

Coordination Group Meeting FGDC Business Report

Ken Shaffer

Deputy Executive Director

*Federal Geographic Data
Committee*

November 14, 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

- ❖ **Wetlands Subcommittee Report**

Contact: Megan Lang, FWS

Read ahead: Wetlands Subcommittee Report

- ❖ **NAIP 2019 and Out Year Discussion**

Contact: Gita Urban-Mathieux, USGS

Read ahead: FGDC HydroVolunteer-3DNationSurvey 10032017

- ❖ **Other Agency Announcements**

Committee's Decision Summary

- ❖ The Executive Committee will hold a workshop in early December 2017 to discuss the future direction of the Geospatial Platform

CG and SC Monthly Membership Changes

❖ Steering Committee

❖ Department of Agriculture

- Everett Hinkley, USDA Acting GIO, is the new Senior Agency Official for Geospatial Information (SAOGI) replacing Kent Williams.

❖ Tennessee Valley Authority

- Tiffany Gibby, TVA Manager GIS and Mapping, is the new Senior Agency Official for Geospatial Information (SAOGI) replacing Roy Teal

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 met on October 18th.
Agenda topics discussed:
 - Geospatial Data Act of 2017
 - Geospatial Platform
 - Address Theme and National Address Database (NAD)
 - Recent Hurricane Response
 - NGAC Meeting Update
- ❖ Andrea Travnicek, Ph.D., Acting Assistant Secretary for Water & Science will serve as acting FGDC Chair
- ❖ The Executive Committee is planning a workshop to discuss the future direction of the Geospatial Platform in early December.

National Geospatial Advisory Committee (NGAC)

NGAC Webinar Meeting

- ❖ Monday, Dec 11, 1:00 – 4:30 pm EST
- ❖ Registration required – contact Lucia Foulkes to register
- ❖ Agenda Topics:
 - FGDC Updates
 - Subcommittee Reports:
 - Landsat Advisory Group
 - Infrastructure
 - Data as a Service
 - Cultural/Historical Resources
 - Public Comment Period
 - Discussion – Potential future study topics

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.
3. Fee recovery options for Landsat data.

❖ Next Steps:

- **Task 1 Action:** Review/adopt Task 1 paper at Dec. NGAC meeting
- **Task 2 Action:** Provide interim draft Task 2 report to NGAC for comment at Dec. NGAC meeting (final paper by March 2018)
- **Task 3 Action:** Provide Task 3 status report at Dec. NGAC meeting (final paper by March 2018)

Geospatial Technology & Infrastructure

❖ Membership:

- Cy Smith (Chair), Keith Masback (Vice Chair), Talbot Brooks, Pat Cummins, 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: Review/adopt infrastructure paper at Dec. NGAC meeting.

Data as a Service

❖ 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:** Provide status report at Dec. NGAC meeting.
- **ACTION:** Develop draft position paper by April 2018. 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:** Provide status report at Dec. NGAC meeting.
- **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

Coordination Group Meeting Dates

❖ 2017 FGDC CG Meeting Calendar

- December 12, 2017 DOI Rachel Carson Room

❖ 2018 CG meeting in development.

FGDC Business Update

- ❖ NGDA Portfolio Management
- ❖ Geospatial Platform Support Update
- ❖ FGDC Standards Update

National Geospatial Data Asset (NGDA) Portfolio Management

Lorna Schmid

FGDC OS

Nov 14, 2017



NGDA Portfolio Management - Current Activities

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

The screenshot shows a web page for the "NGDA A-16 Imagery Community". The header includes "GeoPlatform | Imagery" and a "Sign In" link. The main content area features a satellite map background with the text: "Welcome to the NGDA A-16 Imagery Community! This community provides information about the National Geospatial Data Asset (NGDA) Imagery Theme. Learn about associated geospatial standards, get information about committees and work groups, or search through the NGDA Datasets." Below this is a "Learn More" button. On the right side, there are links for "NGDA Datasets", "Theme Strategic Plan", and "Theme Implementation Plan".

Below the main content is a "Featured Pages" section with three thumbnails:

- Overview**: A thumbnail showing a map of the United States.
- Geospatial Standards**: A thumbnail showing a large meeting room with people seated at tables.
- Committees and Work Groups**: A thumbnail showing people working at computer workstations.

To the right of the featured pages is a sidebar titled "★ Imagery Theme Community" with the following information:

- Community Type: NGDA Theme
- Sponsor: FGDC
- Sponsor Email: service@geoplatform.gov
- Theme Lead Agency: U.S. Department of Agriculture, Farm Service Agency (FSA) U.S. Department of the Interior, U.S. Geological Survey (USGS)
- Theme Lead: John Cullen (USGS); Shirley Hall (FSA)

2017 NGDA Portfolio Reporting: Lifecycle Maturity Assessment

❖ **NGDA Dataset Reports:**

- ❖ November- Finalize template and generate reports
- ❖ December- Review by Dataset Managers, Theme Lead, Coordination Group and Steering Committee

❖ **LMA Dashboard (Under Review)**

❖ **Theme Summary Reports:**

- ❖ November - December – template and generate reports
- ❖ January- Review by Dataset Managers, Theme Lead, Coordination Group and Steering Committee

❖ **2017 LMA Analysis and Recommendation Report:**

- ❖ November – December- Finalize draft report
- ❖ January- Review by Dataset Managers, Theme Leads Coordination Group and Steering Committee

❖ **Portfolio Summary Report:**

- ❖ Develop template

Feedback: NGDA Dataset Reports & LMA Dashboard

- ❖ Theme Lead Feedback highlighted that 2015 and 2017 LMA Maturity Levels are not comparable, why?
 - ❖ Calculation Differences Between 2015 Maturity Levels and Subsequent Year's Levels
 - ❖ Changes in Maturity Levels Between Reporting Years
 - ❖ 2015 LMA Baseline and Improvements to the 2017 LMA
- ❖ Drafted a Webpage to describe the changes
 - ❖ [Temporal Changes in Lifecycle Maturity Assessment \(LMA\) Maturity and Results Comparisons](#)
- ❖ Following initial agreement by Theme Leads
 - ❖ Drafts of the Dashboard and Dataset Reports will be distributed to Theme Leads, Coordination Group and Steering Committee in November/December timeframe.

Theme Implementation Plans Progress Report

- ❖ FY17 Updates due October 31 - Action to Update with Table
- ❖ Once complete TIPs to be posted on public GeoPlatform Theme communities
- ❖ Goal to review activities and progress across Themes going forward to advance portfolio management

Theme	Status
Address	New Theme: TBD
Biodiversity and Ecosystems	Not Submitted
Cadastre*	In Progress
Climate and Weather	Not Submitted
Cultural Resources	Completed
Elevation*	Not Submitted
Geodetic Control*	In Progress
Geology	Not Submitted
Governmental Units*	Completed
Imagery*	In Progress
Land Use Land Cover	In Progress
Real Property	Initiated
Soils	Not Submitted
Transportation*	Completed
Utilities	Not Submitted
Water Inland*	Completed
Water Oceans and Coasts*	Not Submitted

Status as of 11/6/2017

NGDA Theme Implementation Plans: Updates with Progress Tables

- ❖ Tables are being incorporated to reflect Progress on Goals and Objectives from Strategic Plans
 - ❖ Will be updated annually and incorporated into Theme Summary Reports
- ❖ Cultural Resources Example:

Goals and Objectives undertaken during 2017	Status
Goal 1: Formulate strategies to develop and manage the data sets within the Cultural Resource Theme.	
Objectives 1.1 Develop and implement strategy to formally explore the incorporation of additional data sets to the Cultural Resource theme by the end of 2017.	In Progress
Objectives 1.2 Expand the use of the <u>GeoPlatform</u> Cultural Resource community webpage.	Not Started
Goal 2: Facilitate the sharing of the data sets within the Cultural Resource Theme.	
Objectives 2.1 Complete the development of the cultural resource spatial data transfer standard currently in development by the Cultural Resource Subcommittee.	In Progress

Table 2. 2017 Progress Summary for Theme Strategic Plan Goals and Objectives.

NGDA Inventory & POC Updates

❖ Theme Executive Champion Change

NGDA Theme		
Imagery, Land Use Land Cover, Soil	Everett Hinkley Acting USDA GIO	Kent Williams, USDA

❖ Theme Lead Change

NGDA Theme	New Theme Lead	Previous Theme Lead
Real Property	Acting Theme Lead: Michael O'Brien Theme Lead Support: Imani Higginson	None

❖ Dataset Manager Changes

NGDA Dataset Name	Theme	New Dataset Manager	Previous Dataset Manager
None			

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 staff has met with COGO leadership
 - FGDC briefing for COGO on NGDA process (6/5)
 - COGO has identified Theme review teams; FGDC has identified POCs for framework Themes
 - COGO is currently conducting theme-level reviews. Theme reviews will be combined into consolidated COGO report.

COGO Report Card – Contact List

Theme	COGO Report Card Teams	FGDC Theme Contacts
Address	Tony Simental (GISCI) Tony.A.Simental@wv.gov Dan Goldberg (UCGIS) Daniel.goldberg@tamu.edu Martha Wells (URISA) mwells@spatialfocus.com Katherine Cargo (URISA) KCargo@911nola.org	Lynda Liptrap (Census) lynda.a.liptrap@census.gov Steve Lewis (DOT) steve.lewis@dot.gov
Cadastre	Dan Fasteen (IAAO) Daniel.Fasteen@CO.Dakota.MIN.US Shelby Johnson (NSGIC) shelby.johnson@arkansas.gov Ed Crane (URISA) ecrane1949@gmail.com	Don Buhler (BLM) dbuhler@blm.gov Bob Ader (BLM) bader@blm.gov
Elevation	Amar Nayegandhi (ASPRS) anayegandhi@dewberry.com Thomas Meyer thomas.meyer@uconn.edu	Ashley Chappell (NOAA) ashley.chappell@noaa.gov Diane Eldridge (USGS) deldridge@usgs.gov
Geodetic Control	Doug Vandegraft (CaGIS) douglas.vandegraft@boem.gov Robert Holiday (NSGIC) RHoliday@mt.gov Bishwa Acharya bishwa@earthmapping.com	Dan Roman (NOAA) dan.roman@noaa.gov
Gov. Units	Hunter Key (URISA) hkey@crc.ga.gov Nancy Von Meyer (URISA) nancy@fairview-industries.com	Dierdre Bevington-Attardi (Census) Dierdre.Bevington.Attardi@census.gov Laura Waggoner (Census) laura.l.waggoner@census.gov Bob Pierce (USGS) rrpierce@usgs.gov
Water-Inland & Water Oceans and Coasts (Hydrography)	Thomas Newman (MAPPS) tnewman@terrasond.com Zsolt Nagy (MAPPS) zsolt.nagy@aecom.com Troy Blanford (NSGIC) TBlanford@mt.gov	Water – Inland Megan Lang (FWS) megan_lang@fws.gov Rebecca Anderson (USGS) rdanderson@usgs.gov
		Water – Oceans and Coasts Tony LaVoi (NOAA) tony.lavoi@noaa.gov Anne Ball (NOAA) anne.ball@noaa.gov
Imagery	Bobbi Lenczowski (ASPRS) Roberta.lenczowski@sbcglobal.net Lucia Lovison-Golob (CaGIS) lovison@afriterra.org Steve Sharp (GISCI) Steve.Sharp@vermont.gov	John Cullen (USGS) jcullen@usgs.gov Shirley Hall (USDA-FSA) shirley.hall@wdc.usda.gov
Transportation	Joe Weber (AAG) jweber2@ua.edu David Moss (IAAO) mossd004@mail.maricopa.gov Bert Granberg (NSGIC) bgranberg@utha.gov Shih-Lung Shaw (UCGIS) sshaw@utk.edu	Raquel Wright (DOT) raquel.wright@dot.gov

COGO Report Card – Current Status

Theme	Status (as of 11-3-17)
Address	Draft report developed. COGO team has sent draft report to Theme Leads for comment. COGO team has met with DOT regarding the NAD, but has not met with Theme Leads regarding the overall Address theme.
Cadastre	Draft report developed. COGO team has met with the Theme Leads. COGO team has not shared draft report with Theme Leads.
Elevation	COGO team has contacted Theme Leads, but they have not met. Status of report unknown.
Geodetic Control	COGO team has not contacted Theme Lead. Status of report unknown.
Governmental Units	Draft report developed. COGO team has sent draft report to Theme Leads for comment (comments will be provided the week of 11/6). COGO team has not met with Theme Leads.
Hydrography	Draft report developed. COGO is reviewing Water-Inland only. COGO team has met with the Theme Leads. COGO team has not shared draft report with Theme Leads.
Imagery	COGO team has contacted Theme Leads with questions. COGO team will meet with Theme leads in the near future. Draft report should be completed soon.
Transportation	COGO team has not contacted Theme Lead. Status of report unknown.

Geospatial Platform Support Contract Monthly Update to Coordination Group

November 14, 2017



Technical Task Order Summary

❖ TO-13 Technical Support

❖ Support: Image Matters, Inc.

❖ Activities

- GeoPlatform.gov
 - Development – quarterly releases of new capability
 - Operations and Maintenance
 - Community Support
 - Service Desk support
- Recent Events
 - GeoPlatform Workshop 10/24 – 10/25 @USGS Reston

Contact: Tod Dabolt DOI, IOS
thomas_dabolt@ios.doi.gov

Shared Infrastructure and Services



Cloud Hosting Services

- ❖ The Geospatial Platform and the Federal Geographic Data Committee (FGDC) are offering a managed hosting service for geospatial assets to FGDC member agencies.
 - ❖ Several DOI Bureaus are currently using this AWS based infrastructure
 - ❖ FEMA active customer
 - ❖ Army Corp active customer
- ❖ More information: <https://www.geoplatform.gov/hosting>

Accomplishments

- ❖ Release 9 deployed in August; Release 10 in November
- ❖ GeoPlatform Workshop (October 24-25)
 - ❖ 5 agenda topics presented over 2 days
 - ❖ “Using the GeoPlatform for Interagency Collaboration and Event Driven Solutions”
 - ❖ “GeoPlatform accomplishments in GFY2017”
 - Demonstration of Object Editor (OE) in an end-end workflow scenario
 - ❖ “GeoPlatform, What’s in the works?”
 - ❖ “GeoPlatform GFY2018 Roadmap: Enterprise Search”
 - Demonstration of new GeoPlatform tools for Knowledge Graphs on portfolio resources... a key enabler for scalable search, discovery, and navigation
 - ❖ Metadata Panel discussion, including overview of GeoPlatform support for ISO 19115 metadata and the “GeoPlatform Profile”
- ❖ Key contacts
 - ❖ NASA (ESDIS) – information exchange and ISO 19115-1 best practices
 - ❖ GSA (CIBORG) – drafted BPA language for required ISO 19115-1/2/3 metadata
 - ❖ DoD (DISDI/GWG) – strategies for coordinating on ISO 19115-1 roadmap

GeoPlatform.gov - Release 10 (Nov 2017)

Theme: Knowledge Graphs, Recommenders, and Communities

- ❖ Manage multiple taxonomies for semantic enrichment and search
 - ❖ Register taxonomy and enrich portfolio objects with Knowledge Graphs
- ❖ Build Knowledge Graphs on Open Layer and Open Map assets
 - ❖ Map Viewer and Map Manager used to semantically enrich layer and map resource
- ❖ Recommender micro-services leverage LKG/ MKG context and tradecraft
 - ❖ Concept/ LKG/ MKG Recommenders assist users with finding relevant resources
- ❖ Curate Dataset, Service, Layer, and Map assets from external sources (e.g., ArcGIS Online)
- ❖ Migrate NGDA Theme Communities
- ❖ Numerous user-experience/usability improvements
- ❖ 2017 NGDA LMA with Dashboard enhancements
- ❖ New community spaces coming online (see below)

GeoPlatform.gov - Release 11 (Mar 2018)

Theme: Enhanced Search, Open APIs, and Dynamic Communities

Capabilities

- ❖ Advanced (semantic) search
- ❖ Recommender micro-services to leverage LKG/ MKG context and tradecraft
- ❖ Demonstrate integrations of community-supplied taxonomies
- ❖ Community Map Viewer tool for viewing dynamic, customized, reusable (embeddable) OpenMaps
- ❖ OAuth for unified authentication and authorization management, secure APIs
- ❖ Portal content refresh/ consolidation

Benefits

- ❖ Expanded use of context and map tradecraft for rich GeoPlatform Portfolio experience
 - ❖ Search, find, and do something
- ❖ Bridging across community and vendor datasets and catalogs
 - ❖ Find the right data (relevant, fit-for-use) across agencies and stovepipes
 - ❖ Open: Vendor/ technology agnostic
- ❖ Enabling Dynamic Digital Community experience

GeoPlatform.gov – Communities

- ❖ **NGDA Theme Communities** – migrating Drupal content to Wordpress and the GeoPlatform “Dynamic Digital Community” package (started)
- ❖ **HIFLD Open** – now part of GeoPlatform
- ❖ **Tribal Nations (BIA)** – good progress and likely first out of gate
- ❖ **Invasive Species (WGA)** – good early progress
- ❖ **Mississippi River Basin Science (MRBS)** – limited progress
- ❖ **International Program for Human Geography (NGA)** – initial requirements, technical exchange, and planning meetings
- ❖ **WWHGD** – re-established contact, reviewed new GeoPlatform community capabilities; possible move to new Dynamic Digital Community package.
- ❖ **DOI Office Emergency Management** – just starting
- ❖ **US Group on Earth Observations (USGEO)** – just starting
- ❖ **Geoplatform Customers** – dedicated space for customer collaboration and information sharing about GeoPlatform Shared Services offerings
- ❖ **GeoPlatform Core Team** – dedicated space for programmatic information-sharing and reporting among GeoPlatform Core Team members

Portfolio Management Task Order Summary

❖ TO-14 NGDA Portfolio Management

❖ Support: Ardent Management Consulting

❖ Activities

- 2017 Lifecycle Maturity Assessment (LMA)
 - Temporal Changes in Lifecycle Maturity Assessment (LMA) Maturity and Results Comparisons – in review by Theme Leads
 - NGDA Portfolio Activity Schedule – in review by Theme Leads
 - NGDA Dataset and Theme Summary Report templates – in review by Theme Leads
 - LMA Report - Analysis and Recommendations – in development
 - Work Plan for Period of Performance– in development
- Continued A-16 Communities Operations & Maintenance
 - Drupal to Word Press Communities migration - Coordinating with Tech Team
- Updated NGDA Database and FGDC web pages – as required
- Draft NGDA LMA Dashboard – in review by Theme Leads
- Capital Planning and Investment and Control (CPIC) - monthly
- Upcoming Events:
 - December 5th, 11 AM ET: Theme Lead Meeting

Capital Planning and Investment Control (CPIC)

❖ USGS CPIC Reporting

- ❖ EVM in eCPIC – completed update
- ❖ Performance Measures in eCPIC – monthly update
- ❖ Risk Register in eCPIC – monthly update
- ❖ 2 Day CPIC Workshop – participated in future direction of Capital Planning
- ❖ Continuous Review and Updating of Artifacts for FY18, e.g. Benefit Cost/Alternative Analysis; Operational Analysis; Risk Management Plan, Acquisition Strategy

❖ Upcoming Events

- USGS CPIC Investment Management Meetings monthly
- Enterprise Risk Management Webex – November 15th

Geospatial Standardization Activities

As presented to the
FGDC Coordination Group on
Tuesday, November 14, 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

- ❖ FGDC online Standards registry has been updated to include
 - ❖ As recommended by NGAC standards subcommittee
 - ❖ Fields
 - ❖ Name of standard
 - ❖ Link to standard
 - ❖ media type (Word, PDF, HTML, etc.)
 - ❖ Publisher/creator (FGDC, ISO, ANSI, OGC, etc.)
 - ❖ Publication date
 - ❖ Constraints (copyright, license, etc.)
 - ❖ FGDC endorsement date
 - ❖ Fees (yes/no) – Link to Why charge for standards?, https://www.ansi.org/help/charge_standards?menuid=15
 - ❖ Description
 - ❖ Keywords, for example, NGDA theme

FGDC

Standard	Where to find	MIME media type	Publisher/creator	Publication date	Constraints	FGDC endorsement date	Fees	Comment	Keywords
United States Thoroughfare, Landmark, and Postal Address Data Standard FGOC-STD-016-2011 Part 1 Introduction	Link	application/pdf	FGDC	2011	unrestricted	2011	No		Address
United States Thoroughfare, Landmark, and Postal Address Data Standard FGOC-STD-016-2011 Part 2: Address Data Content	Link	application/pdf	FGDC	2011	unrestricted	2011	No	Part 2 defines address elements, their attributes, and address reference system elements.	Address, data content
United States Thoroughfare, Landmark, and Postal Address Data Standard FGOC-STD-016-2011 Part 3: Address Data Classification	Link	application/pdf	FGDC	2011	unrestricted	2011	No	Part 3 classifies addresses according to their syntax, that is, the <i>x</i> address elements and the order in which those elements are arranged. Syntax determines the record structure needed to hold and exchange an address, and often it is all that is known about the address in a given file. Classifying addresses by syntax (rather than semantics (i.e. meaning) allows users to focus on record structures and avoid making any assumptions about what address feature type the address might identify.	Address, data classification
United States Thoroughfare, Landmark, and Postal Address Data Standard FGOC-STD-019-2011 Part 4: Address Data Quality	Link	application/pdf	FGDC	2011	unrestricted	2011	No	Part 4 helps users assess the quality of their address data. It provides ways to measure the quality of each element, attribute, and classification. Some measures compare values to Address Reference System (ARS) specifications or domains of values, while others check internal consistency. Measures describe ways to discover anomalies, in isolation, in relationships between data, and in relationship to the ARS, and how to report the quality of the data.	Address, data quality
United States Thoroughfare, Landmark, and Postal Address Data Standard FGOC-STD-019-2011 Part 5: Address Data Exchange	Link	application/pdf	FGDC	2011	unrestricted	2011	No	Part 5 provides: (1) a template for the XML documents and metadata for data exchange; (2) information on preparing address data to be packaged; and (3) information on encapsulating address data. Part 5 simplifies implementation of data exchange by providing a flexible data structure for exchanging street address data. The Address Data Standard is designed to be flexible enough to fit within current data sharing methods. The Address Data Standard supports two basic forms of sharing data: (1) one-off file, in which a records are in the exchange package and (2) transactional, in which the exchange package records include commands to add or remove a record from the local copy of records.	Address, data exchange
United States Thoroughfare, Landmark, and Postal Address Data Standard FGOC-STD-016-2011 Part 6:	Link	application/pdf	FGDC	2011	unrestricted	2011	No		Address

FGDC

- ❖ Standards registry applications
 - ❖ Sort and filter standards by FGDC endorsement date for maintenance. Review standards every 5 years: visit FGDC standards directive #9, Maintenance, <https://www.fgdc.gov/standards/process/standards-directives/directive-09>
 - ❖ Sort and filter standards by keywords to identify standards that are relevant to an NGDA data theme
 - ❖ Discover if there are usage or legal constraints for a standard
 - ❖ Discover if you have to pay for standards. This applies to ANSI and ISO standards. Refer to Why Charge for Standards, https://www.ansi.org/help/charge_standards

FGDC

Proposals for FGDC endorsement of external standards

1. ISO 19115-3:2016, Geographic information -- Metadata -- Part 3: XML schema implementation for fundamental concepts
2. OGC Web Coverage Service (WCS) 2.0 + extensions, with retirement of WCS 1.1.2
3. OGC Web Processing Services (WPS) 2.0 [14-065], with confirmation of WPS 1.0.0
4. OGC GML 3.3 [10-129r1], with confirmation of GML 3.2.1
5. OGC Geography Markup Language (GML) simple features profile (with Corrigendum) (2.0) [10-100r3]
6. OGC KML 2.3 [12-007r2], with confirmation of OGC KML 2.2.1
7. OGC Filter Encoding (FE) 2.0.2 [09-026r2], with retirement of FE 1.1
8. OGC GeoPackage 1.1 [12-128r12], with retirement of OGC GeoPackage 1.0, which has been deprecated
9. 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
10. ISO/TS 19157-2:2016 Geographic information -- Data quality -- Part 2: XML schema implementation – TBD

INCITS L1/U.S. TAG

Updates to international standards projects

Standard	Stage date	Current stage
ISO/FDIS 19115-2 Geographic information -- Metadata -- Part 2: Extensions for acquisition and processing	2017-10-20	Final text received or FDIS registered for formal approval (ISO stage code 50.00)
ISO 19115-1:2014/FDAmendment 1 Geographic information -- Metadata -- Part 1: Fundamentals -- Amendment 1	2017-10-13	
ISO 19157:2013/PRF Amendment 1 Geographic information -- Data quality -- Amendment 1: Describing data quality using coverages	2017-10-05	

INCITS L1/U.S. TAG

- ❖ OMB Circular A-119 (2016) directs Federal agencies to
 - ❖ use voluntary consensus standards in lieu of government unique standards, except where inconsistent with law or otherwise impractical.
 - ❖ participate in voluntary consensus standards bodies.
- ❖ According to OMB Circular A-16, the NSDI supports and advances the Global Spatial Data Infrastructure, consistent with national security, defense, and intelligence and international trade requirements. International compatibility is an important aspect of the NSDI.
- ❖ Adoption and use of international standards help promote interoperability among SDIs at all geographic extents, from local to state to national to transnational to global.
- ❖ INCITS L1 serves as the U.S. Technical Advisory Group to ISO Technical Committee 211, Geographic information/Geomatics. Most projects assigned to INCITS L1 are international projects.

INCITS L1/U.S. TAG

International Projects in work

Identifier	Name
ISO/NP 19105	Conformance and testing
ISO/NP 19123-1	Schema for coverage geometry and functions
ISO/NP 19126	Feature concept dictionaries and registers
ISO/NP TS 19139-1	Metadata -- XML schema implementation -- Part 1: Title missing
ISO/AWI TS 19130-3	Imagery sensor models for geopositioning -- Part 3: Implementation Schema
ISO/AWI 19150-4	Ontology -- Part 4: Service ontology
ISO/AWI 19160-2	Addressing -- Part 2: Good practices for address assignment schemes
ISO/AWI 19161-1	Geodetic references -- Part 1: The international terrestrial reference system (ITRS)

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International Projects in work, continued

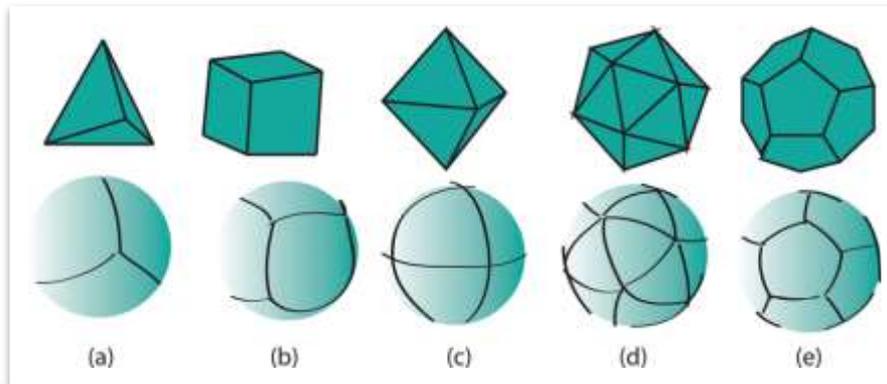
Identifier	Name
ISO/AWI 19165-2	Preservation of digital data and metadata -- Part 2: Content specifications for earth observation data and derived digital products
ISO/AWI 19166	BIM to GIS conceptual mapping (B2GM)
ISO/CD 19142	Web Feature Service
ISO/CD 19143	Filter encoding
ISO/CD TS 19159-3	Calibration and validation of remote sensing imagery sensors and data -- Part 3: SAR/InSAR
ISO/CD 19116	Positioning services
ISO/CD 19160-3	Addressing -- Part 3: Address data quality
ISO/CD 19112	Spatial referencing by geographic identifiers
ISO/CD 19111	Referencing by coordinates
ISO/CD 19131	Data product specifications

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- ❖ The INCITS membership cycle begins December 1st.
- ❖ To join INCITS L1, visit Apply for Membership, <http://www.incits.org/participation/apply-for-membership>

OGC

- ❖ OGC has approved the Discrete Global Grid System (DGGS) standard.
- ❖ DGGSs represent the Earth as hierarchical sequences of equal area tessellations on the Earth's surface. Preservation of total surface area is necessary for representing information consistently at successive resolutions.

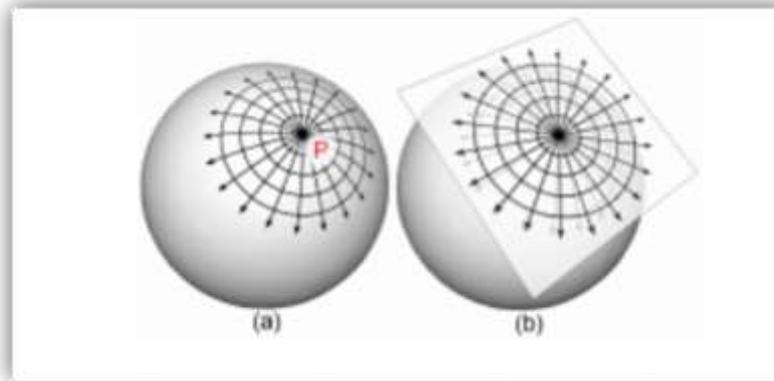


This figure shows regular polyhedra (top) and their initial equal area tessellation (bottom)

OGC

DGGS, continued

- ❖ Existing spatial reference systems build grids from projected Cartesian or ellipsoidal coordinate axes. While planar geometry holds true at local scales, it fails at larger regions of interest (see figure below).



- ❖ The DGGS standard may be found at <http://docs.opengeospatial.org/as/15-104r5/15-104r5.html>.

Questions