















NSRS Modernization Update and Federal Coordination Planning January 10, 2019

Tony LaVoi, Geospatial Information Officer (GIO), NOAA OCIO





# **Objectives for today**









 Provide insights on the GDA implementation approach and next steps



Identify impacts and opportunities for the geodetic control community









# Geospatial coordination before the GDA







 Promotes the coordinated development, use, sharing, and dissemination of geospatial data on a national basis.



- The technology, policies, standards, and human resources necessary to acquire, process, store, distribute, and improve utilization of geospatial data.

## National Geospatial Data Assets (NGDA)

- A geospatial dataset that meets at least one of the following criteria: supports mission goals of multiple federal agencies, statutorily mandated, supports Presidential priorities.

### NGDA Themes

- Groupings of NGDA datasets, with coordinated management led by one or more Federal agencies; mandated under OMB Circular A-16

## - National Geospatial Advisory Committee (NGAC)

- Dept. of Interior FACA to "provide advice and recommendations related to management of Federal and national geospatial programs."







## **Selected GDA Drivers**







- Revisit the 2005-6 Future Directions outcomes, specifically related to a more collaborative governance structure
- More reflective of the geospatial marketplace; U.S. gov't is not the major funder as it was three decades ago
- Increase cost accountability and performance management for Federal agencies
  - Builds on GAO 2013 study on "GEOSPATIAL INFORMATION: OMB and Agencies Can Reduce Duplication by Making Coordination a Priority"
- Fresh start learn from past 3 decades
- Desire for Congressional involvement in the NSDI







# **GDA Core Objectives**

















The GDA formalizes
Federal government
structures related to
geospatial data



The GDA provides policy and guidance to empower the use of geospatial data and technology



Facilitates broad cooperation between the public and private sector





## **GDA Sections**

















Section 751.
 Short Title; Findings

- Section 752. Definitions

- Section 753. Federal Geographic Data Committee

Section 754. National Geospatial Advisory Committee

Section 755.
 National Spatial Data Infrastructure

Section 756. NGDA Data Themes

Section 757. Geospatial Data Standards

Section 758. GeoPlatform

- Section 759. Covered Agency Responsibilities

- Section 759A. Limitation on Use of Federal Funds

Section 759B. Savings provision

Section 759C. Private sector





# **GDA Tiger Teams**





Analysis of the GDA—identify impacts, requirements and recommendations that will result in the development of an implementation strategy.





Governance & Organization



Data, Standards and Delivery



Covered Agencies & Reporting



Communications & Outreach



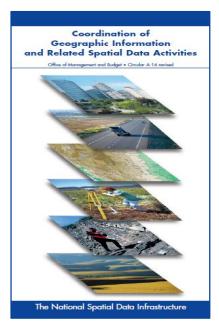




# **OMB** Implementation Guidance



- GDA requires OMB to issue implementation guidance to agencies one year after signing the GDA into law (October 2019 past due)
- Small team of FGDC Secretariat and member agency staff took results for GDA Tiger Team work, and based on direction from OMB, completely revised OMB Circular A-16



**OMB Circular A-16** 

- A-16 Revised mirrors the GDA organizational structure for ease of use
- FGDC website and/or GeoPlatform will be used as a repository for additional GDA implementation resources
- Expect release of A-16 Revised from OMB in the near future





# **Stewardship of Data**













Requires the FGDC to designate for management by Federal agencies NGDA data themes, for which the coordinated development, maintenance, and dissemination of geospatial data would benefit the Federal government and people of the United States.





**Section 756. NGDA Data Themes** 





# **Current Approach vs GDA**





 Development, maintenance, and dissemination of geospatial data are coordinated within Themes

### - GDA Changes

- FGDC Lead Agencies will build a stronger alignment of Themes and development of standards
- New reporting requirements (as part of administering the NGDA data themes) include:
  - Submit an annual Theme Implementation Performance Report
  - Comment on FGDC summaries of the Annual Reports
  - Contribute to the biennial Congressional report
  - Publish maps and graphics showing extent and status of NGDA themes
- Identify and publish proven practices for the use and application of geospatial data of the lead covered agency





# **Theme Reports / Plans / Audits**













regarding planning, agencies. This table cover elements incl	reporting, audits, a will be updated an luded in this table.	arize the requirements in the Geospatial D and related activities, including new and o id maintained on the FGDC website. FGDC or Plans, Reports, Audits, and Related Acti	ngoing requirements for Technical Guidance will
Responsible Party	GDA Reference	Requirement for FGDC or Agencies	Timing/Frequency

Responsible Party	GDA Reference	Requirement for FGDC or Agencies	Timing/Frequency
Performance Repor	rts		
Lead Covered Agencies	§756(b)(3)(E)(ii)(I)	Annual performance report to FGDC on the NGDA data theme.	Annual
Federal Geographic Data Committee	§753(c)(10)(A), (B)	Online publication on the status of each NGDA data theme and a summary and evaluation of the achievements of each covered agency.	Annual
National Geospatial Advisory Committee	§753(c)(11) §754(f)(2)(6)	Provide comments on FGDC summaries and evaluations of NGDA data themes. Include in comments a discussion of any failure by a covered agency to furnish information in response to an NGAC request under subparagraph 754	Annual
Lead Covered Agencies	§756(b)(3)(E)(ii)(II)	Provide comments to FGDC on FGDC's summary and evaluation of the performance report.	Annual
Covered Agencies	§753(c)(12)(A)	Provide comments to FGDC on FGDC's summary and evaluation of each covered agency.	Annual
Federal Geographic Data Committee	\$753(c)(11)(C) \$753(c)(12)(B)	Submit to Congress a report on the status of each NGDA data theme and a summary and evaluation of the achievements of each covered agency, including comments of the National Geospatial Advisory Committee, the comments of the covered agencies, and the responses of the FGDC to the comments.	Not less than onc every 2 years
<b>Budget Justification</b>	15		
Covered Agencies	§759(b)(2)(A)	Each agency shall include geospatial data in preparing the budget submission to the President.	Annual
Office of Management and Budget	§759(b)(4)	In its annual evaluation of each covered agency, the Office of Management and Budget will take into consideration the RGDC's summary and evaluation of each covered agency, NAAC's and the Lead Cover agencies Comments to RGDC's summary and evaluation, and RGDC's responses to those comments, which are required under subparagraphs 755(c)(10)(a) and (b) and paragraphs 755(c)(10)(a) and (b) and paragraphs 755(c)(10) and (12).	Annual

than years
ined
ined
ined
ined
ined
ined
no later
arch 1, per
irch 1, per

Requirement for FGDC or Agencies	Timing/Frequency
for each NGDA data theme, the lead covered	Not defined
agency shall provide leadership and facilitate	
the development and implementation of a	
plan for nationwide population of the NGDA	
data theme.	
For each NGDA data theme, the lead covered	Not defined
agency shall develop a plan to originate and	
implement needed standards with relevant	
community and international practices.	
Publish maps or comparable graphics online	Ongoing
showing the extent and status of the NGDA	
data themes for which the covered agency is	
a lead covered agency.	
identify and publish proven practices for the	Ongoing
use and application of geospatial data of the lead covered agency.	
Appoint a contact to coordinate with the lead	Ongoing
covered agencies for collection, acquisition,	Ungoing
maintenance, and dissemination of the NGDA	
data themes used by the covered agency.	
Use the geospatial data standards, including	Within 5 years
the standards for metadata for geospatial	after the NGDA
data, and other appropriate standards,	data theme
including documenting geospatial data with	standards are
the relevant metadata and making metadata	established
available through the GeoPlatform.	and the same of th
Implement NGDA data theme standards	
within 5 years after the standards are	
approved or funding restrictions and	
potential waivers apply. See Section 7.	
Determine if each covered agency is utilizing	Starting 5 years
applicable NGDA data theme standards	after the NGDA
established by FGDC. The FGDC Chairperson	data theme
may grant a covered agency a waiver of the	standards are
limitation on Federal funds under certain	established
conditions.	
ition	
Publish FGDC membership directory online,	Annual
including identifying members of any	
subcommittee or working group of the FGDC.	
Upon request of the NGAC Chairperson, the	Upon request of
head of the covered agency provides information considered by the NGAC as	the NGAC and with concurrence
necessary to carry out its duties.	of FGDC
necessary to carry out its duties.	Chairperson
Agencies shall ensure that data information	Ongoing
products and other records created in	979057
geospatial data and activities are included on	
agency NARA approved records schedules.	I

	Requirement for FGDC or Agencies	Timing/Frequency
	Maintain an inventory of all geospatial data assets.	Ongoing
Γ	Prepare an annual report to Congress identifying Federal-wide geospatial data assets.	Annual
	Each agency shall disclose each contract, cooperative agreement, grant, or other transaction that deals with geospatial data, which may include posting information related to the transaction on USAspending gov and it	Ongoing





# Standards to promote interoperability and innovation















Requires the FGDC use national and international standards adopted by voluntary consensus bodies to the maximum extent possible; establish and promulgate new standards if they do not already exist and consult with a broad range of users and providers.





Section 757. Geospatial Data Standards





## **Current Approach vs GDA**





- Federal agencies are required to use FGDC-endorsed standards per OMB Circular A-16
- OMB Circular A-119 directs Federal agencies to use voluntary consensus standards in lieu of government-unique standards except where inconsistent with law or otherwise impractical
- Public Law 104-113, the National Technology Transfer and Advancement Act of 1995, codified policies in OMB Circular A-119

### - GDA Changes / Issues to Resolve

- Standards must be consistent with international standards and protocols
- Standards must be "periodically" reviewed and updated; need to define "periodically"
- Repercussions for agencies whose data does not comply with applicable standards (See Section 759A Limitation on Use of Federal Funds)



















- Waiting on OMB to issue Circular A-16 Revised
  - OMB is expecting agencies to begin complying in FY20
- Interagency Working Group meeting weekly – two priorities
  - GDA FY20-21 Roadmap
  - Phased Agency
     Implementation Guidance
- National Geospatial Advisory
   Committee coordination
- Overlaps with Federal Data
   Strategy and Evidence Act

### FY20-21 GDA ROADMAP TASKS

#### GOVERNANCE AND ADMINISTRATION

- 1. Develop FY2020/2021 GDA Roadmap
- 2. Implement OMB Circular A-16 Revised
- 3. Revise FGDC Governance Structure
- 4. Establish GDA Council
- 5. Define NGAC Role and Processes
- 6. Develop GDA Implementation Budget Recommendation

#### PLANNING AND ADMINISTRATION

- 7. Develop Revised NSDI Strategic Plan
- 8. Develop Agency Geospatial Strategies
- 9. Implement FDS Action Plan FY19-20 FGDC Actions

#### **REPORTING AND AUDITS**

- 10. Develop GDA Report to Congress
- 11. Execute Agency Annual Reporting Process
- 12. Complete GeoPlatform Planning and Reporting
- 13. Support Covered Agency IG Audits

### COMMUNICATIONS AND ENGAGEMENT

- 14. Develop and Execute GDA Communications Strategy
- 15. Develop and Execute GDA External Engagement Events
- 16. Advance GDA High-Value Federal Investments and Incentives Activities





## Geospatial Data Act requirements overlap with

## Federal Data Strategy & Evidence Act

Federal Data Strategy

Evidence Act

		Strategy	Act
1	Prepare and implement a strategy for advancing geospatial data activities appropriate to the agency's mission		
2	Collect, maintain, disseminate, and preserve geospatial data such that resulting data, information, or products can be shared		
3	Promote geospatial data integration		
4	Ensure that geospatial information is included on agency record schedules that have been approved by the National Archives and Records Administration.		
5	Allocate resources to fulfill geospatial data responsibilities		
6	Use geospatial data standards		
7	Coordinate with other federal agencies, state, local, and tribal governments, institutions of higher education, and the private sector		
8	Make federal geospatial information more useful to the public, enhance operations, support decision making, and enhance reporting to the public and to Congress		
9	Protect personal privacy and maintain confidentiality in accordance with federal policy and law.		
10	Participate in determining whether declassified data can become part of the NSDI		
11	Search all sources to determine if existing data meet the needs of the covered agency before expending funds to acquire geospatial data		
12	Ensure that those receiving federal funds for geospatial data collection provide high-quality data		
13	Appoint a contact to coordinate with other lead covered agencies		











# **Geodetic Community Impacts and Opportunities**





- Potential ramping up of requirements for planning and reporting
- Leadership and best practice opportunities
  - Expectation of broad engagement across the all sectors already happening with GC community
  - Standards guidance many themes are going to be looking for best practices and approaches to follow
  - Potentially more opportunities to communicate NSRS plans and changes







## **Links for More Information**







- https://www.fgdc.gov/
- About the Geospatial Data Act, with full text: <a href="https://www.fgdc.gov/gda">https://www.fgdc.gov/gda</a>
- OMB Circular A-16: <a href="https://www.fgdc.gov/policyandplanning/a-16/index\_html">https://www.fgdc.gov/policyandplanning/a-16/index\_html</a>
- Executive Order 12906: <a href="https://www.fgdc.gov/policyandplanning/executive\_order">https://www.fgdc.gov/policyandplanning/executive\_order</a>
- Federal Data Strategy: <a href="https://strategy.data.gov/">https://strategy.data.gov/</a>
- Foundations for Evidence-Based Policymaking Act:

https://www.congress.gov/bill/115th-congress/house-bill/4174

- 2019 Executive Order on Artificial Intelligence:

https://www.whitehouse.gov/presidential-actions/executive-order-maintaining-american-leadership-artificial-intelligence/







## **Contact Information**





- Tony LaVoi, NOAA Geospatial Information Officer (GIO)





