

**NATIONAL GEOSPATIAL ADVISORY COMMITTEE MEETING**  
**March 17-18, 2011**  
**Minutes**

The National Geospatial Advisory Committee (NGAC) held a public meeting from 1:00 p.m. to 5:15 p.m. on March 17, 2011 and from 8:30 a.m. to 4:00 p.m. on March 18, 2011. The meeting was held at the American Institute of Architects (AIA) in Washington, DC. In accordance with the requirements of the Federal Advisory Committee Act, the meeting was open to the public.

**NGAC Members present:**

David Cowen (Chair)

Jerry Johnston (Vice-Chair)

Robert Austin

Richard Clark

Jack Dangermond

David DiSera

Joanne Gabrynowicz

Kass Green

Barney Krucoff

Laurie Kurilla

Xavier Lopez

E. Donald McKay

Anne Miglarese

Kimberly Nelson

Matthew O'Connell

Jack Pellicci

Mark Reichardt

Cynthia Salas

Eugene Schiller

Anthony Spicci

Gary Thompson

Gene Trobia

David Wyatt

**NGAC Members not present:**

Sophia Beym

Timothy Nyerges

Randy Johnson

Patrick Olson

Ivan DeLoatch, Designated Federal Officer (DFO) for the NGAC, and Karen Siderelis, Geospatial Information Officer (GIO) for the Department of the Interior, were also in attendance.

**Other Attendees:**

Myra Bambacus (NASA), Wendy Blake-Coleman (EPA), Nancy Brelas (Pictometry), Bill Burgess (NSGIC), John Byrd (MAPPS), Pat Cummins (ESRI), Wei Du (CoreLogic), Erin Engle (Library of Congress), Brady Foust (CoreLogic), Randy Fusaro (Census), Tricia Gibbons (Lead Alliance), Steven Jackson (NGA), Dennis Klein (Boundary Solutions), Jim Kwolek (NGA), Roxanne Lamb (FGDC), Steve Lewis (DOT), Yuanjie Li (NOAA), Stephen Lowe (USDA), Arista Maher (FGDC), John Mahoney (FGDC), Jeremy McHugh (NOAA), Joshua Murphy (NOAA), Sarah O'Connor (NOAA), Sheri Phillips (NOAA), Ken Shaffer (FGDC), Howard Shuster (CoreLogic), Laurence Socci (ACSM), Patricia Solano (KTS), Larry Sugarbaker (USGS), Gita Urban-Mathieux (FGDC), Steve Wallach (GeoEye)

**THURSDAY, MARCH 17:****Call to Order and Welcome**

Ivan DeLoatch, NGAC Designated Federal Officer (DFO) called the public meeting to order at 1:00 p.m., welcomed the National Geospatial Advisory Committee members and audience to the meeting, and summarized the meeting agenda. Mr. DeLoatch introduced Anne Castle, the Assistant Secretary for Water and Science at Interior, and Andrew Jackson, the Deputy Assistant Secretary for Information Technology and Business Services at Interior.

**Leadership Dialogue**

Ms. Castle addressed the NGAC membership and welcomed the new Chair, Dr. David Cowen, and the new Vice Chair, Dr. Jerry Johnston. She presented them with letters signed by Secretary of the Interior Ken Salazar appointing them to these positions.

Ms. Castle noted that in her role as Assistant Secretary, she oversees the Bureau of Reclamation and U.S. Geological Survey. She said that Secretary Salazar has been focused on five major priorities and all of these priorities have science and geospatial components as key undepinnings. The five areas are:

- Developing a new energy frontier
- Empowering Tribal nations (including entering into historic Indian water rights settlements)
- Balancing clean water supplies across the nation (including water conservation and incentivization of water recycling)
- Preserving our treasured landscapes (including the America's Great Outdoors initiative, established by President Obama)
- Youth Initiatives (including initiatives that involve kids in the outdoors and support environmental and resource education). This priority is related to the First Lady's *Let's Move Outside* initiative and also to Science, Technology, Engineering, and Mathematics (STEM) education priorities.

Ms. Castle summarized that scientific data and information, such as geospatial information, are key components in addressing all of these priorities. She emphasized that Secretary Salazar is committed to using unbiased and sound data in addressing the DOI priorities.

Ms. Castle also noted that the President's 2012 budget includes \$48 million for a National Land Imaging program to continue the Landsat missions. Landsat furthers the Department of the Interior's important

role in land and remote sensing under the President's National Space Policy and provides invaluable data for land use, climate change research, and a host of other uses.

Ms. Castle told the Committee that DOI leadership intends to utilize the committee as completely as possible. She noted that the NGAC includes accomplished leaders representing multiple disciplines and stakeholders, and that she looked forward to hearing new ideas and fresh perspectives to the challenges facing in the federal government.

Ms. Castle noted that the guidance that was provided for the committee's activities is well aligned with the goals and objectives of the Department and the Obama Administration. Ms. Castle also identified specific topics where Interior would particularly like to have feedback from the NGAC, including the following:

- Concrete advice on how to build a robust data integration platform
- Advice on how to leverage public-private partnerships to fill critical data gaps and leverage scarce resources

Mr. Jackson also addressed the Committee and welcomed the new Chair and Vice Chair and the other new committee members. He also thanked outgoing Chair Anne Hale Miglarese and outgoing Vice Chair Steve Wallach for their dedicated and effective service and continued involvement in the NGAC.

Mr. Jackson spoke about the "stovepiping" of geospatial information across agencies and the need for better sharing of information. He noted that geospatial information should be more easily accessible and leveraged. The ultimate goal is a Geospatial Platform that can be a useful resource in allowing users to access geospatial data and other tools. Mr. Jackson also spoke about the Landsat initiative and summarized recent activities related to the Geospatial Platform, including discussions with GSA.

#### **Meeting Start-Up**

The new NGAC Chair, Dr. David Cowen, reviewed the agenda and the objectives and purpose of the meeting. Dr. Cowen noted that an opportunity for public comment would be provided during the morning of March 18. Members of the public were asked to sign up if they would like to comment.

#### **Review and Adoption of December 2010 Meeting Minutes**

Dr. Cowen reviewed the draft minutes of the December 2010 NGAC meeting and called for approval.

**DECISION:** The NGAC adopted the minutes of the December 2010 meeting.

#### **NGAC Bylaws**

**ACTION:** NGAC members will provide any comments on the current NGAC bylaws by April 8, 2011

#### **Member Introductions**

Members and observers were asked to introduce themselves to the Committee.

## **State of the NGAC**

Dr. Cowen and Dr. Johnston provided an overview of NGAC activities and highlighted recent products and accomplishments of the NGAC. Dr. Cowen reviewed the mission and vision of the NGAC, and provided a summary of key activities and recent products. Dr. Johnston spoke about the necessity of the NGAC having a “bias towards action.” He noted that the NGAC has made good on this promise, but highlighted the need to continue this work. Some of the issues he would like NGAC to focus on in this term include: actionable ideas related to partnerships; shared infrastructure across state governments and the Federal government; national coverage of core geospatial data; and raising awareness of gaps in key datasets.

## **Perspectives from USGS Leadership**

Kevin Gallagher, the Associate Director for Core Science Systems at USGS, addressed the NGAC. He provided an overview of the USGS Science Strategy, the recent USGS reorganization, and the role that geospatial information will play in meeting USGS, DOI, and government-wide goals. The Science Strategy outlines major natural-science issues facing the Nation and focuses on areas where natural science can make a substantial contribution to the well being of the Nation and the world. These areas include global climate change, water resources, natural hazards, energy and minerals, ecosystems, and data integration. The recent USGS reorganization aligns the organization with the interdisciplinary focus areas within the Science Strategy. The new mission areas under the reorganization are:

- Climate and Land Use Change
- Core Science Systems
- Ecosystems
- Energy and Minerals, and Environmental Health
- Natural Hazards
- Water

Mr. Gallagher noted that USGS has long-standing partnerships with many of the organizations represented on the NGAC, and that he looks forward to building on these relationships through the NGAC.

## **FGDC Report**

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

### Geospatial Line of Business and Geospatial Platform

The Geospatial Platform Modernization Roadmap V4 was submitted to OMB in March 2011. FGDC agencies are having discussions with OMB and GSA about the role and location for a Geospatial Platform Managing Partner. FGDC has established a Platform Technical Development Task Team (TDTT) which will recommend a path forward for implementation of Platform common services and shared infrastructure. TDTT recommendations will include a notional technical architecture, and candidate solutions architecture(s). Mr. DeLoatch also discussed the redesign of the Geospatial Platform website.

#### A-16 Supplemental Guidance

The FGDC is working with OMB to prepare implementation plan to agencies on how to comply with the Supplemental Guidance. The FGDC also plans to select a portfolio management pilot for the FY13 budget process.

#### Federal Trade Commission (FTC) Privacy Report

The recent Draft FTC Staff Report: "Protecting Consumer Privacy in an Era of Rapid Change: A Proposed Framework for Businesses and Policymakers" addressed the issue of "Precise Geolocation Data" but did not offer a clear definition of its meaning. The NGAC discussed the report at the December NGAC meeting and recommended that FGDC collaborate with FTC to seek clarification of language and avoid unintended consequences. The FGDC Secretariat submitted comments to FTC, which are posted at:

<http://www.ftc.gov/os/comments/privacyreportframework/00354-57961.pdf>. The FGDC Secretariat is working with FTC staff to arrange follow-up dialogue on the geolocation privacy issue.

#### Imagery for the Nation (IFTN) Request for Information

Current activities related to Imagery for the Nation (IFTN) were reviewed. The National Geospatial-Intelligence Agency sponsored a Request for Information (RFI) to gather additional information about IFTN, and the FGDC Executive Committee continues to deliberate on the future direction of IFTN.

#### Geospatial Standards

The FGDC has endorsed the ***United States Thoroughfare, Landmark, and Postal Address Data Standard***. The Standard provides a data content, classification, quality, and exchange standard for thoroughfare, landmark, and postal addresses, and for address reference systems. In addition, the FGDC Standards Working Group and Geospatial Intelligence Standards Working Group (SWG) are working toward coordinating their standards processes for common standards across the military, intelligence, and civil spaces. The goals of this effort include:

- Working towards a single set of common geospatial standards for use across the Federal government
- Establish common framework for cross domain capabilities
- More efficiently leveraged resources and reduce duplicative assessments processes between sectors
- Reduce overall standards review time.

#### **FGDC Guidance to NGAC**

Karen Siderelis provided an overview of the 2011 guidance to the NGAC from the FGDC and the Department of the Interior. The primary components of the guidance are as follows:

- Innovative Strategies for Geospatial Programs and Partnerships
- Geospatial Platform
- Geospatial Workforce Development
- Emerging Technologies

- Geospatial Partnerships with Tribal Governments
- Feedback on Specific Programs/Initiatives

Following Ms. Siderelis' presentation, members of the FGDC Executive Committee engaged in a dialogue with the NGAC about the new guidance.

### **Day 1 Wrap-Up/Planning for Day 2**

The Chair summarized the day's activities, made announcements regarding plans for Day 2 of the meeting.

### **Adjournment for Day 1**

The Chair adjourned the meeting at 5:15 p.m.

## FRIDAY, MARCH 18

### **Welcome, Summary of Day 1, Overview of Agenda**

The Chair convened the second day of the meeting at 8:30 a.m., reviewed the previous day's activities, and provided an overview of the agenda for the day.

### **Landsat Recommendations**

Kass Green presented a draft recommendation on the National Land Imaging Program (Landsat) as a follow-up to the discussion with Anne Castle. The draft recommendation was drafted by a team that included Ms. Green, Joanne Gabrynowicz, Barney Krucoff, and Tony Spicci. Members were asked to review the draft and provide feedback later in the meeting.

### **Interagency Data Sharing Spotlight Session**

Robert Austin introduced and moderated a panel discussion on Interagency Data Sharing. The objectives of the discussion were to identify best practices and lessons learned from interagency data sharing and coordination partnerships, and to discuss success factors that may apply to the implementation of the Geospatial Platform. The session included the following presentations:

#### Multi-Agency Collaboration Environment (MACE)

Bob Piccerillo from the Department of Defense (DOD) presented on the Multi-Agency Collaboration Environment (MACE). MACE's mission is to protect the Nation by leveraging the power of information to achieve cross-agency interoperability, collaboration and shared awareness. MACE's goals are to achieve greater levels of situational awareness and enable more accurate and timely decision making across the DoD and Federal Agencies; and to accelerate the interoperability, policy, and security advancements needed to meet the future security and integration challenges that the U.S. will encounter in the coming years.

#### Homeland Infrastructure Foundation-Level Data (HIFLD) Working Group

Todd Spangler from the Department of Homeland Security (DHS) presented on HIFLD. HIFLD is a voluntary coalition of Federal, state, and local government organizations and supporting private

industry partners involved with geospatial issues related to Homeland Defense, Homeland Security, Emergency Preparedness and Response, and Civil Support activities. The community involved in HIFLD is diverse; there are over 3,900 contributing partners. The primary Federal partners are NGA, DHS, DoD, and USGS. The HIFLD Working Group was established in 2002 to address desired improvements in collection, processing, sharing, and protection of homeland infrastructure geospatial information across multiple levels of government. The objective of HIFLD is to support domestic infrastructure data gathering, sharing, and protection, visualization, and spatial knowledge management or homeland defense, homeland security and emergency preparedness, response and recovery communities.

#### Digital Coast

Joshua Murphy of the NOAA presented on the Digital Coast initiative. The Digital Coast is a community-driven enabling platform initiated by the NOAA Coastal Services Center for use by those organizations that manage the nation's coastal resources. It was developed to address the needs of its users by providing a simplified way to access geospatial data and the tools and methods to turn that data into information that is used. The Digital Coast partnership includes multiple national, state, and local organizations involved in coastal data issues. This group has been instrumental in building the Digital Coast on a collaborative basis.

The NGAC members engaged in a wide-ranging discussion with the panel members about their initiatives and about best practices and success factors for data sharing. The NGAC agreed on the following actions:

**ACTION:** NGAC Members will provide brief list of best practices and barriers related to interagency data sharing to Bob Austin, John Mahoney and Tricia Gibbons by March 25.

**ACTION:** NGAC task team will draft a summary of best practices and success factors from current interagency data sharing initiatives, including MACE, HIFLD, and Digital Coast. The summary is meant to inform the ongoing development of the Geospatial Platform.

#### **Subcommittee Reports**

Updates on recent NGAC subcommittee activities were given by the subcommittee Chairs, including the following:

#### Geospatial Platform

Jerry Johnston provided an update on the progress of the Geospatial Platform. He provided a brief recap of the background and progress to date on the Platform initiative, and discussed current activities and next steps. Mr. Johnston indicated that FGDC is collaborating with GSA on a Statement of Work for Platform-related enhancements to Data.gov. Funding for this work is being transferred to GSA for procurement. He also summarized the enhancements that the Data.gov work will entail, including enhanced catalog search capability, spatial visualization of existing map services and catalog metadata, and improved harvesting with geospatial intelligence.

#### Workforce Development Subcommittee

David DiSera provided an update on the activities of the Workforce Development Subcommittee. The subcommittee's purpose is to provide recommendations on approaches to develop intergovernmental and public-private strategies to facilitate the development, training, and retention of a highly skilled workforce to meet the expanding geospatial needs of the public and private sectors. The subcommittee's primary activities in 2010 included researching current and future needs and assessing existing resources and research. The subcommittee's activities in 2011 will include identification of best practices and defining the gap between "need" and existing or projected workforce.

#### Emerging Technologies Subcommittee

As part of the Emerging Technologies Subcommittee's report, Dick Clark provided a report on the status of the Multi-State GIS Cloud Computing initiative. A consortium of Western States, led by Montana, recently issued a Request for Information (RFI) for GIS Cloud Computing services. The objectives of the RFI included achieving cost efficiencies, providing flexibility and scalability, and reducing support costs. The State of Montana received 23 responses to the RFI and 80% of the respondents met the minimum requirements. Next steps include appointing a RFP team and lead State, developing and issuing an RFP, developing a governance structure, and continuing to work with other jurisdictions.

### **Public Comment Period**

#### Dennis Klein, Boundary Solutions

Mr. Klein provided comments on national parcel data, the impacts of the financial crisis, and opportunities to utilize parcel data to address the mortgage crisis and other societal issues.

#### Dave Cowen

Dr. Cowen provided a summary of a report submitted by Dr. Tim Nyerges on the UCGIS Place-based Summit, which was held in Washington, DC on February 3-4, 2011. The meeting covered multiple aspects of place-based policies, including workforce development, HUD programs, and a proposed place-based geospatial extension program. Dr. Cowen also noted that the National Science Foundation (NSF) has a solicitation for grants related to cyber infrastructure, and a number of UCGIS members have formed a coalition and submitted a proposal for a national network of GIS nodes.

### **FGDC Guidance to NGAC**

The objective of this session was to discuss the NGAC guidance and the development of the NGAC Plan of Action for 2011. To initiate the discussion, Dr. Cowen reviewed the key elements of the 2011 FGDC Guidance to the NGAC. The NGAC members then broke into groups to discuss different aspects of the guidance and the NGAC's activities for 2011. The results were reported out as follows:

Geospatial Programs and Initiatives (Kass Green, Don McKay, Anne Miglaresse, Gary Thompson, Gene Trobia, and David Wyatt)

Anne Miglaresse presented the recommendations from this group. The group recommended that NGAC Points of Contact (POCs) be established for key Federal geospatial programs and initiatives. The role of the POCs (in coordination with the Designated Federal Officer) would be to keep NGAC members updated on key program activities, and notify the NGAC Chair and DFO if the program or initiative would like to solicit feedback or bring an issue to the NGAC for review. The NGAC concurred with this approach and agreed on the following action:

**ACTION:** The NGAC will designate members to serve as Points of Contact (POCs) for several Federal geospatial programs. The NGAC Designated Federal Officer (DFO) will contact federal agency program leads to introduce NGAC Points of Contact and describe their roles.

The NGAC also had a follow-up discussion on the draft recommendations related to the National Land Imaging Program (Landsat). The NGAC approved the following recommendation:

**RECOMMENDATION:**

- The NGAC strongly supports the establishment of the National Land Imaging Program as described in the Administration's FY 2012 budget proposal and we encourage the Department of the Interior to implement the program as soon as possible.
- NGAC looks forward to providing advice to the Department on the development and implementation of the program.
- This recommendation is made in the context of a more comprehensive multi-agency, multi-resolution, multi-sensor imagery program for the nation.

Geospatial Workforce Development (Dave DiSera, Joanne Gabrynowicz, Cindi Salas, and Gary Thompson)

Dave DiSera presented for the Geospatial Workforce group. They spoke about continuing the subcommittee with new members. One major area the subcommittee hopes to focus on in 2011 relates to the STEM (science, technology, engineering, and math) education opportunities discussed by Anne Castle. The subcommittee will examine opportunities for synergies with STEM. The subcommittee will also continue to focus on opportunities to utilize the geospatial competency model.

Emerging Technologies (David Cowen, Xavier Lopez, and Mark Reichardt)

Xavier Lopez presented on Emerging Technologies. The group identified a preliminary list of technology issues that should be assessed, particularly as they relate to the Geospatial Platform. The list included the following topics:

- 3D processing
- Real-time sensors
- Crowd-sourcing middleware
- Reconciliation of vocabularies and semantics in metadata
- Adoption of formal standards in the Geospatial Platform, including OGC, W3C, and Gap Analysis standards.

Next steps include filtering and prioritizing the next phase of work and receiving additional guidance from NGAC, FGDC, USGS, and DOI. Discussion questions posed to the Committee included: What additional Emerging Technologies should be explored? What type of investigation is warranted (white paper, best practices, prototype, etc.)?

Intergovernmental Subcommittee – Geospatial Platform Implementation (Bob Austin, Jerry Johnston, Barney Krucoff, Anne Miglarese, Cindi Salas, and Gene Schiller)

Jerry Johnston gave a summary of the Geospatial Platform discussions. The group talked about the architectural overview and shared infrastructure and data models. They also discussed specific items the NGAC could potentially address. These included: refocusing the data sharing best practices to make them more specific to the Platform; assisting FGDC with the business plan for the Geospatial Platform; and going beyond visualization (how to further the concept of the workbench in the initial version of the Platform and how to achieve the vision described by Anne Castle.)

Innovative Strategies, Programs, and Partners (David DiSera, Laurie Kurilla, Mark Reichardt, and Tony Spicci)

Dave DiSera presented on Innovative Strategies for Geospatial Programs and Partnerships. Next steps include: reviewing previous work of the NGAC; reviewing data sharing efforts (such as MACE, Digital Coast, and HIFLD) to look for opportunities for replication; reviewing the GITA Data Sharing Process document; and expanding the concept of data sharing to include information and derivative products such as web services. The deliverable will be a best practices white paper on data sharing and data integration partnerships.

Partnerships with Tribes (David Wyatt)

David Wyatt briefly presented on Partnerships with Tribes. He explained that tribes are very involved in GIS, and it is important to maintain proactive partnerships.

**NGAC Plan of Action**

**ACTION:** The NGAC Chair, Vice-Chair, and DFO will synthesize the comments and feedback provided by NGAC members at the March NGAC meeting and develop a draft Plan of Action for the Committee's activities in 2011. The Plan of Action will address the priorities identified in the NGAC guidance and will include a set of subcommittees and task teams to accomplish the tasks. Based upon member's areas of interest, the Chair, Vice-Chair, and DFO will assign subcommittee and task team membership.

**Lightning Sessions/Community Announcements**

The intent of this agenda item was to allow members an opportunity to present announcements and key geospatial community initiatives to their colleagues on the Committee.

Kass Green provided a report on the new "ChangeMatters" Landsat viewer. This new web-based Landsat viewer application developed by ESRI allows users to view land change maps drawn from Landsat imagery. She gave a demonstration of the application, highlighting its land change viewing features.

Tony Spicci gave a presentation on the Coalition of Geospatial Organizations (COGO). COGO is a coalition of 16 national professional societies, trade associations, and membership organizations in the geospatial field, representing more than 30,000 individual producers and users of geospatial data and technology. COGO has been in existence for two years. They have taken positions on significant issues including the FTC Privacy Report and the STEM initiative. COGO is also working to establish a geospatial report card. They are assembling a panel of experts who will help develop the criteria. They are looking at *national* geospatial infrastructure for the report card, not just Federal.

Gene Trobia gave a presentation on the results of the NSGIC mid-year meeting, including a summary of the NSGIC advocacy agenda. The agenda includes the following components: developing a consolidated national Addresses Point file to reduce duplication of effort; “For the Nation” Initiatives to reduce duplication, sharing costs and sustaining jobs at all levels of government; new technology for effectiveness and efficiency (i.e., the Geospatial Platform); and inclusive governance of national geospatial programs.

Jack Dangermond gave a presentation on the Russian Public Cadaster Portal. Russia’s “Rosreestr” is the Federal Agency for Property Registration, Cadaster and Mapping. They are creating a public-oriented GIS, and the public cadaster portal is currently in production. A demonstration of the public cadaster maps from the Rosreestr agency was shown. A user can perform parcel searches by address, as well as address searches. It covers 70% of Russia’s territory, and includes 80 million parcels. There are over 12,000 users a day and there were 700,000 transactions in 2010, and 10 million transactions in 2011. They are working with Microsoft to put this data in the cloud. Free services include: parcel cadaster number and address; land status; parcel area; land use/zoning category; parcel/property cadaster price (assessed value); parcel/property statement on-line (for reference purposes); and contact information of a local land administration. Paid services include authoritative cadaster statements; property rights register statements; and digital signatures.

Kim Nelson gave a brief presentation about cloud computing and energy savings. Microsoft recently commissioned a report by Accenture that identifies significant environmental and energy savings of cloud computing.

#### **Meeting Summary/Wrap-Up**

The Chair and staff summarized action items and decisions from the meeting and provided information about the next scheduled NGAC meeting.

**Next Meeting**

The next NGAC meeting is planned for June 8-9, 2011 in Washington, DC. Potential agenda topics include the following:

- NGAC Plan of Action
- NGAC Subcommittee reports
- Follow-up on Geospatial Platform initiative
- Implementation of new HMDA parcel data requirements
- Transportation for the Nation (TFTN) strategic plan

**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.

David Cowen, Chair, National Geospatial Advisory Committee

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 8, 2011***

## **March 2011 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: [http://www.fgdc.gov/ngac/meetings/december-2010/index\\_html](http://www.fgdc.gov/ngac/meetings/december-2010/index_html)

### **State of the NGAC**

- State of the NGAC Presentation

### **FGDC Report**

- FGDC Update

### **FGDC Guidance to NGAC**

- 2011 FGDC Guidance to NGAC
- NGAC Guidance Overview
- NGAC Guidance Discussion

### **Interagency Data Sharing Spotlight Session**

- Interagency Data Sharing Overview – Austin
- Multi-Agency Collaboration Environment (MACE) – Piccerillo
- Homeland Infrastructure Foundation-Level Data (HIFLD) Working Group – Spangler
- Digital Coast – Murphy
- Interagency Data Sharing Best Practices – Austin

### **NGAC Emerging Technologies Subcommittee**

- Multi-State GIS Cloud Computing RFI

### **NGAC Workforce Development Subcommittee**

- Workforce Development Subcommittee Update

### **NGAC Intergovernmental Subcommittee**

- Intergovernmental Subcommittee Update – Geospatial Platform

### **National Land Imaging Program – Landsat**

- National Land Imaging Program – Landsat Recommendation

### **Local Government GIS Best Practices**

- NGAC Local Gov GIS Best Practices Paper
- NGAC Local Gov GIS Best Practices Flyer

### **Lightning Sessions**

- COGO Update – Spicci
- NSGIC Update – Trobia
- Russian Public Cadaster Portal – Dangermond