The National Geospatial Advisory Committee (NGAC) held a public meeting from 8:30 a.m. to 5:30 p.m. on March 17, 2015 and from 8:30 a.m. to 4:00 p.m. on March 18, 2015. The meeting was held at the South Interior Building in Washington, DC. In accordance with the requirements of the Federal Advisory Committee Act, the meeting was open to the public.

**NGAC Members present:**
Robert Austin (NGAC Chair)
Julie Sweetkind-Singer (NGAC Vice-Chair)
Keith Clarke
Patricia Cummens
Dave DiSera
Steve Emanuel
Joanne Gabrynowicz
Matt Gentile
Bert Granberg
Frank Harjo
Jack Hild
Michael Jones
Jeff Lovin
Roger Mitchell
Kevin Pomfret
Major General William Reddel III
Douglas Richardson
Anthony Spicci
Gary Thompson
Harvey Thorleifson
Molly Vogt
Jason Warzinik

Jennifer Gimbel, FGDC Chair, 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:**
Talbot Brooks
Steve Coast
Dan Cotter
Jack Maguire
Keith Masback
David Wyatt

**Other Attendees:**
David Alexander (DHS), David Beddoe (Intergraph Government Solutions), Wendy Blake-Coleman (EPA), Stephen Bryce (ESRI), Bill Burgess (NSGIC), John Byrd (MAAPS), Allen Carroll (ESRI), Ashley Chappell (NOAA Office of Coast Survey), Gene Dixon (Ardent MC), Matthew Falter (Intergraph Government Solutions),
Solutions), Lucia Foulkes (FGDC), Jim Geringer (ESRI), Sean Gorman (timbr.io), Travis Hardy (Ardent MC), Robin Hoban (Ardent MC), Kevin Hope (NGA), Jerry Johnston (DOI), Michel Kareis (GSA), Dennis Klein (BSI), Roxanne Lamb (FGDC), Tony Lavo (NOAA), Butch Lazorchak (LOC), Steve Lewis (DOT), Sophia Liu (USGS), Stephen Lowe (USDA), Vicki Lukas (USGS), Richard McKinney (DOT), John Moeller (Northrop Grumman), Gary Moll (Global Ecosystem Center), Charles Mondello (Pictometry), Tim Newman (USGS), Allyson Rennie (Intergraph Government Solutions), Denice Ross (DOE), Jennifer Runyon (USGS), Major Jeff Samon (NH National Guard), Ken Shaffer (FGDC), Vaishal Sheth (FGDC), Jon Sperling (HUD), Camille Touton (DOI), Dick Vraga (USGS), John Wertman (AAG)

Wednesday, March 17, 2015

Call to Order and Welcome
Dr. Robert Austin, NGAC Chair, called the public meeting to order at 8:30 a.m. and welcomed NGAC members and attendees. Dr. Austin provided an overview of the purpose, objectives and logistics of the meeting. Dr. Austin introduced Ms. Jennifer Gimbel, Principal Deputy Assistant Secretary for Water and Science, as the new FGDC Chair. In addition, he introduced Julie Sweetkind-Singer as the new NGAC Vice Chair. Dr. Austin provided a brief overview of the activities of the NGAC and the NGAC subcommittees.

Review and Adoption of December 2014 NGAC Minutes
Dr. Austin reviewed the draft minutes of the December 3, 2014 NGAC meeting and called for approval.

DECISION: The NGAC adopted the minutes of the December 3, 2014 NGAC webinar meeting.

Leadership Dialogue
Jennifer Gimbel, FGDC chair, provided an overview of FGDC activities and discussed administration priorities. Ms. Gimbel noted that the outreach and communication strategy is critical to enhancing the ability to reach out and promote two-way communication with partners and stakeholders. She discussed the recent GAO report, which was released in March 2015. She noted that FGDC was in general agreement with the recommendations in the report and is taking action to address the recommendations. She also discussed recent enhancements to the Geospatial Platform and thanked the NGAC for its contributions and advice on key issues.

FGDC Report
Ivan DeLoatch, FGDC Executive Director, provided an update on current FGDC activities. Highlights included the following:

- **2016 President’s Budget:** The budget proposal includes a proposed $11 million for the Climate Resiliency Toolkit.
- **NSDI Strategic Plan:** The FGDC is currently completing the FY 15 NSDI Implementation Plan, which will include final targets for FY 15 activities. The FGDC will also complete an FY 15 Status Report in FY 16 Q1 reporting on accomplishments for the year.
- **NGDA Management Plan:** Multiple activities are underway to implement the actions in the National Geospatial Data Asset (NGDA) Management Plan.
- **COGO Report Card:** Jennifer Gimbel, FGDC Chair, sent a message to COGO thanking them for compiling the Report Card document. FGDC looks forward to engaging with the COGO organizations on issues identified in the report.
- **GAO Report:** FGDC is working to address the recommendations in the recent GAO report, and may seek NGAC input on implementation issues.
- **FGDC Steering Committee Meeting:** An overview of the agenda for the March 19 Steering Committee meeting was presented.
• **2015 NGAC Member Appointment Process**: The FGDC will issue a call for nominations in Spring 2015 for the next round of appointments to the NGAC.

Jerry Johnston provided an update on current Geospatial Platform activities. He noted that a functional and operational helpdesk has been established. Other recent enhancements, tools, and capabilities of the Geospatial Platform were discussed.

John Mahoney provided an overview of the NSDI/Geospatial Platform Communication and Outreach Strategy. A task order to support the communication and outreach strategy was recently awarded to Ardent MC. The strategy will address components such as key audiences, key messages, outreach and training, and revised web presence. Next steps include obtaining feedback from the FGDC community and the NGAC on the components of the outreach and communication strategy.

**ACTION**: FGDC will issue call for nominations for next round of appointments to the NGAC in spring 2015. NGAC members are encouraged to share this opportunity widely through their professional organizations and networks.

**Outreach and Communications Subcommittee**

Bert Granberg, Outreach and Communications Subcommittee chair, provided an introduction of the subcommittee and led a discussion on goals, communication outlets, target audiences, and key messages that will be part of the communication and outreach strategy. The NGAC broke into discussion groups to address the following questions:

**Question 1**: Given the goal of an integrated communications plan (how all the pieces fit together) – what are the key elements? What will success look like? Why do we do geospatial technology in the federal sector? What is the message?

**Key comments**:
- On the message, the strategy should emphasize a National approach - not just Federal. The strategy should emphasize face-to-face interactions.
- Communicate that this technology enable people/organizations to do the job better and faster. Messaging to the non-geospatial community should avoid jargon. Instead of the term NSDI, use “geospatial data.”
- Inform the public, identifying problems and solutions. Customers need to know that geospatial information is being used.

**Question 2**: How can FGDC most effectively engage the NGAC and partner organizations in developing the plan and implementing it?

**Key comments**:
- Resources permitting, work with groups like COGO and others on a dedicated two-way dialog to work on an effective plan to spread the message to organizations.
- What advice can be provided to Ardent to implement the communication strategy? Need to cast our net more broadly, go beyond COGO.
- Need to talk to marketers.
- Think about the future, and look for engaging questions.

Next steps were summarized as follows:
- The subcommittee will meet with FGDC & contractor team
- Identify subcommittee tasks
- Develop project outline
**ACTION:** FGDC will seek input through the NGAC Outreach and Communications Subcommittee on the development of the NSDI/Geospatial Platform Outreach and Communications Strategy.

**Crowd-Sourced Geospatial Data**

Molly Vogt, Crowd-Sourced Geospatial Data Subcommittee Chair, led a panel discussion on Crowd-Sourced Geospatial Data. In introducing the session, Ms. Vogt provided background information on crowd sourcing and volunteered geographic information, and discussed the different types of sensors that can collect data. Ms. Vogt introduced three speakers who provided presentations on crowdsourced data approaches:

**Sophia Liu**

Dr. Sophia Liu, USGS Mendenhall Research Fellow, provided background on crowdsourced data initiatives. She noted the following definitions from the Federal Community of Practice for Crowdsourcing and Citizen Science:

- **Citizen Science** is a form of open collaboration where members of the public participate in the scientific process in ways that may include identifying research questions, making new discoveries, collecting and analyzing data, interpreting results, developing technologies and applications, or problem solving.
- **Crowdsourcing** is a process where individuals or organizations submit an open call for voluntary contributions from a large group of unknown individuals (“the crowd”) or, in some cases, a bounded group of trusted individuals or experts.
- **Crowd mapping** is a process where individuals or organizations submit an open call for volunteered geographic information (VGI) or information with an associated geographic location from volunteers to produce collaborative maps.

Dr. Liu discussed current USGS citizen science projects that included Nature’s Notebook, the “Did You Feel It” program, and other projects such as the National Map Corps, Tweet Earthquake Dispatch, iCoast, Hurricane Sandy Project, and Strategic Geo Sourcing, which she is currently working on.

**Denise Ross**

Denise Ross, Presidential Innovation Fellow at the Department of Energy, provided a presentation on Crowdsourcing for Disasters.

She began her presentation by noting that:

- People want to share information
- The government doesn’t have all the information people need
- People want to help fix their community after a disaster
- The government can’t fix a community on its own

Ms. Ross pointed out that this often provides a good scenario for collaboration between government and the public around data crowdsourcing. She discussed the role of public volunteers and the role of government in a virtuous circle of volunteered geographic information.

Case studies on Hurricane Katrina Hurricane and Sandy were presented to demonstrate how the government could foster and exercise a culture of innovation to be ready to collaborate with the community when disasters take place.

**Sean Gorman**

Dr. Sean Gorman, timbr.io, provided a presentation on the challenges of Crowdsourcing Multidimensional Data. Dr. Gorman noted that traditional geospatial workflows include data collection,
data processing & analysis, and production of data products. In this model, data’s full life cycle was monolithic; creating inherently authoritative data. Dr. Gorman discussed how crowdsourcing approaches are driving a fundamental shift in who is creating data. He discussed several models and examples, including the following:

- Authoritative data: Geography Network, OpenStreetMap, Geocommons, AGOL, ESRI Open Data
- Volunteered Geographic Information: OSM, Wikimapia, Waze
- Ambient Geographic Information: Twitter, Foursquare, Instagram, Fitbit, Strava, Google Traffic

He also discussed the tremendous growth in crowdsourced applications, provided examples of several current initiatives, and discussed approaches to data diversity.

Following the presentations, the NGAC members broke into table groups and had discussions based on the following questions:

- How do you see the emergence of crowd sourced data impacting or affecting your organization or sector?
- What do federal managers need to know about or be aware of regarding crowd-sourced data?

Following the break-outs, each group reported on their discussions. Key points included the following:

**Group 1:**
- Have the questions changed as crowd-sourcing is not new
- Liability – if you are using crowd-sourced information in a crisis and made decisions based on that information, is the government entity liable for taking action based on non-authoritative data?
- Discussed parallels like Good Samaritan laws Is there a way some protection could be involved?
- How best to develop credible information?
- Using statistical data and how to validate data
- Do we have best practices that can provide guidance to entities? We should learn what the community is doing on this regard.

**Group 2:**
- Define what can be crowd sourced
- May have hybrid models where we can pull the data from the best source
- People should be able to understand how the data was created and maintained
- What authoritative source could be used to get the best results
- Will crowd sourcing end up as supplemental data?
- The legalities of data and the authoritative nature of the data, and the legal constructs

**Group 3:**
- Broad agreement there is vast potential, but confusion about what different crowd sourced data might be, and what the implications are
- Challenges to find solutions include:
  - How to organize information
  - How to evaluate the quality
  - How to sustain it beyond the initial launch
  - What is really worth collecting
- Lots of different alternative data sets, how do we integrate these sources
- Legal issues, how do we protect the positive aspects while avoiding negative consequences
- Need to consider privacy issues, what are the legal requirements to guaranty privacy?
ACTION: As a follow-up to the panel discussion on crowd-sourced geospatial data, NGAC members should provide any additional questions to Molly Vogt, who will consolidate the questions and coordinate responses from the presenters.

Geospatial Privacy Subcommittee Report
Kevin Pomfret, Geospatial Privacy Subcommittee Chair, reported on recent subcommittee activities. He reported on the February meeting held by the CIO Council Privacy Committee. FGDC and NGAC members briefed the Privacy Committee on geospatial privacy issues. Topics addressed in the briefing included background on FGDC and the NGAC, key points on geospatial technology and information, emerging issues to consider, and concerns of the geospatial community. Key concerns conveyed in the meeting included:

- Embedded geospatial technologies and data are critical to existing and future functioning of the public sector, industry, and commerce
- Geospatial products and services are increasingly created using geospatial data from a variety of sources (Federal, State, local, Tribal, industry, crowd-sourced, etc.)
- Regulatory or statutory changes affecting geospatial privacy, if not carefully crafted, could have significant adverse impacts
- Geospatial community has not been actively involved in policy discussions related to geospatial privacy on policy discussions in relation to geospatial privacy.

Conclusions and next steps from the meeting were summarized as follows:

- Geospatial privacy is an emerging issue – needing collaboration & dialogue between privacy & geospatial communities
- Privacy community can utilize FGDC/NGAC as a resource for input/reaction on geospatial privacy issues
- Identify points of contact in respective organizations
- Identify follow-up study questions/additional information needed
- FGDC/NGAC glad to brief individual agencies on geo privacy issues
- Invite CIOC privacy subcommittee to meet with FGDC.

Mr. Pomfret noted that the discussion with the CIO Council Privacy Committee was very positive and productive. He noted that NGAC members were pleased with the opportunity engage with the Federal privacy community, and looked forward to continued engagement in the future.

NTIA Unmanned Aircraft Systems (UAS) Discussion
Bob Austin led a discussion on the National Telecommunications and Information Administration’s (NTIA) request for public comment related to the recent Presidential Memorandum “Promoting Economic Competitiveness While Safeguarding Privacy, Civil Rights, and Civil Liberties in Domestic Use of Unmanned Aircraft Systems (UAS).” He noted that the Memorandum directed NTIA to establish a multi-stakeholder engagement process to develop and communicate best practices for privacy, accountability and transparency issues regarding commercial and private UAS use.

Dr. Austin led a discussion of a proposed resolution expressing the NGAC’s interest in this issue and conveying the need to engage the geospatial community in the stakeholder engagement process. Following discussion of the proposed resolution, the NGAC agreed on the following actions:
DECISION: The NGAC approved the following resolution:

“The NGAC recommends that the FGDC work collaboratively with the National Telecommunications and Information Administration (NTIA) to ensure that the geospatial community is actively involved in the multi-stakeholder engagement process described in the February 2015 Presidential Memorandum “Promoting Economic Competitiveness While Safeguarding Privacy, Civil Rights, and Civil Liberties in Domestic Use of Unmanned Aircraft Systems.” The NGAC encourages the FGDC to work collaboratively with the NTIA to develop and communicate appropriate best practices for privacy, accountability, and transparency issues regarding commercial and private UAS use for data acquisition, while encouraging innovation and the development and deployment of appropriate technologies that benefit the nation and serve the scientific and economic missions of multiple agencies. The NGAC looks forward to providing input and suggestions to the FGDC to inform the multi-stakeholder process as it develops.”


Lighting Session 1
An opportunity for brief announcements was provided to NGAC members.

Jeff Lovin – UAVs
Mr. Lovin provided an overview of unmanned aircraft system (UAVs). He noted that many existing aviation regulations from the FAA do not effectively address issues posed by UAVs. He noted that his company, Woolpert, has received exemptions allowing UAV use, and has had to work with FAA on operational and technical issues to ensure that operations would be safe for the national airspace. Approvals are for a specific make and models.

Julie Sweetkind-Singer – Stanford Geospatial Search Engine EarthWorks
Ms. Sweetkind-Singer presented “EarthWorks,” Stanford University’s geospatial data discovery application. EarthWorks is a discovery tool for geospatial data. It allows users to search and browse the GIS collections owned by Stanford University Libraries, as well as data collections from many other institutions.

Gary Thompson – North Carolina State Lidar Initiative
Mr. Thompson provided an update on the North Carolina State Lidar Initiative.

Gary Thompson – NGS Datum Update
Mr. Thompson provided an update on new geometric and geopotential (vertical) datums. Both a new geometric and a new geopotential (vertical) datum are scheduled to be completed by 2022.

Day 1 Wrap Up/Planning for Day 2
The Chair made announcements regarding logistics for the next day’s meeting.

Adjournment for Day 1
The Chair adjourned the meeting at 5:30 p.m.
Wednesday, March 18, 2015 NGAC Public Meeting

Welcome & Review of Day 1
Dr. Austin reviewed the topics discussed on March 17.

Landsat Advisory Group Report
Jack Hild, Landsat Advisory Group (LAG) Chair, provided an update on the LAG activities that included:
- Summary of initial meetings with Chair, Co-chairs, and Federal program staff
- Discussion of collaboration with program staff to refine study questions
- Review of membership – added 2 new members

Tim Newman, USGS Land Remote Sensing Program Coordinator, gave an update of the Landsat Remote Sensing Program. He discussed the Sustainable Land Imaging Program (SLI) in the FY 16 President’s Budget proposal. A status on Landsat operations, including Landsat 7 and Landsat 8, was provided. Mr. Newman also discussed the 2015 guidance to LAG. The guidance topics address the following:
- USGS Land Remote Sensing Program (LRSP): provide suggestions for non-Federal data requirements
- Regarding Sentinel and new commercial smallsats and microsats: identify success non-Federal users are having with data access and delivery mechanisms, data-use policies, and data applications.
- Follow-up activities to 2013 LAG papers and recommendations.

Next steps:
- The USGS will provide briefings to LAG members on:
  - LRSP Requirements, Analysis, and Capabilities project. (Action 1)
  - USGS plans to archive and distribute Sentinel 2 data (Action 2)
  - EROS responses to observations and recommendations made in 2013 LAG papers (Action 3)
- Next LAG meeting – March 20

**ACTION:** USGS will provide a briefing for members of the Landsat Advisory Group (LAG) on March 20 regarding USGS activities and responses to previous recommendations by the LAG

3DEP Subcommittee Report
Vicki Lukas, USGS, provided an update on the 3D Elevation Program (3DEP). She noted that national Lidar data coverage supports issues of national significance. She pointed out that the 3DEP goal is to acquire Lidar across the nation on a continuous basis. A 3DEP Stakeholder Meeting will take place on April 15 at The National Surveying, Mapping and Geospatial Conference. The purpose of the meeting is to provide a status report to primary stakeholders and discuss strategies, challenges, and opportunities to fully implement 3DEP in collaboration.

Gary Thompson, 3DEP Subcommittee Chair, discussed the 2015 guidance and study questions, and provided a summary of the subcommittee’s activities:
- Program briefing at initial subcommittee meeting on 2-13-15
- Subcommittee assignments made to address 3 Study Questions:
  - Q1 - NAPA Report Recommendations
    - Harvey Thorleifson will take the lead on this question
    - Goal is to develop response for consideration at June NGAC meeting
- Q2 - 3DEP Data Acquisition Coordination
  - Jason Warzinik will take the lead on this question
  - Goal is to develop response for consideration at September NGAC meeting
- Q3 - Emerging Lidar Technology
  - Jeff Lovin will take the lead on this question
  - Goal is to develop response for consideration at September NGAC meeting

Next Steps:
- Further refine project outline per assignments
- Develop response for Q1 for consideration at June NGAC meeting
- Develop responses to Q2 & Q3 for consideration at September NGAC meeting

**ACTION:** FGDC/USGS will provide information to the NGAC on the series of public meetings on 3DEP requirements planned for May/June once the meetings are scheduled.

**COGO Report Card**

Bob Austin introduced a session to discuss the recently-issued Coalition of Geospatial Organizations (COGO) Report Card on the NDSI. John Wertman, Past Chair of COGO, provided introductory remarks giving an overview of the background and objectives of the Report Card project. He emphasized that the goal of the project was highlight the importance of the NSDI and to focus attention on the need to devote sufficient attention and resources on the NSDI as critical infrastructure. Mr. Wertman introduced Gov. Jim Geringer and John Moeller, two of the leaders of the expert panel that developed the report, to provide a presentation on the Report Card.

Gov. Geringer noted that COGO is comprised of thirteen national nonprofit organizations focused on geospatial technologies. He noted that COGO patterned the NSDI Report Card after the American Society of Civil Engineers (ASCE) Report Card for America’s Infrastructure, which highlights the status of the nation’s infrastructure. Work on the NSDI Report Card began in 2014 with the selection of the Expert Panel, which included experienced leaders in the geospatial community. In developing the report, the panel considered a number of factors, including the following:

- While there have been previous efforts, there still are no effective metrics to gauge progress in implementing the NSDI
- This Report Card is the first of a series of periodic Report Cards by COGO
- The Report Card does not include cost estimates for completing the NSDI or for bringing the Framework to a specified level
- The goal of this evaluation and report is to bring attention to the need for current and accurate geospatial data for the United States

The panel graded both the individual Framework Data Themes and the NSDI Framework as a cohesive effort. The grades were based on criteria modeled on the criteria used by ASCE) Report Card. Gov. Geringer and Mr. Moeller summarized the grades and evaluations in the Report Card, including the individual Framework Data Themes and the NSDI Framework as a whole. They also discussed the conclusions in the Report Card, including the following:

- The Framework requires attention
- There have been many positive actions in the implementation of the NSDI Framework.
- The original vision and the greatest potential value of the NSDI Framework have not yet been fulfilled.
- Current representations exist as seven separate themes rather than a fully integrated system
Gov. Geringer and Mr. Moeller also discussed the recommendations in the report, including the following:

- The concept of the Framework needs to be reaffirmed.
- A new model for Framework data needs to be adopted, and this new model must acknowledge the importance of local partners.
- This model should be transaction based and emphasize the use of current information technologies, federated, and web-based capabilities; and support web-based services and applications.
- The Federal Geographic Data Committee (FGDC) needs to emphasize that the Framework is part of its Strategic Plan, and that it will work in collaboration with non-federal and non-governmental partners to build an effective NSDI Framework.
- In today’s environment the most accurate and current geospatial data are often collected by local government. A successful NSDI demands that these high resolution data become part of the Infrastructure.
- Budgetary and leadership investments must be made to implement a new model.

Following the presentation, the NGAC members engaged in a discussion with the panel members on the issues raised in the Report Card. Dr. Austin and Mr. DeLoatch thanked the COGO representatives for the presentation and for their work on this initiative.

**Public Comment Period**
An opportunity for members of the public to provide comments to the Committee was provided.

**Bill Burgess, NSGIC**
Mr. Burgess gave a brief talk and observations on the COGO Report Card.

**Dennis Klein, BSI**
Mr. Klein discussed a concept called 2Maps, a national climate change reversal resettlement model. This would involve implementing National parcel-level map layers defining Walk and Transit potential. Mr. Klein indicated that this approach could contribute to climate change reversal by expediting smart growth and sustainable community development to reduce automobile dependency. Mr. Klein also discussed possible development steps.

**John Byrd, MAAPS/NSPS**
Mr. Byrd announced the 2015 National Surveying and Mapping Conference, Collaboration: The Map of the Future. He pointed out that the National Geodetic Survey (NGS) will host a summit meeting, and that the U.S. Geological Survey will hold a 3D Elevation Program stakeholder meeting, as a part of the conference. Mr. Byrd encouraged NGAC members to share information about the conference with colleagues and partners.

**Subcommittee Work Session & Debrief – Subcommittee Chairs**
The NGAC members broke out into subcommittee break-out groups to discuss activities, address guidance and/or study questions, and discuss next steps and potential deliverables for June meeting.

**ACTION:** The NGAC discussed the following approach for the 2015 NGAC Subcommittees:
- Subcommittees refine 2015 work plans
- Subcommittees provide status reports at June NGAC meeting
- Subcommittees develop draft papers by September NGAC meeting
- Subcommittees develop final draft papers prior to the December NGAC meeting
Lightning Session 2
This session provided the opportunity for NGAC and FGDC members to give brief talks on topics of interest to the committee.

Bert Granberg
Mr. Granberg discussed current activities at the Utah Automated Geographic Reference Center (ARGC).

Steve Lewis – National Address Database Summit
Mr. Lewis provided an update on the National Address Database Summit that will take place on April 8-9 at the Conference Center at the Maritime Institute in Linthicum Heights, Maryland. Mr. Lewis noted that the goal of the summit is to identify the possible alternatives for developing a NAD with the pros and cons of each alternative based on real case examples that are currently in place. Participants include representatives from federal agencies, state governments, local governments, private sector and nonprofit organizations.

Gary Thompson – Update on NGS Webinar
Mr. Thompson reported on the recent webinar presentation made by Juliana Blackwell of the National Geodetic Survey (NGS) on the 2022 Datum Modernization efforts.

Douglas Richardson – Announcements
Dr. Richardson reported that the Association of American Geographers has partnered with ESRI to create a National Geomentors program that will assist in the implementation of ESRI’s software gift to K-12 schools across the country. He also noted that the No Child Left Behind Bill is ready for reauthorization, providing an opportunity to emphasize the importance of geography education. He also indicated that the U.S. Geological Survey is working with partners to create a map of global ecological land units. The project will be launched at the AAG Conference in Chicago in April 2015.

Review Action Items, Decisions & Next Steps
The results and actions from the meeting were reviewed. The next NGAC meeting is scheduled for June 9-10, 2015 in Washington, DC. Additional information will be provided prior to the meeting.

Meeting Adjournment
The Chair adjourned the meeting at 4:00 p.m.

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

Dr. Robert Austin, 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 June 9, 2015
March 2015 NGAC Meeting
Summary of Presentations and Handouts

The following is a list of the presentations and handouts from the meeting. These meeting materials are posted along with the minutes at: https://www.fgdc.gov/ngac/meetings/march-2015/index_html

NGAC Update
- State of the NGAC – Chair Comments

FGDC Update
- FGDC Report
- Geospatial Platform Update
- NSDI/Geospatial Platform Communication Overview

Communication & Outreach Subcommittee
- Communication & Outreach Subcommittee Update

Crowdsourced Geospatial Data – Spotlight Session
- Empowering Citizens to Ground Truth Science – Sophia Liu
- Crowdsourcing for Disasters – Denice Ross
- The Challenges of Crowdsourcing Multidimensional Data – Sean Gorman

Geospatial Privacy Subcommittee
- FGDC NGAC Geospatial Privacy Presentation – February 2015
- Geospatial Privacy Subcommittee Report
- NGAC UAS Discussion

Landsat Advisory Group
- Landsat Advisory Group Status Report
- Landsat Program Update

3D Elevation Program (3DEP) Subcommittee
- 3DEP Subcommittee Update
- 3DEP Program Update

COGO Report Card
- COGO NSDI Report Card Presentation

NGAC Member Lighting Sessions
- UAV Activities – Lovin
- Stanford EarthWorks Search Engine – Sweetkind-Singer
- North Carolina Lidar – Thompson
- Utah Geospatial Activities – Granberg
- National Address Database Summit – Spicci/Lewis
- Datum Modernization – Thompson