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FEDERAL GEOGRAPHIC DATA COMMITTEE

Coordination Group Meeting
FGDC Business Report

Ken Shaffer

Deputy Executive Director

Federal Geographic Data Committee

October 3, 2017

Background

This presentation contains general update information on FGDC business activities. A list of the other agenda topics with references to their associated materials is also included. This presentation is intended as a read-ahead with only highlights of some of these activities being presented during the meeting. Questions on the included topics or content can be posed during the FGDC Business Update during the meetings.

It is the responsibility of the attendees to review the material prior to the meeting, as per CG standard operating procedures.

The general organization of the information is:

CG Agenda Items - Items on the Coordination Group (CG) agenda with references to any read-ahead materials

FGDC Committee Meeting Summaries

FGDC Business Update - Current FGDC initiatives/activities

CG Agenda Items

- FGDC Business Highlights
  Contact: Ken Shaffer, FGDC OS
  Read ahead: FGDC Business Highlights

- National Boundaries Group
  Contact: Laura Waggoner, US Census Bureau
  Read ahead: National Boundaries Group Annual Report

- 3D Nation Elevation Requirements and Benefits Study, and NHDPlus HR Beta Quality Control
  Contact: Gita Urban-Mathieux, USGS
  Read ahead: FGDC HydroVolunteer-3DNationSurvey 10032017

- Geospatial Platform PMO Activities Update
  Contact: Janet Hoyt, FGDC PMO
  Read ahead: Geospatial Platform Support Contract Monthly Update

- Other Agency Announcements

Committee's Decision Summary

- The Executive Committee agreed that starting the discussions on revising OMB Circular A-16 should wait until after the budget and new leadership and members are in place.

CG and SC Monthly Membership Changes

- No changes this month.

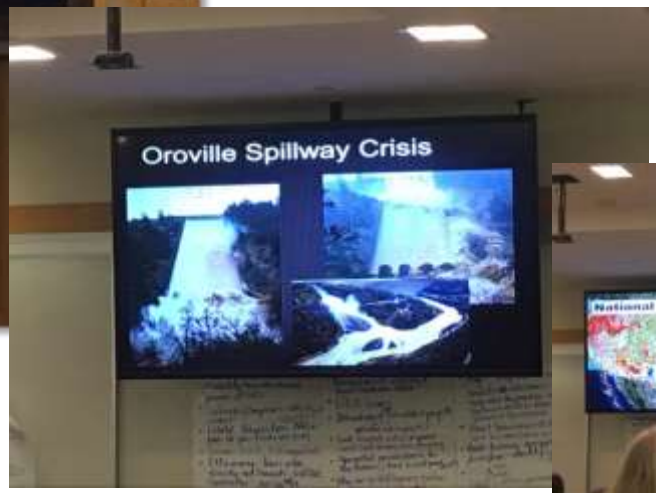
Steering Committee

- The next Steering Committee meeting will be held once designation of the new FGDC leadership and redesignation of Steering Committee membership is in place.
- The Executive Committee will continue to provide committee leadership in the interim

Executive Committee

- The Executive Committee will meet on October 18th. Agenda Topics include:
  - Geospatial Data Act of 2017
  - Geospatial Platform
  - Address Theme and National Address Database (NAD)
  - Recent Hurricane Response
  - NGAC Meeting Update

Summary of Sept. 6-7, 2017 NGAC Meeting



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NGAC Membership – September 2017

Ms. Julie Sweetkind-Singer (Chair)
Stanford University

Mr. Keith Masback (Vice-Chair)
U.S. Geospatial Intelligence Foundation

Dr. David Alexander
Department of Homeland Security

Mr. Frank Avila
National Geospatial-Intelligence Agency

Dr. Sarah Battersby
Tableau Software

Mr. Talbot Brooks
Delta State University

Mr. Gar Clarke
State of New Mexico

Mr. Garet Couch
National Tribal GIS Center

Ms. Patricia Cummens
ESRI

Mr. Stuart Davis
State of Ohio

Mr. Matthew Gentile
Deloitte Financial Advisory Services, LLP

Mr. Frank Harjo
Muscogee (Creek) Nation

Mr. Xavier Irias
East Bay Municipal Utility District

Ms. Roberta Lenczowski
Roberta E. Lenczowski Consulting, LLC

Mr. Roger Mitchell
MDA Information Systems, Inc.

Ms. Rebecca Moore
Google, Inc.

Mr. Kevin Pomfret
Centre for Spatial Law and Policy

Dr. Laxmi Ramasubramanian
Hunter College, City University of NY

Major General William N. Reddel III
New Hampshire National Guard

Dr. Carl Reed
Carl Reed and Associates, LLC

Ms. Amber Reynolds
City of Topeka, KS

Dr. Douglas Richardson
Association of American Geographers

Mr. Cy Smith
State of Oregon

Ms. Rebecca Somers
Somers-St. Claire GIS Consultants

Ms. Jennie Stapp
State of Montana

Dr. Harvey Thorleifson
Minnesota Geological Survey

Mr. Jason Warzinik
Boone County, MO

Dr. May Yuan
University of Texas – Dallas

Sept 2017 NGAC Meeting – Agenda

- **Leadership Dialogue**
- **FGDC Report**
- **Federal Program Updates:**
  - National Address Database
  - International Activities (US-GEO, GEOSS, UNGGIM)
  - 3D Elevation Program / USGS Hydrography Program
  - Geospatial Platform Update/Demo
- **NGAC Subcommittee Sessions:**
  - Landsat Advisory Group
  - Geospatial Technology & Infrastructure
  - Cultural & Historical Geospatial Resources
  - Data as Services
- **Public Comment Period**
- **Lightning Sessions**

FGDC Activities

Leadership discussion with Kerry Rae (DOI).

Dialogue on Federal Geospatial Activities:

- ❖Transition activities
- ❖Infrastructure initiatives
- ❖Geospatial Data Act
- ❖NSDI Strategic Framework

Federal Program Updates

National Address Database:

- Update from Steve Lewis (DOT) & Tim Trainor (Census).
- NGAC has provided extensive input on development of the NAD and looks forward to continued progress.

National Geospatial Program:

- Update from Vicki Lukas (USGS) on 3DEP and Hydrography programs.
- USGS may ask for NGAC feedback in 2018.

FGDC International Activities:

- Overview from Ivan Deloatch and Tim Trainor (Census) on international activities including US-GEO, AmeriGEOSS, and UNGGIM.

GeoPlatform:

- Update and demo from Tod Dabolt (DOI) on recent and upcoming GeoPlatform activities.

Landsat Advisory Group

- **Membership:**
  - NGAC Members: Frank Avila (Chair), Roberta Lenczowski (Vice Chair), Rebecca Moore, Kevin Pomfret
  - Non-NGAC Members: Peter Becker, Steven Brumby, Joanne Gabrynowicz, Kass Green, Walter Scott
- **Tasks**: LAG study topics for 2017/2018 include the following:
  1. Possible architectures for future missions.
  2. Temporal data cubes. temporal data cubes to support projection or 'forecast' models of land change trends.
  3. Fee recovery options for Landsat data.
- **Next Steps**:
  - **Task 1 Action**: Provide draft paper to NGAC prior to December 2017 NGAC meeting
  - **Task 2 Action:** Provide interim report to NGAC prior to December 2017 NGAC meeting
  - **Task 3 Action:** Draft proposed initial report by December 2017

Geospatial Technology & Infrastructure

- **Membership:**
  - Cy Smith (Chair), Keith Masback (Vice Chair), Talbot Brooks, Pat Cummens, Matt Gentile, Xavier Irias, Roger Mitchell, Carl Reed, Amber Reynolds
- **Task**: Develop products describing how geospatial technology, tools, and information can help drive smart decision-making on infrastructure priorities and investments, including:
  - Mapping and understanding infrastructure needs.
  - Working smarter in designing and executing projects.
  - Tracking, monitoring, and communicating results.
- **Next Steps:**
  - ACTION: Subcommittee will draft infrastructure document, to be submitted to NGAC prior to December NGAC webinar meeting

Data As Services

- **Membership:**
  - David Alexander (Chair), Sarah Battersby (Vice Chair), Stu Davis, Gen. William Reddel, Rebecca Somers, Jennie Stapp, Harvey Thorleifson, Jason Warzinik, May Yuan
- **Task**: Provide advice and recommendations addressing current and future needs for data as services from Federal data repositories that provide online data access (GeoPlatform, Data.gov, etc.). Include documentation of user needs and recommendations regarding formats and standardization for users.
- **Next Steps:**
  - **ACTION:** Develop draft position paper by April 2018
  - **ACTION:** Provide draft final position paper to NGAC by September 2018

Cultural & Historical Geospatial Resources

- **Membership:**
  - Garet Couch (Chair), Frank Harjo (Vice Chair), Laxmi Ramasubramanian, Doug Richardson, Gar Clarke
- **Task**: Collaborate with the FGDC Cultural Resource Subcommittee to provide advice and feedback on policies and procedures to protect geospatial data assets that have cultural and historical significance. May include reviewing agency policies and procedures currently in place regarding cultural and historical geospatial data – both in terms of data security and data sharing – to identify best practices and model approaches.
- **Next Steps:**
  - **ACTION:** Subcommittee will develop best practices document to be completed in 2018.

NGAC Points of Contact

- NGAC has designated POCs for several key ongoing geospatial programs & initiatives. POCs will coordinate with FGDC and program leads to keep NGAC members updated on key program activities, as needed. POCs are as follows:

Initiative	NGAC POC
Geospatial Platform	May Yuan
NSDI Strategic Plan	Jennie Stapp
NGDA Management Plan	Amber Reynolds
3DEP	Jason Warzinik
USGS Hydro	Harvey Thorleifson
National Address Database	Cy Smith
Imagery	Bobbi Lenczowski / Frank Avila
Workforce & Education	Talbot Brooks

Lightning Talks

- **Government & Public Safety UAS** – Jason Warzinik
- **National Geologic Mapping** – Harvey Thorleifson
- **Geospatial Aspects of Emergency Response / Oroville Dam** – Xavier Irias
- **DHS First Responders Group** – David Alexander
- **TRELIS-GS Program** – Sarah Battersby/ Laxmi Ramasubramanian
- **Prime Meridians** – Julie Sweetkind-Singer
- **AmericaView Update** – Roberta Lenczowski
- **DHS Flood APEX Overview** – David Alexander

Next Steps

- Subcommittees meet to address guidance and develop draft products.

Next NGAC meeting:

- December 11, 2017 webinar meeting, 1:00 – 4:30 pm EST

Coordination Group Meeting Dates

2017 FGDC CG Meeting Calendar

- November 14, 2017 DOI Rachel Carson Room
- December 12, 2017 DOI Rachel Carson Room

FGDC Business Update

- New DOI Leadership Briefing
- NGDA Portfolio Management
- NSDI Strategic Planning
- FGDC Standards Update

New DOI Leadership Briefing

- Andrea Travnicek, Ph.D – Acting Assistant Secretary for Water & Science
- FGDC OS and GeoPlatform Managing Partner briefing on FGDC and GeoPlatform
- Provide background, overview, current activities, actions
- Dr. Travnicek will also be attending the Executive Committee meeting

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National Geospatial Data Asset (NGDA) Portfolio Management

Jen Carlino

FGDC OS

October 3, 2017

NGDA Portfolio Management - Current Activities

Theme Implementation Plans Progress Report due Oct. 31

- Upcoming reporting period March - September 2017
- Still have several outstanding to be completed for October 2016 – September 2017
- Will be posted on public Geoplatform Theme community
- Goal to review activities and progress across Themes going forward to advance portfolio management

Theme	Status
Address	To be determined
Biodiversity and Ecosystems	In Progress (Draft)
Cadastre*	Completed
Climate and Weather	In Progress
Cultural Resources	Completed
Elevation*	In Progress (Draft)
Geodetic Control*	Completed
Geology	Extension
Governmental Units*	Completed
Imagery*	Completed
Land Use Land Cover	Completed
Real Property	To be determined
Soils	In Progress
Transportation*	Completed
Utilities	In Progress
Water Inland*	Completed
Water Oceans and Coasts*	In Progress

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Status as of 9/26/17

NGDA Portfolio Management - Current Activities

- A-16 Communities will transition from Drupal to WordPress in fall 2017. Imagery Theme prototype:

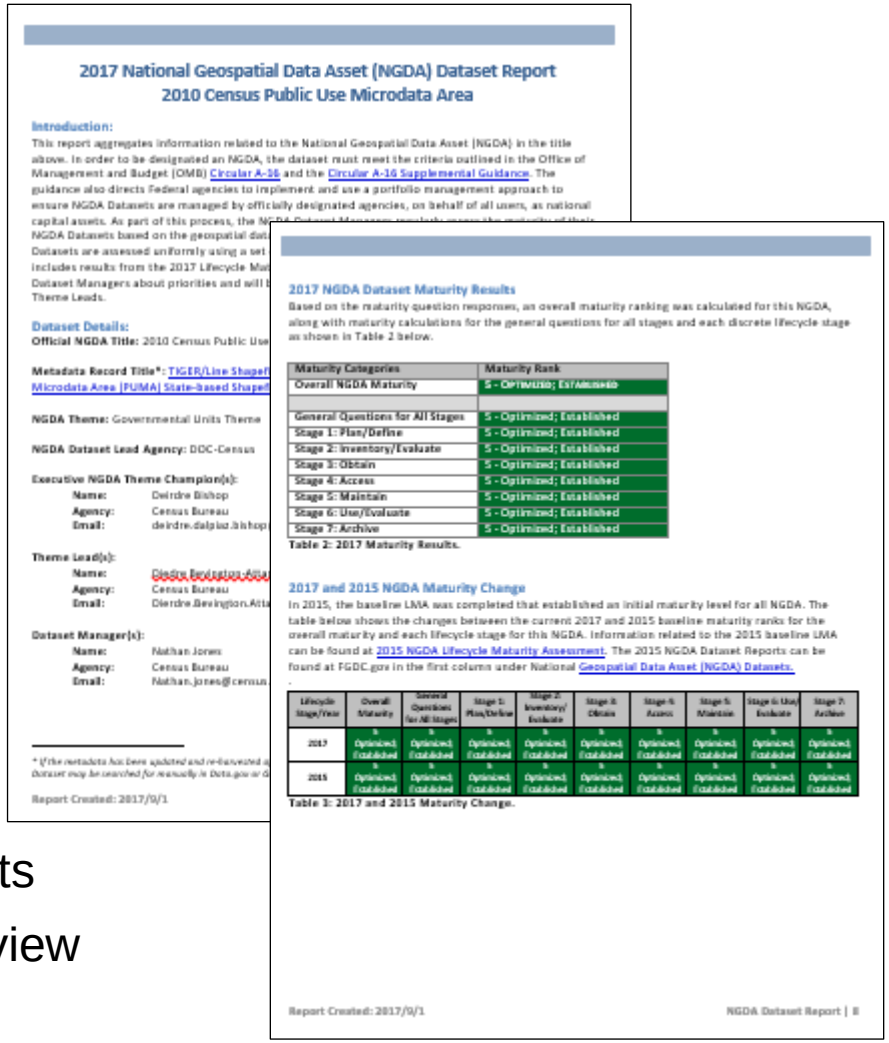
2017 Lifecycle Maturity Assessment – Next Steps

October

- ❖ Generate NGDA Dataset Reports (DSR) for internal review
- ❖ Analyze 2017 LMA results
- ❖ Finalize template and generate Theme Summary Reports for internal review
- ❖ Develop Portfolio Summary Report template

November

- ❖ Finalize 2017 LMA Analysis and Recommendation Report
- ❖ Update LMA Dashboard
- ❖ Release Dataset/Theme Summary Reports
- ❖ Develop Portfolio Summary Report for review



2017 National Geospatial Data Asset (NGDA) Dataset Report
2010 Census Public Use Microdata Area

Introduction:
This report aggregates information related to the National Geospatial Data Asset (NGDA) in the title above. In order to be designated an NGDA, the dataset must meet the criteria outlined in the Office of Management and Budget (OMB) Circular A-16 and the Circular A-16 Supplemental Guidance. The guidance also directs Federal agencies to implement and use a portfolio management approach to ensure NGDA Datasets are managed by officially designated agencies, on behalf of all users, as national capital assets. As part of this process, the NGDA Dataset Managers ... NGDA Datasets based on the geospatial data ... Datasets are assessed uniformly using a set ... includes results from the 2017 Lifecycle Mat... Dataset Managers about priorities and will b... Theme Leads.

Dataset Details:
Official NGDA Title: 2010 Census Public Use ...

Metadata Record Title*: TIGER/Line Shapef... Microdata Area (PUMA) State-based Shapef...

NGDA Theme: Governmental Units Theme

NGDA Dataset Lead Agency: DOC-Census

Executive NGDA Theme Champion(s):
Name: Deirdre Bishop
Agency: Census Bureau
Email: deirdre.dalpiaz.bishop...

Theme Lead(s):
Name: Diedre Bevington-Atta...
Agency: Census Bureau
Email: Dierdre.Bevington.Atta...

Dataset Manager(s):
Name: Nathan Jones
Agency: Census Bureau
Email: Nathan.jones@census...

* If the metadata has been updated and re-harvested a... Dataset may be searched for manually in Data.gov or G...

Report Created: 2017/9/1

2017 NGDA Dataset Maturity Results
Based on the maturity question responses, an overall maturity ranking was calculated for this NGDA, along with maturity calculations for the general questions for all stages and each discrete lifecycle stage as shown in Table 2 below.

Maturity Categories	Maturity Rank
Overall NGDA Maturity	5 - Optimized; Established
General Questions for All Stages	5 - Optimized; Established
Stage 1: Plan/Define	5 - Optimized; Established
Stage 2: Inventory/Evaluate	5 - Optimized; Established
Stage 3: Obtain	5 - Optimized; Established
Stage 4: Access	5 - Optimized; Established
Stage 5: Maintain	5 - Optimized; Established
Stage 6: Use/Evaluate	5 - Optimized; Established
Stage 7: Archive	5 - Optimized; Established

Table 2: 2017 Maturity Results.

2017 and 2015 NGDA Maturity Change
In 2015, the baseline LMA was completed that established an initial maturity level for all NGDA. The table below shows the changes between the current 2017 and 2015 baseline maturity ranks for the overall maturity and each lifecycle stage for this NGDA. Information related to the 2015 baseline LMA can be found at 2015 NGDA Lifecycle Maturity Assessment. The 2015 NGDA Dataset Reports can be found at FGDC.gov in the first column under National Geospatial Data Asset (NGDA) Datasets.

Lifecycle Stage/Year	Overall Maturity	General Questions for All Stages	Stage 1: Plan/Define	Stage 2: Inventory/ Evaluate	Stage 3: Obtain	Stage 4: Access	Stage 5: Maintain	Stage 6: Use/ Evaluate	Stage 7: Archive
2017	5 Optimized; Established	5 Optimized; Established	5 Optimized; Established	5 Optimized; Established	5 Optimized; Established	5 Optimized; Established	5 Optimized; Established	5 Optimized; Established	5 Optimized; Established
2015	5 Optimized; Established	5 Optimized; Established	5 Optimized; Established	5 Optimized; Established	5 Optimized; Established	5 Optimized; Established	5 Optimized; Established	5 Optimized; Established	5 Optimized; Established

Table 3: 2017 and 2015 Maturity Change.

Report Created: 2017/9/1 NGDA Dataset Report | 8

2017 NGDA Dataset Report Example Pages

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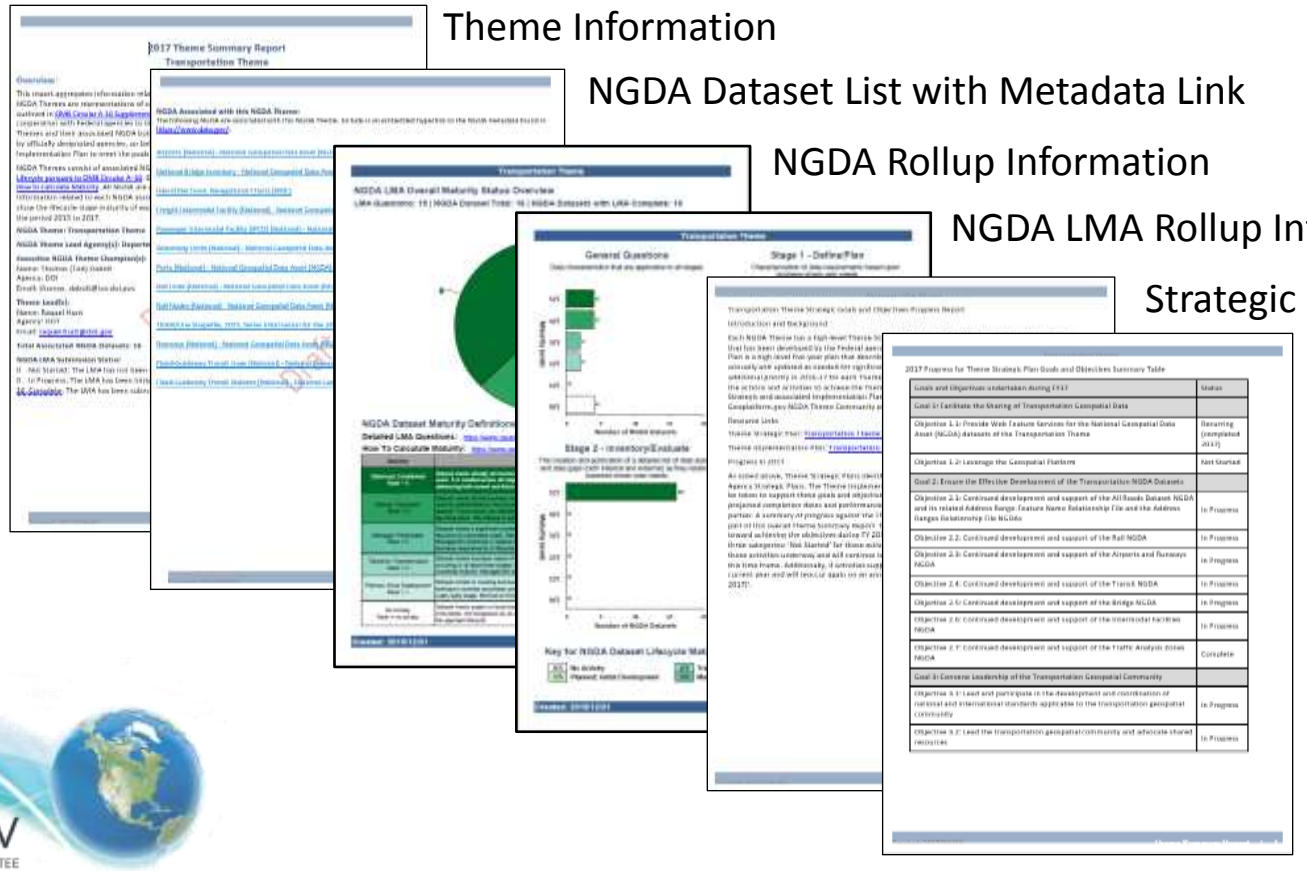
2017 NGDA Theme Summary Report Template

- Updated template based on 7/25/2017 review
- New for 2017: FY17 Progress Related to Theme Strategic Plan Goals and Objectives



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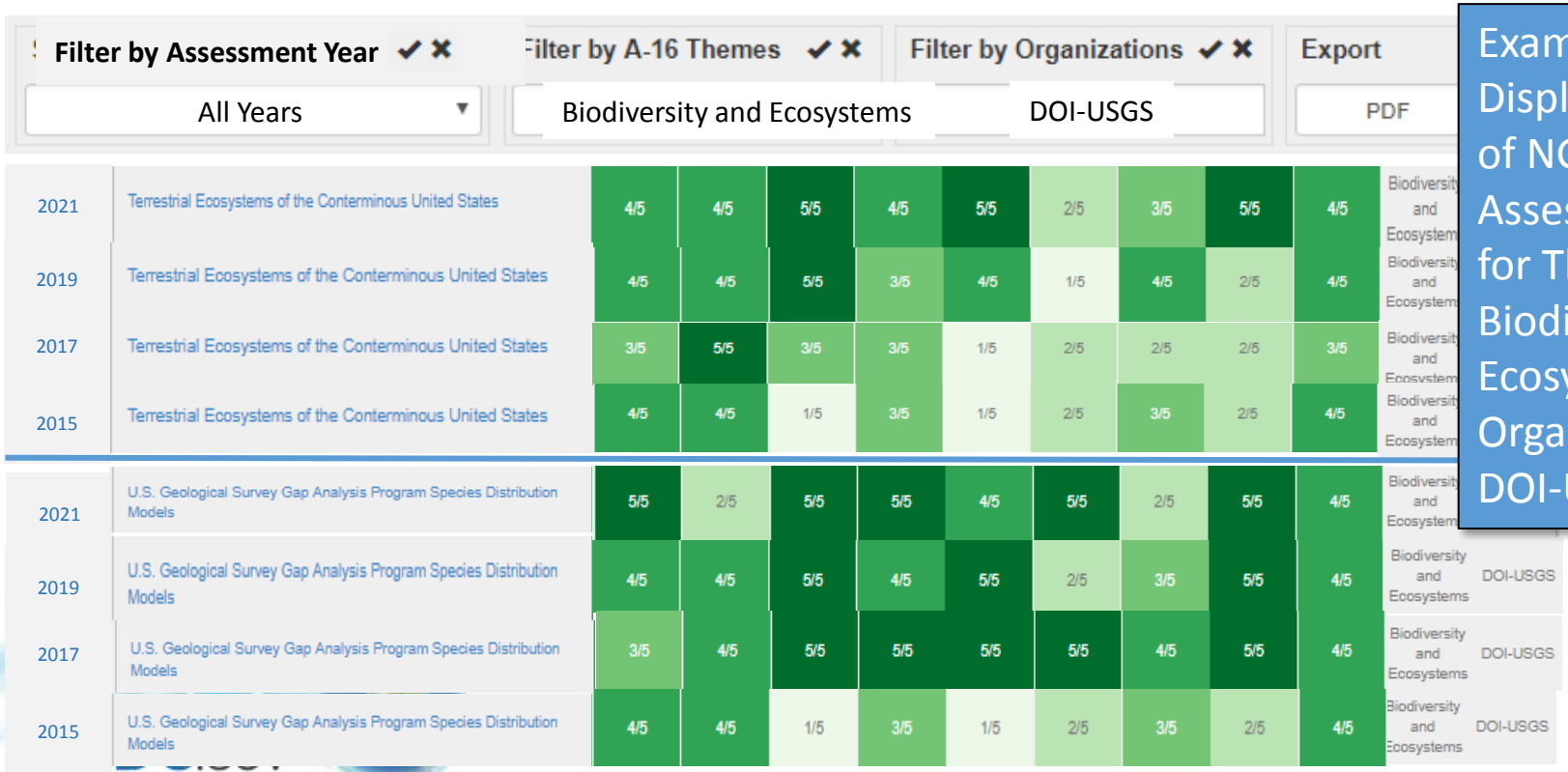
NGDA LMA Dashboard

- GeoPlatform team is considering filter option approach for potential implementation to see multiple years, based on Theme Lead input
- Should be released in November 2017 (Release 10)



Example: Display All Years of NGDA Assessments for Theme Biodiversity and Ecosystems and Organization DOI-USGS

NGDA Inventory Updates

- No Changes

COGO Report Card Update

- First COGO Report Card on the NSDI completed in 2015. Provided evaluation of framework Themes and overall NSDI status.
- Second Report Card has been initiated; completion in 2018. Will review framework Themes (plus Address) and NSDI status.
  - FGDC briefing for COGO on NGDA process – June 5
  - COGO has identified Theme review teams; FGDC has identified POCs for framework Themes
  - COGO reached out to Imagery Theme on NAIP and USGS High Resolution Orthoimagery 9/15
  - Water-Inland Theme briefing 8/18
  - Next step: other Theme-specific briefings for COGO review teams – to be determined

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Geospatial Standardization Activities

As presented to the
FGDC Coordination Group on
Tuesday, October 3, 2017

Julie Binder Maitra
FGDC Standards Coordinator
FGDC OS

Topics

- FGDC
- INCITS Technical Committee L1/U.S. Technical Advisory Group to ISO Technical Committee 211, Geographic information/Geomatics (INCITS L1/U.S. TAG)
- Open Geospatial Consortium (OGC)
- Questions & contact information

FGDC

- Review of standards-related policies issued since OMB Circular A-16 (2002), including OMB Circular A-119 (2016)
- Standards Suites for SDIs
  - Resolved ~90 comments
  - Prepared revised draft
- Proposals for FGDC endorsement of external standards (next slide)

FGDC

Proposals for FGDC endorsement of external standards

- ISO 19115-3:2016, Geographic information -- Metadata -- Part 3: XML schema implementation for fundamental concepts
- OGC Web Coverage Service (WCS) 2.0 + extensions, with retirement of WCS 1.1.2
- OGC Web Processing Services (WPS) 2.0 [14-065], with confirmation of WPS 1.0.0
- OGC GML 3.3 [10-129r1], with confirmation of GML 3.2.1
- OGC Geography Markup Language (GML) simple features profile (with Corrigendum) (2.0) [10-100r3]
- OGC KML 2.3 [12-007r2], with confirmation of OGC KML 2.2.1
- OGC Filter Encoding (FE) 2.0.2 [09-026r2], with retirement of FE 1.1
- OGC GeoPackage 1.1 [12-128r12], with retirement of OGC GeoPackage 1.0, which has been deprecated
- OGC Web Services Context Document (OWS Context) 1.0 [12-080r2] *and* Atom Encoding standard 1.0 [12-084r2], with retirement of OGC Web Map Context

INCITS L1/U.S. TAG

Updates to ISO projects since August 29, 2017 CG meeting

Standard	Description	Status	Date
ISO 19160-4 Addressing -- Part 4: International postal address components and template languages	Defines key terms for postal addressing, postal address components and constraints on their use.	Under publication	2017-09-25

- *Census and others have developed a profile of ISO 19160-1:2015, Addressing -- Part 1: Conceptual model, for the FGDC-endorsed U.S. Thoroughfare, Landmark, and Postal Data Standard.*
- *This profile conforms to ISO 19160-1 core* and *address documentation conformance classes.*

OGC

Topics

- The OGC met September 11-15, 2017 in Southampton, UK
- Newly published standards
- Approval for electronic vote
- Other

OGC

Newly published standards

- GeoRSS [OGC17-002r1], http://docs.opengeospatial.org/cs/17-002r1/17-002r1.html
- OGC GeoPackage 1.2 [OGC12-128r14], https://portal.opengeospatial.org/files/12-128r14
- Spatial Data on the Web Best Practices [OGC15-107r1], https://www.w3.org/TR/sdw-bp/
  - *Search engines (e.g. Google) are not intended to replace metadata catalogues for search and discovery; rather, the two complement each other.*

OGC

Approval for electronic vote

- Web Processing Service (WPS) 2.0.2 [OGC 14-065r1] as a bug fix to WPS 2.0
- OGC Web Coverage Services (WCS) 2.0 Interface Standard – Earth Observation Application Profile [OGC 10-140r2]

OGC

Other

- WCS 2.1: Roll out extensions for Trajectories for aviation and General Regularly-distributed Information in Binary form (GRIB2)
- Web Service Common: Review and analyze change requests
- Quality of Service (QoS)
  - Identify QoS metrics. The key factor for improving QoS is to constantly measure QoS using well-defined and consistent metrics.
  - Develop OGC Best Practice for providing QoS metadata for OGC Web Services
  - Prepare OGC Discussion paper for ensuring Quality of Experience (QoE) for users of OGC Web Services

Questions