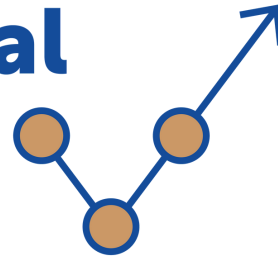




# Geospatial Maturity ASSESSMENT



## Contact Information (Section 1 of 12)

### Name

Joe Sewash

### Agency/Organization Name

Commonwealth of Virginia

### State

Virginia

### Email Address

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## Coordination (Section 2 of 12)

### A. GIS Program Support

#### 1. Does your state have a GIO? (pick one)

Yes - official statewide GIS coordinator (not officially called GIO, but authorized to perform statewide coordination work on a full-time basis)

#### 2. To whom does the GIO directly report? (pick one)

Other (specify)

Please specify:

9-1-1 & Geospatial Services Bureau Chief

3. What abilities does the GIO have? (choose all that apply)

- Influence on state and federal policy issues affecting the GIS community
- Input to budget and financial matters affecting the state GIS office
- Input over technology used at the state enterprise level
- Control over state-wide GIS data standards
- Coordinate activities across levels of government and within state government

#### B. Support for Coordination

1. What authorization exists for the GIO/coordination position? (pick one)

Statute

2. How is the GIO office funded? (choose all that apply)

- Other (specify)

Please specify:

911 Wireless Fund

3. Is the GIO office able to accept "soft" money such as grants, fees for service, etc.? (pick one)

Yes

4. Does the GIO have a full-time professional staff that works on the ongoing programs of the office? (pick one)

Yes

#### C. Implementation

1. Does your state have a clearinghouse? (pick one)

Yes

2. Does your state have a strategic plan for GIS? (pick one)

Yes, less than 5 years old

3. Does your state have an active GIS coordinating council that meets at least 4 times a year? (pick one)

Yes, an official GIS Council defined/recognized by statute, executive order, or administrative rule

4. Does the council have representation from all relevant stakeholders? (pick one)

Yes

#### D. URL and Website Information

1. Enter the complete URL for your State GIS Data Clearinghouse website. (Include http:// or https://)

<https://vgin.maps.arcgis.com/home/index.html>

2. Enter the complete URL for your State's GIO office website. (Include http:// or https://)

<https://www.vaemergency.gov/911-geospatial/vgin-geospatial-services/>

3. Enter the complete URL for your state's GIS Council website. (Include http:// or https://)

<https://www.vaemergency.gov/911-geospatial/vgin-geospatial-services/vgin-advisory-board/>

4. Any new legislation? If so, please provide a very brief description and a full URL for any newly enacted GIS-related statutes in your state. These can include the establishment of the coordination office, sustained funding sources, public record laws, or other relevant laws.

§ 2.2-2423. Virginia Geog. Info. Network Advisory Board (<https://law.lis.virginia.gov/vacode/2.2-2423/>)§ 44-146.18:6. Geog. Info. Network Div. established; powers and duties (<https://law.lis.virginia.gov/vacode/title44/chapter3.2/section44-146.18:6/>)

#### Next Generation 9-1-1 (NG9-1-1) (Section 3 of 12)

1. Is there an effort in your state to coordinate the development, normalization, aggregation, and/or distribution of GIS data in support of NG9-1-1? (pick one)

Yes

2. Is there a state GIS coordinating body assigned with the responsibility for GIS data readiness for NG9-1-1? (pick one)

Yes

3. Is there a relationship between the state GIS office or coordinating body and state 9-1-1 coordinating body? (pick one)

Formal – GIS coordinating body is included in state 9-1-1 coordinating body

4. Is the development, normalization, aggregation, and/or distribution of GIS datasets required for NG9-1-1 funded? (pick one)

Yes

5. Are there processes in place to normalize and aggregate authoritative GIS datasets required for NG9-1-1 to statewide datasets? (pick one)

Yes

5a. Is the designated aggregator public or private? (pick one)

Public/private partnership

5b. Do data sharing agreements exist with authoritative data providers to support statewide data aggregation? (pick one)

Data sharing agreements are unnecessary

Road Centerlines

Hybrid

Site/Structure Address Points

Hybrid

PSAP Boundaries

Hybrid

Service Boundaries (law/fire/EMS)

Hybrid

Provisioning Boundaries

Hybrid

7. Do you have a consistent update cycle for ensuring that the statewide GIS datasets required for NG9-1-1 are as current as possible? (choose all that apply)

- Road Centerlines
- Site/Structure Address Points
- PSAP Boundaries
- Provisioning Boundaries

8. Please identify the data comparisons or assessments that you apply to your data: (choose all that apply)

- Comparison between GIS data and MSAG/ALI data
- Boundaries checked for unintended gaps and overlaps
- Minimum required attributes are present and compliant with NENA standard
- Address Points to Road Centerlines
- Other (specify)

Please specify:

RCL tests for address ranges: no duplicates, no overlaps, parity, or ranges ending in zero. RCL geometry tests: check valid geometry, no multipart, no duplicate, ensure snapping, no dangles. AP checks: no duplicates, has address number and street name.

Road Centerlines (enter %)

90-100%

Site/Structure Address Points (enter %)

90-100%

PSAP Boundaries (enter %)

90-100%

Service Boundaries - Law Enforcement (enter %)

25-49%

Service Boundaries - Fire (enter %)

25-49%

Service Boundaries - EMS (enter %)

25-49%

10. Which of the following statewide GIS datasets are publicly available? (choose all that apply)

- Road Centerlines
- Site/Structure Address Points
- PSAP Boundaries
- Provisioning Boundaries

11. Are 9-1-1 calls in your state being spatially routed to the PSAP over an ESInet using Next Generation Core Services (NGCS) and the Emergency Call Routing Function (ECRF)? (pick one)

Yes, but not statewide (regionally, or only some PSAPs)

12. Is there any inter-state NG9-1-1 GIS coordination (ex: boundaries alignment)? (pick one)

Yes (Specify)

Please describe:

PSAPs in Virginia define boundaries using consistent process with interstate and interstate PSAP neighbors to insure interoperability with data from different states. Boundary data is reviewed with neighboring states for accuracy and agreement.

Elections (Section 4 of 12)

1. Does your office have a formal relationship (statute, administrative rule, formal agreement for services, or a standing coordination meeting) with your State's Election Director? (pick one)

No

2. Does your state manage or have easy access to an accurate, current statewide voting precinct boundary layer? (pick one) (Please note, that accuracy in this question means two things. First, accuracy indicates that the layer contains all of the most recent precinct boundary polygons. Second, accuracy also means that all the layers of information needed to do any election data management are in the right projection and at the appropriate scale.)

No

3. Does your state use and maintain a state or commercial geocoding web service to locate voter addresses and voters? (pick one)

No

4. Does your state have an audit process for precinct assignments within its election database? (pick one)

No

Address data creation and maintenance (pick one)

Yes

District data creation and maintenance (pick one)

Yes

Precinct data creation and maintenance (pick one)

Yes

Civic boundary data creation and maintenance (pick one)

Yes

6. Will the new precinct boundaries be added to your state's clearinghouse after the 2021 redistricting process?  
(pick one)

No

#### Address Points (Section 5 of 12)

1. Does your state have a program for developing or maintaining an authoritative statewide address database?  
(pick one)

Yes

2. What percent of local address-authorities contribute to your state's address point database? (pick one)

90-100%

3. How frequently is this data updated? (pick one)

Quarterly

4. What is the quality of the state-level data? (pick one)

Published to the NENA GIS Data Model (Site/Structure Address Points) or a state-level standard that can be rolled up to that standard and is verified via QA

5. How widely available is your address point database? (choose all that apply)

- Available for download
- Available via API (e.g., map service, feature service)
- Contributed to the National Address Dataset (NAD)
- Available publicly

6. Is your address point data used to support the following? (choose all that apply)

- Used to support 9-1-1 activities
- Used as reference data for a geocoder web service

7. Identify the characteristics of your address point database. (choose all that apply)

- Steward: There is a designated aggregator or steward for this data layer
- Attributes: The state data contains attributes associated with address points; e.g. address including sub-units, land use (e.g. home, park), and nature of point (e.g. parcel centroid, front door of structure, driveway access point)

## Cadastre/Parcels (Section 6 of 12)

### A. Parcel Data

1. What percentage of your counties have georeferenced digital parcel maps? (pick one)

90-100%

2. Does your state have a program of collecting current digital parcel data from local jurisdictions? (pick one)

Yes

### B. Centralized state collection of digital parcel data

1. What percentage of your counties participate? (pick one)

90-100%

2. What standard is maintained for the central database? (pick one)

Published as received



3. How accessible is data from this central database? (choose all that apply)

- Open, free, viewable, downloadable, with API

4. What are the characteristics of your state parcel program? (choose all that apply)

- None apply

#### Transportation (Section 7 of 12)

1. How complete is your state's road centerline database? (pick one)

100%

2. How frequently is this data updated? (pick one)

Quarterly

3. What is the quality of the state-level data? (pick one)

Edgematched and published to an approved state or national standard (verified/validated)

4. How accessible is your road centerline database? (pick one)

Open, free, viewable, downloadable, with API

5. Identify the characteristics of your road centerline database. (choose all that apply)

- Steward: There is a designated aggregator or steward for this data layer
- Funding: This program does have regular state-level funding
- Attributes: The state data does contain attributes associated with road centerlines (e.g. lanes, speeds, address ranges)

#### Hydrography (Section 8 of 12)

1. Is NHD meeting your state's requirements for hydrography? If yes, the grade cannot be lower than C. If no, the grade can rise or decline. (pick one)

Yes

2. Choose the answer that best describes the status of your state's program/initiative to improve your hydro dataset. (pick one)

No program

3. Are you actively working on an improved NHD hydro dataset? And if so, how much has your state completed? (pick one)

Have not actively begun

4. If you are actively working on an improved hydro dataset, how frequently is it being maintained? (pick one)

Not being maintained regularly at this point

5. When you are actively working on an improved hydro dataset, do you coordinate with USGS so your updates will integrate with the NHD? (pick one)

No

6. How accessible is your state's hydrography database? (pick one)

Open, free, downloadable

7. Does your state have a Data Steward for hydrography and are they actively engaged with USGS and with stakeholders in your state to make updates to the current NHD? (pick one)

No designated steward

8. Identify the best practices characteristics of your hydrography database. (choose all that apply)

- None apply

## Orthoimagery (Section 9 of 12)

### A. Leaf-On

1. How much of your state is covered by leaf-on orthoimagery? (pick one)

90-100%

2. Please indicate its update frequency. (pick one)

Every 2-3 years

4. Please indicate its accessibility. (pick one)

Findable and downloadable

5. Identify the characteristics of your leaf-on orthoimagery database. (choose all that apply)

- None apply

## B. Leaf-Off

1. How much of your state is covered by leaf-off orthoimagery? (pick one)

90-100%

2. Please indicate its update frequency. (pick one)

Every 4-5 years

4. Please indicate its accessibility. (pick one)

Findable and downloadable

5. Does your program collect more than the three R-G-B bands of data? (pick one)

Yes (Specify)

Please specify:

NIR

6. Identify the characteristics of your orthoimagery database. (choose all that apply)

- Steward. There is a designated aggregator or steward for this data layer
- Funding. This program has regular state-level funding
- Local government. There are some formal connections with the local government on buy-ups
- Accessibility: The data are freely available to the public as a service

## Governmental Units (Section 10 of 12)

1. Does your state have >75% unincorporated areas (as measured by the number of county subdivisions, not by land mass)? (pick one)

No

2. Of your incorporated areas, what percentage have reliable boundaries? (pick one)

<25%

3. Does your state have an authoritative source for boundary data? (pick one)

No

4. What is the update frequency of the data? (pick one)

Infrequent because of annual reporting expectation for the Census

5. How are the data published? (pick one)

Data published in a different standard

6. Are the data publicly available? (pick one)

Downloadable, with API

7. Identify the characteristics of your governmental boundaries activities. (choose all that apply)

- None apply

#### Geodetic Control (Section 11 of 12)

1. Does your state have any program activities focused on geodetic control? (pick one)

No

2. Is your state included in the Public Land Survey System (PLSS)? (pick one)

No

4. What are the details of your state efforts? (choose all that apply)

- Steward: There is a designated state steward

5. How is your state preparing for NGS's 2022 vertical datum and terrestrial reference frames update? (NSRS Modernization)

- It's on our "To Do" list

Elevation (Section 12 of 12)

1. Indicate the level of completion of the elevation data layer as a percentage. (pick one)

There is no state program for developing or maintaining an authoritative statewide elevation database