NSGIC

National States Geographic Information Council

2019 GEOSPATIAL MATURITY ASSESSMENT STATE REPORT CARDS

The Coalition of Geospatial Organizations (COGO) has used the traditional A-F system to grade the national spatial data infrastructure (NSDI) development effort, naming the federal agencies responsible for eight data layers in the NSDI. With this GMA, NSGIC turned to its own members and measuring their contributions to the NSDI.

NSGIC developed a questionnaire that was sent to each of its member states. Forty-one states responded. Their responses were then graded. The questionnaire, individual state responses, and the grades given each are available as separate resources. The responses were pulled together to grade each state on each of 10 different themes – the eight COGO themes, plus a grade for state-level coordination activities and separate grades for leaf-on and leaf-off orthoimagery.

Both questionnaires and grading schemes were developed by NSGIC volunteers, each an expert in the theme they addressed.

In the pages that follow, participating states' report cards can be found. Please reference the full report for more information on methodology, grading schemes, and national trends.

STATE SUMMARIES

STATE	OVERALL GRADE	STATE	OVERALL GRADE
Alabama	C+	North Carolina	B+
Arkansas	B+	North Dakota	B-
Arizona	B-	Nebraska	B
Colorado	C+	New Jersey	B
Delaware	B-	New Mexico	B+
Florida	B-	Nevada	C-
Georgia	C	New York	B+
Hawaii	C-	Ohio	B
Idaho	B	Oklahoma	C+
Illinois	C+	Oregon	B+
Indiana	B	Pennsylvania	B-
Iowa	C	Tennessee	B+
Kansas	B+	Texas	B
Kentucky	B+	Utah	B+
Louisiana	C	Virginia	C+
Massachusetts	B+	Vermont	B
Michigan	B	Washington	B
Minnesota	B+	Wisconsin	B-
Missouri	C+	West Virginia	B+
Mississippi	C+	Wyoming	C-
Montana	B-		

METRICS:

A – Superior	C – Average	F – Failure
B – Above average	D – Below average	N/A – Not Applicable

GEOSPATIAL MATURITY ASSESSMENT 2019

Alabama Report Card

Overall Grade: C+

COORDINATION	GRADE: B

STATE-LED THEMES	GRADE
Address	F
Cadastre	B
Elevation	F
Orthoimagery Leaf-Off	A+
Transportation	B-

FEDERAL-LED THEMES	GRADE
Geodetic Control	C+
Government Units	A-
Hydrography	C
Orthoimagery Leaf-On	B

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

The National States Geographic Information Council Geospatial Maturity Assessment provides NSGIC members and other partners with a summary of geospatial initiatives, capabilities, and issues within and across state governments. The NSGIC GMA now produce report cards for each state on central data themes and coordination topics. The assessment is performed every two years.

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GEOSPATIAL MATURITY ASSESSMENT 2019

Arizona Report Card

Overall Grade: B-

COORDINATION	GRADE: B

STATE-LED THEMES	GRADE
Address	B+
Cadastre	C+
Elevation	D+
Orthoimagery Leaf-Off	N/A
Transportation	A-

FEDERAL-LED THEMES	GRADE
Geodetic Control	B
Government Units	B-
Hydrography	C
Orthoimagery Leaf-On	B

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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GEOSPATIAL MATURITY ASSESSMENT 2019

Arkansas Report Card

Overall Grade: B+

COORDINATION	GRADE: A+

STATE-LED THEMES	GRADE
Address	A-
Cadastre	A+
Elevation	B+
Orthoimagery Leaf-Off	B
Transportation	B

FEDERAL-LED THEMES	GRADE
Geodetic Control	B+
Government Units	A+
Hydrography	A-
Orthoimagery Leaf-On	B

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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ARKANSAS GMA RESPONSE

We appreciate the opportunity to participate in the Geospatial Maturity Assessment. It provides metrics for use in self evaluation as well as objective measures from an external perspective that we can point to as we are evaluated within our state government organizational structure. We believe the results to be an accurate representation of our current state of affairs. We are and have long been very fortunate to enjoy an atmosphere of effective cooperation and coordination among the various GIS stakeholders in the state, including state agencies, local government, higher education, and the private sector.

It has long been the policy of both the Arkansas GIS Office and the GIS Board to capture leaf-off imagery. Leaf-off imagery better supports the needs of transportation, local tax assessors, and local 9-1-1. Unfortunately, our state does not have an imagery "program", i.e. no sustainable revenue stream. Consequently, imagery acquisition has always been dependent on available on-time funding. Over the last 20 years, statewide image acquisition has occurred, on average, every six to seven years.

Over the past three to four years, governmental units has become a particular focus for our state as we prepare for the 2020 Census and redistricting that will follow. Dovetailing with this has been our participation in the Geo-enabled Elections effort. We see these as exceptional opportunities glean quality data to take into the next decade.

Lastly, statewide address data has been one of our goals for the past decade, and we are now close to seeing the culmination of that effort. Currently, 72 of 75 counties have physical address dataset in maintenance, and the remaining three have efforts underway at some level to complete county-wide data for the first time. This dataset is of particular significance due to its integral role in Next Generation 9-1-1.

Shelby Johnson
GIO, State of Arkansas

GEOSPATIAL MATURITY ASSESSMENT 2019

Colorado Report Card

Overall Grade: C+

COORDINATION	GRADE: B

STATE-LED THEMES	GRADE
Address	B
Cadastre	C+
Elevation	C
Orthoimagery Leaf-Off	N/A
Transportation	C

FEDERAL-LED THEMES	GRADE
Geodetic Control	B-
Government Units	C
Hydrography	C
Orthoimagery Leaf-On	B-

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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COLORADO GMA RESPONSE

The State of Colorado appreciates NSGIC's efforts involved with all aspects of the GMA. An objective assessment of the high level GIS efforts within each state is invaluable information. Furthermore, seeing where other states are struggling and excelling allows for productive discussion and collaboration amongst states.

Colorado's grades are, for the most part, on par with where we feel we are in our efforts. It was interesting to see the grade difference (albeit minor) between address and cadastre, as we feel both data sets are about equally far along. All in all, the grades reinforce the point that additional time and resources are needed to improve upon these grades, along with better coordination across the state. In fact, Colorado's grade for coordination seems high, as this is an area that the state can greatly improve upon. However, after revisiting the grading system and questions for the Coordination section, the grade does seem justified. While the questions do address a state's ability and capacity for effective coordination, missing are questions about whether a state is actually actively coordinating. Perhaps additional questions can be included that involve the frequency and nature of coordination efforts among federal, state and local governments.

Anthony Filipiak
Senior GIS Analyst, State of Colorado

GEOSPATIAL MATURITY ASSESSMENT 2019

Delaware Report Card

Overall Grade: B-

COORDINATION	GRADE: D

STATE-LED THEMES	GRADE
Address	A-
Cadastre	A+
Elevation	A-
Orthoimagery Leaf-Off	A-
Transportation	A-

FEDERAL-LED THEMES	GRADE
Geodetic Control	C
Government Units	D
Hydrography	B-
Orthoimagery Leaf-On	B

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
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GEOSPATIAL MATURITY ASSESSMENT 2019

Florida Report Card

Overall Grade: B-

COORDINATION	GRADE: B+

STATE-LED THEMES	GRADE
Address	F
Cadastre	A+
Elevation	A+
Orthoimagery Leaf-Off	C-
Transportation	B-

FEDERAL-LED THEMES	GRADE
Geodetic Control	A-
Government Units	Inc
Hydrography	A
Orthoimagery Leaf-On	C

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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FLORIDA
GMA RESPONSE

NSGIC should be complimented for the clear, transparent way this geospatial maturity assessment was carried out and the way the results are being shared and used as a guide for programmatic improvements. The State of Florida accepts their B+ result as a fair representation of our current status based on the selected indicators. We look forward to the challenge of using the assessment results to improve the quality of service to our stakeholders.

When the 2017 Florida Legislature mandated the creation of a geographic information office, it signaled an understanding of the vital role spatial data should play in Statewide decision making. Having this coordinating body will positively impact all sectors of our maturity assessment going forward. The 2018 Florida Legislature permanently organized the new State Geographic Information Office with the Department of Environmental Protection (DEP) and gave the office rule making ability, with oversight of State Agencies and the State's five Water Management Districts (WMD). This GIO benefits from the legacy of a strong, active, and forward thinking GIS workgroup which coordinated geospatial policy since the 1990s.

There are two specific areas of the assessment for Florida that we would like to highlight. The first is the Address category (grade F). The Florida Dept. of Management Services (DMS) is the lead agency for Florida's 9-1-1 system. After a lengthy wait, DMS received a Federal grant in October 2019 that supports a variety of matching funds in support of NG 9-1-1. The GIO and GIS leads from the Dept. of Transportation of the Dept. of Emergency Management recently attended a kick off meeting and are working together to support this DMS initiative for Florida. The project end date is March 31, 2022.

Continued on page 2

FLORIDA
GMA RESPONSE

The GIO office will share the individual benchmarks the maturity assessment has identified for a successful Address program with the project participants. The second area of focus is Hydrology (grade A). Water quality and supply are hugely important to Florida's leadership. The DEP hosts the National Hydrography Dataset editors for the State and is always looking for ways to partner with the WMDs and other State agencies to improve our spatial data for surface, ground, and coastal waters. With the 2020 delivery of 3DEP QL1 peninsular LiDAR, we anticipate significant improvement in our detailed hydrography coverages based on analysis from the derived LiDAR products.

This NSGIC Maturity Assessment and results will be presented to the State stakeholders at our scheduled January 2020 meeting. Thank you for the opportunity to provide feedback.

Kim Johnson
Geospatial Information Officer

GEOSPATIAL MATURITY ASSESSMENT 2019

Georgia Report Card

Overall Grade: C

COORDINATION	GRADE: B-

STATE-LED THEMES	GRADE
Address	F
Cadastre	B
Elevation	B+
Orthoimagery Leaf-Off	A
Transportation	F

FEDERAL-LED THEMES	GRADE
Geodetic Control	C
Government Units	B-
Hydrography	C+
Orthoimagery Leaf-On	C

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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GEOSPATIAL MATURITY ASSESSMENT 2019

Hawaii Report Card

Overall Grade: C-

COORDINATION	GRADE: A

STATE-LED THEMES	GRADE
Address	F
Cadastre	A+
Elevation	F
Orthoimagery Leaf-Off	N/A
Transportation	F

FEDERAL-LED THEMES	GRADE
Geodetic Control	B-
Government Units	Inc
Hydrography	C
Orthoimagery Leaf-On	B-

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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GEOSPATIAL MATURITY ASSESSMENT 2019

Idaho Report Card

Overall Grade: B

COORDINATION	C+

STATE-LED THEMES	GRADE
Address	C+
Cadastre	C+
Elevation	B
Orthoimagery Leaf-Off	N/A
Transportation	B+

FEDERAL-LED THEMES	GRADE
Geodetic Control	A
Government Units	C+
Hydrography	A
Orthoimagery Leaf-On	A

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
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GEOSPATIAL MATURITY ASSESSMENT 2019

Illinois Report Card

Overall Grade: C+

COORDINATION	GRADE: D

STATE-LED THEMES	GRADE
Address	F
Cadastre	B-
Elevation	A-
Orthoimagery Leaf-Off	B
Transportation	D

FEDERAL-LED THEMES	GRADE
Geodetic Control	A-
Government Units	B-
Hydrography	C
Orthoimagery Leaf-On	A-

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
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GEOSPATIAL MATURITY ASSESSMENT 2019

Indiana Report Card

Overall Grade: B

COORDINATION	GRADE: A+

STATE-LED THEMES	GRADE
Address	B+
Cadastre	A+
Elevation	A-
Orthoimagery Leaf-Off	A
Transportation	D

FEDERAL-LED THEMES	GRADE
Geodetic Control	B-
Government Units	B-
Hydrography	B
Orthoimagery Leaf-On	N/A

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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INDIANA
GMA RESPONSE

The Indiana GIS community appreciates the opportunity to participate in the GMA. This important endeavor provides valuable insight and information that we can share with fellow GIS professionals and decision-makers across the state.

Indiana GIS data coordination is possible through community and partnerships between the Indiana Geographic Information Council, the Indiana Geologic and Water Survey, local and county GIS professionals, and leadership from the State Geographic Information Office. The State appreciates our 100% data sharing success with all of our county partners, the layers of which are graded in the GMA. Now that Indiana has achieved this, our community looks to increasing precision, accuracy and reliability of data sharing, the next levels of which will be seen in the next round of the GMA. We are also embarking on the next phase of data sharing. It is our goal to utilize new tools and technologies alongside our well-established and appreciated GIS data sharing environment to make our datasets more easily accessible, managed for reliability and updated with reliable metadata.

Our goals for next year will be to improve grades in specific to boundaries, transportation and addressing. Initiatives such as taxing, planning and NextGen 9-1-1 are driving our State's purpose for accurate, authoritative and timely data layers from local and county government. Current efforts are underway to establish statewide address and centerline data standards, along with data sharing guidelines that will help us improve our GMA in these areas. We are facing challenges with the lack of financial support to transition our statewide datasets into standardized datasets, ready at the level of reliability and accuracy needed for these use cases. It is our hope to encourage support in this area from state leadership and agency partnerships benefiting from the "build it once, use it many times" model.

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INDIANA
GMA RESPONSE

Indiana has been fortunate to have completed statewide orthoimagery at 12-inch resolution on average every five to six years. It is our policy to capture leaf-off orthoimagery statewide and make that data open and freely available for statewide consumption (i.e. license-free product). Leaf-off imagery better supports the needs of transportation, local tax assessors, economic development and local 9-1-1 departments. Unfortunately, our state lacks in the sustainability and reliability of the program because, despite annual request to budget for the program, the GIO lacks the funds to reliably support the program. Consequently, imagery acquisition has always been dependent on available, on-time funding.

Specific to the leaf-on imagery, Indiana's business case does not indicate value for imagery with leaf-on at a frequency or resolution greater than the NAIP data provided by our federal partners.

Additionally, we are fortunate to have a near-completed statewide QL-2 Lidar acquisition update. This would not have been possible without the funding support of our federal partners, primarily the Natural Resources Conservation Service (NRCS) and the United States Geological Survey (USGS). Our GIS community, transportation, economic development, and agriculture are beneficiaries of this data. It will be Indiana's plan to make both the Lidar and orthoimagery programs planned on a cycle, with support from all partners possible through the planning of the program.

Megan Compton
GIO, State of Indiana
Office of Technology

GEOSPATIAL MATURITY ASSESSMENT 2019

Iowa Report Card

Overall Grade: C

COORDINATION	GRADE: C+

STATE-LED THEMES	GRADE
Address	F
Cadastre	B+
Elevation	C-
Orthoimagery Leaf-Off	A
Transportation	D+

FEDERAL-LED THEMES	GRADE
Geodetic Control	C+
Government Units	C-
Hydrography	C
Orthoimagery Leaf-On	A

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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IOWA
GMA RESPONSE

Iowa appreciates the opportunity to participate in the NSGIC Geospatial Maturity Assessment (GMA). We feel the assessment is accurate and reflective of efforts and support for Statewide framework data. The State of Iowa has worked effectively in a federated manner leveraging the resources of State Agencies that have stepped up to act as a steward for an identified framework data layer, Typically because the data set meets a particular business need. Most of our successes have been inter-agency data efforts such as aerial imagery, elevation, parcels and NG911. Funding, state-level coordination and executive support have been critical to the success of these data programs. As with many states, Iowa has been able to build acquisition programs around data that has been easy to sell to leadership. As we move onto data sets that are less charismatic like addresses, hydrography, governmental units and geodetic control, we need to explore business needs and relationships that have not yet been discovered.

Patrick Wilke-Brown
GIS Coordinator,
Office of the CIO

NSGIC

GEOSPATIAL MATURITY ASSESSMENT 2019

Kansas Report Card

Overall Grade: B+

COORDINATION	GRADE: A-

STATE-LED THEMES	GRADE
Address	A
Cadastre	B+
Elevation	A-
Orthoimagery Leaf-Off	A+
Transportation	B+

FEDERAL-LED THEMES	GRADE
Geodetic Control	B-
Government Units	B
Hydrography	C
Orthoimagery Leaf-On	B

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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GEOSPATIAL MATURITY ASSESSMENT 2019

Kentucky Report Card

Overall Grade: B+

COORDINATION	GRADE: A

STATE-LED THEMES	GRADE
Address	D
Cadastre	B
Elevation	A+
Orthoimagery Leaf-Off	B
Transportation	A+

FEDERAL-LED THEMES	GRADE
Geodetic Control	A-
Government Units	A+
Hydrography	B
Orthoimagery Leaf-On	A-

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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KENTUCKY
GMA RESPONSE

Kentucky is pleased with the GMA scoring for 2019. The grades do reflect the status of our governance and coordination, as well as each of the "themed" layers here in the Commonwealth. It is our feeling that the scoring methodology is straightforward and the results are meaningful. We know that there is progress to be made in some areas and the GMA reaffirms that fact.

It is valuable to see where we measure up against other states and sharing the national results with our leadership helps to underscore our level of success here in Kentucky. Additionally, seeing which states excel in a certain category, lets us know who to contact for guidance and direction.

We appreciate the effort involved in compiling the assessment tool and sharing the results with the NSGIC community. Many thanks!

Kent Anness
GIS Operations Manager

GEOSPATIAL MATURITY ASSESSMENT 2019

Louisiana Report Card

Overall Grade: C

COORDINATION	GRADE: D

STATE-LED THEMES	GRADE
Address	D+
Cadastre	C-
Elevation	A-
Orthoimagery Leaf-Off	D
Transportation	B-

FEDERAL-LED THEMES	GRADE
Geodetic Control	B-
Government Units	C+
Hydrography	C+
Orthoimagery Leaf-On	B

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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GEOSPATIAL MATURITY ASSESSMENT 2019

Massachusetts Report Card

Overall Grade: B+

COORDINATION	GRADE: B

STATE-LED THEMES	GRADE
Address	A
Cadastre	A+
Elevation	A-
Orthoimagery Leaf-Off	A+
Transportation	B

FEDERAL-LED THEMES	GRADE
Geodetic Control	B+
Government Units	A
Hydrography	B
Orthoimagery Leaf-On	B-

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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MASSACHUSETTS GMA RESPONSE

With one exception, the Geospatial Maturity Assessment (GMA) grades for Massachusetts correctly reflect the states investments in framework data layers (especially cadastral, roads, address points, and imagery) and the 30-year existence of MassGIS, the state's GIS Office. The exception is the "B" grade for coordination which does not reflect the inadequacy of our state-level coordination efforts. MassGIS' has a relatively high-profile location in the state's two-year-old Cabinet-level IT agency. Also, the scope of MassGIS' statutory language calls for statewide coordination and for standards setting. However, there is no statewide GIS coordinating body. Thus all the coordination is informal and rests largely with the efforts of MassGIS' Director. This bottom up approach is not mature and increasingly does not support effective approaches to key issues such as funding, governance, and the appropriate scale of technology deployment. Recent developments suggest that MassGIS' success in developing and maintaining the mapping and data used by the Next Gen 9-1-1 system and the higher visibility from being in a Cabinet-level agency may start surfacing the need for more systematic state-level GIS coordination.

As mentioned above, substantial data investments have been made and the state is realizing the benefits of this investment, although much more could be achieved. In particular, additional work on and investment in improving the accuracy and detail of hydrography is needed. The State's Department of Environmental Protection is now the steward for National Hydrography Dataset (NHD); however their efforts are very limited due to lack of funding, and they have no mandate to develop the NHD outside of watersheds involved in public drinking water supply.

While the "B" grade assigned to transportation is a correct assessment, on-going work on this data set should see this grade go up in the next GMA.

Neil MacGaffey
Director, MassGIS

GEOSPATIAL MATURITY ASSESSMENT 2019

Michigan Report Card

Overall Grade: B

COORDINATION	GRADE: B

STATE-LED THEMES	GRADE
Address	C+
Cadastre	C+
Elevation	A-
Orthoimagery Leaf-Off	A-
Transportation	A

FEDERAL-LED THEMES	GRADE
Geodetic Control	A
Government Units	A
Hydrography	C+
Orthoimagery Leaf-On	B-

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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MICHIGAN GMA RESPONSE

The Geospatial Maturity Assessment (GMA) reflects Michigan's focus on key framework layers over the past two decades, with notable exceptions of cadastre, address and hydrography. Michigan has an established data program for maintaining transportation data and government unit boundaries and resources are assigned to the regular stewardship of those data layers. The Michigan Statewide Authoritative Imagery and LiDAR program has provided statewide coordination around statewide aerial imagery (leaf-off) and LiDAR elevation data acquisition since 2010. Michigan will have statewide QL2 LiDAR data statewide this year.

Michigan's coordination score of B does not reflect a lot of the coordination activities that are present across the State. Coordination for many of Michigan's GIS programs such as the Michigan Geographic Framework and the Michigan Statewide Aerial Imagery and LIDAR program are managed through the Center for Shared Solution (CSS) in the State's Department of Technology, Management and Budget. CSS coordinates GIS activities across the State in partnership with the two GIS associations, the Michigan Communities Association of Mapping Professional (MiCAMP) and the Improving Michigan's Access to Geographic Information Networks (IMAGIN) organization.

Leaf-on imagery has never been a priority for Michigan as leaf-off imagery is the primary requirement. Michigan uses the United State Department of Agriculture's National Aerial Imagery Program (NAIP) imagery for any leaf-on needs.

Cadastre and Addresses: These layers are managed at the local government level and exist in GIS format across most counties but there are still some gaps. For many years, these layers have not been made available publicly, however a handful of counties have recently published these datasets as open data. State and local government have recently been working together to exchange imagery and GIS data to begin to build out these layers as statewide datasets for government entities to access. The current goal is to continue to work in partnership between state and local government to integrate this data statewide and fill the gaps, where possible as funding is limited. These coordination efforts have just begun in the past year and we expect these efforts to lead to an improving grade by the next GMA.

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MICHIGAN
GMA RESPONSE

Hydrography: The State of Michigan has provided updates to the National Hydrography Dataset (NHD) over the years to get it to the current NHD baseline of 1:24,000. There is a need to improve the accuracy and completeness of the current hydrography data layer but lack of funding and staff resources has limited any data maintenance for this data layer. During the past year a hydrography focus group was formed to determine possible paths forward to improving this data by leveraging Michigan's statewide QL2 LiDAR data. Small pilot projects have been planned to validate the best methodology to improve this data layer but a statewide hydrography data update won't be possible until additional funding is identified.

Mark Holmes
Geospatial Services Manager

GEOSPATIAL MATURITY ASSESSMENT 2019

Minnesota Report Card

Overall Grade: B+

COORDINATION	GRADE: A

STATE-LED THEMES	GRADE
Address	A
Cadastre	A-
Elevation	A-
Orthoimagery Leaf-Off	B
Transportation	A

FEDERAL-LED THEMES	GRADE
Geodetic Control	B
Government Units	A
Hydrography	B+
Orthoimagery Leaf-On	B

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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NSGIC

GEOSPATIAL MATURITY ASSESSMENT 2019

Mississippi Report Card

Overall Grade: C+

COORDINATION	GRADE: B-

STATE-LED THEMES	GRADE
Address	F
Cadastre	D-
Elevation	A-
Orthoimagery Leaf-Off	B
Transportation	A+

FEDERAL-LED THEMES	GRADE
Geodetic Control	B-
Government Units	D+
Hydrography	B+
Orthoimagery Leaf-On	B

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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GEOSPATIAL MATURITY ASSESSMENT 2019

Missouri Report Card

Overall Grade: C+

COORDINATION	GRADE: B+

STATE-LED THEMES	GRADE
Address	F
Cadastre	D-
Elevation	B-
Orthoimagery Leaf-Off	A-
Transportation	A+

FEDERAL-LED THEMES	GRADE
Geodetic Control	A+
Government Units	D
Hydrography	B-
Orthoimagery Leaf-On	B

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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NSGIC

MISSOURI
GMA RESPONSE

Missouri's score reflects our "home rule" approach to many initiatives. Programs that are managed centralized within other states, not just GIS, are not in Missouri. The distributed approach is reflected in how Missouri scored for initiatives like addresses, cadastre and governmental units, efforts that remain managed at a local level. The state has multiple strong local GIS departments, generally in the more urban areas of the state, as well as a long history of GIS within various state agencies. Our departments of Transportation, Conservation, Natural Resources and Emergency Management all have a large GIS user base, along with significant applications within Health, Economic Development, Revenue and Highway Patrol.

Our centralized Office of Geospatial Information, part of our consolidated Information Technology Division, is positioned to expand coordination across all state agencies, looking for ways to implement GIS in many aspects of State business. This differs from other states, which appear to have a greater emphasis on coordination with local governments.

Our Missouri Geographic Information System Advisory Council, which has representatives from local, state, federal and commercial interests continues to emphasize outreach and education as one of its primary goals. This includes regular regional workshops, as well as the bi-annual Missouri GIS conference.

Tracy Schloss
GIO, State of Missouri

GEOSPATIAL MATURITY ASSESSMENT 2019

Montana Report Card

Overall Grade: B-

COORDINATION	GRADE: A

STATE-LED THEMES	GRADE
Address	B+
Cadastre	A+
Elevation	C-
Orthoimagery Leaf-Off	N/A
Transportation	C

FEDERAL-LED THEMES	GRADE
Geodetic Control	B
Government Units	B
Hydrography	C+
Orthoimagery Leaf-On	B

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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GEOSPATIAL MATURITY ASSESSMENT 2019

Nebraska Report Card

Overall Grade: B

COORDINATION	GRADE: A-

STATE-LED THEMES	GRADE
Address	A-
Cadastre	B+
Elevation	B+
Orthoimagery Leaf-Off	N/A
Transportation	C

FEDERAL-LED THEMES	GRADE
Geodetic Control	B-
Government Units	B-
Hydrography	B-
Orthoimagery Leaf-On	B-

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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NEBRASKA GMA RESPONSE

Overall the grades reflect GIS activities in Nebraska. Nebraska is a progressive, forward-thinking state in terms of utilizing GIS. IT consolidation helped play a major role in the development of a Statewide Enterprise GIS platform.

Nebraska would like to address the Orthoimagery Leaf-off grade. While the state imagery standard and business plan calls for a 12" leaf off collection, we do not have a statewide collection. Several counties that have a large urban population have a collection process to collect leaf-off imagery every other year, and the data is available through the participating County GIS office or ESRI's Living Atlas. In addition to this collection, during the 2018 Natural Resource Conservation Service (NRCS) LiDAR refresh in Southeastern Nebraska, leaf-off imagery was collected in addition to the LIDAR data. It is not known if this will be a continued collection from NRCS or not. This information was not used in the 2019 Geospatial Maturity Assessment.

In general, Nebraska feels the grades are representative of our activities, with the exception of the statewide imagery program. Nebraska has a business plan and standards for a custom imagery collection or subscription based imagery data. Nebraska as a state lacks the funding to accomplish these tasks. Nebraska is very appreciative of the federal agencies' collection of NAIP and LIDAR statewide and the counties for their imagery and data collection.

John Watermolen
State GIS Coordinator

GEOSPATIAL MATURITY ASSESSMENT 2019

Nevada Report Card

Overall Grade: C-

COORDINATION	GRADE: D

STATE-LED THEMES	GRADE
Address	F
Cadastre	B-
Elevation	F
Orthoimagery Leaf-Off	N/A
Transportation	A

FEDERAL-LED THEMES	GRADE
Geodetic Control	A-
Government Units	B
Hydrography	C
Orthoimagery Leaf-On	D

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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NEVADA
GMA RESPONSE

The grade assigned to the state of Nevada reflects the current coordination and support level that GIS has received statewide. Nevada has no statewide coordinating GIS body, and any coordination efforts are largely informal and conducted with minimal resources. In addition, coordination between many state, local, and regional agencies is not well established. Several counties in Nevada either do not have dedicated GIS staff or contract out for GIS services, thus making coordination difficult across the state for themes such as addresses. Since the majority of Nevada is federally owned land and the bulk of our population resides in either the Reno metro area or the greater Las Vegas area, Nevada has historically relied on datasets available from federal programs (NAIP and NHD) since the need for greater detailed datasets has not been vocalized.

Nevada's Department of Transportation (NDOT) has done an excellent job in compiling a road centerline database, maintaining it, and making it publically accessible. We will be working towards identifying potential partners and developing a statewide program for elevation data in the near future.

Rachel Micander
Cartographer / GIS Specialist, Nevada Bureau of Mines & Geology, University of Nevada - Reno

GEOSPATIAL MATURITY ASSESSMENT 2019

New Jersey Report Card

Overall Grade: B

COORDINATION	GRADE: A-

STATE-LED THEMES	GRADE
Address	D+
Cadastre	A+
Elevation	A-
Orthoimagery Leaf-Off	A
Transportation	B+

FEDERAL-LED THEMES	GRADE
Geodetic Control	B+
Government Units	C-
Hydrography	B+
Orthoimagery Leaf-On	B

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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NSGIC

NEW JERSEY GMA RESPONSE

Addresses: This data layer has become our primary focus this year, and we are devoting significant resources to improving it. The completeness is already improved enough that were we to take the survey now, the grade would be a C+. This is still not acceptable to us, but is indicative of the progress we are making. Our grade reflects the fact that the program is still getting started.

Governmental Units: For this layer, the grade does not accurately reflect the condition of our data. Our governmental units data sets (state, municipal, and county boundaries) are in excellent shape and are updated on a continuing basis. Solely on the condition of the data, a grade of A or even A+ would be reasonable. But that is not the question being asked in the GMA. The GMA grade for governmental units focuses on a state's participation in the formal programs that US Census Bureau uses to maintain their aggregation of the data, such as the Boundary and Annexation Survey (BAS). Participation in New Jersey in these programs is not very high by the standards used in the GMA. Many towns do not respond, and the state is not authorized to respond for them. But the reason for that low participation is that municipal boundaries very rarely change in New Jersey, and since we have no unincorporated land, annexations are a non-issue. The towns that don't respond usually have nothing new to submit.

These comments aside, the GMA provides an accurate assessment of our efforts in the areas that it covers, and we are focusing our efforts accordingly.

Andy Rowan
GIO, Office of Information Technology

GEOSPATIAL MATURITY ASSESSMENT 2019

New Mexico Report Card

Overall Grade: B+

COORDINATION	GRADE: B

STATE-LED THEMES	GRADE
Address	A
Cadastre	A
Elevation	B
Orthoimagery Leaf-Off	N/A
Transportation	A

FEDERAL-LED THEMES	GRADE
Geodetic Control	B+
Government Units	A+
Hydrography	C+
Orthoimagery Leaf-On	B+

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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NEW MEXICO GMA RESPONSE

First, the State of New Mexico (NM) commends the National States Geographic Information Council (NSGIC) for lending resources to support the Geospatial Maturity Assessments (GMA). We believe this is a wonderful measure of how we're performing and where we can improve. In addition, using the GMA to leverage requests for State Support for programs not performing well provides us with a useful tool. Thank you.

Thank you for the opportunity to respond to our "Report Card" results. We wish to provide more clarity to parts of the NM NSGIC GMA marks. I believe more clarity may improve our results. We are in agreement with much of the marks, yet have some issues in two categories as follows:

Elevation: Believe this mark is way too low. Through our NM Geospatial Advisory Committee Elevation Data Planning and Acquisition Subcommittee we have been able to secure nearly $20M in funding through close coordination among federal, state, local, tribal, and private actors that will complete a statewide elevation layer by the end of next year (2020). I believe that is a stellar star for the State of New Mexico.

Coordination: Lastly, we find this a bit disturbing considering the "coveted by others" coordinative body we've developed through the years that has been exceptionally successful in a variety of tasks (Census/LUCA, Transportation, Elevation, Addresses, NM911). I am targeting the NM Geospatial Advisory Committee (NM GAC) that meets monthly and attended by Federal, State, Local, Tribal, and Industry representatives. This group has been instrumental in data requirements of our state. In addition, NM GAC has close hooks to our professional organization, the New Mexico Geographic Information Council (NMGIC) that provides strong coordination in training and a non-profit mechanism that we can leverage. We believe "Coordination" does not reflect the solid collaborative environment we developed in New Mexico.

Again, New Mexico appreciates the opportunity to participate in the GMA and are grateful for NSGIC's support.

Gar Clarke
State GIO

GEOSPATIAL MATURITY ASSESSMENT 2019

New York Report Card

Overall Grade: B+

COORDINATION	GRADE: A-

STATE-LED THEMES	GRADE
Address	A
Cadastre	A
Elevation	A
Orthoimagery Leaf-Off	A+
Transportation	A

FEDERAL-LED THEMES	GRADE
Geodetic Control	A
Government Units	C
Hydrography	B
Orthoimagery Leaf-On	B

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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NEW YORK
GMA RESPONSE

New York's grades in the Geospatial Maturity Assessment (GMA) generally reflect the investment in and the maturity of the State's framework data programs, many of which have been in existence for nearly two decades. Notable exceptions exist in the areas of government unit boundaries, hydrology and leaf-on orthoimagery.

The GMA questions on government unit boundaries focused on the Census Bureau annual Boundary and Annexation Survey (BAS). In New York there is a reasonably mature boundary maintenance program which makes boundary updates available to Census outside of their standard annual BAS update. This reduces the importance of the BAS in keeping boundaries synchronized.

Stewardship for New York's portion of the National Hydrography Dataset was recently transferred to the NYS GIS Program Office (GPO) after maintenance activities were stopped by the previous steward because of fiscal constraints. Improvements in the hyrography theme are underway now that data maintenance is the responsibility of the GPO along with the other framework data themes.

Leaf-on orthoimagery was prioritized lower than leaf-off by the New York State Geospatial Advisory Council representing GIS stakeholders from every sector.

Frank Winters
State GIO

GEOSPATIAL MATURITY ASSESSMENT 2019

North Carolina Report Card

Overall Grade: B+

COORDINATION	GRADE: B+

STATE-LED THEMES	GRADE
Address	B
Cadastre	A+
Elevation	A-
Orthoimagery Leaf-Off	A
Transportation	A+

FEDERAL-LED THEMES	GRADE
Geodetic Control	A+
Government Units	B
Hydrography	B
Orthoimagery Leaf-On	B

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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NORTH CAROLINA GMA RESPONSE

North Carolina accepts the results represented in the Geospatial Maturity Assessment. It is very helpful for our state to gauge where we are internally and compared to the other states. The grades in large measure reflect the investments in time and financial resources over the past 10-15 years.

Leaf-off orthoimagery and cadastre are two examples where extensive coordination and business plans have yielded ongoing, funded statewide programs. Cooperation between state and local government partners has been essential to this success. Other long-term investments made in elevation, transportation and geodetic control have also yielded exemplary results.

The lower grades in the scale include addresses, hydrology, and governmental units. For the addresses layer, statewide snapshots were created with non-recurring state funds in 2009 and in 2014, respectively, yielding over five million addresses each time. Legislative support for an ongoing program occurred just as NextGen 911 efforts were beginning to ramp up. We chose to avoid duplication of efforts by deferring an update to the addresses layer, relying on the NextGen 911 process as the mechanism for an ongoing update.

Concerning the hydrology layer, North Carolina has been slow to evolve from a 1:24,000-scale statewide product to a local (higher) resolution product. However, in the past year the key agencies have considered requirements that will meet permitting and other needs. Those agencies, supported by the NC Geographic Information Coordinating Council, will lead the statewide community toward a more detailed product that meets requirements for completeness and consistency and satisfies a range of business needs.

Continued on page 2

NORTH CAROLINA GMA RESPONSE

Governmental units is a final area where we acknowledge that improvement is needed. Municipal boundaries are receiving attention currently that will deliver a better statewide data layer than currently exists.

In conclusion, North Carolina places great value in the GMA and looks forward to learning from other states in those areas where we need to improve. Thanks to the work of NSGIC we have a fresh look at where we stand individually and collectively as member states.

Tim Johnson
Director, Center for Geographic Information and Analysis

GEOSPATIAL MATURITY ASSESSMENT 2019

North Dakota Report Card

Overall Grade: B-

COORDINATION	GRADE: B+

STATE-LED THEMES	GRADE
Address	C+
Cadastre	C-
Elevation	B+
Orthoimagery Leaf-Off	B
Transportation	A

FEDERAL-LED THEMES	GRADE
Geodetic Control	B-
Government Units	D
Hydrography	C+
Orthoimagery Leaf-On	B+

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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NSGIC

GEOSPATIAL MATURITY ASSESSMENT 2019

Ohio Report Card

Overall Grade: B

COORDINATION	GRADE: A

STATE-LED THEMES	GRADE
Address	B+
Cadastre	C+
Elevation	A
Orthoimagery Leaf-Off	A+
Transportation	B

FEDERAL-LED THEMES	GRADE
Geodetic Control	A
Government Units	C
Hydrography	C
Orthoimagery Leaf-On	C+

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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NSGIC

GEOSPATIAL MATURITY ASSESSMENT 2019

Oklahoma Report Card

Overall Grade: C+

COORDINATION	GRADE: B+

STATE-LED THEMES	GRADE
Address	F
Cadastre	C
Elevation	F
Orthoimagery Leaf-Off	N/A
Transportation	A

FEDERAL-LED THEMES	GRADE
Geodetic Control	A+
Government Units	D
Hydrography	B-
Orthoimagery Leaf-On	A-

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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OKLAHOMA GMA RESPONSE

I believe that our grades reflect the fact that the State of Oklahoma provides very little state resources to support the coordination and development, maintenance and delivery of the state's geospatial data. Certain themes which are the primary responsibility of individual agencies utilize mainly federal funds to support their geospatial efforts. The discussion below is provided to give a little more background in our statewide efforts with the hope of improvement in future grading. Without the state providing meaningful resources, however, we are very limited in making significant progress in many of these themes.

Coordination: Oklahoma receives no state funding to support our efforts but we do receive a small amount of funds from the agency we are housed in. These are funds, which support about 15% of two individual's salaries, are derived from federal programs that the agency manages. These funds allow us to operate and maintain our geospatial clearinghouse which is supported by an annual state/federal Homeland Security Grant. If you were to remove from all state's the points related to state funding support and paid full time staff, our score would place us in the top 5 of all states in this category.

Addresses-NG911: For our purposes, address points and NG911 are tied together since address points will be derived from our NG911 efforts. We are just embarking on implementing a NG911 program. We are working directly with the state 911 authority to develop and maintain (once completed) authoritative data layers at the statewide level that include PSAP, state, county and municipal boundaries along with a statewide address point and centerline database. We have received two 3-year grants to implement this effort which includes training of local PSAP staff on implementing the State NG911 Addressing Standard as well as maintaining their local data. We will also be creating and maintaining a web portal for PSAPs to submit their data for QA/QC analysis and inclusion in the statewide database.

Continued on page 2

OKLAHOMA GMA RESPONSE

Cadastre/Parcels: Although we do not have a program that interacts with the counties to aggregate their parcel data, we do have a state vendor that does aggregate our entire county parcel data into a statewide database. This vendor is providing this database with monthly updates to us free of charge and allows us to publish it through our state clearinghouse. Although the database is not downloadable, it can be freely viewed, individual basic parcel attributes can be accessed, viewed and printed, and the statewide coverage can be used as a base map in GIS software through our OGC WMS web service.

Orthoimagery: We do have leaf-on statewide imagery from USDA but no state funded program for leaf-off. We are very appreciative that USDA is providing this data.

Elevation: We do currently have 90-plus% statewide coverage of QL3 or better data that we have received from NRCS, USGS and FEMA. It is available through our clearinghouse API, downloadable, and WMS web service as raw LiDAR, DEM and contours. No state funds have been provided to support this effort. Without this support from the federal agencies we would be dependent on 10 meter DEMs as our statewide dataset. We are very grateful to the federal agencies for providing this data.

Mike Sharp
State Geographic Information Coordinator

GEOSPATIAL MATURITY ASSESSMENT 2019

Oregon Report Card

Overall Grade: B+

COORDINATION	GRADE: A

STATE-LED THEMES	GRADE
Address	B+
Cadastre	A
Elevation	A+
Orthoimagery Leaf-Off	N/A
Transportation	A

FEDERAL-LED THEMES	GRADE
Geodetic Control	A
Government Units	D+
Hydrography	A-
Orthoimagery Leaf-On	A-

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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NSGIC

OREGON
GMA RESPONSE

We accept the Geospatial Maturity Assessment (GMA) as an adequate record of our current situation. We feel we are doing an adequate job in most areas, and exemplary job in some, and a few where we will strive to do better. In most cases, this will mean we need additional time or resources.

In particular, we want to respond to the grade in one area, that being Governmental Units. While we are making progress for this theme, we are not the official entity identified by the Census Bureau for their purposes. In addition, we do not have an identified steward for all governmental units, nor specifically identified funding for that theme. We have also identified over 100 governmental units that we track and are attempting to develop and maintain. Some of those are not included in the governmental units category for this assessment, but are a higher priority for us, so we have made progress on those data sets. That work doesn't count in the GMA.

Cy Smith
DAS/CIO Geospatial Enterprise Office

NSGIC

GEOSPATIAL MATURITY ASSESSMENT 2019

Pennsylvania Report Card

Overall Grade: B-

COORDINATION	GRADE: B

STATE-LED THEMES	GRADE
Address	F
Cadastre	B
Elevation	A-
Orthoimagery Leaf-Off	A+
Transportation	A+

FEDERAL-LED THEMES	GRADE
Geodetic Control	B-
Government Units	B
Hydrography	B-
Orthoimagery Leaf-On	B-

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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NSGIC

PENNSYLVANIA GMA RESPONSE

Pennsylvania welcomes the opportunity to participate in NSGIC's biennial geospatial maturity assessment, an exercise in self-assessment that helps us to define our goals and opportunities in the geospatial environment.

The overall grading report is an accurate reflection of the current status of geospatial activities within the Commonwealth. Since the implementation of the State Geospatial Coordinating Board via 2014 legislation, the assessment of GIS in Pennsylvania has shown a marked improvement, especially in the areas of coordination and state-led themes. The one area of concern is addresses, as we have had very minimal progress on what has been considered a low-priority item. However, with the implementation of NG911 continuing to move forward, as well as the National Address Database initiative, Pennsylvania views this as an opportunity to engage the appropriate entities to improve not only our grade on this item, but also an improvement on the data that can be made available to our customers.

We appreciate the grading effort and find it beneficial for us to be able to compare our progress as it ranks against other states. Additionally, it assists us in identifying areas for improvement that we can utilize as we plan our future geospatial activities.

Mary Fulton
Chief, Geospatial Services

GEOSPATIAL MATURITY ASSESSMENT 2019

Tennessee Report Card

Overall Grade: B+

COORDINATION	GRADE: B+

STATE-LED THEMES	GRADE
Address	A
Cadastre	A+
Elevation	A
Orthoimagery Leaf-Off	A-
Transportation	B-

FEDERAL-LED THEMES	GRADE
Geodetic Control	B+
Government Units	A-
Hydrography	B-
Orthoimagery Leaf-On	A-

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

The National States Geographic Information Council Geospatial Maturity Assessment provides NSGIC members and other partners with a summary of geospatial initiatives, capabilities, and issues within and across state governments. The NSGIC GMA now produce report cards for each state on central data themes and coordination topics. The assessment is performed every two years.

NSGIC

TENNESSEE GMA RESPONSE

The State of Tennessee appreciates the opportunity to participate in the NSGIC led 2019 Geospatial Maturity Assessment. Overall, the grades we received accurately reflect the progress and current status of our GIS coordination efforts and statewide framework GIS data set development.

The high marks we received reflect the hard work and dedication that several people at many levels of government have poured into these efforts for many years. Starting with the Tennessee Base Mapping Program from 2000-2007, many of the framework datasets were initially developed and are now being maintained at both the local and State level.

Future work needs to focus on enhancing the Transportation and Hydrology (Hydrography) datasets, as well as enhancing public access of these datasets through various mechanisms sponsored by the State GIS Coordination Office in Finance and Administration, Strategic Technology Solutions.

Future efforts of the Geospatial Maturity Assessment should include some measure of how these GIS framework datasets are being leveraged or applied by State agencies, local government and the public to improve the well-being of our citizens, improving efficiencies in government, protecting our environment, and expanding our economic development. Simply creating and maintaining GIS data to support the NSDI is not enough; we should now be challenged to maximize its potential use in all of these areas and beyond.

Dennis Pedersen
Director, GIS Services

GEOSPATIAL MATURITY ASSESSMENT 2019

Texas Report Card

Overall Grade: B

COORDINATION	GRADE: A-

STATE-LED THEMES	GRADE
Address	B
Cadastre	B+
Elevation	B-
Orthoimagery Leaf-Off	A
Transportation	B-

FEDERAL-LED THEMES	GRADE
Geodetic Control	B+
Government Units	D+
Hydrography	B-
Orthoimagery Leaf-On	A

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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NSGIC

TEXAS
GMA RESPONSE

Texas' GMA grades are reflective of the dedication put forth by our contributing state agency partners. Coordination for GIS in Texas spans more than 40 years and more than 100 million dollars in cooperative geospatial data investments. Texas realizes the benefits of the GMA exercise and we are grateful to see how our state compares to the efforts of other states in the nation.

There is one glaring low grade among our above average scores – Governmental Units. The Governmental Units section was based on U.S. Census geography and data provisioning. Texas is proud to have a statewide county boundary dataset as well as a municipal boundary dataset collected and updated by the Texas Department of Transportation on an annual basis. Our stance is that for a state as large as Texas, we are fortunate to have these two statewide datasets and an agency dedicated to updating municipal boundaries, annually. We firmly believe that if the GMA questions on Governmental Units was based more on existence of data rather than participation in the U.S. Census boundary programs, Texas would score a B at the very minimum.

Richard Wade
GIO, State of Texas

GEOSPATIAL MATURITY ASSESSMENT 2019

Utah Report Card

Overall Grade: B+

COORDINATION	GRADE: A

STATE-LED THEMES	GRADE
Address	A
Cadastre	A+
Elevation	C-
Orthoimagery Leaf-Off	B
Transportation	A

FEDERAL-LED THEMES	GRADE
Geodetic Control	B+
Government Units	A
Hydrography	B
Orthoimagery Leaf-On	B

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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GEOSPATIAL MATURITY ASSESSMENT 2019

Vermont Report Card

Overall Grade: B

COORDINATION	GRADE: A

STATE-LED THEMES	GRADE
Address	A
Cadastre	A-
Elevation	A-
Orthoimagery Leaf-Off	A-
Transportation	A-

FEDERAL-LED THEMES	GRADE
Geodetic Control	B
Government Units	D+
Hydrography	B-
Orthoimagery Leaf-On	C

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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GEOSPATIAL MATURITY ASSESSMENT 2019

Virginia Report Card

Overall Grade: C+

COORDINATION	GRADE: A

STATE-LED THEMES	GRADE
Address	A-
Cadastre	A
Elevation	F
Orthoimagery Leaf-Off	A
Transportation	B

FEDERAL-LED THEMES	GRADE
Geodetic Control	B
Government Units	F
Hydrography	C
Orthoimagery Leaf-On	C+

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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GEOSPATIAL MATURITY ASSESSMENT 2019

Washington Report Card

Overall Grade: B

COORDINATION	GRADE: B

STATE-LED THEMES	GRADE
Address	B+
Cadastre	A-
Elevation	A+
Orthoimagery Leaf-Off	C+
Transportation	N/A

FEDERAL-LED THEMES	GRADE
Geodetic Control	B-
Government Units	B
Hydrography	B
Orthoimagery Leaf-On	B-

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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GEOSPATIAL MATURITY ASSESSMENT 2019

West Virginia Report Card

Overall Grade: B+

COORDINATION	GRADE: B

STATE-LED THEMES	GRADE
Address	A-
Cadastre	B+
Elevation	A-
Orthoimagery Leaf-Off	B
Transportation	B-

FEDERAL-LED THEMES	GRADE
Geodetic Control	A-
Government Units	A
Hydrography	C+
Orthoimagery Leaf-On	A

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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NSGIC

WEST VIRGINIA GMA RESPONSE

Analysis of the Geospatial Maturity Assessment (GMA) data used to calculate a "B+" grade for West Virginia shows that the result is primarily due to insufficient funding for creation, maintenance and updates of some framework layers, a dated strategic plan and lack of strategic plans for individual layers.

The WV Office of GIS Coordination is pleased to report that efforts to address these deficiencies are underway.

The State GIS Policy Council, which includes high-ranking state officials, has been made active again. On April 29, 2019, the Council approved the development of a new strategic plan and a series of programs and projects that will enhance the state's GIS program. It is through this body that additional funding for the development of new statewide layers, the maintenance and updating of existing framework layers, and the development of strategic plans for specific layers can and will be advocated.

Led by the State GIS Coordinator in partnership with the GIS Steering Committee (Steering Committee) and the WV Association of Geospatial Professionals (AGP), an update to the 2010 State GIS Strategic Plan is underway. Development of strategic plans for individual layers is being explored by the GIS Technical Issues Committee.

The groups mentioned above are active in their collective efforts to educate state, regional and local elected and appointed officials on the importance of GIS for government, economic development, emergency management, cadastre, and other activities. This initiative has been part of an advocacy agenda for the Office of GIS coordination and the AGP. Activities such as "GIS Day at the Legislature" and other events held during the State's legislative session and presentations at government officials' trade conferences have proven useful in this task.

Continued on page 2

WEST VIRGINIA GMA RESPONSE

Support for several new GIS programs has resulted from the advocacy cited above. Among them:

- GeoEnabled Elections (GEE) Pilot program led by the State GIS Coordinator and in partnership with the WV Secretary of State has been authorized and funded. This initiative grew from NSGIC's GEE project.
- High school certification program in geospatial technologies is being developed by the Department of Education in partnership with the Office of GIS Coordination.
- Broadband Mapping program developed by the WV Development Office and the WV Broadband Enhancement Council, in partnership with the WV Office of GIS Coordination.
- Enterprise software agreement that provides regional and local governments access to GIS software secured by the Region 1 and Region 4 Planning and Development Councils in partnership with a major GIS Software vendor.

West Virginia believes current and planned efforts will increase our grade in future GMAs.

Tony Simental
West Virginia GIS Coordinator's Office

GEOSPATIAL MATURITY ASSESSMENT 2019

Wisconsin Report Card

Overall Grade: B-

COORDINATION	GRADE: D

STATE-LED THEMES	GRADE
Address	F
Cadastre	A+
Elevation	A-
Orthoimagery Leaf-Off	A-
Transportation	D

FEDERAL-LED THEMES	GRADE
Geodetic Control	A
Government Units	A+
Hydrography	B-
Orthoimagery Leaf-On	C+

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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NSGIC

GEOSPATIAL MATURITY ASSESSMENT 2019

Wyoming Report Card

Overall Grade: C-

COORDINATION	GRADE: D

STATE-LED THEMES	GRADE
Address	F
Cadastre	A
Elevation	F
Orthoimagery Leaf-Off	N/A
Transportation	C

FEDERAL-LED THEMES	GRADE
Geodetic Control	C
Government Units	C+
Hydrography	C+
Orthoimagery Leaf-On	B+

METRICS:

A - Superior
B - Above average
C - Average
D - Below average
F - Failure
N/A - Not Applicable

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WYOMING
GMA RESPONSE

Wyoming's grades reflect the level of support GIS has received in the state over the last 20 years. Not much coordination occurs across state agencies, between the State and federal agencies, or between the State and county or local governments on the framework data layers that comprise the National Spatial Data Infrastructure (NSDI). The Advisory Board has experienced a gap in meetings due to a change in administrations. It is anticipated to convene again in 2020. Our cadastre grade is attributable to a program built on a verbal agreement between County Assessors and the Department of Revenue. Improvements in hydrology have been made in the last few years thanks to the Water Development Office. Our Leaf-On Orthoimagery grade is due to 0.5 m buy-up made possible in 2015 by the Bureau of Land Management Wyoming State Office.

Karen Rogers
Habitat Protection Analyst