



navigatOR

OREGON'S ONE GOVERNMENT APPROACH TO GEOSPATIAL INFORMATION AND TECHNOLOGY

GEOSPATIAL ENTERPRISE OFFICE

OFFICE OF THE STATE CHIEF INFORMATION OFFICER



JANUARY 19, 2018

NAVIGATOR VISION...

Authoritative GIS data available and accessible when needed.

AUTHORITATIVE DATA

- Data developed for a particular regulatory, statutory or related purpose by or for the authoritative source
- Authority is the legal responsibility provided by a legislative body to conduct business for the public good

ONE GOVERNMENT

- Citizens expect government to act as One, but...
- Government is structured as silos
- GIS connects business processes across silos
- Connections between silos happen, but...
 - Unreliable, inconsistent, intermittent
- Data sharing is the most critical element for consistent service provision
- Governance is key to one government approach

HOW DOES GIS HELP

- GIS technology stores & analyzes locational (geographic) data
- Geography connects all things that exist or happen at any location
- Most government databases contain, or can contain, a locational element

HOW DOES GIS HELP

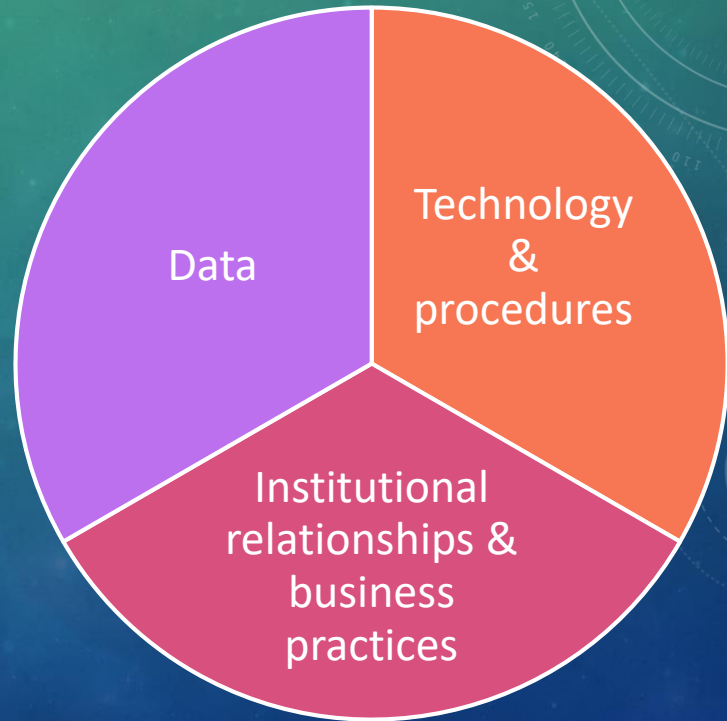
- If you use GIS to combine data from multiple organizations based on location, you can answer questions like these:
 - *How many miles of water-quality limited streams are within an Urban Growth Boundary?*
 - *Where should the boundary for an economic development zone be located to have the greatest impact?*
 - *What percentage of the population in the Salem area now lives within 5 minutes walking distance of public transit?*
 - *Where are the locations that a new fire station could be placed to optimize response time?*
 - *How can foster children be matched with foster homes to keep those children in the same school attendance area?*

CONSISTENT SERVICES

- Consistent government services depend on locational data
- The data to support consistent services doesn't exist everywhere in the state
- We haven't yet achieved the navigatOR vision

What is navigatOR?

Oregon's
*spatial data
infrastructure*



navigat*OR* GOALS & OBJECTIVES

Develop and maintain technical and organizational structures to support:

- Full statewide maturation of Oregon's geospatial Framework data
- Data sharing and access for a broad user community
- Provide an efficient environment and tools to support Framework data elements throughout the data lifecycle

I'M LOOKING FOR HELP ON THIS, VIRTUAL TEAM...



Function

IT'S NOT IN MY P & L.



Country

IT'S NOT IN MY OBJECTIVES.



Product Group

I'D LIKE TO HELP, BUT...

Traditional silos getting in the way?



ONE GOVERNMENT APPROACH

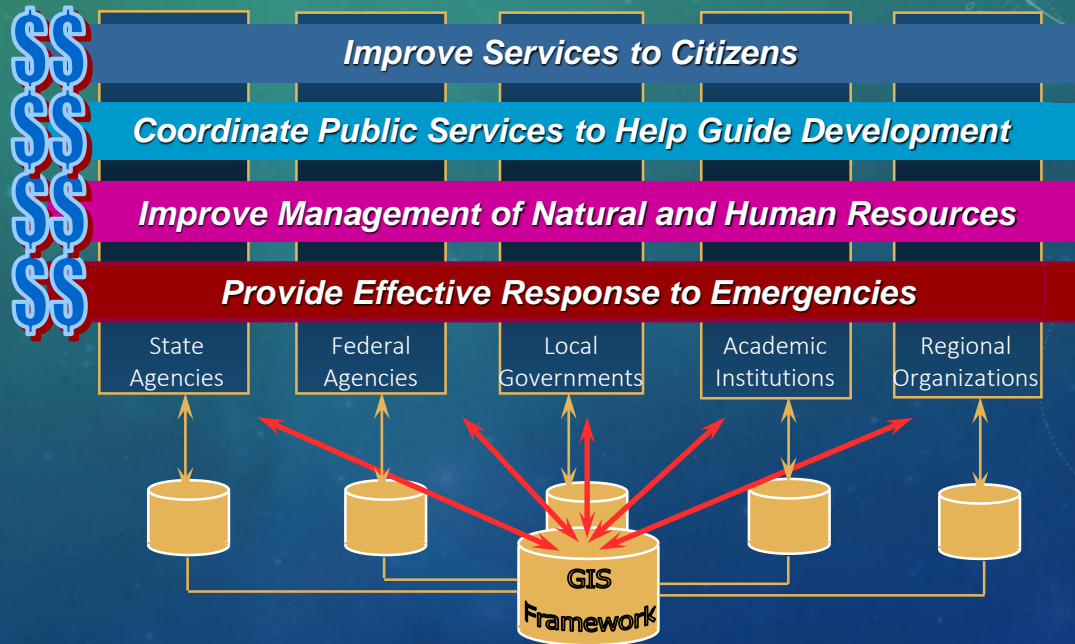


- Connect business processes across silos
- Ensure reliable, consistent, and permanent connections
- How?
 - [Geospatial] data sharing
 - Governance
 - Coordination

ACTIVITIES MANAGED WITH A FOCUS ON OUTCOMES

GIS Integrates Information Across the Enterprise

How
One Govt.
approach
operates



GIS GOVERNANCE & COORDINATION

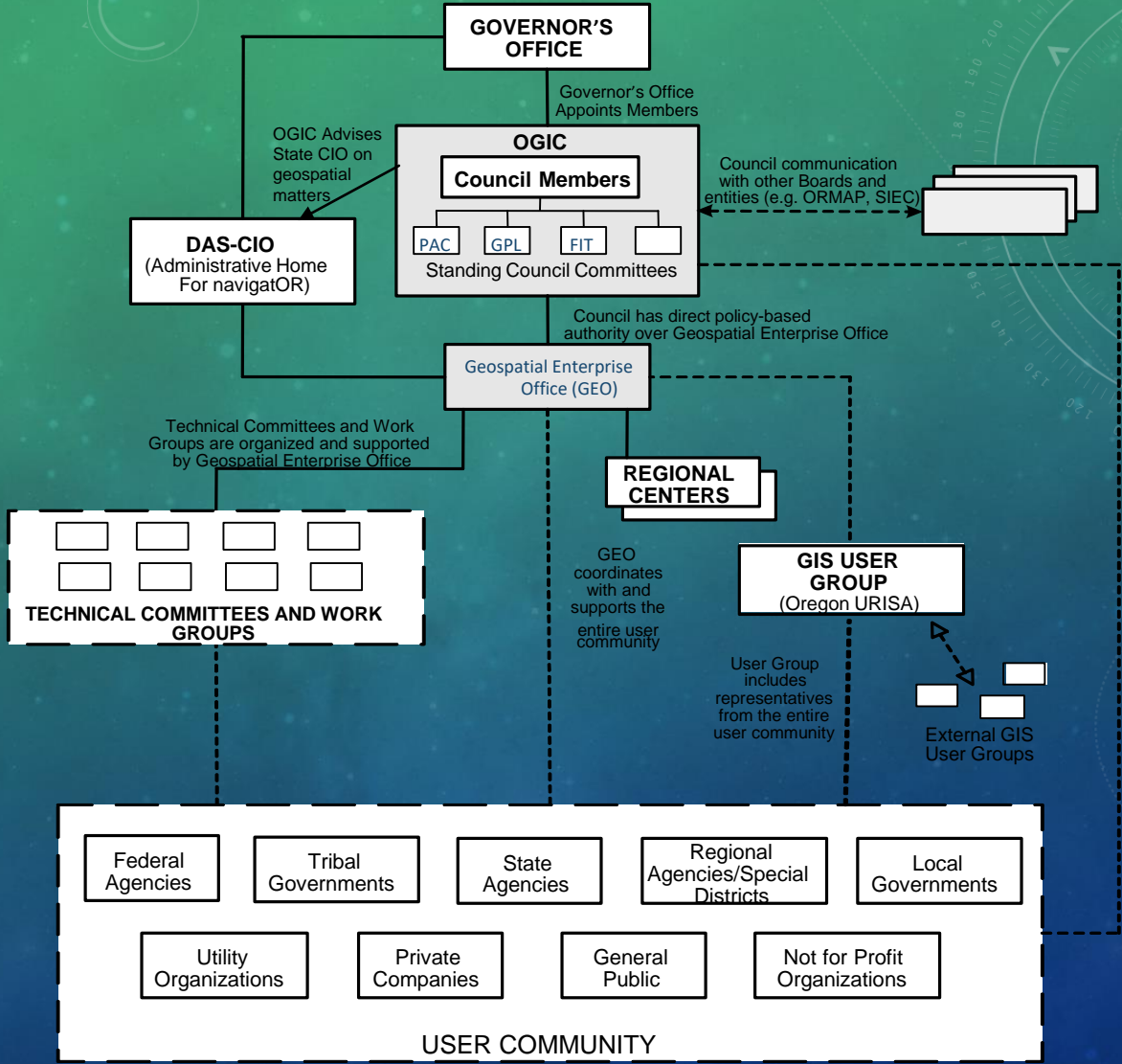
Oregon Geographic Information Council

- Authorized under ORS 166 (State Laws of 2017)
- Existed since 1983 under various Executive Orders

GIS GOVERNANCE & COORDINATION

Council has a broad array of responsibilities, including:

1. Statewide governing body for managing/sharing geospatial data
2. Develop and update a strategic plan to manage and share geospatial data
3. Recommend legislation and adopt rules, policies, & standards for improving management and sharing of geospatial data
4. Recommend to the Legislative Assembly strategies for eliminating fees that public bodies charge each other for geospatial Framework data
5. Recommend terms and allocation of responsibilities among public bodies for managing and sharing geospatial Framework data



GIS GOVERNANCE & COORDINATION

- Geospatial Enterprise Office (GEO)
 - navigatOR program operated by State GIO and 3 staff
 - 2017-19 program budget: \$2,500,000
- GEO operates under ORS 166 (State Laws of 2017)
 - Managed by State GIO
 - Coordinates the GIS activities of public bodies in Oregon
 - Provides library of shared geospatial data
 - Provides support to OGIC

EXAMPLE GEO ACTIVITIES

- Esri Enterprise License for state agencies
- Statewide address points project (OMAR)
- Public safety common operating picture (RAPTOR)
 - <http://arcg.is/0Smjq1>
 - OEM administers, used by 100s of first responders

EXAMPLE GEO ACTIVITIES (CONT)

- ArcGIS Online for state government
 - <http://Geo.maps.arcgis.com>
 - State agency entry points
 - Local government seats in exchange for data sharing (8-10 are using)
- Oregon Explorer & Spatial Data Library
 - <http://oregonexplorer.info>

[Topics](#)[Places](#)[Tools](#)[Data](#) All Topics Places

Explore TOPICS

Explore PLACES

[Animals and Plants](#)[Climate, Water, and Air](#)[Coast, Ocean, and Marine](#)[Forestry and Agriculture](#)[Land Use and Planning](#)[Landscapes and Ecosystems](#)[People and Communities](#)

TRENDING TOPICS

- ▶ Hazards
- ▶ Land Use
- ▶ Rural Communities
- ▶ Sage-Grouse
- ▶ Wetlands
- ▶ Wildlife

Looking for previous Explorer sites?

<http://oregonexplorer.info/>

The screenshot shows the main map interface of the Oregon Explorer website. It features a satellite-style map of Oregon with county boundaries overlaid. A search bar at the top left contains the text "Find a place or address." with a magnifying glass icon. To the right of the search bar are two dropdown menus labeled "Counties" and "Satellite". A large orange button in the center of the map says "Start Exploring". On the left side of the map, there are several icons: a plus sign for zooming in, a minus sign for zooming out, a home icon, a refresh icon, and a "LIVE" icon with a signal strength indicator. At the bottom left, there is a hamburger menu icon. At the bottom right, there is a scale bar and a compass icon. The text "Earthstar Geographics" is visible in the bottom right corner of the map area.

Annotations on the map:

- An arrow points to the search bar with the text: "TYPE ANY PLACE OR ADDRESS HERE"
- An arrow points to the "Counties" dropdown menu with the text: "CHANGE THE GEOGRAPHY"
- An arrow points to the map area with the text: "CLICK THE MAP TO EXPLORE"

Find Geospatial & Oregon Framework Data

Q |

Search

Clear Filters

search keyword:
city limits



24 data sets

Show Framework data

Sort by: Newest first

Show: 10



1 2 3 » Last

▼ Collections

▼ Formats

▼ Sources

▲ Topics

Admin Boundaries (2)

Bioscience

Cadastral (6)

Climate



Oregon City Limits - 2017

This data layer is an element of the Oregon GIS Framework. This data represents the State of Oregon

Download

Details



Oregon Urban Growth Boundaries - 2016

This data layer is an element of the Oregon GIS Framework. This theme delineates Urban Growth Bounda

Download

Details



Oregon City Limits - 2016

This data represents the State of Oregon city limit boundaries. Each city limit is defined as a cont

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Details



Oregon Urban Growth Boundaries - 2015

This theme delineates Urban Growth Boundaries (UGBs) in the state of Oregon. Oregon land use laws li

Download

Details

State of Oregon

Geospatial Data, Maps & Applications



Story Maps



Featured Apps



Documentation

Oregon's ArcGIS Online helps make creating, collaborating, and sharing geospatial content easier than ever! You can explore all of this great content by viewing our featured [Story Maps](#), featured [applications](#), or use the links below to see what individual agencies are building. State employees or agencies wanting to join ArcGIS Online can refer to the [documentation site for more information](#).

View Participating Agency Pages



Oregon Geospatial
Enterprise Office



Oregon Department of
Transportation



Oregon Department of
Forestry



Oregon Chief Financial
Office

STATE/LOCAL GEOSPATIAL INVESTMENT

- Amount Spent Annually on Geospatial Data
 - Use, Management, Collection, Maintenance

State Government ~ \$2,235,576,000

County Government ~ \$1,121,239,000

City Government ~ \$1,480,729,000

TOTAL ~ \$4,837,544,000

SHARED INFORMATION

Sizable and costly portion of needed data is common to nearly all programs and decisions

Traditional approach

- Each agency develops base data themselves, in slightly different ways – lots of examples
- Result is lack of needed data in lots of places, particularly rural areas, and inconsistent services

One Government approach

- One or more organizations steward each base data set, on behalf of all others, in a coordinated way

ASPECTS OF FRAMEWORK

DATA

- Geospatial data for use in applications
- Base to which users can add or attach information
- Basis for accurate geographic registration and data compilation
- Base data for displaying locations and other information
- 250+ framework data elements identified

ASPECTS OF FRAMEWORK

TECHNOLOGY & PROCEDURES

- Community-designed standards and guidelines for:
 - Building data
 - Integrating data
 - Maintaining data (stewardship)
 - Documenting data (metadata)
- Data access
 - Oregon Spatial Data Library (OSDL)
 - ArcGIS Online

ASPECTS OF FRAMEWORK

INSTITUTIONAL RELATIONSHIPS & BUSINESS PRACTICES

- It's a group effort
 - Collaborative, cooperative community of participants
 - Responsive to needs of the geographic community



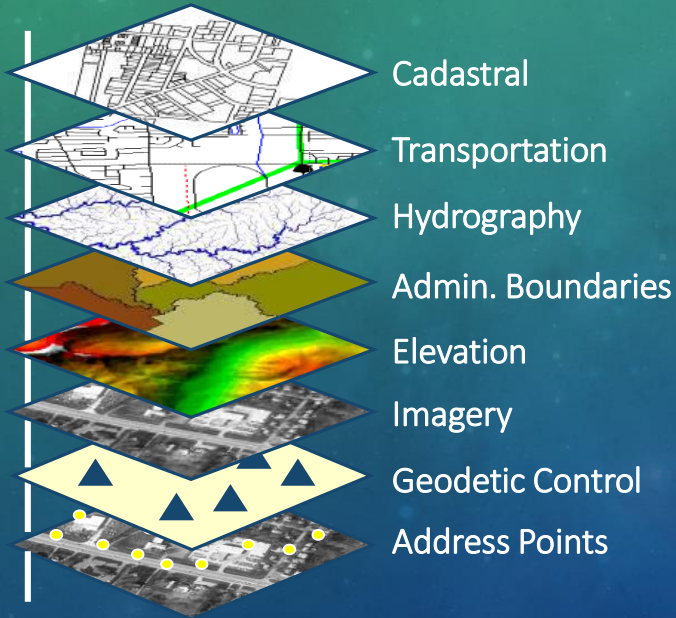
ASPECTS OF FRAMEWORK

INSTITUTIONAL RELATIONSHIPS & BUSINESS PRACTICES

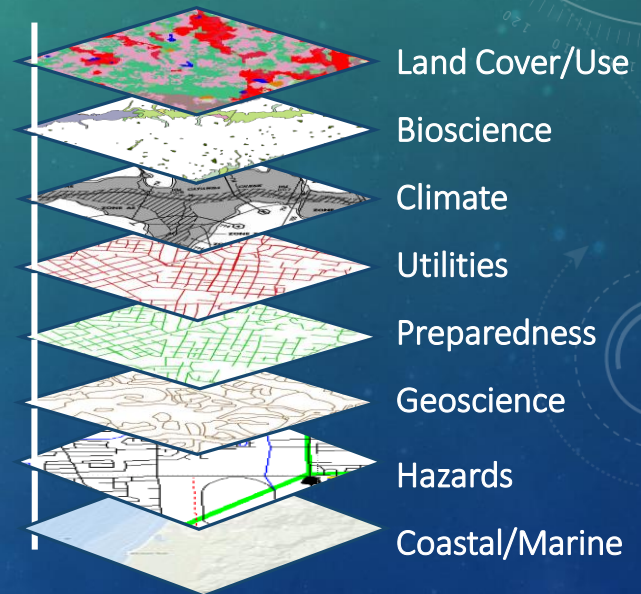
- Benefits wide user base through collaboration and cooperation (e.g., data development)
- Ensures data maintenance by tapping into business needs

FRAMEWORK DATA THEMES

Nationally recognized



Oregon-specific



FRAMEWORK DATA INITIATIVE

- Fifteen working committees – 450+ people
- Operates under auspices of OGIC
- Tasked with implementation plan and standard for each data theme
- Data standards development & adoption
- Certification of authoritative data
- Biggest challenge is communication

FRAMEWORK STORY MAP

The screenshot shows a web browser displaying an ArcGIS Story Map. The browser's address bar shows the URL: <http://geo.maps.arcgis.com/apps/MapJournal/index.html?appid=843bd501dc674e21baddad0cc658bdcd>. The browser's title bar reads "Oregon Framework Data". The browser's address bar also shows several tabs: "The Nature of Geographic...", "Oregon State Library State...", "Home: HIFLD Open Data", "Citrix XenApp", "GEO", "WorkFlowly", "Freedcamp Dashboard", "Tasks - V4 Web Transfer", "Web Slice Gallery", "Safari", and "Suggested Sites".

The story map content includes:

- A header "A story map" with social media icons and the Esri logo.
- A main title "Oregon Framework Data".
- A paragraph: "For almost 15 years, the State of Oregon has employed collaborative methods to generate, maintain, and share geospatial data. These voluntary efforts form the Oregon GIS Framework Program. Through processes rooted in consensus, the program breaks down barriers that often divide government organizations and encourages different levels of government to engage with one another in meaningful ways."
- A sub-section titled "In short, the Oregon GIS Framework Program seeks to:" followed by a list of four goals:
 1. support multiple levels of government operations and functions through the creation of foundational and widely-used geospatial data
 2. develop the standards that govern the data's creation and exchange
 3. develop consensus for the data's maintenance or stewardship through stewardship plans
 4. share the data with the user community and public as dictated by the data use and access rules
- A sub-section titled "Public Safety" with a blue double-chevron icon below it.
- A large image collage on the right side of the page. The collage features a red barn, a red biplane flying over a house, a helicopter over a river, a grid of various maps, and a waterfall. The text "Oregon Framework" is overlaid on the collage.

<http://arcg.is/1Yf7fCy>

MANAGING A SHARED RESOURCE

- How will consistent communications happen?
- How will policies, regulations, and procedures be established?
- How will the distributed data for all the shared themes be updated consistently to ensure that relied-upon capabilities are always available?
- A shared organizational structure with equal representation from all sectors is critical.
- Authority for that structure comes from ORS 166.

ONE GOVERNMENT SUMMARY

- Citizens expect government to act as One, but...
 - ...mostly structured as silos
- GIS connects business processes across silos, but...
 - ...connections are unreliable, inconsistent, and intermittent

TAKE HOME MESSAGE

- Data sharing is the most critical element for consistent service provision
- Consistent service provision best provided through a One Government approach
- One Government approach depends on excellent governance