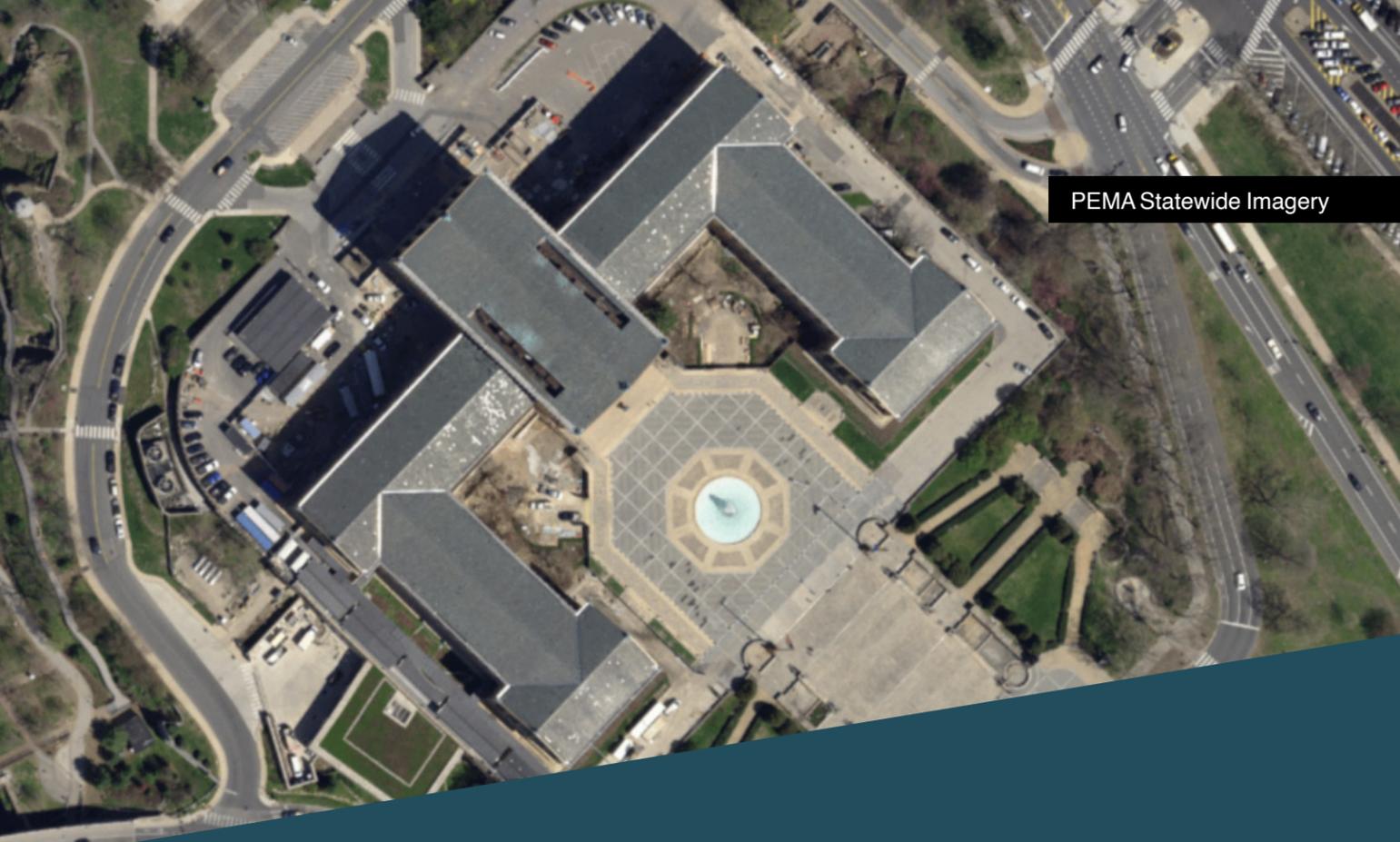




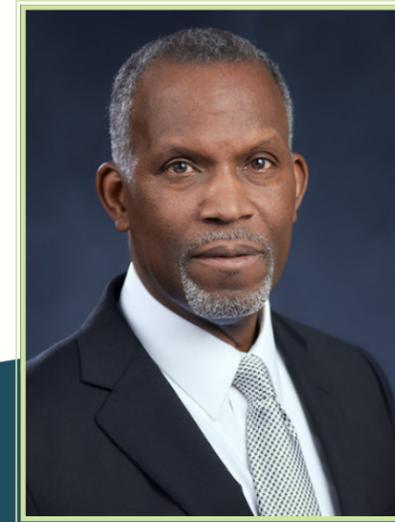
PA State Geospatial Coordinating Board 2021 Annual Report





PEMA Statewide Imagery

Michael Newsome, Secretary



I am pleased to present the State Geospatial Coordinating Board (GeoBoard) annual report for 2021.

The success of the GeoBoard continues to rely on the pursuit of common goals for the benefit of the consumers of spatial data throughout Pennsylvania. The volunteer members of the GeoBoard represent a variety of stakeholders, experiences, and perspectives to promote the mission of the group.

In this report you will read more about the efforts and outcomes of the GeoBoard.

I would like to highlight the GeoBoard's decision to revise the strategic plan in August 2021 and the hiring of an Executive Director. We remain committed to coordinating opportunities that may drive improved business outcomes from geospatial technologies. The core strategies in the plan are:

- Sustainability
- Collaboration
- Stewardship

GeoBoard members also continued their outreach to educate stakeholders at a variety of events to increase awareness and understanding around the value and impact that spatial data has on business programs. Part of this outreach included a Statewide Imagery Report, which highlighted the use of spatial data technology vital to PEMA's NG911 efforts and in supporting emergency response across the commonwealth.

I would like to thank the GeoBoard's members for their dedication to the mission of the group while coping with business challenges.

Michael Newsome

[Pennsylvania Office of Administration](#)

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Mission

The GeoBoard shall provide advice and recommendations to the Governor, the General Assembly, and the public on geospatial issues, uniform data standards, coordination and efficiency in geospatial policy, and technology across different sectors.

Vision

Through the work of the GeoBoard and its partners, geospatial activities throughout the commonwealth will be enhanced through open communication, collaborative efforts, unified planning, and coordinated implementation, resulting in effective and efficient use of geospatial resources.

About the GeoBoard

The Pennsylvania State Geospatial Coordinating Board (GeoBoard) was established in 2014 under Act 178 to:

“Provide advice and recommendations to the Governor and the citizens of this commonwealth on geospatial issues and provide uniform data standards, coordination and efficiency in geospatial policy and technology issues among Federal, State and local government agencies, academic institutions and the private sector.”

In June 2020, the operations of the GeoBoard were re-authorized through the enactment of House Bill 2418.

The GeoBoard has the following powers and duties:

1. Recommend data development priorities and interoperability standards for data sharing across agencies and different units of government across this commonwealth.
2. Monitor national and state trends, identify issues of potential interest and concern to the commonwealth, and submit annual reports to the Governor and the General Assembly and other reports as necessary.
3. Define and prioritize strategic opportunities where maps and spatial analysis activities could enhance the business of government and provide more cost-effective services to citizens. This may include recommendations of specific geospatial technology investments in the commonwealth.
4. Develop task forces as needed to formulate recommended positions or actions. The task force membership may be comprised of board members or designees appointed by the board. The board shall consider any task force recommendations at its next meeting.

Leadership Team

In August 2021, the Leadership Team selected its first-ever Executive Director, whose role will be to foster collaboration and enhance communications both among GeoBoard members and externally.

The Leadership Team is an unofficial title given to the collective group comprised of the GeoBoard chair, vice chair, all task force chairs, and Executive Director. The Leadership Team strives to ensure GeoBoard operations comply with the intent of authorizing legislation and with Commonwealth requirements for advisory boards. Additionally, the Leadership Team acts as a focused communication platform by engaging in open dialogue, debate, prioritization, and frequent interaction to advance the mission of the GeoBoard.

The GeoBoard continues to use a procedures framework to help guide governance, operations, and agenda topics.

Task Forces

As identified in authorizing legislation, the GeoBoard may develop task forces as needed to formulate recommendations and perform actions. At the GeoBoard’s initial meeting in March 2016, three task forces were created in accordance with the enabling legislation. The current task forces are (1) Service Delivery, (2) Data Program, and (3) Governance. The GeoBoard formally adopted charters to guide the task force activities.

Task force meetings occur as needed, with certain task forces meeting as frequently as twice a month. Task force members are volunteers from within and outside of the GeoBoard, including members from local, county, and state government agencies, academia, and the private sector. Task forces can choose to form one or more working groups to focus on key goals and objectives.



PA Mine Map Atlas

Accomplishments

The following section highlights the GeoBoard's accomplishments in 2021 and a summary of key agenda items and decisions made by board members.

Executive and Administrative

The quarterly meetings of the GeoBoard document oversight and continuity of activities and directions of the various working groups in identifying opportunities and sharing ideas for collaboration throughout the year.

March 15, 2021

- 2020 Annual Report approved February 18 by email vote and published on website
- 55 of 67 counties have signed data sharing agreement
- Department of State representatives, Secretary Veronica Degraffenreid, Jonathan Marks, and Michael Moser discussed a new Election Administration modernization project (aka Statewide Uniform Registration of Electors, or SURE)

June 14, 2021

- Acknowledged Board membership changes
 - GIS Professionals Association
 - Pennsylvania Municipal Authorities Association
 - State Police
 - Environmental Protection
- Progress update on strategic plan revisions
- Motion approved to update certain procedural items in anticipation of Executive Director role

August 23, 2021

- Acknowledged hiring of Executive Director
- Data Task Force lead identified and approved
- Strategic Plan revision approved August 10 by email vote

November 15, 2021

- Executive Director updates
- PEMA Imagery Report published on website

Details about the 2021 board meetings and supplemental material are available on the GeoBoard website: <https://www.oe.pa.gov/Programs/Information%20Technology/Pages/geoboard.aspx>

Task Force Activities

This section highlights the activities and important accomplishments of the three task force groups associated with the GeoBoard.

Service Delivery Task Force

The Service Delivery Task Force (SDTF) continued with activities that focused on outreach and collaboration to improve spatial data.

2021 PEMA Statewide Imagery Report

The PEMA Statewide Imagery Project began in 2018 and completed imagery capture for all 67 counties in 2021. This effort gives Pennsylvania a complete and updated base map which will support the Next Generation 911 (NG911) emergency response efforts across the commonwealth. Penn State's Institutes of Energy and the Environment (IEE) and the Pennsylvania Emergency Management Agency (PEMA) worked together to detail a comprehensive summary of the project which includes processes and procedures, data delivery and storage, and map service development. PEMA is committed to collecting imagery on a regular basis to keep Pennsylvania's base map current.

Data Sharing Success

The task force was successful in connecting with many counties that have shared data as well as with new county data sharing partners. One-on-one meetings with counties have helped to build the statewide base map. We are excited about the relationships that continue to form and grow as this will encourage data sharing well into the future.

The Pennsylvania GIS Data Sharing Status map can be found on page 8 as well as at the following link:

<https://pasda.maps.arcgis.com/apps/View/index.html?appid=64d2c828f7254947927e56afa5678772>

Portal Connections

The task force has continued to work with PASDA on identifying partners for streaming data services. Cumberland County was the first county partner and that connection has enabled up to date data to be passed from the county to PASDA.

COVID-19 Report Update

The task force updated the COVID-19 Special Report that was published in 2020. This report captures additional GIS services and activities that agencies and organizations used and are continuing to use to manage COVID-19 in their respective communities.

Statewide Land Record Database

Members of the SDTF participated in meetings with the County GIS Professional's Land Records Committee and the Director of the State Tax Equalization Board to work toward the creation of a statewide land record database. All involved desire to see an aggregated land record dataset that would include parcel polygons with identification numbers and spatial attributes. Standardizing this data could improve data accuracy, promote data stewardship and application development, and make the information much more usable for all citizens.

PA Open Data Portal

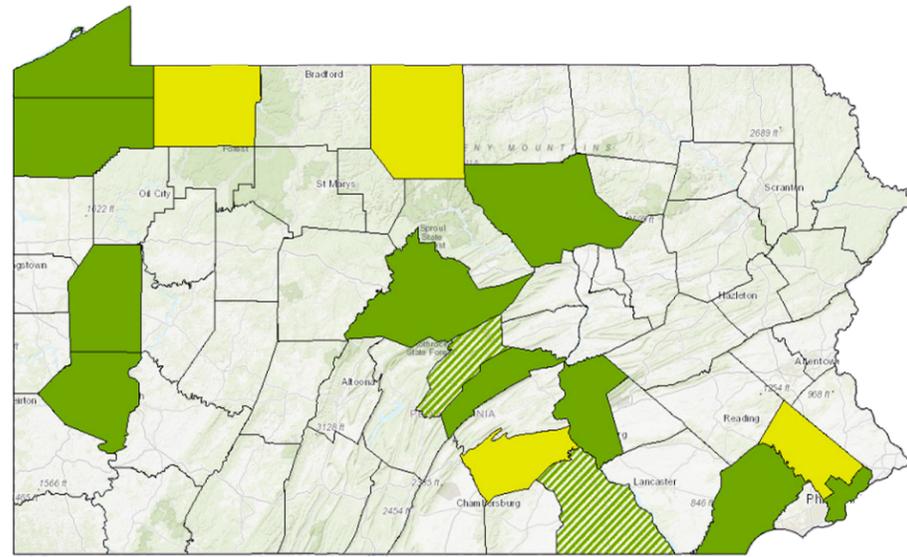
Members of SDTF met on a quarterly basis with the PA Chief Data Officer and Open Data Officer to discuss methods of collaboration, share ideas, and discuss data access issues. This collaboration ensures that there is open communication and no duplication of effort across data portals.

Data Program Task Force

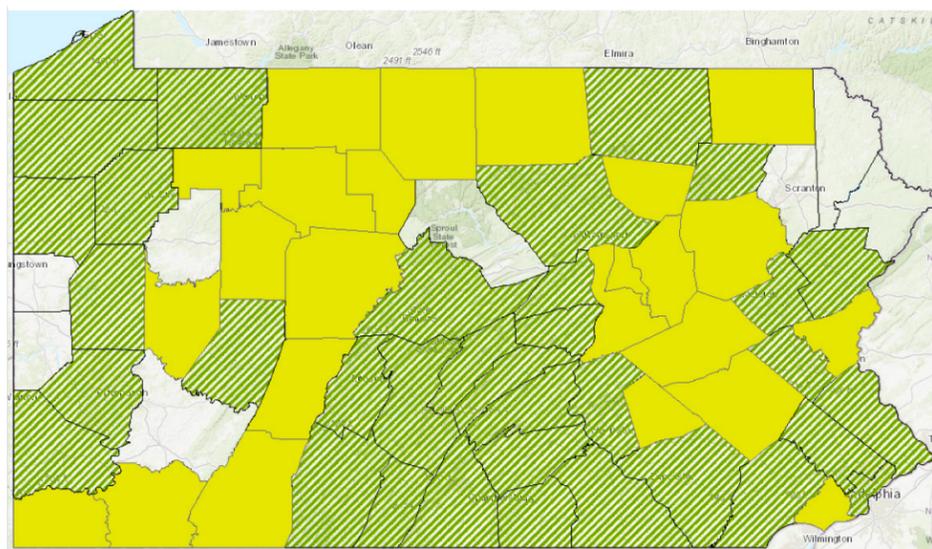
The Data Program Task Force (DPTF) is developing and refining the definitions of current and future data layers that comprise the PA Base Map. Individual working groups meet to improve our data quality, encourage acceptance of national standards, promote shared stewardship, and elimination of duplication in data development and management

NG911 GIS Working Group

- Members include: PEMA, County GIS Professionals, PennDOT, Office of Administration, and CCAP. This team is responsible for standardization and aggregation of datasets necessary for Next Generation 911, and their data development and coordination activities are proving valuable for many other applications across the commonwealth.



Data Sharing 2019



Data Sharing 2021

Imagery

- PEMA statewide high-resolution orthoimagery, second cycle data capture for 33% of the state.
- Commenced discussions with Elevation Working Group to consolidate future data acquisition planning.

Standards

- In September 2021, PEMA adopted state minimum standards for the required GIS data layers to support NG911 call delivery. The minimum standards formalize the schema and expectations for maintaining and sharing these datasets. These efforts can be used as an example to standardize other GIS data layers as Pennsylvania continues work towards formalizing a State Base Map. The required layers to support 911 call delivery are:
 - Road centerlines
 - Site/structure address points
 - Public safety answering point boundary
 - Provisioning boundary
 - Emergency service boundary

Data Development

- PEMA provided financial assistance in the form of grants to standardize and enhance development of the required GIS data layers.
- In November 2021, Indiana County became the first county in Pennsylvania to achieve compliance with the NG911 GIS minimum standards. Many other counties are making significant progress towards achieving compliance which will lead to current, standardized road centerline and site/structure address point layers across Pennsylvania by June 2023.
- County GIS Professionals shared expertise in address and boundary datasets with election management system modernization led by the Department of State.

Road Centerlines Collaboration

- PennDOT has initiated a study to assess integration of road information aggregated for NG911 with All Roads Network of Linear Referenced Data (ARNOLD). The project is an opportunity for standardization and collaboration among state agencies and federal partners.

Hydrography Working Group

- Members include: PA Mapping and Geographic Information Consortium (PaMAGIC), DCNR Bureau of Geological Survey, County GIS Professionals, and United States Geological Survey (USGS).
- Organized and presented virtual workshops in February to update interested parties on the PA Hydrography Dataset (PAHD) Initiative.

- Hosted monthly hydro applications conference calls.
- Held Weekly PAHD technical calls through August.
- Successfully promoted the Raystown Elevation-derived Hydrography Pilot Project, which captured \$300k in federal partnership resources, and should attract National Wetland Inventory pilot projects.

Civic Boundary Working Group

- Members include: PaMAGIC, DOT, DCED, County GIS Professionals, Pennsylvania Society of Land Surveyors (PSLS), PA One Call System.
- Held quarterly working group conference calls.
- Advised Local Government Commission on proposed legislation to unify boundary change reporting and additional boundary change procedures (HB 1877).
- Supported a Boundary Data Exchange Agreement between PennDOT and DCED that was signed in October 2021.
- Active promotion of Statewide Boundary and Annexation Survey (BAS) agreement with U.S. Census Bureau.

Elevation (LiDAR) Working Group

- Members include: PaMAGIC, DCNR, County GIS Professionals, USGS, PA Chapter of the Management Association of Photogrammetry and Professional Surveying (PA-MAPPS), PASDA, and PASSHE.
- Fostered development and delivery of QL2 LiDAR data for 20 Western PA counties to complete LiDAR coverage of Pennsylvania, which captured over \$2.5 million in federal partnership resources.
- Represented Pennsylvania interests in the USGS 3D Elevation Program (3DEP).
- Hosted quarterly virtual working group meetings.
- Provided well-maintained website for working group (hosted by Susquehanna River Basin Commission)
- Curated technical discussions on future topographic data needs and planning for “3DPA” concept plan.

Governance Task Force

The Governance Delivery Task Force (GTF) focused on safeguarding and guiding the future of geospatial activity within the commonwealth through action driven, topic specific sub-groups.

Strategic Plan

The Governance Task Force spearheaded the effort to update the GeoBoard’s strategic plan for the next

three years. During this update, the strategic plan was reimagined to provide more concise guidance and allow easier consumption by readers. The new strategic plan calls out three key themes to help guide the GeoBoard and Pennsylvania's geospatial community: sustainability, collaboration, and stewardship. The strategic plan can be accessed at:

<https://www.oa.pa.gov/Programs/Information%20Technology/Pages/geoboard.aspx>

Implementation Approach

The Governance Task Force worked with each task force to develop a consolidated listing of tasks and short-term goals that outline their approach to achieving the strategic goals. Not only does this document provide more details on the roadmap to achieving the strategic goals, but it also acts to enhance coordination between the task forces.

Subcommittee Activities

Within the Governance Task Force, the Legislative Review Subcommittee (LRS) monitored the proposed amendments to the Engineer, Land Surveyor, and Geologist Registration Law (originally 2017 HB 1106 Printers Number 1931; later 2020 HB 2101 Printers Number 3257, most recently HB 609 Printers Number 1281) as it progressed through the legislative process, keeping the GeoBoard up to date.

With the changes to the GeoBoard's leadership team via the hiring of an Executive Director, the Procedures Subcommittee adjusted the GeoBoard's operating procedures to include this new role.

Website

The GeoBoard website is located at the following link:

<https://www.oa.pa.gov/Programs/Information%20Technology/Pages/geoboard.aspx>



Appalachian Trail, PA

APPENDIX: Membership

The designees, alternates, and volunteers make the GeoBoard possible and successful.

State Geospatial Coordinating Board Contact Sheet		
VOTING MEMBERS		
Organization Member	Member Name	Formal Designee
Secretary of Administration	Michael Newsome	John MacMillan
Secretary of Environmental Protection	Patrick McDonnell	Kevin Eaton
Secretary Conservation and Natural Resources	Cindy Dunn	Gale Blackmer
Director of Pennsylvania Emergency Management Agency	Randy Padfield	Jeff Thomas
Secretary of Transportation	Yassmin Gramian	Frank DeSendi
Secretary of General Services	Curtis Topper	Matt Bembenick
Secretary of Agriculture	Russell Redding	Cheryl Cook
SENATE: Municipal Authority	—	—
SENATE: Elected Local Government Official - Rural Community	—	—
SENATE: Elected Local Government Official - Suburban Community	—	—
HOUSE: Elected Local Government Official - Urban Community	—	—
HOUSE: Employee of County Emergency Management Agency	Phil Colvin	Glenn Mohler
HOUSE: Individual with Expertise in Geospatial Technology	—	—
County Commissioners Association of Pennsylvania (CCAP)	Kevin Boozel	Scott Zubek
Pennsylvania Society of Land Surveyors	Michael Krieger, PLS	Matthew Warner, PLS
Individual with Expertise in Data Development and Sharing	Kenneth Juengling GeoAnalytics Info Officer, PA Turnpike Commission	—
County GIS Professionals Association of Pennsylvania	Laura Lettiere	—
Pennsylvania Mapping and Geographic Information Consortium	Dave Gilbert	—
Pennsylvania Chapter of the Management Association for Private Photogrammetric Surveyors	Howard Hodder	—

State Geospatial Coordinating Board Contact Sheet		
NON-VOTING EX OFFICIO MEMBERS		
Organization Member	Member Name	Formal Designee
United States Geologic Survey Mapping Liaison	Eliza Gross	—
Pennsylvania One-Call System	Bill Kiger	—
Public Utility Commission - Chairman	Gladys Brown	Damon Anderson
Pennsylvania State System of Higher Education - GIS Consortium	Scott Drzyzga	—
Pennsylvania Municipal Authorities Association	William Campbell	—
American Planning Association, Pennsylvania Chapter	Brian Traylor	—
Pennsylvania Spatial Data Access - Director	Maurie Kelly	—
Pennsylvania State Police Commissioner	Colonel Robert Evanchick	Lindsay Manning
Executive Director	Eric Jespersen	—

State Geospatial Coordinating Board Contact Sheet	
NON-VOTING MEMBERS	
Task Force	Task Force Chair Name
Service Delivery	Laura Lettiere
Data Program	Jeff Boyle
Governance	Kevin Eaton

PA State Geospatial Coordinating Board