMAN-T is a Flood Inundation Mapping and Alert Network for Transportation. As opposed to just buildings, it is structured to capture transportation impacts. FIMAN is used for government flood insurance and works on all phones and mobile devices.

Discussion of Potential NGAC Study Topics

Mark Reichardt and Sarah Battersby led a discussion on potential 2021 NGAC study topics.

Potential 2021 Study Topics

- Privacy and Protection of PII:
 - Consideration should be given to alignment with the Open, Public, Electronic, and Necessary (OPEN) Government Data Act.
 - Identify what geospatial information should and should not be private.
 - Consider implications of combining data sources (data mosaic).
- Leveraging AI/ML to Advance the NDSI
 - Comments referenced the need for tangible examples, including case studies and challenges.
- Stakeholder Engagement:
 - Comments referenced the need for tangible examples, including case studies and challenges.
 - Stakeholder engagement is a great use of a FACA and can aid in determining which data assets are valued by both current and potential stakeholders.
- Future of GeoPlatform:
 - Definition as to what it currently does, why it was developed and what business case and use cases does it seek to solve.
 - Should there be a shared ownership model? What is the role that Federal agencies should play? Is it supported by the right funding model?
 - Consider other successful joint initiatives, possibly P3 model.
 - Consider combining this topic with “Power of Geospatial in Context” topic.
- Power of Geospatial in Context:
 - This is a recurring NGAC theme and may be useful to the new administration.
- 2022 National Spatial Reference System Modernization:
 - Seek to focus users on how best to prepare for the modernization effort.
- U.S. Geospatial Strategy on the Global Front:
 - Explore issues of competitiveness and national security related to geospatial strategies.
- Additional potential topics from FGDC Agencies:
 - Education and Workforce: How can Federal agencies engage in advancing geospatial education and workforce development?
 - Recommendations for improving the GDA: it would be useful for FGDC to have a clear set of recommendations if opportunities arise to amend the Act.

Next Steps: December/Early January

- 1-2 new NGAC Subcommittees are expected for 2021, adding to current 4 subcommittees.
- NGAC/FGDC leadership will meet to refine and finalize study topics.
- Requests will be sent to NGAC members for first and second choices for subcommittee assignments.
- NGAC/FGDC leadership will finalize subcommittee assignments and leadership to ensure appropriate balance and representation on all groups.

ACTION: Based on the discussion this week, NGAC and FGDC leadership will refine the 2021 NGAC study topics and ask NGAC members for choices on subcommittee assignments. Subcommittee assignments and leadership will ensure appropriate balance & representation on all groups.

Public Comment Period

Opportunity was provided for public comment. While no audience members made formal public comments, the Chair opened the floor for general discussion. Key points included the following:

- Recommendation for COGO to be aligned with NGAC efforts.
- Where does geospatial on the global front rank in terms of priority? One NGAC member responded that this consortium of thought leaders should offer advice and direction on the important topic of geospatial in a global context aligned with new administration's strategy.
- If there is no comprehensive strategy, how can investments, such as those in satellite imagery, be protected? The NGAC may want to consider framing this as an independent, separate issue.

Discussion of 2021 Activities

Ivan DeLoatch and Mark Reichardt led a discussion focused on planning 2021 NGAC activities. Discussion topics included:

- Lack of familiarity in the broader GIS community with the FGDC and NGAC's work demonstrates that NGAC needs to focus on stakeholder engagement and revisit the GeoPlatform's business case.
- The FGDC and NGAC should encourage balanced representation from the different sectors when considering membership. Regional/local, academic, and non-profit representation could be increased.
 - A suggestion was added that the NGAC should include consumers, as well as producers/creators of geospatial data.
 - *Code for America* was suggested as an organization that could be included.
- The NGAC should collaborate with State CIOs. NASCIO has been doing a survey since 2007 of top ten topics for CIOs. Data analytics, data management, and "everything as a service" have been consistently high on this list.
- NGAC can consider partnerships to solve problems and bring Chief Data Officers (CDOs) into discussions. Location is an important and universally common characteristic of data—this is not fully understood by the CDO community.

Mr. DeLoatch noted that FGDC and NGAC leadership is in the process of scheduling NGAC meetings for 2021, it is expected for meetings to occur virtually in April and June.

Virtual Meeting Feedback

- Members mentioned enjoying the ice breaker events, and identified a need for document collaboration space. John Mahoney noted that the support team is developing a solution in Microsoft Teams that will be available for use in 2021.

ACTION: The 2021 NGAC meeting schedule is being finalized and will be provided to the NGAC members as soon as possible.

Adjourn

Sarah Battersby made closing remarks and adjourned the meeting.

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 April 27, 2021

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-2020/index.html>

FGDC Report

- FGDC Update

Public-Private Partnerships Subcommittee

- Public-Private Partnerships Subcommittee Update

Landsat Advisory Group

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

GDA Report to Congress

- GDA Report to Congress Presentation

NSDI Strategic Plan

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

Lightning Talks

- Flood Inundation Mapping Alert Network - Thompson

Planning for 2021 NGAC Activities

- NGAC Potential Future Topics Dialogue