National Geospatial Advisory Committee Overview

Dr. David Cowen, NGAC Chair

FGDC Steering Committee Meeting
June 7, 2011
Outline

- Relationship between NGAC and FGDC
- Who are we?
- How are we organized?
- What have we accomplished?
- How can we help?
- Suggestions
- Q & A
Lots of Proposed Governance Models
Current Model

Figure: Overview of the structure of the various components of the FGDC

National Geospatial Advisory Committee
National Geospatial Advisory Committee

David Cowen, Chair
University of South Carolina

Jerry Johnston, Vice Chair
Environmental Protection Agency

Robert Austin
City of Tampa, FL

Richard Clark
State of Montana

Jack Dangermond
ESRI

David DiSera
EMA, Inc.

Joanne Irene Gabrynowicz
University of Mississippi

Kass Green
Kass Green & Associates

Randy Johnson
Hennepin County, Minnesota

Barney Krucoff
District of Columbia

Laurie Kurilla
Ventura County, CA

Xavier Lopez
Oracle USA

E. Donald McKay
State of Illinois

Anne Hale Migliarese
Booz Allen Hamilton

Kimberly Nelson
Microsoft Corporation

Timothy Nyerges
University of Washington

Matthew O’Connell
GeoEye

Patrick Olson
Aero-Metric, Inc.

Jack Pellicci
Intergraph Corporation

Mark Reichardt
Open Geospatial Consortium

Cynthia Salas
CenterPoint Energy

Eugene Schiller
S.W. Florida Water Management District

Anthony Spicci
State of Missouri

Gary Thompson
State of North Carolina

Gene Trobia
State of Arizona

David Wyatt
Eastern Band of Cherokee Indians

Ivan DeLoatch
NGAC Designated Federal Officer (DFO)
Federal Geographic Data Committee

June 2011
Distribution of NGAC Members - 2011
NGAC Purpose

- The Committee will provide advice and recommendations on federal geospatial policy and management issues and provide a forum to convey views representative of partners in the geospatial community.

- Under Federal Advisory Committee Act rules, will function solely as an advisory body, providing recommendations on effective management of Federal geospatial programs. In particular, it will provide advice on the development of the National Spatial Data Infrastructure (NSDI).

*NGAC Charter
NGAC Mission

To provide strategies regarding the creation, management and dissemination of cohesive geospatial data, information and knowledge to enable commercial, academic, and nonprofit organizations and all levels of government to more effectively:

- empower and serve the public
- protect our homeland
- foster economic growth
- advance science
- manage our resources
- prepare for and respond to emergencies
- govern our nation

* Adopted by NGAC, June 2008
Strategic Vision

"The Nation and its citizens value and are empowered by geospatial resources"

* Adopted by NGAC, January 2009
NGAC Actions & Activities 2008-2010

Focused on…

- Building a community with a strong foundation and commitment to make a difference
- Establishing subcommittees and task teams to address the guidance & issues
- Taking action on key issues impacting the geospatial community
- Creating products to proactively address concerns & issues
NGAC Actions & Activities 2008-2010

- Endorsed recommendations in National Research Council report, “National Land Parcel Data: A Vision for the Future” and identified comments related to recommendations
- Endorsed FGDC Executive Committee Record of Decision (ROD) on Imagery for the Nation (IFTN)
- Made Recommendations to FGDC on Economic Stimulus
- Provided on-going feedback and advice to The National Map
- Drafted Economic Recovery: Lessons Learned for the Geospatial Community
- Reviewed and commented on OMB Circular A-16 Draft Supplemental Guidance
NRC Parcel Recommendations

1. A panel should decide whether the Bureau of Land Management can be the lead federal agency.
2. The Federal Geographic Data Committee should consider the parcel as a basic resource for various OMB A-16 mandated data themes.
3. A Federal Land Parcel Coordinator should be empowered to develop and maintain a single database of land parcels owned or managed by the federal government.
4. A National Land Parcel Coordinator should be established to develop and oversee a land parcel data business plan for the nation including federal, local, state, and tribal partners.
5. An Indian Lands Parcel Coordinator should be established by the Office of Special Trustee for Tribal Lands.

6. Congress and the Census Bureau should explore modifying Title 13 so that building addresses and coordinates can be made public.

7. State Coordinators should be established in each state to develop plans and relationships with local government.

8. The National Land Parcel Coordinator should develop an intergovernmental funding program for the development and maintenance of parcel data, including incentives to participate for those counties with fully-developed systems and financial support for those who do not.

9. Local government is expected to put into the public domain both parcel geometry and a very limited set of attributes. This should become a minimum requirement to receive federal funds directly associated with property, such as disaster relief.
NGAC Actions & Activities 2008-2010

- Built a strong foundation for the NGAC
  - Adopted the NGAC Bylaws
  - Created the NGAC Mission Statement
  - Crafted and approved NGAC Strategic Vision

- Featured Spotlight Sessions to Understand Critical Issues impacting the Geospatial Community
  - Metrics
  - Geospatial Platform
  - Geospatial Workforce Development
  - Interagency Data Sharing & Collaboration
Key NGAC Products

NGAC Transition Recommendations

Changing Geospatial Landscape White Paper
Key NGAC Products

WHY THE UNITED STATES NEEDS A NATIONAL GEO SPATIAL POLICY

America’s ability to confront and develop solutions on major issues including climate change, healthcare, homeland security, pandemics, energy, resilient and sustainable communities, and the mortgage crisis depend, in part, on our ability to map, understand, analyze, and then act on information using geospatial resources.

Americans embrace a wide range of location-based technologies that make their lives easier and keep the world in a context that can be better understood. We are able to do this because of the $30 billion per year geospatial technology market. Companies like MapQuest and Google are universally known. What is less well known is that this thriving business owes its very existence to enlightened policy decisions by the United States. There has been an evolving set of detailed street data, geospatial software, airborne and satellite sensing and imaging, and global positioning systems. Government has played an important role, however, as geospatial resources continue to evolve at a fast pace, national guidance and policies needed to bring order and efficiency to the development of the National Spatial Data Infrastructure (NDSI) will be needed.

Geospatial resources are critical components for priorities of the Obama Administration. Recent examples are: (1)mitigate, an innovative public access tool championed by the Administration, includes a geodatabase catalog as a prominent feature; and (2) Executive Office of the President Memorandum U.S.02-23, “Developing Effective Place-Based Policies for the FY2011 Budget.” Recognizes that much of what government and its citizens need involves place-based planning and place-based services.

With so much at stake, an organized approach to the NDSI utilizing technological advancements guided by a National Geospatial Policy is essential.

WHY DOES THE UNITED STATES NEED A NATIONAL GEO SPATIAL POLICY?

Because the United States taxpayers own or back nearly $5 trillion in real estate mortgages.

A national geospatial policy would enable the tracking of these investments to better understand and manage our economic health, and help prevent another mortgage-based crisis.

Because sea levels are predicted to rise and climate change has the potential of having a significant impact.

A national geospatial policy will ensure current, accurate and detailed information is available to government agencies, academic, and the public to anticipate and adapt to climate change and environmental issues.

Because our geospatial community needs the tools.

The global geospatial marketplace is evolving, with emerging regional markets in countries of all sizes. A national policy would ensure that the U.S. geospatial business is competitive and leads the way.

Because there are more than 17 million unemployed Americans, and geospatial is one of 13 high-growth industries.

The U.S. Department of Labor targets geospatial as a high-growth sector because it will add substantial numbers of new jobs to the economy or affect the growth of other industries. A national policy would encourage innovation and skill development, and put Americans to work in this growth industry.

Because we know that governments at all levels spend money on geospatial resources, but don’t know how much.

Federal agencies are not required to provide information on how much is spent on geospatial resources. More can be done to coordinate spending among federal agencies and in partnership with state and local government to minimize costs, and avoid buying duplicate or unnecessary geospatial data. A national geospatial policy would provide the necessary guidance and regulation to address this.

Geospatial Policy Benefits Statement

GIS Best Practices for Local Government
Guidance 2011

Focus Areas

- Innovative Strategies for Geospatial Programs and Partnerships
- Geospatial Platform
- Geospatial Workforce Development
- Emerging Technologies
- Geospatial Partnerships with Tribal Governments
- Feedback on Specific Programs/Initiatives
## NGAC 2011 Subcommittees

<table>
<thead>
<tr>
<th>Subcommittees</th>
<th>Members</th>
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<tr>
<td>1. Innovative Strategies for Geospatial Programs and Partnerships</td>
<td>Cowen, Nyerges (Co-Chairs), Austin, Reichardt</td>
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<td>2. Geospatial Platform Implementation</td>
<td>Miglarese (Chair), Clark, Johnston, Krucoff, Kurilla, Pellicci, Salas, Schiller, Thompson</td>
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<td>3. Geospatial Workforce</td>
<td>DiSera (Chair), Gabrynowicz, Johnson, McKay, O’Connell, Salas, Spicci</td>
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<td>4. Emerging Technologies</td>
<td>Lopez, Nelson (Co-Chairs), Clark, Dangermond, Green, Miglarese, O’Connell, Olson, Reichardt, Trobia</td>
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<td>5. Geospatial Partnerships with Tribal Governments</td>
<td>Wyatt (Chair), Johnston</td>
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NGAC Points of Contact

NGAC has designated Points of Contact (POCs) for several Federal programs and initiatives. In coordination with the NGAC DFO, the POCs will keep the 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.

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<th>Program/Initiative</th>
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<td>Broadband Mapping</td>
<td>Robert Austin</td>
<td>Mike Byrne, Anne Neville</td>
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<td>Laurie Kurilla, David Wyatt</td>
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<td>Joanne Gabrynowicz</td>
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<td>Peter Lyttle, Kevin Gallagher</td>
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<td>Addresses</td>
<td>Barney Krucoff</td>
<td>Randy Fusaro, Jon Sperling</td>
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National Geospatial Advisory Committee
We believe it is about data: A-16

(This is the FG DATA Committee)

- What data does the federal government require to fulfill its missions?
- What is the proper role of the federal government in the production, maintenance and distribution of these data?
- Which federal agency is the proper steward?
- How is the data program funded?
- How can the federal government work with state, local, tribal and private organizations to meet these requirements?
Not a New Problem – 1993
Intended to be an annual assessment

Federal Geographic Data Committee

Manual of Federal Geographic Data Products

Funding for the compilation and editing of the Manual was provided by the U.S. Environmental Protection Agency's (EPA) Office of Information Resources Management. The Agency conceived of the Manual and initiated a partnership with the FGDC to jointly design, compile, and produce the Manual. The Manual provides a means of satisfying the EPA's internal need for a comprehensive, standardized description of Federal geographic data products. The Manual serves as a data catalog within the EPA's Spatial Data Management Plan—a data life cycle plan for acquiring, preparing, and delivering spatial data to meet the needs of the Agency.
## Data Product Keyword Matrix

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The situation has changed
Shift from producer to consumer

Figure 5. Continuum of SDI Development based on the first and second generations of SDI.

June 8-9 NGAC Meeting

AIA Building, Washington, DC

- Agenda topics:
  - Leadership Dialogue
  - NGAC Plan of Action
  - Transportation for the Nation (TFTN) strategic plan
  - Census Update
  - USGS Update/Report on National Map User Conference
  - Parcel Data spotlight session
  - NGAC Subcommittee reports
My personal Issues and goals?

- Impatient – My last chance
- This is my “Day Job”
- Resolve tough issues
  - Stewardship, Turf, Priorities, Funding
- Details not diagrams
- Dialog not reports
- Acquire and use most appropriate information from the best sources
- Discover and evaluate the most appropriate and efficient technology
My Interpretation

- We don’t live in a 1:24,000 world
- NSDI – Means acquire and use most appropriate data (high resolution and current)
  - Local & crowd sourced
- The platform/cloud provide new technology infrastructure
- Challenges:
  - “It’s easy to make a decision in the absence of information”
  - “How do we make geospatial information so accessible that it cannot be ignored?”
Lets make this relationship work  
(The Arrows Go Both Directions)
Issues and Challenges for Federal Geospatial Information

Peter Folger
Specialist in Energy and Natural Resources Policy

May 18, 2011

- What is the best way to organize and manage the vast array of geospatial information that is acquired at many levels and that has a variety of potential uses?
- What is the best way to share data, particularly among local, state, and federal stakeholders, each of whom may have a need for the same or similar data?
- What is the best way to coordinate among federal agencies, such as the administration and management by different agencies of all the federal lands in the United States?
NGAC Recommendations to Obama Administration

- establish a geospatial leadership and coordination function immediately within the Executive Office of the President; the geospatial coordination function should be included in the reauthorization of the E-Government Act;
- require OMB and FGDC to strengthen their enforcement of OMB Circular A-16 and EO 12906;
- establish/designate Geographic Information Officers with each department or agency with responsibilities stipulated within OMB Circular A-16;
- establish and oversee an Urgent Path forward for implementation of geospatial programs necessary to support current national priorities and essential government services underpinning the NSDI; and
- continue NGAC.
**Suggested Process**

Problems identified by FGDC

Review by NGAC

Recommendations from NGAC to FGDC

...internal FGDC processes

Feedback from FGDC

Reconsideration if necessary

Secondary Analysis

Actions by FGDC
NSGIC Recommendations

Steps that Need to be Taken

A framework allowing Federal, state and local government agencies to partner on production of Address Points must be encouraged/mandated and funded. Opportunities should also exist for the private sector to participate. The following steps will promote this partnership:

- Congress should remove addresses and address point locations from Federal privacy restrictions in all relevant Titles (e.g. Title 13 and Title 39).
- Congress should instruct Federal agencies to jointly develop a common address point file in cooperation with state and local governments and ensure that this file will be publicly available to promote economic growth and government efficiency.
- Congress should either enact the provisions of HR 235 in Section 11, Mandatory Elimination of Duplicative Government Programs, or step-up its other efforts to stop Federal agency waste.
- If a national address point file can be publicly shareable, the U.S. Census Bureau should become the data steward for this file and adhere to the new Supplemental Guidance in OMB Circular A-16.
- If existing privacy constraints cannot be addressed, another Federal agency without such constraints should become the custodian of address points and all other agencies should obtain their information from this unrestricted source.
- States must coordinate the development of address point files working with local governments.
- In anticipation of the 2020 decennial Census, and to support the American Community Survey, the U.S. Census Bureau should contract with willing States to coordinate state and local government address data activity and to provide pass-through funding to maintain local address point files. These data should be developed locally with local and state agencies acting as data integrators.
- A national business plan for address points must be created and adopted by all Federal, state and local agencies, including a suitable data standard, data model, exchange standard and funding model.

May 4, 2011

National Geospatial Advisory Committee
Thanks