

2017 GMA Summary

2017 NSGIC Geospatial Maturity Assessment Summary

This document is a summary of a 2017 survey of the states by the National States Geographic Information Council (NSGIC). It summarizes 40 responses: 39 states plus the District of Columbia. The summary covers most of the questions asked but does not include responses to text questions.

This summary consists of 6 parts, with the following pages covering each of the numbered items below.

1. Sources of funding
2. Major activities that impact operations
3. Geographic Information Office, leader, and staff
4. Strategic and business planning
5. Coordination activities, including data sharing
6. Status of data themes

This summary was is written in the present tense. It reflects the conditions states faced in 2017. NSGIC acknowledges the contributions of Will Craig in making this summary possible.

Sources of funding

Sources | 36 responses | Ranked most to least

Sources used to help maintain enterprise-level coordination or GIS data development

18	Federal grant
16	Federal partnership (BAA, MOA, contract, etc.)
15	State general fund appropriation
15	911 tax/fee (plus 1 additional "other" telecommunications tax/fee)
14	Ad-hoc multi-agency partnership funding (state and/or local government, utilities, etc.)
10	Assessment on state agencies (or IT internal service fund)
8	Cost-recovery fees for geospatial services
6	State fuel or road tax/fee
6	State enterprise geospatial fund (dedicated/restricted fund)
5	Wildlife/Hunting/Fishing tax/fee
5	Environmental protection tax/fee

- 5 Property transfer tax/fee
- 6 Other

Agencies | 36 responses | Ranked most to least
Federal agencies providing the source of funding

- 18 Interior (DOI, including USGS and NOAA)
- 12 Transportation (DOT)
- 9 Agriculture (USDA)
- 5 Homeland Security
- 4 Environmental Protection Agency (EPA)
- 2 Health and Human Services (HHS)
- 2 Energy (DOE)
- 1 Treasury
- 1 Tennessee Valley Authority (TVA)
- 1 National Science Foundation (NSF)
- 1 Housing and Urban Development (HUD)
- 1 Commerce (DOC)

Major activities that impact operations

Major business lines | 40 responses | 10 point scale
Major business lines having the most significant impact on the states and their GIS shop operations; a score of 1 indicates great impact and a score of 10 indicates low impact

- 1 Public Safety, 9-1-1, Emergency Management
- 3 Natural resources management
- 3 Transportation
- 5 Environmental protection
- 5 Land use planning/Land records
- 6 Health services or issues

- 7 Agriculture
- 7 Economic development
- 7 Tax/revenue requirements
- 10 Elections management

Operational issues | 40 responses | 8 point scale

Operational issues having the most significant impact on the states and their GIS shop operations; a score of 1 indicates great impact and a score of 8 indicates low impact

- 2 Funding - data acquisition (new)
- 2 Funding - general operations and coordination
- 4 Funding - IT infrastructure
- 4 IT infrastructure strategy/consolidation
- 4 Open data
- 6 Cloud computing
- 6 Mobile applications
- 8 Other source implementations

Geographic information office, leader and staff

GIO | 40 responses

Does your state have a Geographic Information Officer (GIO)?

85% 34 states have a GIO or GIS coordinator (official or not). Six states do not.

Housed | 40 responses

Where is the position housed?

74% Most GIO positions are in the state Chief Information Officer (CIO) office or equivalent. Another 9% are in the Department of Natural Resources.

Authorization | 40 responses

How is the position authorized?

- 47%** Nearly half (47%) of GIO positions were authorized by state statute. Another 16% were authorized by executive order.

Staffing | 40 responses

How many staff are directed by the GIO?

- 0-20** Staff directed by GIO range from 0-20 full-time people. Median staff size is 5 FTEs.

Other workers | 40 responses

How many other state GIS workers are directed by the GIO?

- 5-100+** Other state GIS workers directed by the GIO range from 0 to more than 100.

Strategic and business planning

Strategic Plans | 40 responses

Several questions focus on the development and use of a strategic plan.

- 85%** Thirty-three states or 85% of states have a strategic plan. Only 7 do not.
- 50%** Half were created or updated within the previous 6 years. Others were 7-10 years old.
- 70%** 70% agree or strongly agree the strategic plan is still relevant.
- 73%** 73% agree or strongly agree the strategic plan is being implemented.
- 94%** 94% agree or strongly agree the strategic plan is being developed in collaboration with stakeholder.

Business Plans | 40 responses

How many states have a business plan?

- 53%** Only 21 states have a business plan. Eight of those have plans covering multiple areas.

Coordination activities, including data sharing

State Councils | 40 responses

Do you have a state council?

80% 32 states have active GIS councils. 14 of those are identified by statute (44%) and another 9 by executive order or administrative rule (28%). The rest have unofficial or non-profit coordination councils.

State Council Stakeholders | 40 responses

What stakeholders participate on the council and what is their level of participation?

Federal agencies	31 states, 18 attend regularly
State agencies	34 states, 33 attend regularly
Tribal governments	17 states, 4 attend regularly
County governments	29 states, 22 attend regularly
Municipal/township governments	30 states, 21 attend regularly
Region governments	26 states, 15 attend regularly
Academia	32 states, 22 attend regularly
K-12 schools	21 states, 1 attend regularly
Utilities	24 states, 11 attend regularly
Utility locators	23 states, 2 attend regularly
Emergency Management community	30 states, 18 attend regularly
Law enforcement	17 states, 4 attend regularly
State 911 or PSAP	27 states, 12 attend regularly
Transportation Department	33 states, 28 attend regularly
GIS businesses	26 states, 17 attend regularly
General Business	20 states, 5 attend regularly
General public	20 states, 3 attend regularly

Data sharing | 40 responses

What parameters are in place for data sharing?

- 45%** 18 states agree (both agree and strongly agree) state statute sets specific expectations or requirements for sharing.
- 25%** 10 states agree (both agree and strongly agree) the state has a standardized data sharing agreement.
- 25%** 10 states agree (both agree and strongly agree) the state's standardized

intergovernmental data sharing agreement is effective.

- 75%** 30 states agree (both agree and strongly agree) the state's open records law makes data publicly available at no cost or cost of reproduction.
- 60%** 24 states agree (both agree and strongly agree) the state's open records law allows collection of fees for distribution.
- 18%** 7 states agree (both agree and strongly agree) the state's open records law allows agencies to copyright data.

NG 9-1-1 | 40 responses

What involvement does the GIO have in the state's efforts to implement Next Generation 9-1-1?

- 28%** 28% have no or minor involvement
- 68%** 68% are moderately or deeply involved
- 30%** 30% are coordinating with local governments to support NG 9-1-1 rollout
- 25%** 25% are working on new standards
- 15%** 15% have a seat on the state 9-1-1 board or equivalent
- 13%** 13% have a formal defined role or relationship with the state 9-1-1 board

Status of data themes

Data Theme	40 Survey Responses			Design of existing or planned program*				
	Have program or will have in 24 months	Percent with program	Program is 50% or more complete	Local Gov't (1)	Steward (2)	Open (3)	WMS (4)	Standard (5)
Parcel Database	29	73%	53%	79%	86%	48%	72%	83%
Orthoimagery	31	78%	68%	65%	100%	84%	94%	97%
Road Centerlines	36	90%	80%	69%	89%	67%	64%	81%
Address Points	30	75%	58%	90%	97%	60%	63%	87%
Gov't Boundaries	32	80%	70%	78%	94%	94%	88%	100%
Hydrography	29	73%	55%	38%	83%	90%	83%	93%
Elevation	32	80%	68%	31%	91%	94%	75%	94%
Geodetic Control	27	68%	10%	48%	93%	89%	74%	85%
Structures/Buildings	14	35%	18%	43%	86%	71%	57%	79%

*Verbatim text of program characteristics

- (1) A systematic program is in place to collect this data from local government
- (2) There is a designated aggregator or steward for this data layer
- (3) This data layer is publically available without restrictions
- (4) This data layer is available on a public web mapping service
- (5) This data is available in standardized formats or data model.

Parcel Data

All 29 states are planning to capture parcel polygons; a few will also have parcel centroids. Two thirds look to provide assessor-type attribute data; e.g., valuation, land-use. Half will provide ownership-related data; e.g., names, mailing addresses.

Orthoimagery

States collected data in a wide variety of types and scales. Looking at the largest scales, the dominant scales were 6-inch and 12-inch, the most popular types were leaf-off, natural color, 4-band, and aerial. 10 or more states fell into each of those scale/type combinations.

Road Centerlines

Over half the states (56%) efforts serve the needs of both state/regional 9-1-1 road needs and the USDOT ARNOLD road reporting requirements.

Hydrography

Nine of ten states (90%) submit their data to USGS for inclusion on NHD.

Elevation

Four of every five states (80%) are working in partnership with the 3DEP program.

Geodetic Control

Four of every five states (80%) provide a real-time GPS correction service for surveyors and other field workers.

Address Points

Just over half the states support both Road Centerline (53%) and Structures/Buildings (58%) data with related address point data.