

# Coordination Group Meeting FGDC Business Highlights\*

*Ken Shaffer*

*Deputy Executive Director*

*Federal Geographic Data  
Committee*

*May 2, 2017*



\*From the detailed monthly business report

# FGDC Leadership Changes

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- ❖ Acting FGDC Chair – Kerry Rae, DOI Acting Principal Deputy Assistant Secretary for Water & Science
- ❖ Tod Dabolt, DOI GIO – New Chair of the Homeland Infrastructure Foundation-Level Database (HIFLD) subcommittee

# CG and SC Monthly Membership Changes

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❖ No changes this month

# Steering Committee

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- ❖ The FGDC Steering Committee met on March 23th at DOI, South Penthouse.
  - Acting FGDC Chair is Kerry Rae, DOI Acting Principal Deputy Assistant Secretary for Water & Science
  - Discussion topics:
    - FGDC Business Activities
    - United Nations Initiative on Global Geospatial Information
    - Address Theme Status Update and National Address Database
    - NGAC Meeting Summary
    - NGDA Cultural Resources Theme Report
    - Geospatial Platform Update
- ❖ The next Steering Committee meeting is scheduled for June 15<sup>th</sup> at DOI's Main Interior Building.

# Executive Committee

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- ❖ The Executive Committee met on April 26<sup>th</sup> at DOI.  
Discussion topics:
  - The State of the Geospatial Platform
  - NSDI Strategic Framework
  - NGAC Guidance Topics

# NGAC Membership – March 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. Gareth Couch\***  
National Tribal GIS Center

**Ms. Patricia Cummins\***  
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



\*Appointed/Reappointed February 2017

# 2017 NGAC Members



# March 2017 NGAC Meeting – Agenda

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Leadership Dialogue

Federal Geospatial Highlights

- ❖ NGDA Portfolio Management
- ❖ Geospatial Platform

Perspectives – Key Issues Facing the Geospatial Community

Spotlight on Geospatial Programs

- ❖ National Address Database
- ❖ USGS National Geospatial Program
- ❖ Parcel Data

NGAC Subcommittee Reports

- ❖ Standards Coordination Subcommittee
- ❖ Landsat Advisory Group

Lightning Sessions

# FGDC Activities

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Leadership dialogue with Kerry Rae (DOI).

Update on Federal Geospatial Activities:

- ❖ Transition activities
- ❖ NSDI Strategic Framework
- ❖ National Geospatial Data Asset (NGDA) Portfolio management
- ❖ Geospatial Platform



# Spotlight on Geospatial Programs

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## **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 Mike Tischler (USGS) on 3DEP, Hydrography, Alaska mapping, etc.
- ❖ USGS will ask for NGAC feedback on 3DEP Multi-year plan at June 2017 NGAC meeting.

## **HIFLD/Parcel Data:**

- ❖ Update from Mike Donnelly (DHS) and Mike Piscotti (NGA).
- ❖ Parcel data available through HIFLD Secure later this year – NGAC organizations encouraged to utilize as appropriate.

# Standards Subcommittee

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- ❖ NGAC adopted paper on “Geospatial Standards: A National Asset” in principle, pending minor edits
- ❖ Paper addressed task from 2016 FGDC guidance:

“The FGDC requests NGAC advice on greater adoption and utilization of standards resulting in enhanced interoperability of geospatial data, services, and systems. The FGDC will also request recommendations on collaboration with voluntary standards organizations to enhance the implementation and uptake of endorsed standards.”
- ❖ **Subcommittee Membership:** Carl Reed (chair), Gen. William Reddel (vice-chair), Talbot Brooks, Xavier Irias, Harvey Thorleifson, and Frank Harjo.

# Standards Paper – Recommendations

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## 1. Discovery - Create a national inventory of key geospatial standards

FGDC should coordinate the development and maintenance of a publicly accessible inventory (registry) of relevant geospatial standards. The initial contribution to this inventory could be those international or national standards already vetted and endorsed by the FGDC and the GWG.

## 2. Role of the FGDC

The FGDC should continue to collaborate with voluntary consensus standards organizations to provide requirements and to facilitate the development of standards.

## 3. Outreach & Education

FGDC, in collaboration with its partners, can provide leadership to:

- Communicate the benefits of standards
- Provide use cases and exemplars
- Determine which standards to use
- Co-sponsor seminars and workshops for partner organizations
- Consider which standards should (or can) be specified in legislation

# Landsat Advisory Group

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## LAG Study Tasks:

### ❖ Task #1 – Revisit Smallsat Investigation

- USGS asking LAG formulate comprehensive narrative on pros and cons of *existing* smallsat technology juxtaposed with Landsats 8 and 9.
  - Task Lead: Kass Green
  - Status: Draft report in June 2017

### ❖ Task #2 – Temporal Data Cube Study

- Study the feasibility and utility of implementing temporal data cubes to support projection or ‘forecast’ models of land change trends
  - Task Lead: Bobbi Lenczowski
  - Status: Draft report in June 2017

# NGAC Dialogue – Ideas for Study Topics

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## **Geospatial technology and infrastructure**

- Recognize that geospatial infrastructure is part of the nation's critical infrastructure
- Demonstrate how geospatial technology and information is needed to address critical infrastructure issues

## **Workforce & Education**

- Scope of geospatial industry has grown dramatically; growing demand and opportunities
- How to train next generation of geospatial professionals

## **Address the geospatial community's needs for Data as Services**

- Think 3-5 years out
- Push and pull analysis

## **Cultural and historical geospatial assets held by Federal agencies**

- Strategies for effective management of protected data with geospatial component
- Assess need & approaches to develop standard/consistent processes

# Lightning Talks

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- ❖ **U.S. Geological Mapping Strategic Plan** – Harvey Thorleifson
- ❖ **RFID and GNSS for Underground Asset Management** – Xavier Irias
- ❖ **Beyond Open Data** – Pat Cummins
- ❖ **Preparing Students for the Workforce** – Talbot Brooks
- ❖ **National Assessment of GIS&T** – Doug Richardson
- ❖ **Exchange Network Conference** – Frank Harjo
- ❖ **State of GeoInt Report** – Keith Masback
- ❖ **NAPSG Foundation Standards Overview** – Gen. William Reddel/Rebecca Harned
- ❖ **DOD Shared Situational Awareness Memorandum** – Gen. William Reddel

# Next Steps

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- ❖ Form short-term working groups to address key issues
- ❖ Plan for imagery/Landsat session at June meeting
- ❖ Form subcommittees to address FGDC guidance (June meeting).

## Next NGAC meetings:

- ❖ June 13-14 (Department of Interior)
- ❖ Sept 6-7 (NCTC – Shepherdstown)
- ❖ December webinar meeting (date TBD)

# Coordination Group Meeting Dates

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## 2017 FGDC CG Meeting Calendar

- ❖ June 6, 2017 - DOI Rachel Carson Room
- ❖ July 11, 2017 - DOI Rachel Carson Room
- ❖ August 29, 2017 - DOI Kiowa Room
- ❖ September - No CG meeting
- ❖ October 3, 2017 - DOI Rachel Carson Room
- ❖ November 14, 2017 DOI Rachel Carson Room
- ❖ December 12, 2017 DOI Rachel Carson Room

# FGDC Business Update

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- ❖ 2014 GAO Engagement
- ❖ NGDA Portfolio Management
- ❖ NSDI Strategic Planning
- ❖ 2017 Doug D. Nebert NSDI Champion of the Year Award Nominations
- ❖ 2017 ISO Metadata Summit
- ❖ FGDC API Concept Development Study
- ❖ FGDC Standards Update

# GAO Recommendations Update

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GAO continues to monitor and close recommendations from their Geospatial Data (GAO-15-193) and Geospatial Information (GAO-13-94) reports.

## Recently Closed

- ❖ DOI – Correct the search function of the Geospatial Platform so it effectively identifies applicable datasets
- ❖ DOC – implement departmental strategies for advancing geographic information and geospatial data activities appropriate to their missions
- ❖ FGDC/DOT/DOC – Create an address data theme with associated subcommittees to assist in furthering a national address database
- ❖ DOI/USGS – Develop and implement a plan for nationwide population of Inland Waters (hydrography) NGDA Data Theme

GAO Released their: **2017 Duplication report and the Action Tracker:**

<http://www.gao.gov/duplication/overview>

# NGDA Portfolio Management - Current Activities

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- ❖ Web services and metadata project
  - ❖ Federal and non-Federal metadata publishers are required to have an OMB MAX account – see instructions <https://cms.geoplatform.gov/resources>
  - ❖ Ongoing coordination with NGDA Dataset Managers and Theme Leads for updating metadata records with web services and download links and publishing to Data.gov/Geoplatform.gov
- ❖ 2015-2016 Draft NGDA Portfolio Summary Report
  - ❖ Theme Leads and NGDA community reviewed
  - ❖ CG review and then send to Steering Committee for approval
- ❖ 2017 Lifecycle Maturity Assessment
  - ❖ To be released May 8 – discuss later in meeting

# NGDA Portfolio Management - Current Activities

## ❖ Theme Implementation Plans

- ❖ First reporting period Oct. 2016-March 2017 due April 28
- ❖ Post on public GeoPlatform Theme community
- ❖ Goal to review activities and progress across Themes going forward to advance portfolio management

Theme Imp. Plan	Status
Address	To be determined
Biodiversity and Ecosystems	Extension 6/16
Cadastre*	In Progress
Climate and Weather	In Progress
<a href="#">Cultural Resources</a>	Completed
Elevation*	In Progress
<a href="#">Geodetic Control</a> *	Completed
Geology	Extension
Governmental Units*	Completed
Imagery*	In Progress
Land Use Land Cover	In Progress
Real Property	To be determined
Soils	In Progress
Transportation*	In Progress
Utilities	In Progress
<a href="#">Water Inland</a> *	Completed
Water Oceans and Coasts*	In Progress

*Status as of 4/24/17*



# NGDA Inventory Updates

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## ❖ Theme Executive Champion Change

NGDA Theme	New Executive Champion	Previous Executive Champion
Governmental Units	Deirdre Bishop, US Census Bureau	Tim Trainor, US Census Bureau
Imagery	Shirley Hall USDA FSA, Acting	Ted Payne, USDA

## ❖ Theme Lead Change

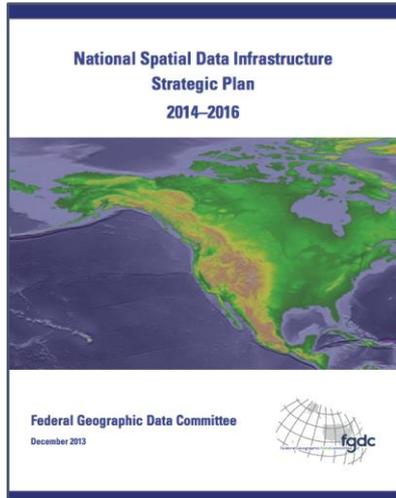
NGDA Theme	New Theme Lead	Previous Theme Lead
Soils	Drew Kinney, USDA NRCS Drew.Kinney@tx.usda.gov	Neil Dominy, USDA NRCS

# NGDA Inventory Updates

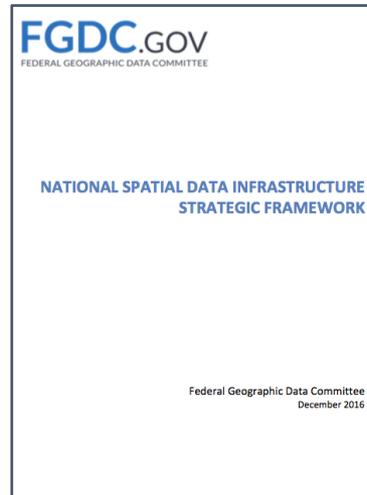
## ❖ Dataset Manager Changes

NGDA Dataset Name	New Dataset Manager	Previous Dataset Manager
ODIN: Observational Data Interactive Navigation, an interactive map of all CO-OPS active stations	Shawn Maddock, NOAA shawn.maddock@noaa.gov Backup Todd Ehret, NOAA Todd.Ehret@noaa.gov	Armin Pruessner, NOAA armin.pruessner@noaa.gov
Sea Levels Online- Sea Level Variations of the United States Derived from National Water Level Observation Network Stations	Shawn Maddock, NOAA shawn.maddock@noaa.gov Backup Todd Ehret, NOAA Todd.Ehret@noaa.gov	Armin Pruessner, NOAA armin.pruessner@noaa.gov

# NSDI Strategic Planning



**2014-2016  
NSDI Strategic Plan**



**2016-2017  
NSDI Strategic Framework**

**Transitional Plan**

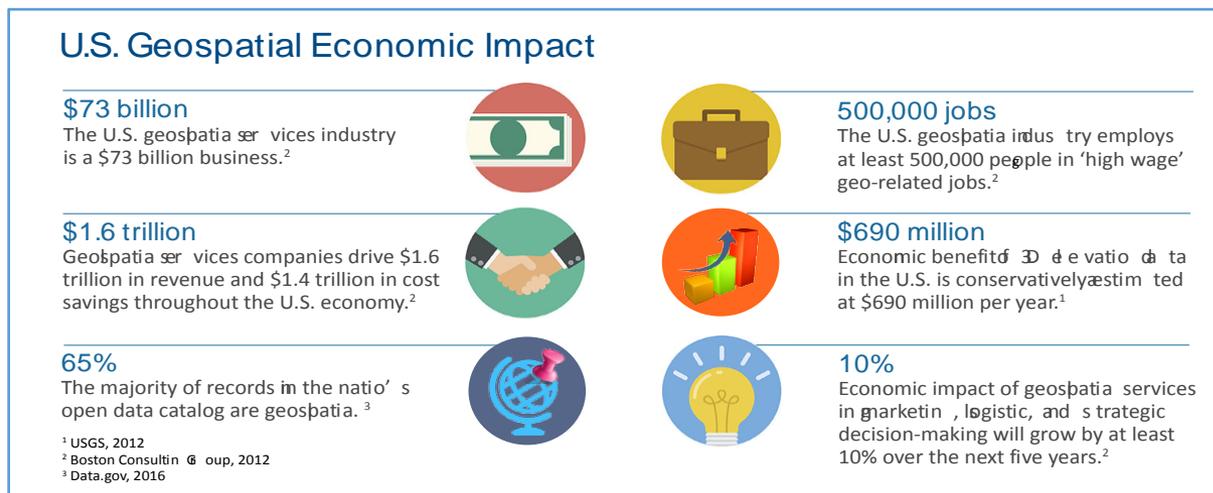


**2017-20XX  
NSDI Strategic Plan**

**Next Full Strategic Plan  
(to be completed in 2017)**

# NSDI Strategic Framework – Current Status

- Strategic Framework endorsed by NGAC – December 14 NGAC meeting
- Strategic Framework approved by Steering Committee via electronic vote – December 2016
- Final Plan posted at: <https://www.fgdc.gov/nsdi-plan/2017/nsdi-strategic-framework.pdf>



# Interim Implementation Approach

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## **2017 FGDC Strategic Activities:**

- Develop high-level work plan identifying priorities and deliverables for 2017 – building on the goals and strategies identified in the NSDI Strategic Framework.

## **NSDI Strategic Plan:**

- Engage with Administration in 2017 to refine the framework and develop final version of NSDI Strategic Plan.
- Concurrently develop more detailed implementation strategy for new NSDI Strategic Plan.

# Interim Implementation Approach

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## **2017 FGDC Priorities – draft components:**

- Geospatial Platform
- Management of National Geospatial Data Assets
- NSDI Strategic Planning
- Key Geospatial Data Initiatives
- Leadership and Coordination
- Standards and Metadata
- Communication and Outreach

# 2017 Doug D. Nebert NSDI Champion of the Year Award Nominations

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- ❖ FGDC is now accepting nominations for the Doug D. Nebert National Spatial Data Infrastructure (NSDI) Champion of the Year Award.
  - Details and nomination process are posted on the FGDC Web site at <https://www.fgdc.gov/nebertaward>
- ❖ Will recognize individual or team representing Federal, State, Tribal, regional, and (or) local governments, academia, or nonprofit and professional organizations that has developed an outstanding, innovative and operational tool, application, or service capability used by multiple organizations
- ❖ Nominations will be accepted until May 5, 2017
- ❖ Questions: Contact Lucia Foulkes ([lfoulkes@usgs.gov](mailto:lfoulkes@usgs.gov))

# 2017 ISO Metadata Summit

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- ❖ Goal: To engage the NSDI metadata community to identify recommendations for enabling interoperable ISO metadata that supports data and services
- ❖ May 24, 2017 - U.S. Geological Survey, Reston, VA
- ❖ Audience: federal and non-federal metadata practitioners
- ❖ Hands-on ISO metadata tool session on May 23
  - ❖ Geoplatform, EPA, potentially others
- ❖ Presentations, breakout sessions, and discussion to identify actions needed for agencies and community members to meet the goal
- ❖ For information and registration:  
<https://www.fgdc.gov/metadata/events/iso-metadata-summit-2017/index.html>

# FGDC API Concept Development Study

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**Background:** FGDC is sponsoring an API Concept Development Study through OGC to support long-term planning. The explosive growth, anticipated need and accelerated expansion of API's in the geospatial community offers new opportunities and challenges.

**Purpose:** The study will be to determine how API providers and data consumers can improve APIs in order to:

- Examine how APIs are used effectively to exchange geospatial information
- Identify where the proliferation of API diversity has impacted interoperability
- Support planning for increased use of protocols to enhance interoperability
- Suggest consensus activities that would improve the geospatial API ecosystem

**Outcome:** The study will provide an in-depth understanding of all the components necessary to enable increased coordination and effectiveness of APIs as applied to geospatial information.

# FGDC API Concept Development Study

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## Schedule

- Request for Information: March 7 - March 31, 2017
- Analysis of responses: April 1 - May 10, 2017
- API Plugfest: May 15, 2017 By Invitation Only
- API Workshop: May 16, 2017
- Publish report: June 2017

# Geospatial Standards

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- ❖ The standards tracking workbook covers 350 standards from FGDC, INCITS Technical Committee L1, ISO Technical Committee 211, OGC, and other standardization activities.
- ❖ FGDC OS is proposing, for Standards Working Group (SWG) consideration, altering this activity to focus on tracking a subset of standards.
- ❖ Monthly updates would be limited to:
  - ❖ Updates on metadata and related standards
  - ❖ SDI standards baseline and related standards
  - ❖ Specific standards proposed for tracking by the SWG

# Standards to be Tracked Monthly

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- ❖ Status updates on 25 metadata and related standards are provided at quarterly FGDC Metadata WG meetings.
  - ❖ Metadata is a key underpinning for catalogs, services, GeoPlatform and other functions.
- ❖ Chapter 10, Standards Suites for SDIs, of the SDI Cookbook, 2012 (currently in revision by FGDC OS) presents an SDI standards baseline that comprises:
  - ❖ Information transfer standards
  - ❖ Service invocation standards
- ❖ Standards agencies propose to recommend for FGDC endorsement.
- ❖ The proposed list will be sent to the CG and SWG for review.

# SDI Standards Baseline

## Information transfer standards

ISO 19115/ISO 19139

OGC Geography Markup Language (GML)  
3.2.1

OGC KML 2.2

OGC Filter Encoding (FE) 2.0

GeoRSS-Simple, GeoRSS GML

Web Map Context (WMC) 1.1

GeoPackage

## Service invocation standards

OGC Catalogue Service 2.0.2 HTTP  
protocol binding (CS-W) ISO Metadata  
Profile

OGC Web Feature Service (WFS) 2.0/ISO  
19142:2010

OGC Web Processing Services (WPS) 1.0 +  
corrigenda

OGC Web Feature Service (WFS) 2.0/ISO  
19142:2010

OGC Web Map Service (WMS) 1.3/ISO  
19128:2005

OGC Web Coverage Service (WCS) 2.0 +  
extensions

# Standards Tracking

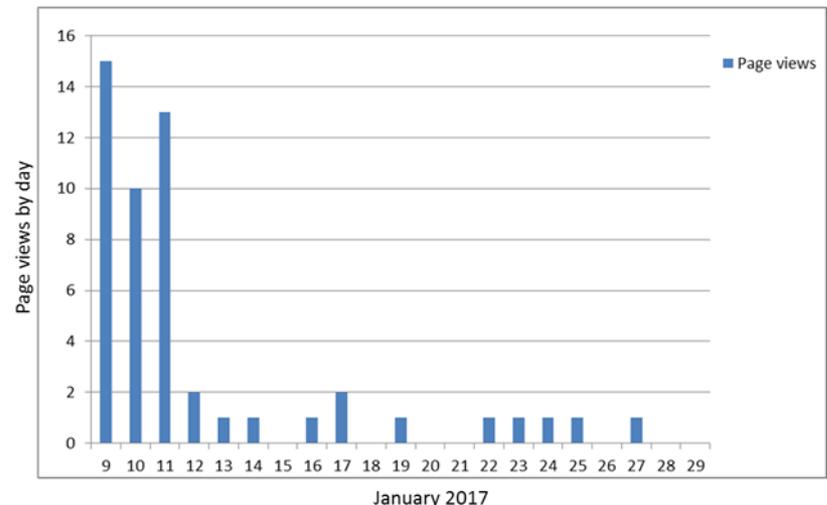
Why the change?

- ❖ The effort is very time-intensive due to the amount of information required to collect, review and corroborate status changes ([sources consulted](#)).
- ❖ Web statistics show very low usage and numerous requests for agency input on their use received a single response.
- ❖ Comparison of direct messaging vs. web page access:

Outreach	Membership
Mailing lists	
INCITS L1/U.S. TAG	51
FGDC Standards WG	41
Linkedin	
Connections	459
Groups	
OGC	9899
ISO/TC 211	230
FGDC Standards WG	22

For period January 9-29, 2017

- 51 page views
- 38 unique visitors



# Sources Consulted

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- ❖ ISO standards
  - ❖ INCITS standards data base
  - ❖ ISO TC 211 committee project data base
  - ❖ L1/U.S. TAG meeting notes
  - ❖ L1/U.S. TAG ballots and voting results
  - ❖ ISO TC 211 ballots and voting results
  - ❖ ISO TC 211 plenary resolutions
  - ❖ Weekly ANSI Standard Bulletin
  - ❖ Other ISO standards. Examples: quantities and units; codes for the representation of names of languages

# Sources Consulted

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- ❖ OGC standards
  - ❖ ballots
  - ❖ Press releases
    - ❖ RFCs on draft standards
    - ❖ publication of new or revised standards
  - ❖ OGC plenary resolutions (quarterly)
- ❖ GWG standards
  - ❖ Change requests (3 times a year)
  - ❖ GWG voting meeting minutes
  - ❖ GWG Geospatial Web Services Focus Group

# Key Geospatial Standards Activities

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- ❖ FGDC
- ❖ GWG
- ❖ INCITS L1/U.S. TAG and ISO Technical Committee 211
- ❖ OGC

# FGDC Geospatial Standards Activities

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- ❖ Adjudication of public review comments on the revision of the FGDC-endorsed Address Data Standards is underway

# GWG Geospatial Standards Activities

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- ❖ Reconcile GWG and FGDC versions of standards in SDI standards baseline

Standard	FGDC version	GWG version
Filter encoding	1.1	2.0
GeoPackage	1.0	1.0.1
Web Feature Service	1.1.0	2.0 (equivalent to ISO 19142:2010)
Web Coverage Web Coverage Service	1.1.2	2.0.1 + extensions.
Geopolitical Entities, Names, and Codes (GENC) Standard	2	3

# INCITS L1 and ISO TC 211 Geospatial Standards Activities

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- ❖ ISO 19160-4 Addressing - Part 4: International postal address components and template languages:
  - ❖ ISO/DIS 19160-4 has skipped Final Draft International Standard (FDIS) and will proceed directly to publication
- ❖ ISO 19123-2, Schema for coverage geometry and functions -- Part 2: Coverage implementation schema
  - ❖ ISO vote on DIS closes on June 19
- ❖ Metadata and related standards
  - ❖ ISO 19115-1:2014 Metadata -- Part 1: Fundamentals - Amendment 1
    - ❖ Ballot on ISO/DIS 19115-1 closes on June 14
  - ❖ ISO 19157:2013/CD Amd 1 Data quality – Amendment 1: Describing data quality using coverages
    - ❖ Ballot on ISO 19157:2013/CD Amd 1 will close on June 16

# OGC Geospatial Standards Activities

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## ❖ Calls for public review

- ❖ Proposed GeoRSS Community Standard. Comments were due by 27th April 2017. FGDC has already endorsed GeoRSS.
- ❖ OGC Web Coverage Service 2.0 Interface Standard - Earth Observation Application Profile 1.1. Comments are due May 22, 2017. For more information, see <http://www.opengeospatial.org/pressroom/pressreleases/2578>.

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# Questions???

