

National Geospatial Advisory Committee Meeting
September 4-5, 2019
Minutes

The National Geospatial Advisory Committee (NGAC) held a public meeting from 8:30 a.m. to 5:00 p.m. on September 4 and from 8:30 a.m. to 4:00 p.m. on September 5, 2018. The meeting was held at the National Conservation Training Center, in Shepherdstown, WV. In accordance with the requirements of the Federal Advisory Committee Act, the meeting was open to the public.

NGAC Members present:

Mark Reichardt, NGAC Vice Chair
Frank Avila
Sarah Battersby
Byron Bluehorse
Gar Clarke
Garet Couch
Pat Cummins
Mike Hussey
Xavier Irias
Sanjay Kumar
Roberta Lenczowski
Amber Reynolds
Cy Smith
Rebecca Somers
Jennie Stapp
Christine Stinchcomb
Julie Sweetkind-Singer
Harvey Thorleifson
May Yuan

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

NGAC Members not in attendance:

Keith Masback, NGAC Chair
Tony LaVoi
Kevin Pomfret
Gary Thompson
Jason Warzinik

Other attendees:

Dierdre Bishop (Census Bureau), Dierdre Bevington-Attardi (Census Bureau), Juliana Blackwell (National Geodetic Survey), John Byrd (NSPS), Amy Boward, Bob Dahl (BLM), Doug Geverdt (Dept of Education), Tricia Gibbons (Lead Alliance), Steve Lewis (Department of Transportation), Deidre McCarthy (National Park Service), Tim Petty (DOI), Lorna Schmid (FGDC), Dru Smith (National Geodetic Survey), Mike Tischler (USGS)

Wednesday, September 4, 2019 NGAC Public Meeting

Welcome & Introductions

Ivan DeLoatch, FGDC Executive Director, welcomed attendees to the third NGAC meeting of 2019. He noted that the FGDC team was looking forward to a productive meeting. He also noted that NGAC Chair Keith Masback could not attend the meeting, and that NGAC Vice Chair Mark Reichardt would lead the meeting in his place.

Mr. Reichardt called the public meeting to order at 8:30 a.m. and welcomed members and attendees. Member and attendee introductions were made. The Vice Chair provided an overview of the agenda for the first day.

Review and Adoption of Minutes

The draft minutes of the June 2019 NGAC meeting were reviewed, and the Vice Chair called for approval.

DECISION: The NGAC adopted the minutes of the June 11-12, 2019 NGAC meeting.

Geospatial Activity

NGAC members participated in a brief activity that included location identification of a group of satellite photos.

Geospatial Data Act Dialogue

FGDC staff provided updates on the revision to OMB Circular A-16, The Federal Data Strategy Action Plan and the NSDI Strategic Plan.

OMB Circular A-16 Revision

Ivan DeLoatch provided an update on the revision to OMB Circular A-16 and the process used to develop the recommendations. Highlights included the following:

- Federal Data Strategy, the Geospatial Data Act and the revision of A-16 to meet OMB's requirement to issue guidance, and the NSDI Strategic Plan are interrelated.
- Draft recommendation aligns the A-16 revision with the GDA and provides for subsequent FGDC technical guidance for those items that may change over time.
- OMB is reviewing the draft recommendations provided by FGDC and the input NGAC provided was valuable.
- Agencies will have 2 weeks for review of draft once released by OMB, there will not be a public comment period.
- The draft A-16 includes updates to the governance structure proposed by the GDA governance working group.
- FGDC is communicating the need to have FGDC agencies have a seat at the table of the Chief Data Officers Council to ensure geospatial needs are addressed.

Federal Data Strategy (FDS) Action Plan

Ken Shaffer, Deputy Executive Director of the FGDC, provided an update on the FDS Action Plan. Highlights included the following:

- The Federal Data Strategy is part of the President’s Management Agenda.
- New data-oriented legislation (the Geospatial Data Act, the Evidence Act, the Open Government Data Act, Confidential Information Protection and Statistical Efficiency, Title III).
- Codifies data governance and requirements:
 - Chief Data Officers Council
 - Inventories and a Federal Data Catalog (data.gov)
 - Machine readable data
- FDS Action Plan – potential FGDC components in Action Plan. Two Pilot Project proposals.
- Key Points:
 - Have a unique opportunity to say that Geospatial Data is not separate from the rest of the data world.
 - How do we geo-enable statistical data? How to take tabular data and identify the geospatial components in that data so it can be overlaid on a map? How do we do that on a large scale?
 - How do we determine which data requires standards to comply with the GDA? When are they worth investment? How and what to report, what types of standards are needed?

NSDI Strategic Plan

John Mahoney provided a presentation that was followed by a discussion to identify key actions and next steps. He described the NGAC role in developing the last Strategic Plan and noted that it was very valuable. The GDA calls for Covered Agencies to develop their own strategies based on the NSDI Strategic Plan. It will be very important to engage communities through focused workshops and meetings, professional conferences, and one on one meetings with community leaders.

The NGAC engaged in a facilitated discussion about the approach and objectives for the development of the NSDI strategic plan. Key points from the discussion included the following:

- What should the NSDI Strategic Plan achieve?
- Modernizing government in order to work smart, drive decisions.
- Address the overarching/broader community.
- Key message could be “beyond government” & consumers.
- Public – Private partnerships: The term “NSDI” in the private sector is sometimes seen as outdated. Not suggesting to change the term, but we need to address this. Align our terminology with industry.
- Multi-faceted NSDI: Multiple user groups, multiple deliverer types, multiple audiences.
- What recommendations would the NGAC make on approach for the development of the new NSDI Strategic Plan?
- What role should NGAC play?

ACTION: The FGDC and NGAC will hold a joint strategic visioning session at the December NGAC meeting to contribute to the development of the next National Spatial Data Infrastructure (NSDI) strategic plan.

ACTION: FGDC established a small team to, 1) gather NGAC input on the scope/approach for the next NSDI strategic plan, and 2) help plan the joint FGDC/NGAC session at the December 2019 NGAC meeting.

ACTION: To assist in the planning for the October 2020 GDA status report to Congress from FGDC, NGAC members will compile:

- Models and best practices for annual reports, corporate reports, and other reports to Congress.
- Use cases demonstrating the value and utility of geospatial data and technology.
- Messaging opportunities (meetings, conferences, etc.) and key messages.

Partnerships Report & Activity

Sanjay Kumar and Mark Reichardt led a session to discuss and gather thoughts and experiences related to the Public-Private Partnerships (PPP) Subcommittee Terms of Reference, and to discuss partnerships including examples and key components of successful partnerships and cautions. The Terms of Reference document was distributed to NGAC members who were also asked to consider the following questions:

1. Based on your experiences, what are some of the key components that make a successful business partnership? What are the cautions?
2. Can you identify any examples within the greater geospatial community of successful partnerships? What contributed to their success? What is their business model?

The NGAC broke into table groups to discuss these topics and questions. Highlights from the discussions included the following:

Question 1:

- Think broadly about what a PPP could be: Understanding the differences between grants, public-private partnerships, CRADA (work because there isn't necessarily money), contracts.
- Balance of the equity and benefits & ensuring they join with the larger economic goals.
- Narrowly define the goals of the partnership.
- When is a partnership successful?
- Focus on what each partner does well.
- What are the government opportunities?
- Ensure there is a mechanism for members of the partnership to step back when it is not working.
- Do homework up front to understand requirements and build in a mechanism to change the requirements moving forward as new factors are identified.

Question 2:

- Good example is National Insurance Crime Bureau (NICB); a non-profit that may be playing a role similar to what government could play. NICB establishes relationships with private insurance companies to gather imagery available for insurance purposes. This model could potentially be applied for vector data, aerial imagery, surface water, road data, etc. Then the industries could help pay for that public information.
- Redefine proprietary data. States buy data and it is available for use by the state, but what if that money could go into building public datasets.
- The USGS stream gage system requires 50/50 USGS funding for gages.

Summary of Public Private Partnership meeting at 2019 UNGGIM in NYC

- Meeting with 50 nations, private organizations.

- A survey was developed “Co-Creating Geospatial Knowledge and Services through Public-Private Partnerships” based on the dialog at the UNGGIM. Will be distributed.
- Partnerships should have:
 - Engagement at the highest levels of each organization.
 - Mutual trust.
 - Scalability and sustainability of the partnership must be identified or in place.
 - Models: what is the value share – who invests what, is there profit sharing? How do you manage the licensing and data products? Is there a revenue stream? that may need to be evaluated.

ACTION: The subcommittee will develop a project outline prior to the December NGAC meeting.

FGDC Announcements

Ivan DeLoatch provided an update on recent FGDC activities. Highlights included the following:

GeoPathways Initiative

- FGDC career training program initiated three years ago, taking advantage of a State Department program. Work with students across the country.
- Had some very talented students. FGDC identifies mentors in the Federal government that students can work with. Help them understand how the Federal government works.
- Projects have included developing communities of practice, working with United Nations Sustainable Development Goals, Smart Communities, Volcanoes project, and support and testing for new enhancements to the GeoPlatform.

FGDC Doug Nebert Award

- The recipient of the 2018 Nebert Award was the HIFLD Hurricane Response Team. Information about the recipients is available on the FGDC website.
- FGDC is accepting nominations for the 2019 Nebert Award through September 15, 2019.

OGC Disaster Pilot: Advancing Spatial Data Infrastructure for Disasters

- Demonstration on September 18, 2019 at USGS in Reston, VA

Status of NGAC appointments

- Call for nominations issued in July 2019 to fill NGAC vacancies occurring in 2019 and 2020. Many high-quality applications received. Interagency review panel will evaluate nominations and develop recommendations. Final decisions to be made by Secretary of the Interior’s office.
- Twelve current appointments expire Dec 31, 2020. New appointments will take effect January 1, 2020.

ACTION: The FGDC will convene an interagency review panel to evaluate nominations for appointment to the NGAC and make recommendations. Final decisions on appointments will be made by the Secretary of the Interior. The new appointments are expected to be finalized by December 31, 2019.

Landsat Advisory Group (LAG)

Frank Avila and Bobbi Lenczowski provided a brief report on the activities of the Landsat Advisory Group (LAG) subcommittee. They noted that the final version of LAG’s recent paper on Landsat cost sharing

was published in June. They noted that FGDC is reviewing the membership of the LAG, and that USGS is developing the next set of LAG study topics. One potential topic: What technology changes have occurred since the current policy on remote sensing was adopted?

ACTION: NGAC and FGDC leadership are updating the membership of the LAG, and working with USGS National Land Imaging Program staff to refine the next set of study questions for the LAG.

Subcommittee Work Session

The NGAC held subcommittee work sessions for the Cultural & Historical Resources, NGAC Operations and the Public Private Partnerships Subcommittees.

Lightning Session 1

An opportunity for brief announcements was given to NGAC members:

National Geologic Map Database Phase Three – Harvey Thorleifson

Dr. Thorleifson provided an update on the development of the National Geologic Map Database, which is an effort endorsed by Congress and AASG to make geologic maps queryable, seamless, zoomable, and 3D in four phases.

Privacy Policy – Sanjay Kumar

Mr. Kumar provided a presentation on privacy policy, including details about how privacy issues are being handled internationally. Key issues and considerations concerning what responsible data protection entails.

Working with Map Projections: A Guide to Their Selection – Sarah Battersby

Dr. Battersby provided an overview of the recent book that she co-authored, “Working with Map Projections: A Guide to their Selection.” The book focuses on map projections for the lay person, and covers how projections can influence perceptions.

Leadership Dialogue – Tim Petty (DOI)

FGDC Chair Dr. Tim Petty provided an update on FGDC/Administration priorities and engaged in a dialogue with NGAC members. Dr. Petty addressed ongoing NGAC activities, including the following subcommittee activities:

- Cultural & Historical Resources. FGDC looks forward to reviewing the recommendations developed by the FGDC Cultural Resources Subcommittee identifying best practices for management of geospatial information related to sensitive cultural and historical resources. Dr. Petty thanked the subcommittee members for their work on this paper.
- NGAC Operations. The draft NGAC bylaws developed by the Operations Subcommittee will be helpful in guiding the NGAC in implementing its new responsibilities. Related to this, the FGDC staff is working with DOI to develop an updated Charter for the NGAC. FGDC looks forward to reviewing NGAC’s recommendations on the bylaws.
- Landsat. The NGAC and the FGDC are updating the membership and the study questions for the Landsat Advisory Group, and will reconvene the group this Fall. The LAG has provided very helpful advice and recommendations, and we look forward to working with the new group.

Dr. Petty also noted that the implementation of the Geospatial Data Act will be the primary focus of the FGDC and the NGAC in the coming year. He indicated that the NGAC has a key role to play – FGDC is looking to NGAC members fully engage in GDA implementation efforts and to be liaisons to the sectors they represent. He discussed the on several important GDA-related tasks:

- Revising OMB Circular A-16. The new draft Circular is currently under review at OMB, and FGDC will keep the NGAC informed as this process proceeds.
- Budget Strategy. FGDC is developing a budget strategy to support the implementation of the GDA.
- NSDI Strategic Plan. FGDC is beginning the process to develop the next NSDI strategic plan, and plans to hold a joint FGDC-NGAC planning session at the December NGAC meeting. FGDC will look to the NGAC to be fully engaged in the development of the new NSDI strategy.
- 2020 Report to Congress. FGDC and the NGAC need to begin planning ahead for the initial GDA report to Congress, which will be due in October 2020.

Dr. Petty noted that FGDC is working closely with OMB on these tasks, and also coordinating with OMB to align the GDA with other related data initiatives. The GDA will continue to be a top priority, and NGAC will play a key role this important new law. In closing, Dr. Petty noted that he looked forward to continuing collaboration with the NGAC, and thanked the NGAC members for their service.

Wrap-up – Mark Reichardt, John Mahoney & Tricia Gibbons

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

Thursday, September 5, 2019 NGAC Public Meeting

Start-up – Mark Reichardt (Vice Chair)

The Vice Chair welcomed NGAC members to the second day of the meeting. A brief overview of the agenda was provided. One change to the agenda was noted – the first session of the day was modified to focus on preparations for the 2020 GDA Report to Congress.

GDA Report to Congress

Tricia Gibbons and Mark Reichardt introduced the session as a continuation of Wednesday's discussion with Assistant Secretary Tim Petty. The discussion focused on three questions: What should the Report to Congress look like? What might be the strategy to get there? What are the opportunities for the stakeholder community and/or the Federal community to engage in the process. Although it was noted that we still need clarification on the process to engage with OMB and the agency reporting requirements, we could move forward on identifying best practice examples of reports.

Ideas that emerged from the discussion included: it needs to be anchored to the GDA, we could start with a collection of resources, use interactive maps and online dashboards, tell the story of what's working as well as the challenges, we need a common compelling message demonstrating the use and impact of geospatial data, and we need to take the time to raise the level of awareness, educate, and mobilize to take action. It was noted that we need to develop a robust communication strategy.

As a result of the discussion, the FGDC will take action to set up a Google Docs site to begin collecting best practice examples of reports, identify use cases, brainstorm key messages, and develop a calendar of events to identify opportunities for communications.

Federal Programs Update

Ivan DeLoatch introduced a session featuring updates on three important Federal geospatial activities: Geospatial support for the 2020 Census, the 2022 National Spatial Reference System (NSRS) modernization, and the continuing development of the National Address Database. Highlights included the following:

2020 Census Update – Deirdre Bishop (Census Bureau)

Deirdre Bishop provided an update and overview of the Census Bureau's preparations for the 2020 U.S. Census. The Census Bureau has been planning the Census for 10 years and on August 18 kicked off the first field office, so implementation is officially underway. As background, satellite imagery from the NGA made it possible for the Census to update their Address database for conducting the 2020 Census. Ms. Bishop noted that without the willingness of NGA to share their satellite data this work would not have been possible.

Outreach is using technology to identify areas that have a high probability of difficulty in getting response. Key points on the process include the following:

- 95% will receive Census invitation via the mail, 5% Census taker will drop it off, and <1% in person.
- Invitation will encourage Internet response, but they can use internet, mail, or by phone.
- 12 languages cover 99% of country for Internet Survey. Printed in 59 additional languages.
- Census Day is April 1. One year after the Census a suite of materials will be delivered to the states at the Census Block Level for Congressional redistricting.
- Census is also developing a new Dissemination Platform.

- Tribal information Partnership with tribal, state and local government provided a 99.5% match with the Census.

2022 National Spatial Reference System (NSRS) Modernization – Dr. Dru Smith (National Geodetic Survey)

Dr. Dru Smith provided an overview of the National Geodetic Survey’s preparations for the 2022 National Spatial Reference System (NSRS) Modernization. He noted that modernizing the NSRS means replacing NAD 83, replacing NAD 88, reinventing the bluebooking process, improving the Geodetic Toolkit, and improving surveying methodologies. Key points included the following:

- Trying to get alpha products ready by the end of 2019 and provide to industry partners for their use and testing.
- Shift and Drift impacting coordinates.
- NSRS using alpha products.
- The plates are shifting and the elevation is rising or falling all the time.
- NOAA CORS network will be constantly updated.
- There will be transformation tools to use old data.
- All US coordinates will have a shift (impacting FEMA Flood Plain Maps, USGS topographic maps, etc.).

National Address Database – Steve Lewis (Department of Transportation)

Mr. Lewis provided an update on the development of the National Address Database (NAD). He noted that Release 3 of the NAD is now available, and much progress is being made. However, developer staff, funding, and contracting issues have impacted progress as well. Highlights included the following:

- Two new states submitted: Texas and Wisconsin.
- Updates from 9 states: AZ, AR, DE, MA, MT, NM, NY, TN, UT.
- Oregon is expected to provide data soon.
- Release 3 includes 48.6M records, with file availability in geodatabase and ASCII formats. Includes basic metadata, and is available from the DOT website.

Mr. Lewis also discussed two use cases:

- Wildfire public safety in the US (Dr. Dapeng Li, South Dakota State University).
- Health Risk Index application, OGC Disaster Pilot (Ajay Gupta, Health Solutions Research, Inc.).

Public Comment Period

An opportunity for public comment was provided to meeting attendees. One attendee offered public comment:

John Byrd, National Society for Professional Surveyors.

Mr. Byrd provided comments related to the Geospatial Data Act (GDA). He provided background on the passage of the GDA as a compromise bill, addressing many past studies and reports on Federal geospatial activities. He also expressed the concern of the NSPS regarding potential duplication and competition between the surveying, mapping, and geospatial activities in Federal agencies and private sector firms in the United States, including small businesses and firms. He also discussed the qualifications based selection process for procurement. Mr. Byrd provided a copy of his statement to the NGAC.

Cultural & Historical Resources Subcommittee Report

Garet Couch provided an update on the activities of the Cultural & Historical Resources Subcommittee. The primary focus was the final consideration of the paper, Protecting Federal Cultural and Historical Geospatial Resources: A Review and Recommendations, which was developed in response to the 2017/2018 FGDC guidance to the NGAC. The final draft paper was approved by the subcommittee on August 21, 2019. This session was used to gather additional input to be presented to the NGAC for final consideration and adoption of the draft paper.

In developing the paper, the subcommittee conducted a series of interviews with managers and staff from multiple Federal agencies with responsibilities for managing cultural and historical resources. The report included the following findings and recommendations:

Findings:

- Finding 1: From the interviews, it is clear that there is a lack of consistency in defining and identifying geospatial data assets associated with sensitive culturally and historically significant resources across Federal agencies.
- Finding 2: The use of geospatial data associated with historic and culturally significant resources is highly regulated. However, the regulatory procedures are highly variable across agencies and states.
- Finding 3: Decisions to provide or deny access to the data is often made by individuals not well-versed in the geospatial sciences.
- Finding 4: Data created by individuals or contractors to manage field operations may be proprietary and not easily subject to regulation or oversight.

Recommendations:

- Recommendation 1: Definitions of cultural resource spatial data.
- Recommendation 2: Guidelines on the management, access control, and exchange of geospatial data associated with sensitive cultural and historical resources.
- Recommendation 3: Data sharing agreements and strategies.
- Recommendation 4: Continue development of current spatial data transfer standards.
- Recommendation 5: Develop a training strategy and materials.

Following discussion, the group agreed on several minor editorial changes to the draft document. The subcommittee also discussed plans to provide briefings and engage in dialogue with representatives from the FGDC Cultural Resources Subcommittee and other stakeholders. The NGAC agreed on the following:

DECISION: The NGAC approved the paper, “Protecting Federal Cultural and Historical Geospatial Resources,” pending minor editorial changes.

ACTION: The subcommittee will work with FGDC staff to plan a briefing session on the paper for FGDC Cultural Resources Subcommittee agencies and other key stakeholders.

NGAC Operations Subcommittee

Cy Smith provided an update on the activities of the Operations Subcommittee. This session included a discussion of the Draft NGAC Bylaws, which were developed by the Operations Subcommittee as a follow up to the discussion at the June NGAC meeting. The draft document was presented to the NGAC

for review and comment. A revised version will be presented to the NGAC in December. The draft bylaws update the original version of the NGAC Bylaws, which were adopted in 2008. The new draft version incorporates new requirements from the Geospatial Data Act. The subcommittee also anticipates developing new operation procedures to supplement the NGAC Charter and Bylaws. Following discussion, the NGAC agreed on the following action:

ACTION: NGAC comments on the draft NGAC Bylaws document are due to Cy Smith by Thursday, September 12. A revised version of the paper will be provided to the NGAC prior to the December NGAC meeting.

Lightning Session 2

Digital Index of North American Archeology – Julie Sweetkind-Singer

Ms. Sweetkind-Singer discussed the Digital Index of North American Archeology (DINAA). The goal of the DINAA project is to digitize archaeological resources. DINAA demonstrates how the aggregation and publication of government-held archaeological data can help to document human activity over millennia and at a continental scale. These data can provide a valuable link between specific categories of information available from publications, museum collections and online databases. Integration improves the discovery and retrieval of records of archaeological research currently held by multiple institutions within different information systems. It also aids in the preservation of those data and makes efforts to archive these research results more resilient to political turmoil.

The Data Driven Policy Maker – Pat Cummens

Ms. Cummens discussed data-driven policy making, including the following key points:

- Tie outreach to actions. When a policymaker talks about healthy cities or sustainable development, determine what kinds of data will contribute to those issues.
- Communicating status and geospatial information does not always need to have a map. Dashboards are the fastest growing service.

Meeting Wrap-up & Next Steps

The Vice Chair reviewed and summarized the meeting actions. The next NGAC meeting will be on December 4-5, 2019 in Washington, D.C.

ADJOURN

The Chair adjourned the meeting at 4:30 p.m.

Certification

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

Mr. Keith Masback, Chair, National Geospatial Advisory Committee

Mr. Mark Reichardt, Vice-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 4, 2019

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/september-2019/index.html>

Geospatial Data Act (GDA) Dialogue

- GDA Update

FGDC Report

- FGDC Update

Public-Private Partnerships Subcommittee

- PPP Subcommittee Presentation

Federal Programs Update

- 2020 Census Overview
- National Spatial Reference System (NRRS) Modernization
- National Address Database Update

Cultural & Historical Geospatial Resources Subcommittee

- NGAC Paper - Protecting Federal Cultural and Historical Geospatial Resources
- Cultural & Historical Geospatial Resources Subcommittee Report

NGAC Operations Subcommittee

- Operations Subcommittee Report

Lightning Sessions

- National Geologic Map Database Phase Three – Thorleifson
- Data Protection and Privacy Policies – Kumar
- Working With Map Projections – Battersby
- Digital Index of North American Archaeology - Sweetkind-Singer