National Geospatial Advisory Committee Webinar Meeting May 18-19, 2022 Minutes

The National Geospatial Advisory Committee (NGAC) held a public meeting on May 18-19, 2022 from 1:00 p.m. to 5:00 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:

Gary Thompson, NGAC Chair Roberta Lenczowski, NGAC Vice Chair Nadine Alameh Clio Andris Chad Baker

Byron Bluehorse

Maggie Cawley

Gar Clarke

Garet Couch

Lynn Dupont

William Haneberg

Tony LaVoi

Mark Meade

Siva Ravada

Felicia Retiz

Vasit Sagan

Cv Smith

Kathleen Stewart

Tim Trainor

Josh Delmonico, Acting 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:

Frank Avila Jack Dangermond

Other Attendees:

Deirdre Bevington-Attardi (Census), Deirdre Bishop (Census), Julia Benbenek (Morgan, Lewis & Bockius LLP), Mariel Borowitz (Georgia Tech), David Brostuen (USGS), John Byrd (NSPS), Diana Cameron (3GIMBALS), Robert Cardillo (St. Louis University), David Carter (DOI), Trisha Christian (SBA), Pat Cummens (Esri), Ivan DeLoatch (FGDC, retired), Kevin Doran (Western Governors Association), Elizabeth DuBan (FGDC), Erin Dudley (State Department), Jonathan Duran (State of Arkansas), Rich Frazier (FGDC), Douglas Geverdt (Dept. of Education), Gary Gold (DOI), Holli Howard (Google), Vincent Hurley (Planet Labs), Nathan Jones (Census), Jenna Leveille (State of Arizona), Mike Little (NGA), Vicki Lukas (USGS), Amy Nelson (USDOT), Timothy Newman (USGS), Zach Nowak (Western Governors Association), Glenn

O'Grady (URISA), Ken Olliff (St. Louis University), Mark Reichardt (ClassM Associates), Karen Rogers (State of Wyoming), Amy Rose (Oak Ridge National Laboratory), Dan Ross (NSGIC), Adam Schimmelpfenning (Omni Federal), Lorna Schmid (FGDC), Ken Shaffer (FGDC), Tim Stiles (San Bernadino County), Christine Stinchcomb (IAAO), Michael Tischler (USGS), Hayley Thompson (FGDC Support), Lynda Wayne (GeoMaxim), John Wertman (Esri), Jessica Whiteaker (USGS), Frank Winters (State of New York)

Wednesday, May 18, 2022 NGAC Public Meeting:

Welcome & Brief Introductions:

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

Review and Adoption of Minutes from December NGAC meeting:

The draft minutes of the December 2021 NGAC meeting were reviewed, and the Chair called for approval.

DECISION: The NGAC adopted the minutes of the December 7-8, 2021 NGAC meeting.

Leadership Dialogue:

Gary Gold, Deputy Assistant Secretary for Water and Science at the Department of the Interior, discussed critical Administration activities, such as climate change and infrastructure. New initiatives that have been recently funded include the Earth MRI, the National Geological and Geophysical Data Preservation Program (NGGDPP), and the new Energy and Minerals Research Facility at the Colorado School of Mines. Mr. Gold noted that NGAC's advice and recommendations have had a significant impact on the FGDC, including:

- The NGAC's input during Climate Mapping Report;
- The Landsat Advisory Group's reports and recommendations, including their paper for maintaining Landsat's free and open data policy; and
- The implementation of the GDA, including comments on GDA reporting.

FGDC Update:

Josh Delmonico (FGDC) provided a briefing on current and upcoming FGDC activities. Highlights included:

- Significant effort has been made in engaging with stakeholders to understand how to collaborate on the NSDI most effectively.
- The Inspectors General of the FGDC GDA covered agencies are in the middle of their biennial audits of GDA implementation.
- The FGDC is working with OMB to revise and OM Circular A-16 to address geospatial objectives, including reinvigorating the standards process.
- The FGDC appreciates the NGAC's input in the development of the climate mapping initiative called out in with the Executive Order (EO) 14008, *Tackling the Climate Crisis at Home and Abroad*.
- The FGDC continues to engage the international community on national and global SDI implementation.

ACTION: The next set of appointments to the NGAC are in review in the Department of the Interior and will be finalized later in 2022.

Landsat Advisory Group Subcommittee:

Roberta Lenczowski provided an update on Landsat Advisory Group (LAG) activities.

- Updates on the 2021 LAG Task #1: Landsat in the Cloud Era included:
 - The team, co-led by Walter Scott and Mariel Borowitz, completed the final draft of the paper, which the LAG approved on May 10, 2022 for submission to the NGAC during this meeting.
 - Many developing countries are dependent on Landsat data, in part because it is free and open. However, some countries have a reluctance to go to the cloud; this is an educational problem of which users should be aware.
 - The USGS National Land Imaging (NLI) program was pleased with the scope and recommendations of the paper.
 - Cloud-native geospatial standards are key; these should be encouraged in tandem with recommendations of cloud adoption.
 - The inclusion of lessons learned and other information of NOAA's Open Data
 Dissemination (formerly Big Data Project / Program) was useful.
- Updates on the 2021 LAG Task #2: Where is the "Water's Edge" of NLI Scope? included:
 - The initial draft of the paper has been completed, with comments received; revisions are ongoing.
 - The LAG will seek approval for this paper during the Fall 2022 NGAC meeting.
- Possible future topics for the LAG include:
 - Analysis of cloud use programs, including imagery organization, available applications, handling exports, and collection of metrics;
 - Harmonization of sensors' data (e.g., Harmonized Landsat Sentinel-2 (HLS)); and
 - Significance of openness to confront geo-political issues with accessible, reliable earth observation.

Tim Newman (USGS) provided updates on the USGS National Land Imaging Program. Highlights included:

- Both Tom Loveland's and E. Lynn Usery's extensive contributions to geospatial science and earth observation were acknowledged.
- Landsat 9 launched successfully, with imagery turned on in January. In late July or August, full control will be transferred to USGS.
- Landsat 7's orbit was lowered, due to the success of Landsat 8 and Landsat 9, as well as several single point failures on Landsat 7.
- The Landsat "Collection 2" has been accessed over 2 billion times in the past year; this is more accesses than in the entire history of Landsat.
- Key Decision Point A for Landsat Next will likely occur in the next few months.
- A potential LAG study topic would be what type of metrics make sense in the cloud era. A
 better understanding of metrics regarding how cloud data is being used are needed.
 Accesses is currently a key metric used by USGS to measure data usage in the cloud.

Following NGAC discussion of the LAG Task 1 paper, the NGAC agreed on the following actions:

DECISION: The NGAC adopted the paper, "Landsat in the Cloud Era", developed by the LAG Subcommittee.

ACTION: The LAG Subcommittee will continue working on Task 2 from the 2021 LAG guidance, addressing the topic: "Where is the "Water's Edge" of National Land Imaging (NLI) Program Scope?" The paper is expected to be completed prior to the next NGAC meeting.

ACTION: The LAG Subcommittee will work with the USGS NLI staff to define the LAG study topics for 2022.

GDA Reporting Subcommittee:

Mark Meade provided an update on GDA Reporting Subcommittee activities. Highlights included:

- Consistency in reporting and comparability across agencies has continued to be a priority in GDA reporting.
- The FGDC referred to last year's NGAC comments frequently in developing the FY 2021 GDA reporting templates. The NGAC comments helped shape the approach to this year's reporting. The process is iterative, with steady improvements being made.
- All FY 2021 annual reports have been completed and posted on the FGDC website, with the summary report submitted to the GDA Reporting Subcommittee.
- The Inspectors General (IGs) of each Covered Agency are conducting biennial audits of agency compliance with GDA requirements, which will be completed by October 2022. The IG council (CIGIE) has identified standards compliance as a key component of the audits.
 This is the second round of audits, with the first round of audits having served as a learning experience for IGs.
- NGAC members provided comments on the 2021 GDA Report Summary under 3 focus areas: positive elements, areas needing improvement, and recommendations for future reports.
 - NGAC comments regarding positive elements included higher survey character limits and the dashboard summary mode.
 - NGAC comments regarding areas needing improvement included the need for greater clarity on the self-assessment approach; a greater focus on results rather than the process; and the need for more agencies to be involved in the reporting process.
 - NGAC comments regarding recommendations for future reports included greater explanation for rating changes and progress made; ordering tables by responsibility; exploring alternative survey technologies for the reports; and expanding the NGAC comment process to include full agency reports.
- As this is the second round of GDA reporting, time-series comparisons to previous reports will be useful to include.
- It may be useful to reconsider IG involvement in the GDA reporting process.
- The FGDC will review and address NGAC comments on the 2021 report; develop plans and timelines for the FY 2022 reports and the biennial GDA Report to Congress; and coordinate with IG offices on 2022 audits.

Following NGAC discussion of the NGAC Comments on the FY 2021 FGDC GDA Report Summary Report, the NGAC agreed on the following actions:

DECISION: The NGAC adopted the paper, "NGAC Comments on the FY 2021 FGDC Summary of GDA Annual Reports", developed by the GDA Reporting Subcommittee.

ACTION: In 2022, the GDA Reporting Subcommittee will review and provide comments on the individual covered agency and National Geospatial Data Asset (NGDA) Data Theme annual reports.

3DEP Subcommittee:

Gary Thompson and John Mahoney provided an update on 3DEP (3D Elevation Program) Subcommittee activities. Highlights included:

- The duties of the 3DEP Subcommittee include examining advances of technology and data distribution to and use by users.
- A report must be provided one year after the subcommittee is fully enacted, with all members appointed. Reports will be delivered biennially after the initial report.
- Membership will include NGAC members and non-NGAC members, who will be selected for their subject matter expertise.

Mike Tischler (USGS) provided updates on the 3DEP Program. Highlights included:

- 3DEP data provides significant benefits to the Nation.
- The 3DEP program has aimed to leverage the agility and efficiencies of the private sector to provide sensors and imaging.
- Part of this program's success is attributable to its whole-of-government approach, which emphasizes its value to all of government, academia, and industry. Funding has been pooled from many Federal agencies, as well as state and local governments.
- The program's Lidar Base Specification has enabled data interoperability and is now being explored by the international geospatial community.
- The program is on track to complete nationwide data acquisition by FY 2026.
- Moving forward, the 3DEP program will work to determine requirements and benefits of additional information, such as nearshore and inshore bathymetric data.
- The 3D National Topography Model (3DNTM) is a combination of elevation and hydrography and will support a broad range of applications.
- Congress has provided supplemental funding to the 3DEP program for several years, including \$5.5 million for lidar to map the impacts of wildfire in the state of Washington.

Additional discussion points included:

- How will older generations of lidar data be preserved to be used for things such as change detection?
 - The 3DEP program's goal is to create a baseline dataset against which future change will be mapped.
 - What is being created now through 3DEP will need to be archived and preserved and will require significant resources to facilitate this data preservation.

• More guidance should be given regarding the level of granularity that should be considered high resolution.

ACTION: The appointments to the 3DEP Subcommittee are in final review with the Department of the Interior and USGS. Orientation for the new members and initial subcommittee meetings will be held once the appointments are complete.

ACTION: In 2022, the 3DEP Subcommittee will focus on developing the first report assessing the 3DEP program, as required under the National Landslides Preparedness Act.

Public-Private Partnerships / Stakeholder Engagement Subcommittee Joint Update:

Cy Smith provided a report on the activities of the 2021 Public-Private Partnerships (P3) / Stakeholder Engagement Subcommittee, including the following highlights:

- A key problem is that there is no comprehensive national governance and coordination process that provides equitable participation in the NSDI.
 - While Federal agencies engage with some local, State, and Tribal governments through partnership programs, those participating governments do not represent the needs to all government entities.
- It may be useful to develop a strategy for expanding NSDI capability and value through broadened stakeholder engagement, partnerships, resource investment, and utilization for improved decision-making.
 - The NGAC has identified the expansion of NSDI stakeholder engagement and the formation of P3s and other innovative partnerships as essential for reaching greater national geospatial coverage and capability for improved decision-making.
- Governance is the way decisions are made about an activity, and the way in which an organization operates and builds trust.
 - The GDA codified the existing Federal governance structure for the NSDI, which could be augmented by a collaborative governance structure including other levels of government.
- The components of the NSDI should be publicly available to the greatest extent possible.
- If a governance pilot were to be done, it may require an advisory body to convene to design several pilots and determine appropriate geographies.
 - Any pilots would be organized to support specific use cases and development/improvements of several NGDA datasets related to a particular use case, such as standards, funding, and data integration.
 - A key deliverable could include documentation of the pilots, including challenges, successes, and failures of the governance structure.

Additional discussion points included:

- The focus of the FGDC is implementing the GDA; several requirements of the GDA have not yet been implemented.
- Standing up a new national governance body would be a major effort, and the FGDC does not have the resources or authority to lead this effort.
- From the standpoint of making decisions together, collaboration is vital for the NSDI.
- Are there other efforts outside of the proposed pilot(s) that could be pursued to promote inclusivity and collaboration?

- There may be more important efforts that need to be pursued by the NGAC; the NGAC will be more effective if it pursues specific, individual issues.
- There is a standing recommendation from the P3 Subcommittee for the NGAC to explore the collaborative potential of innovative partnerships in the NSDI process.

ACTION: The P3/Stakeholder Engagement Subcommittee will continue to develop input and recommendations on partnerships, stakeholder engagement, and governance issues, and will contribute to the new NGAC study topic on the Review of Geospatial Data Act Implementation.

Climate Mapping Initiative:

Tony LaVoi provided an update on climate mapping initiative required under Executive Order 14008. Highlights included:

- EO 14008 was issued in January 2022. The NGAC held four sessions in 2021 to provide input in the development of the climate mapping initiative. This included an NGAC resolution to support the Climate Resilience Information System (CRIS), passed in October 2021.
- At its March 2022 meeting, the FGDC Steering Committee concurred with revising the climate mapping approach to focus on the development of CRIS.
- The focus of CRIS is to bring together the climate-relevant Federal data to support local planning and decision-making to help protect people, property, and infrastructure.
- The Resilience and Adaptation Information (READI) Portal is being developed as a centralized hub of information to aid in planning and implementing climate resilience in Federally funded projects and programs with specific relevance to the Infrastructure Investment and Jobs Act (IIJA).
 - The READI Portal is meant to support a high-level assessment of project vulnerability based on exposure to high priority climate-related hazards derived from authoritative Federal climate data.
 - The READI requirements and Statement of Work are complete; initial deployment of READI is scheduled for Summer/Fall 2022.
- The CRIS Leadership Team continues to refine the scope of CRIS and develop initial implementation plans; there may be an opportunity for a future NGAC session when the prototype is ready for review.
- The community of last-mile service providers are critical to resilience; they have been key stakeholders in mind in the development of CRIS to enable smart decisions to be made at the local level.

ACTION: FGDC will continue to keep the NGAC apprised of the status of the development of the Climate Resilience Information System (CRIS) and the Resilience and Adaptation Information (READI) Portal.

Adjourn

Mr. Thompson made closing remarks and provided overview of Day 2 agenda.

Thursday, May 19, 2022

NGAC Vice-Chair Roberta Lenczowski called the meeting to order at 1:00 p.m. and welcomed members and public attendees and provided an overview of the day's agenda.

Taylor Geospatial Institute:

Vasit Sagan, Robert Cardillo (St. Louis University), and Ken Olliff (St. Louis University) provided an overview of the new Taylor Geospatial Institute (TGI). Highlights included:

- TGI, named after Andy Taylor, aims to be a unique geospatial research consortium.
- The TGI's vision is to be the Nation's leader in geospatial science research and accelerate the St. Louis region's development as a global geospatial center of excellence. As TGI evolves, it will likely work to build broader, international connections.
- The TGI's mission is to advance geospatial science through multi-institutional, interdisciplinary collaborations in order to create innovative, real-world solutions to societal grand challenges.
- To counter the geodesy crisis, a consistent, lasting stream of government funding in geospatial sciences is needed.
- TGI funding includes block grants, seed grants, a post-Doctoral program, a Visiting Scholars program, and Start-up Packages.
- TGI is an excellent example of how innovative partnerships can be started and grown.
- TGI is open to partnering with universities and other institutions across the Nation.

COGO Assessment of the NSDI:

Karen Rogers (NSGIC) and Christine Stinchcomb (IAAO) provided an overview of the plans for the development of the 2023 COGO Assessment of the NSDI. Highlights included:

- The COGO Assessment will be published in December 2023, then every four years thereafter, staggered with the ASCE Report Card.
- The name of the COGO NSDI Report Card was changed to the COGO Assessment of the NSDI.
- For the first time, COGO will be using a survey instrument as part of the data collection for the assessment.
- The assessment will examine eight Framework layers, as well as a Universal Theme, which is an overall review of the maturity of the NSDI, including funding and capacity.
 - The UN has defined 14 fundamental data themes; it would be interesting to see how the US stacks up against other countries with more data themes.
- Teams will work with the FGDC Secretariat and Lead Covered Agencies to gather input, incorporating information from June 2023 GDA reporting.
- COGO plans to coordinate with FGDC agencies early in the planning process. Agency
 collaboration will be done in a way that does not interfere with GDA reporting; it will likely
 occur during early Summer to late Fall.

•

• The objective is to conduct an objective assessment of the state of the NSDI from users' perspectives, outside of the FGDC's assessment.

- The FGDC sees the benefits of COGO's assessment and may be interested in collaborating on the effort.
 - The previous COGO assessment had a significant amount of engagement with data theme leads.
 - The themes defined in the COGO Assessment are not entirely aligned with the NGDA themes; it would be helpful to align the COGO Assessment themes with the existing NGDA themes.
- Related assessment initiatives include the following:
 - The NSGIC Geospatial Maturity Assessment (GMA) looks at data themes from the perspective of state GIOs.
 - The Urban and Regional Information Systems Association's (URISA) tool was
 designed for local governments to use to determine their own GIS maturity, making
 it much broader than just datasets; it has only been used by some local
 governments, and was viewed as a resource in designing the COGO survey.

Public Comment Period:

Opportunity was provided for public comments.

John Byrd (NSPS) discussed potential changes to application of the Davis Bacon Act, including the following highlights:

- Land survey crews performing work on projects funded Federally should not be considered "laborers and mechanics" as referenced in the Davis-Bacon Act.
- Survey crews are engaged in tasks that are primarily analytical in nature, rather than manual labor.
- 99% of firms engaged in surveying work are small businesses; applying the Davis-Bacon Act to survey crews would impose a significant and costly burden on these small businesses.
- NSPS supports the exemption of surveying crews as part of the proposed updates to the Davis-Bacon and Related Acts Regulations.

Dan Ross (NSGIC) provided comments on public-private partnerships and national geospatial governance, including the following highlights:

• The NGAC should move forward with the NGAC P3 subcommittee's recommendation to pursue opportunity for greater stakeholder involvement and pursue pilot projects to advance national geospatial governance approaches.

NGAC 2022 Study Topics Discussion:

Roberta Lenczowski led a discussion of NGAC Subcommittee activities and membership, with a focus on newly established subcommittees

Discussion points regarding the GDA Implementation Subcommittee included the following:

- This is an important study topic; the GDA was intended to energize the NSDI and national geospatial communities, but this may not currently be happening.
- This study topic should be broader than just a Federal focus—it should include a holistic, national perspective.

- Framing this topic as a review of GDA implementation may imply a focus on process, which
 may be duplicative of existing reports and audits; it may be useful to reframe it to focus on
 impacts and outcomes—for example, "National Impacts from the GDA Four Years from
 Passage, What Has Changed?"
- It could be useful to compare different geospatial assessments (GDA, COGO, NSGIC, etc.) to understand what may be missing.
- It would be useful to understand concerns that agencies may have with the GDA; understanding this could help the NGAC be more effective as a champion for these needs.
- There is a desire for more national involvement to incorporate information and feedback about the GDA
 - o Understanding improvements and stumbling blocks would be useful.
 - o How can leadership in the national community be generated?
- Governance should be inclusive, but the GDA as currently written is not inclusive.
 - The NGAC can be a mechanism for that inclusivity; it is responsible for providing information to the FGDC on community interests and needs.
 - There is a structural issue with the governance of the NSDI—the GDA codified that Federal governance structure.
 - Stakeholders are often only advisors—they lack influence in decision-making.
 - Partnerships cannot always be relied upon; there must be more extensive involvement.
 - Long-term, strategic action is needed to address this issue.
- Local geospatial officials often have close relationships with their regional Federal agency representatives—this could be a local-Federal network to leverage.
- The GDA may be diminishing agencies' capabilities to take action, through its extensive reporting requirements.
- The NSDI is primarily focused on data; it does not fully address the data ecosystem or data integration.
- As part of the FGDC infrastructure under the GDA, there is a co-chair from OMB, but OMB
 has not been an active participant. DOI, through the FGDC Chair or the Secretary of the
 Interior, should advocate for more effective OMB engagement.
- The executive branches of the government and funding agencies should seek to create a specific geospatial funding stream.

<u>Discussion points regarding the Geospatial Excellence and Innovation Subcommittee included the following:</u>

- This effort should be a multi-year project using a phased approach beginning with one or two specific topics.
- The NGAC should develop findings and recommendations to address this topic, and should include concrete, specific steps by specific actors.
 - Consider a national strategy to address this challenge.
 - At what level should geospatial leadership be located to be to be effective within the United States?
- The state of geodesy in the Nation is a critical issue that must be addressed.

- In addition to AI/ML and big data, the fundamental science behind data collection must also be emphasized. Innovation includes IT and process improvement.
- The GEO Revolution project, as an example, showcases how geospatial technology is changing the world.
- The NGAC cannot solve this problem, but it can advise and help to promote these ideas regarding geospatial excellence.
 - Not all of the NGAC's work must be requesting action from the Federal government to solve a problem; some of its work can be simply raising awareness.
 - Federal agencies may not be fully aware of the potential impact of geospatial modernization—part of the NGAC's role can be to gather and share this information.
 - Promoting education for not only new technologies but their impact is important; contextualizing information is key.
- The NGAC could encourage collaboration and public interest, preparing the geospatial workforce for the future is important.
 - Cases studies showing what Federal organizations are doing with geospatial internship programs may be one option.
 - Classifying geospatial sciences as a STEM field has attracted more international students and provided additional opportunities for funding.
 - How can the FGDC encourage and support educational funding sources like the National Science Foundation (NSF)?
 - o It could be impactful to raise awareness for students as early as high school about opportunities in the geosciences field.
- There is a fundamental issue of identity for the field of geosciences.
 - Unlike the US, many other countries are treating geospatial as its own major area of study, contributing to additional workforce training for this area.
- The UK Geospatial Commission has a seat in the UK's Cabinet; compared to the US, there is no single geospatial representative with geospatial decision-making ability.
- From a certain perspective, the NSDI can be said to require a management office, architecture, roadmap, and funding; what systems deliver to the NSDI? From another perspective, the NSDI has been and may remain an abstraction that may never be realized.
- Perhaps Congress could set up an intergovernmental funding program to incentivize a more collaborative approach to the NSDI.
- The rationale for a collaborative governance approach is that there is no single authority for the NSDI; Congress does not have the authority to force local governments, tribes, states, academia, NGOs, or industry to participate.
- There is no authority for a different approach unless all stakeholders come together and agree on collaborative governance; examples demonstrating that this works come from several areas, including some in the geospatial sciences that were highlighted by the NGAC's P3 Subcommittee.
- There are collaboration opportunities that may exist with the AASHTO GIS-T Committee as well as the Transportation Research Board Data Section, which includes the Geospatial Information Science standing committee and other committees looking at AI/ML.

Many states and governors have workforce development high on their priority list;
 connecting with the workforce development community could be a valuable connection.

Following the discussion about the 2022 subcommittees, the NGAC agreed on the following action:

ACTION: NGAC members respond to NGAC leadership indicating first and second choices for subcommittee assignments by Monday, May 23. The 2022 NGAC subcommittees include the following:

- Landsat Advisory Group Subcommittee
- 3D Elevation Program Subcommittee
- GDA Reporting Subcommittee
- P3/Stakeholder Engagement Subcommittee
- Review of GDA Implementation Subcommittee
- Geospatial Excellence & Innovation Subcommittee

Lightning Talks:

Lynn Dupont discussed urban planning in the time of climate change. Highlights included:

- New Orleans is a major port that serves the world; it is second in Class 1 railroads and a nexus for truck routes.
- In 2005, New Orleans lost 30% of its urban density in the South Shore.
 - New Orleans' population is no longer growing.
- When rebuilding New Orleans, the goal was to build back quickly while making the most of funding—meaning building back with improvements.
 - To make a city habitable, traffic control, wild animal/rodent control, water, sewage, and electricity are required.
 - New Orleans recently undertook a large Regional Transit study.

Tim Trainor provided a summary of the 2022 Cambridge Conference, including a short video. Highlights included:

- The Cambridge Conference was founded in 1928 and occurs every four years.
 - The first paper was a radical paper on aerial photography.
- The Cambridge Conference brings together international leaders of geospatial organizations to think strategically.
- The Cambridge Conference is committed to addressing the international climate challenge.

Next Meeting:

Additional information about the 2022 NGAC meeting schedule will be provided soon.

Adjourn:

Ms. Lenczowski 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. Gary Thompson, Chair, National Geospatial Advisory Committee

Mr. Josh Delmonico, Acting Designated Federal Officer, National Geospatial Advisory Committee

Mr. John Mahoney, Alt. 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 September 7, 2022

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/may-2022/index https://www.fgdc.gov/nga

FGDC Update

• FGDC Update

Landsat Advisory Group

- USGS Report
- Landsat Advisory Group Update
- LAG 2021 Task 1 Paper

GDA Reporting

- GDA Reporting Update
- NGAC Comments on FY 2021 FGDC Summary of GDA Annual Reports

3DEP Subcommittee

- 3DEP Update
- USGS Program Update

Public-Private Partnerships / Stakeholder Engagement Subcommittees Joint Update

• Public-Private Partnerships / Stakeholder Engagement Subcommittees Joint Update

Climate Mapping Initiative

Climate Mapping Initiative

Taylor Geospatial Institute

• Taylor Geospatial Institute

COGO Assessment of the NSDI

COGO Assessment of the NSDI

NGAC 2022 Study Topics Discussion

- 2022 NGAC Study Topics Paper
- NGAC Study Topics Update