GIS Organization and Implementation at the State-Level

Through the Public Lens

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Project Goals

- Create baseline Summer 2024 of state-level geospatial data and oversight
- Find trends and patterns to identify gaps, weaknesses, and best practices
- Consider current landscape of state-level geospatial information and technology vs NDSI strategic plan

State GIS Office and Clearinghouse Logos [1]

Methodology

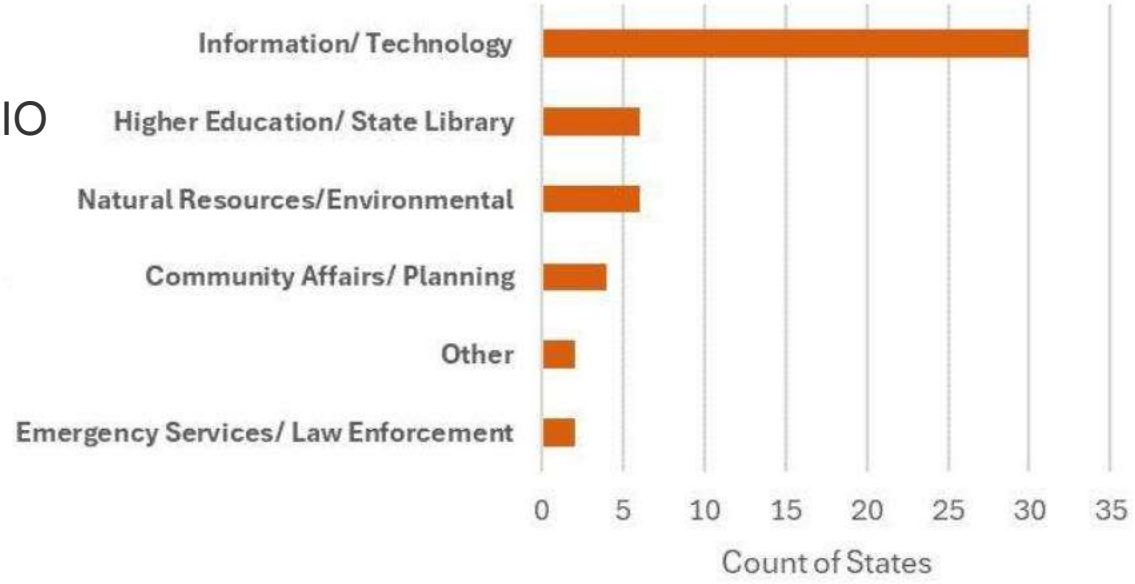
- Surveyed government and private websites and states' GIS Strategic Plans
- Federal Geographic Data Committee (FGDC) 50 States Initiative
- NSGIC Geospatial Maturity Assessment (GMA) Report and Dashboard

Source: NSGIC GMA Dashboard [2]

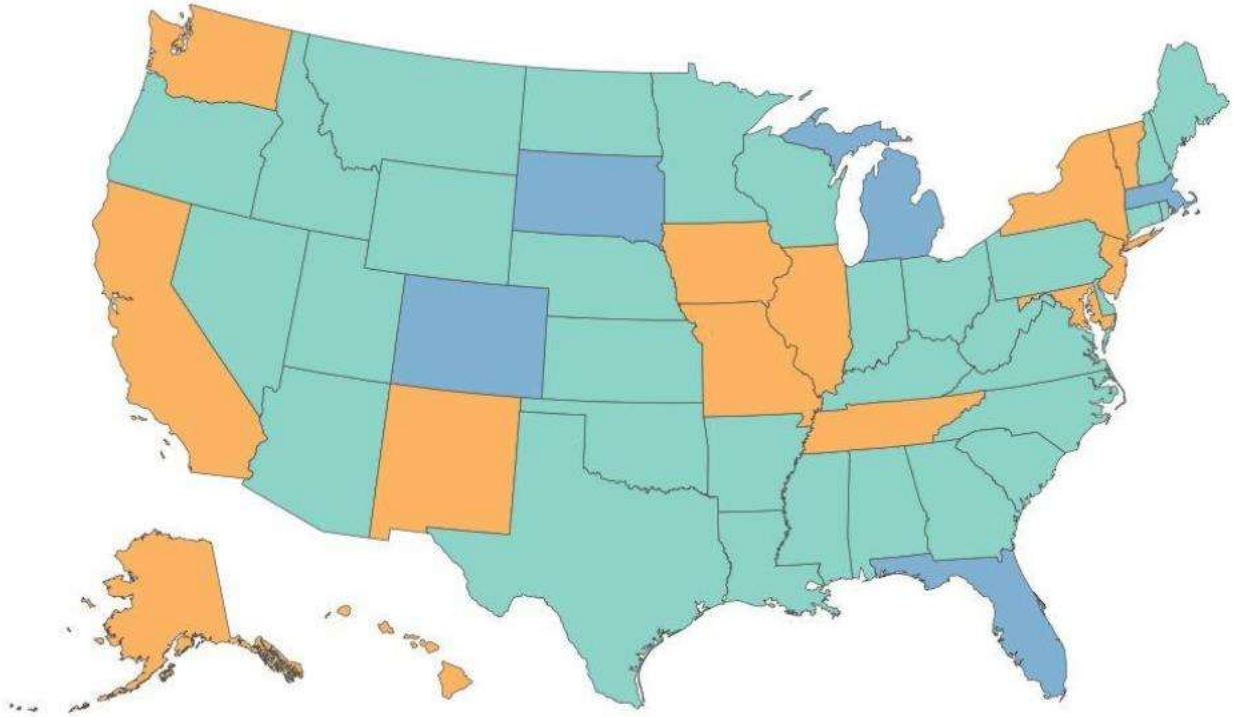
GIO Organizational Structure

- 60% GIO offices hosted within state's Information/ Technology Office
- 38% of states have GIO
- 30% have official coordinator

Department or Office GIO is Housed Under



GIS Coordinating Council Activity by State

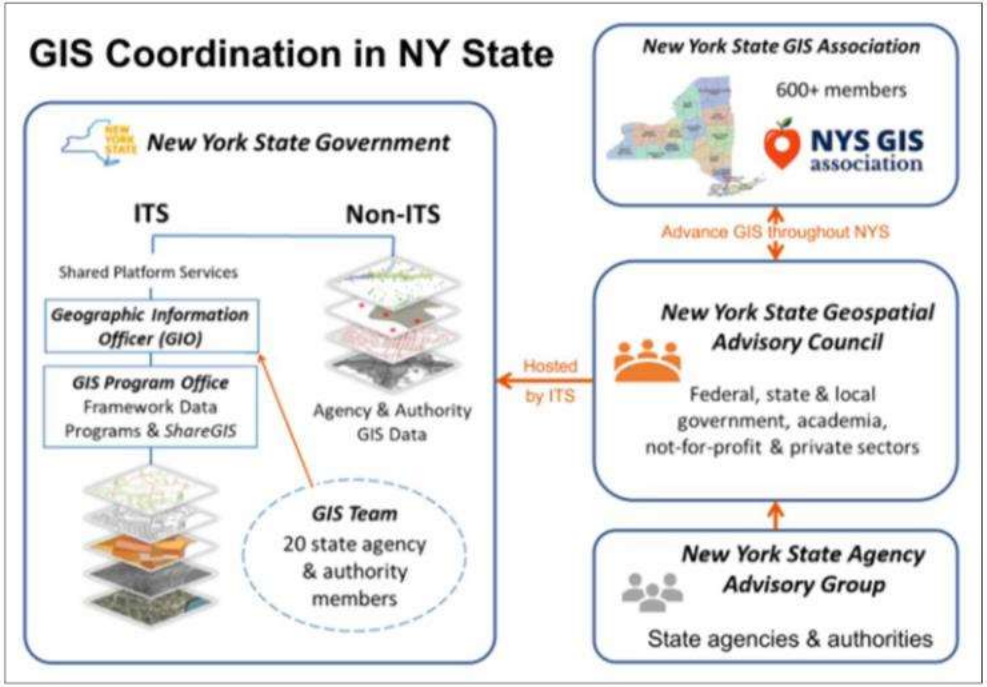


Active GIS Coordinating Council?

- Yes, Unofficial
- Yes, Official
- No

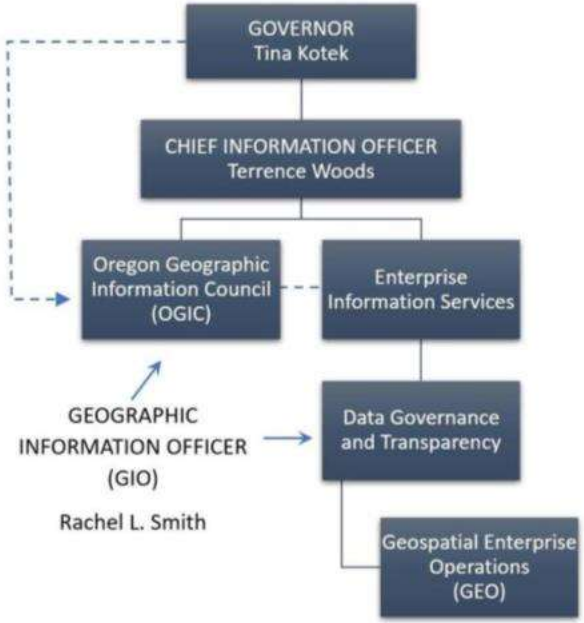
GIS Council Organization Examples

New York



Source: New York State GIS Resources Coordination Program [3]

Oregon



Source: OGIC Structure [4]

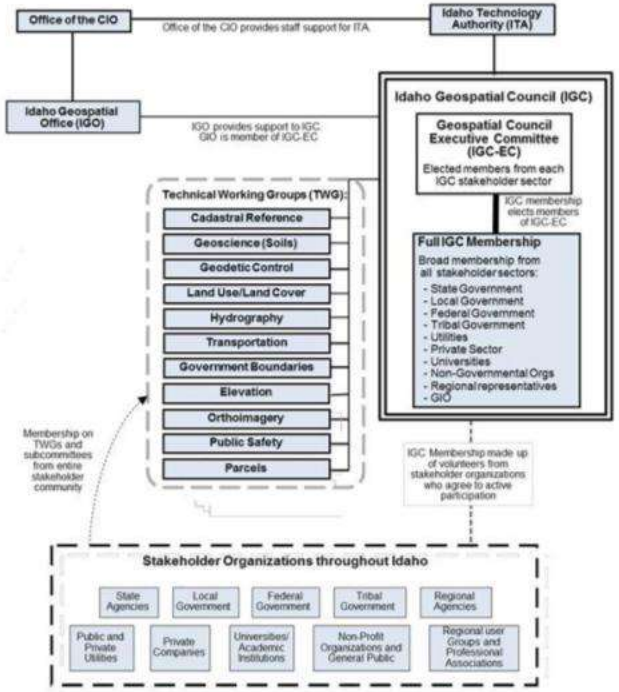
GIS Council Organization Examples

Alabama

Figure - 1. Relationship between the Executive Council, Program Office, and Advisory Committee.

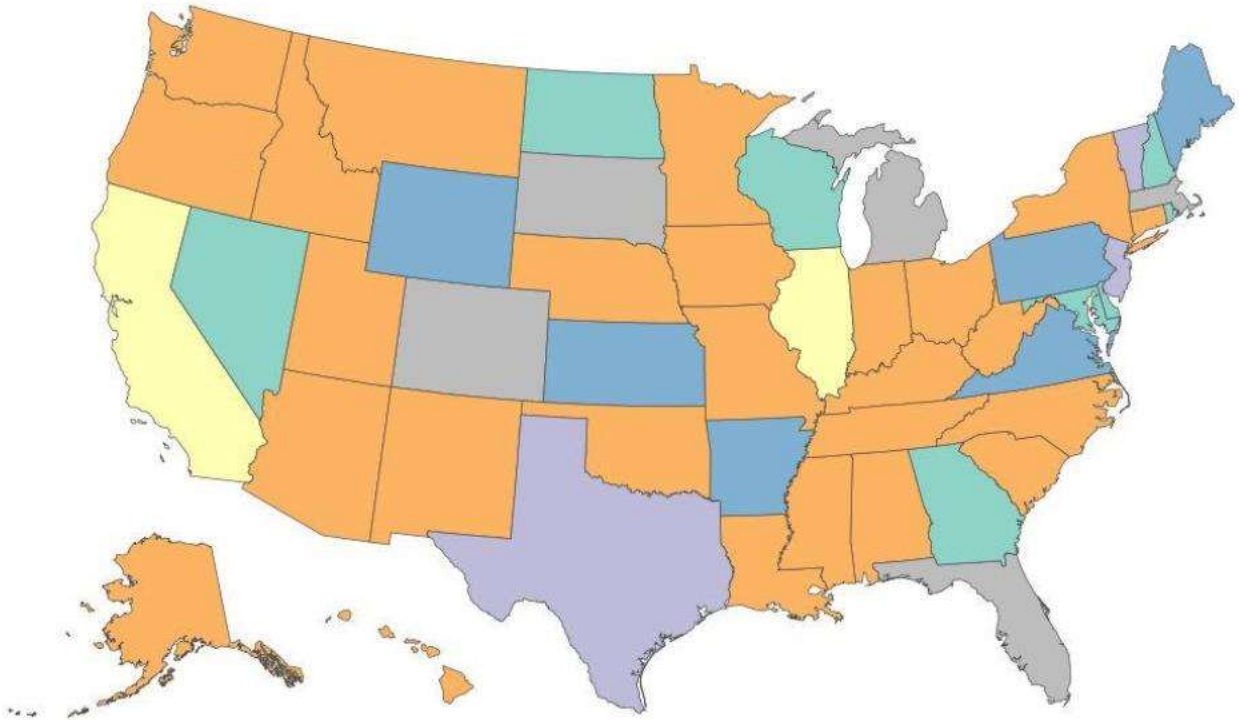
Source: Final Project Report for Alabama's NSDI CAP Category 3 Fifty States Initiative [5]

Idaho



Source: Idaho Geographic Information Systems (GIS) State GIS Strategic Plan 2016 [6]

GIS Coordinating Council Type by State

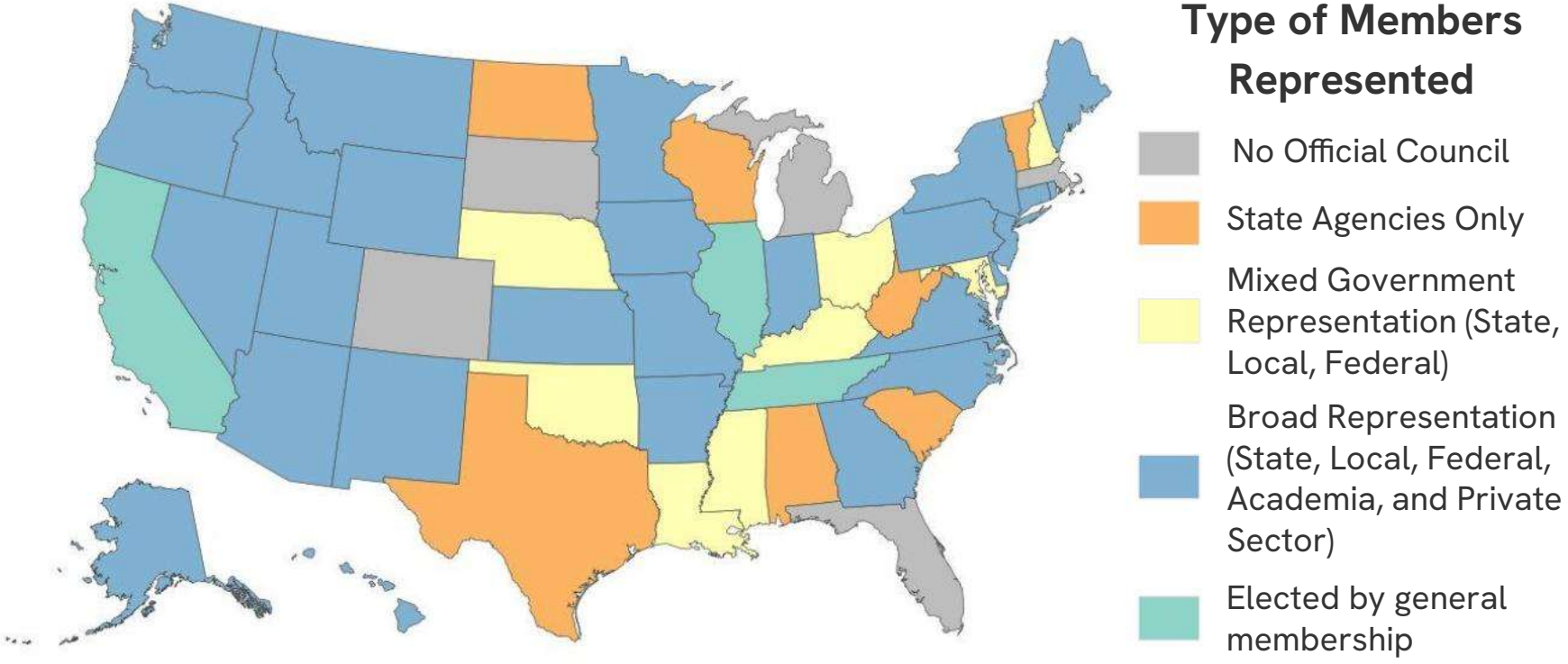


Council Type by Name

- No Council
- Council
- Association
- Board
- Committee
- Other

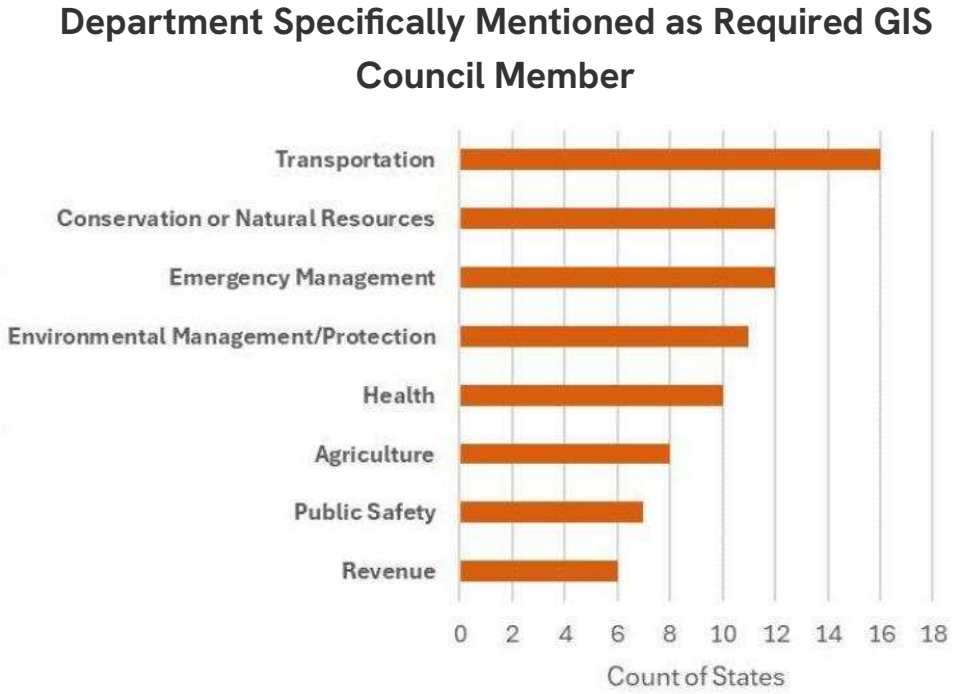
*Represents diversity in council name only and not in functionality of council

GIS Council Member Representation

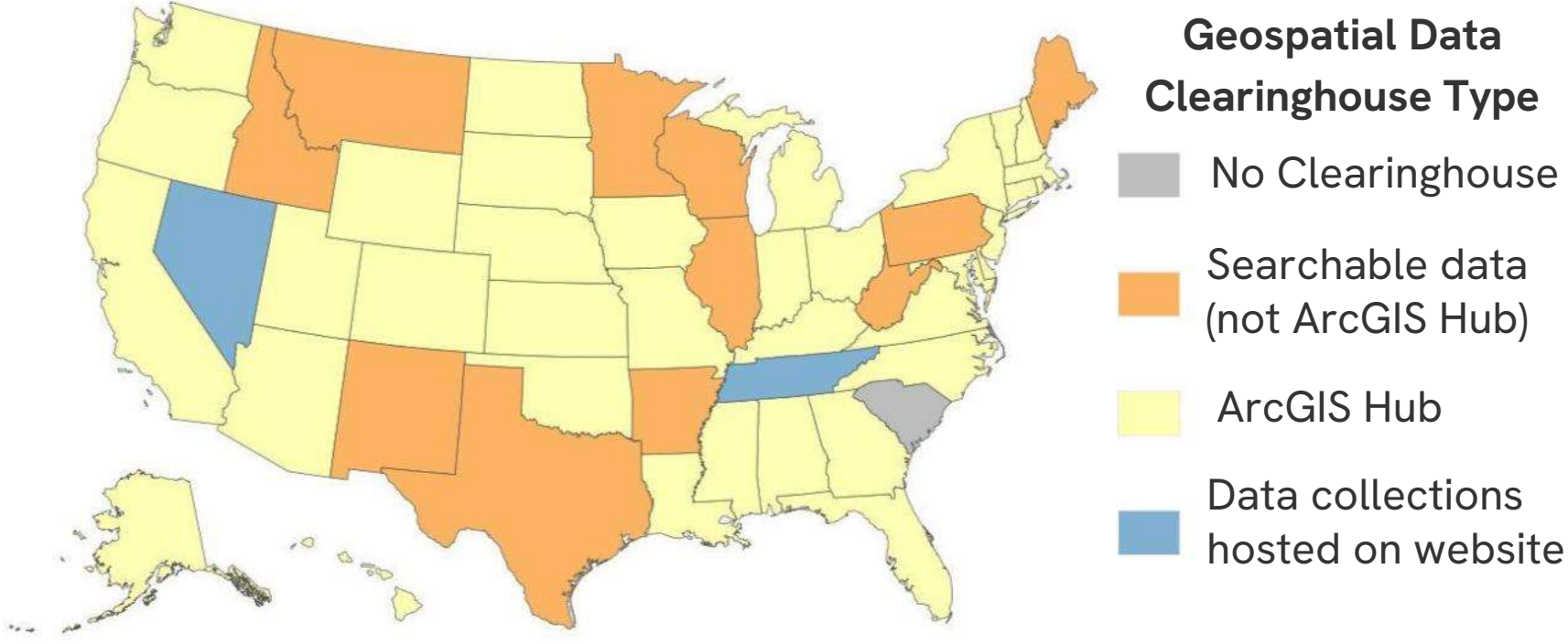


GIS Council Member Representation

- 11 states include the state GIO or CIO as a listed council member
- Alaska, Arizona, Idaho, Minnesota, Montana, and Nebraska designate at least one tribal representative

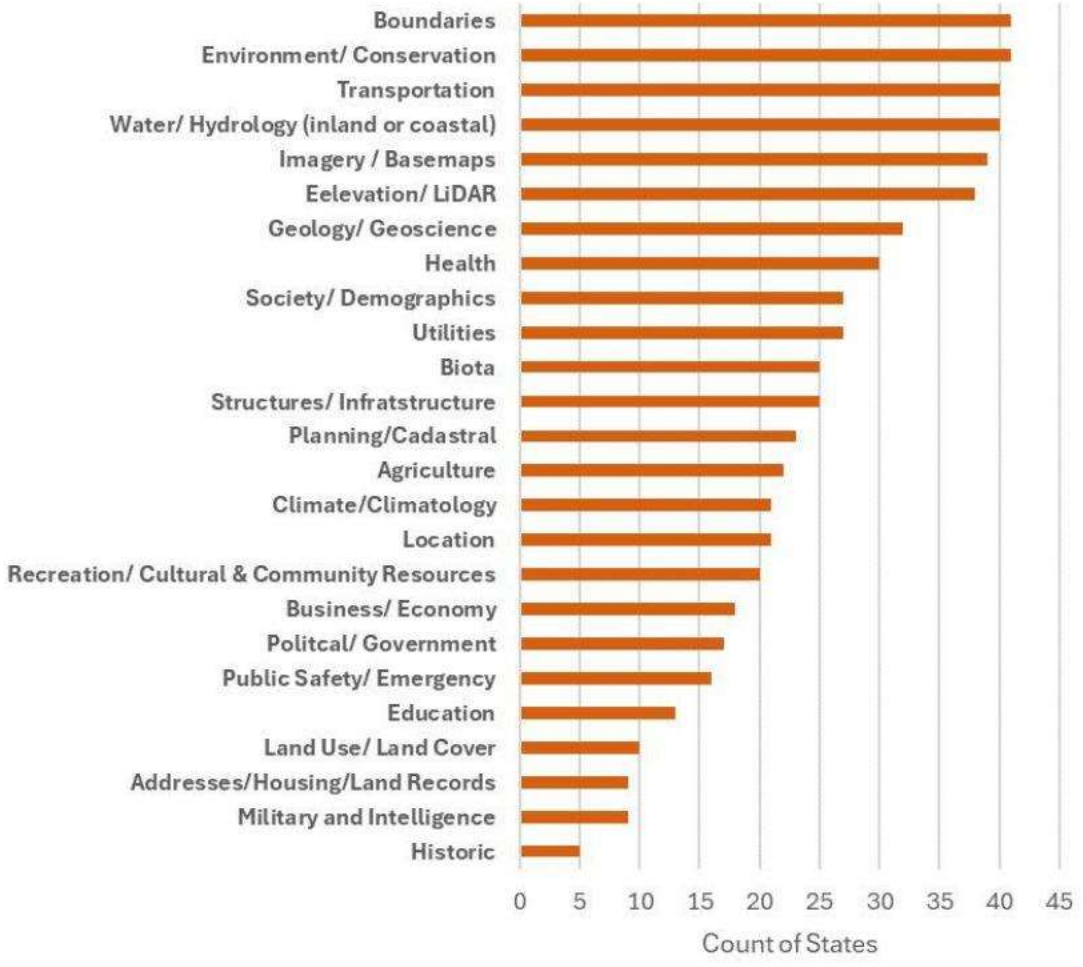


Geospatial Data Clearinghouse Type by State

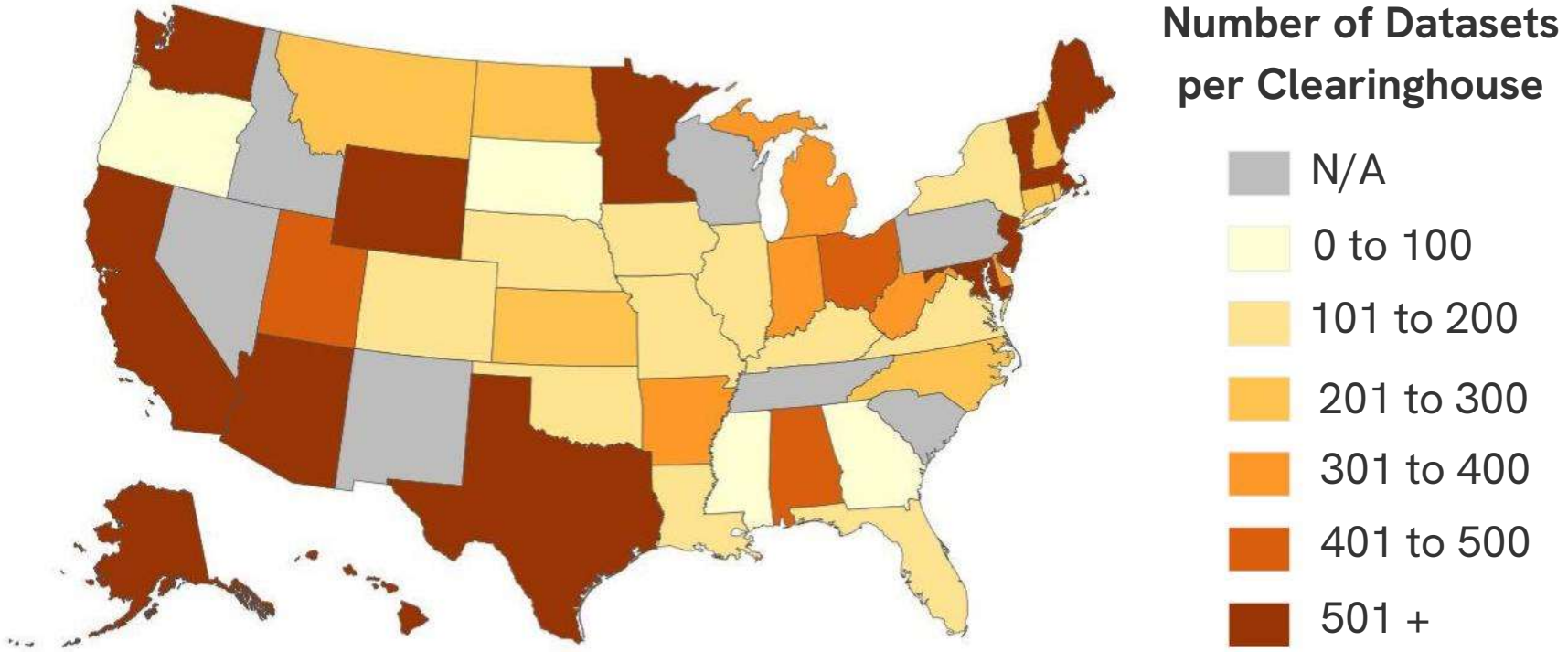


Data Categories

- State clearinghouse categories
- Most represented
  41 Boundaries
  41 Environment/ Conservation
  40 Transportation
  40 Water/Hydrology



Number of Geospatial Datasets Available



Conclusions

- State-level geospatial coordination varies, reflecting local needs & priorities
- Most have well-maintained Data Clearinghouses using ArcGIS Hub, but datasets vary from < 100 to > 500
- Next step: further classify organizational differences
- Next step: identify reasons for structural differences and benchmark best practices

Thank you!

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Sources

[1] State GIS Logos:
Oregon https://www.oregon.gov/eis/geo/pages/default.aspx
Alaska https://gis.data.alaska.gov/
Maine https://www.maine.gov/geolib/
NH Granit https://granit.unh.edu/
Hawaii https://geoportal.hawaii.gov/

[2] National States Geographic Information Council. 2023. Geospatial maturity assessment (GMA) dashboard.Retrieved September 9, 2024, from
https://experience.arcgis.com/experience/f237feb1800d4de99c2a4f4e416ca9fe/page/Overview/

[3] New York State GIS. (2024). Coordination program. New York State GIS Resources.
https://gis.ny.gov/coordination-program

[4] OGIC. (n.d.). OGIC structure. OGIC GeoHub. Retrieved September 9, 2024, from
https://ogic-geo.hub.arcgis.com/pages/about

[5] Alabama Department of Economic and Community Affairs (ADECA). (2011, September 1). Final project report for Alabama's NSDI CAP Category 3 Fifty States Initiative (Agreement No. G10AC00176). ADECA.

[6] Idaho Geospatial Council—Executive Committee. (2016). Geographic Information Systems (GIS) state GIS strategic plan. Idaho Technology Authority.
https://its.idaho.gov/ita/wp-content/uploads/sites/3/2018/10/GIS-Strategic-Plan-APPROVED-20161206.pdf