



Geospatial Platform Update

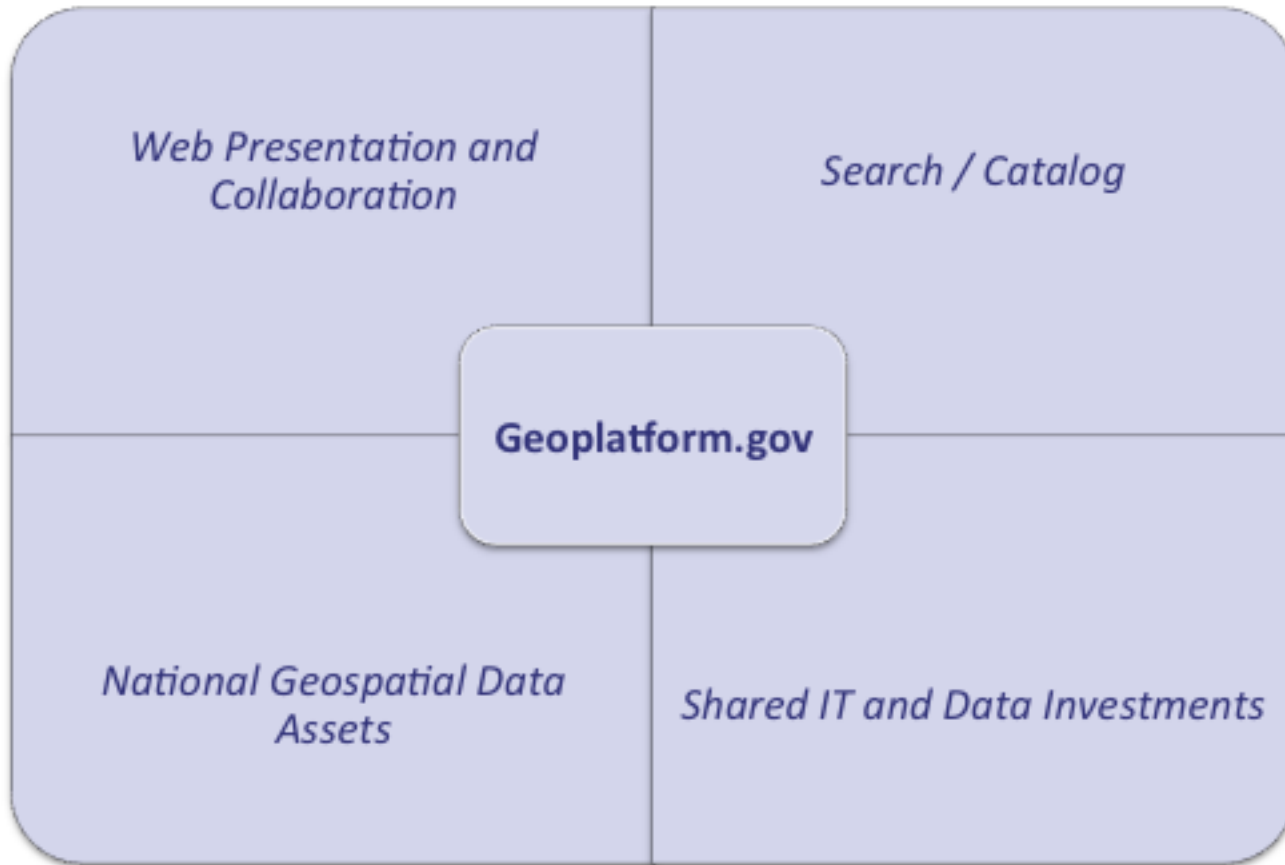
Overview and Current Status

FGDC Steering Committee & NGAC Meeting

June 2015

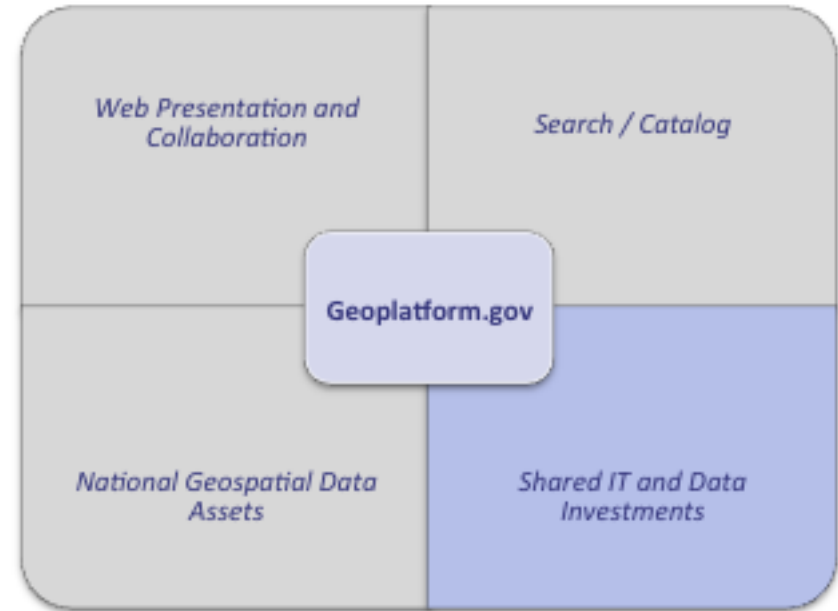
U.S. Department of the Interior

Geospatial Platform Components



Geospatial Platform – Shared Investments

- Common data / application hosting infrastructure to enable agencies to save time and money
 - Leveraging ArcGIS Online
 - Full Cloud Server Hosting Offering coming in June!**



Developing shared IT security documentation for the common hosting environment – leveraging DOI Foundational Cloud Hosting Contract and existing relationship with Esri



Near Term and Planned New Features

▪ June Release

- [New home page / web design](#)
- [Expanded performance and portfolio measurement tools](#)
- [New Web Map Viewer](#)
- [Improved capabilities for map gallery creation and sharing](#)

▪ In Design...

- Knowledge Graphs supporting open maps and other Platform objects
 - *Radical improvement to discovery, access and use of resources*
- Enhanced service quality / status checking and reporting
- Extensive technical architecture development, documentation, APIs



Semantic Search and Maps

Key Characteristics

- Technology-agnostic at the level of standards-based *GeoPlatform* service framework
- Implemented in Map Viewer, Map Publisher, etc
- Rich new “Map Knowledge Graph” based upon *5-star Linked Open Data*
- Built upon OGC/W3C standards and other defacto standards

Map Knowledge Graph

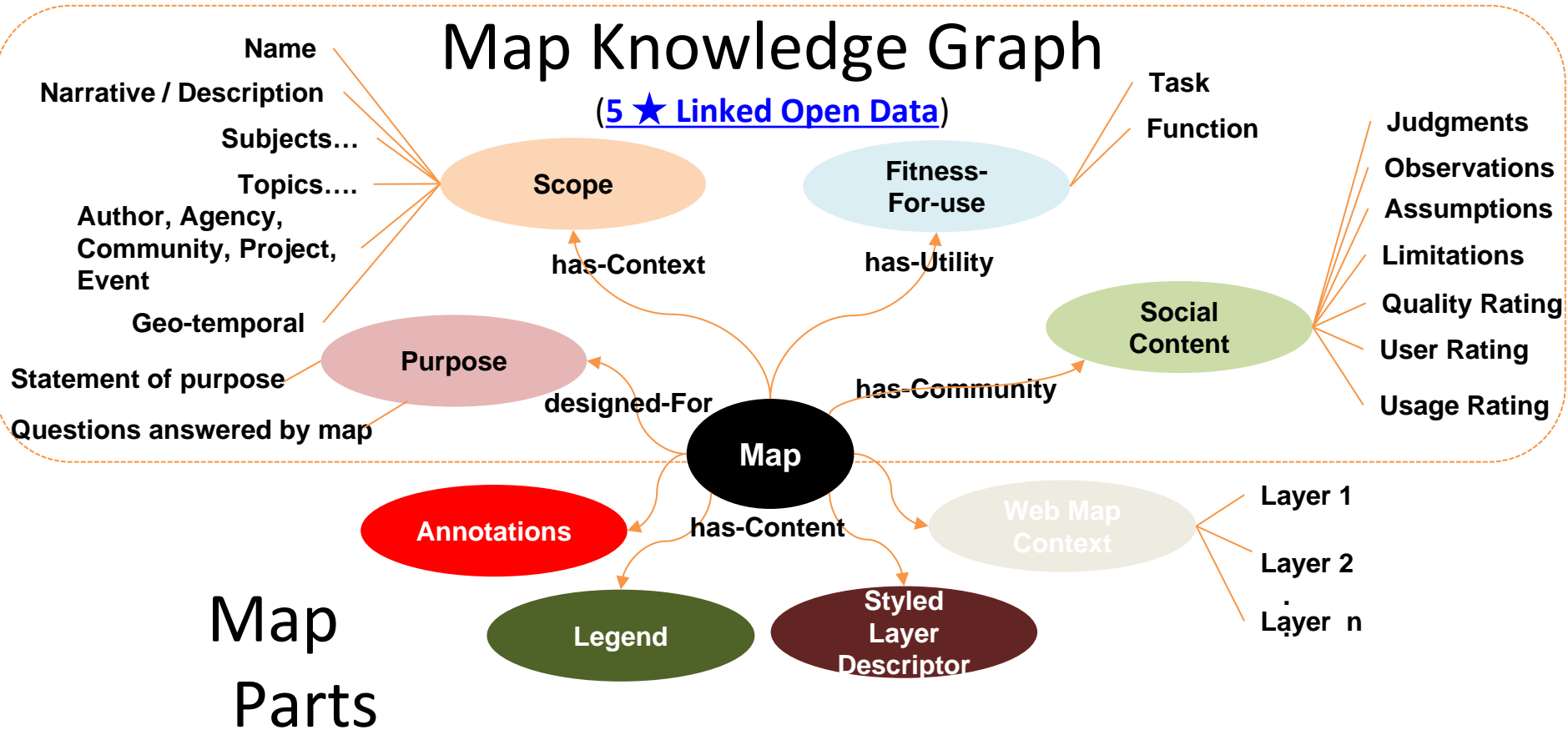
- Purpose
- Scope
- Social content
- Fitness-for-use

Key Standards:

- Geoplatform APIs (*defacto*)
- OGC WMC & SLD
- OGC WMS, WMTS, WFS
- OGC KML
- W3C HTML5, CSS
- W3C RDFS, OWL, SKOS
- ESRI REST API, Shapefile (*defacto*)



Semantic Search and Maps, con't



The “Map Knowledge Graph” adds map context (meaning, significance and relevance) to the map. SMEs craft this information so that others can easily discover just the right map that is fit for their purpose. A community also contributes rich social content, making the map a valuable social object in a shared geospatial experience.



Stimulating Partner Usage of Climate Data

- Two major issues to address:
 - Increase use of federal climate data resources by partners and constituents
 - Better publish, unify and organize data... and support agencies in achieving this
- **Objective 1:** Stimulate partner and constituent use of data through mapping, spatial analysis and other interactive exploration and tool development
 - Geospatial Platform tools to enable visualization
 - Tools to enable user generated visualizations (map mashups)
 - Tools and capabilities to facilitate usage of data
 - Story maps that show users how to take advantage of government climate data
- **Objective 2:** Encourage, support and assist agencies in publishing their key datasets as web services, and organize the results so data are easily accessible and understandable



US Climate Information Enterprise

(Placeholder, name TBD)

Wireframe / Concept for FY16 Future State

Advanced Search

Search | ?

Assessment & Impacts

Regions | Sectors

Our Changing Climate

Response Strategies

U.S. Climate Resilience Toolkit

Get Started | Topics | Tools

Case Studies | Find Expertise

Climate Data

Prototype development in May/June?

Esri Open Data Portal Site
(Using data from CDI, presented separate from Data.gov catalog view)

Story Maps / Interactive Mapping

Begin prototype development now for June demonstration

Mitigation

Future development

International

Future development

Credits & departments' / agencies' logos go here

Proposed Tasks

- **Task 1:** Build sample story maps and interactive mapping capabilities to support:
 - Increased use of geospatial climate data for understanding and resilience planning
 - Increased understanding of federal climate data resources
 - Demonstrate the “art of the possible” by showing agencies what end users can do with their data if provisioned as web services
 - One focus area: climate impacts on human health
- **Task 2:** Build prototype “open data portal” to facilitate enhanced organization, access and usability of key climate data resources
- **Task 3:** Train agency staff on publication of mapping data that can be consumed by the collaborative mapping environment
 - Offer support and hosting capabilities from Geospatial Platform infrastructure
- **Proposed immediate actions:**
 - DOI to draft professional services task order for Esri to support some development and training activities
 - DOI and Esri to collaborate on web presence and presentation for initiative
 - Question: for near term demonstration and subsequent training purposes, is prototype in *.com environment acceptable? **Answer: Yes**
 - *Examples of the potential types of web products on following slides*
 - Federal partners and Esri to collaborate on development of concepts for “story maps”

