



PENNSYLVANIA SPATIAL DATA ACCESS ANNUAL REPORT FY 2025 - 2026

SUBMITTED BY

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ABOUT PASDA

Pennsylvania Spatial Data Access (pasda.psu.edu), the public geospatial data clearinghouse for the Commonwealth of Pennsylvania, marked its 31st year in 2026. PASDA, which has grown from a small website offering 35 data sets in 1995 to the expansive user-centered open data portal that it is today, has become a staple of the GIS community in Pennsylvania.

PASDA was developed as a service to the citizens of the Commonwealth of Pennsylvania. The purpose of PASDA is to serve as a comprehensive and coordinated authoritative open geospatial data portal that provides free public access to geospatial data and information by, for, and about the Commonwealth of Pennsylvania.

PASDA is a cooperative project of the Governor's Office of Administration, Office for Information Technology, and Penn State Institutes of Energy and the Environment of the Pennsylvania State University. Funding and support is provided by the Pennsylvania Office for Information Technology. Penn State provides significant contributions to PASDA including system administration support and infrastructure from the Institute for Computational and Data Sciences (ICDS).

WHY PASDA?

VISION

PASDA will continue to provide free storage of geospatial data, as well as build partnerships that enhance ease of access and benefit the data provider, and to develop data access resources and innovative tools to enhance the use of geospatial data for all citizens of the Commonwealth.

MISSION

PASDA was developed as a service to the citizens of the Commonwealth of Pennsylvania. The purpose of PASDA is to serve as a comprehensive and coordinated open geospatial data portal that provides free public access to geospatial data and information by, for, and about the Commonwealth of Pennsylvania. Any state, local, or federal government, non-governmental agency, or academic institution can freely share its data through PASDA.



PASDA

PASDA STATS

The year *in numbers*

7.1 million

Datasets
Downloaded

831 million

Site Visits

14 million

Visitors

14.5 million

PA Imagery
Navigator Hits

43.6 million

PennPilot Hits

438 million

Map Services
Accessed

78 million

PEMA Statewide
Imagery

6.9 million

Underground
Mine Map Atlas

631

TB of Data
Downloaded

DATA PROVIDERS

PASDA continued to receive ongoing and new data sets from data providers across a broad spectrum of organizations. Partners included state, local, federal, and regional agencies, local governments, NGOs and academic institutions.

Pennsylvania State Agencies	Department of Environmental Protection, Department of Transportation, Department of Conservation and Natural Resources, Fish and Boat Commission, Geologic Survey, Game Commission, Department of Health, Emergency Management Agency, State Police.
Counties & Regional Governments	Berks County, Blair County, Bradford County, Bucks County, Centre County, Chester County, Clearfield County, Cumberland County, Delaware County, Erie County, Fayette County, Forest County, Franklin County, Adams County, Allegheny County, Allegheny County/City of Pittsburgh Landslide Data, Erie County, Franklin County, Indiana County, Lancaster County, Lycoming County, Mercer County, Mifflin County, Montgomery County, Philadelphia, Snyder County, Union County, Susquehanna River Basin Commission, Delaware Valley Regional Planning Commission.
NGOs & Academic Institutions	Eastern PA Coalition for Abandoned Mine Reclamation, Kittatinny Ridge Association, Natural Lands Trust, PA Sea Grant, Penn State University, WeConservePA.
Federal Agencies	Federal Emergency Management Agency, Department of Homeland Security HIFLD Datasets (80+ datasets), National Weather Service, Natural Resources Conservation Service, National Drought Information Service, US Department of Agriculture, US Fish and Wildlife Service, US Forest Service, US Geological Survey.

DATA HIGHLIGHTS

PASDA has received an enormous amount of data this fiscal year. From current imagery provided by DVRPC, USDA NAIP, City of Philadelphia, and Penn State to historic data from PA DEP Coastal Regions, SRBC, Cambria County, and the Southwest PA Commission. Lidar collections have also been acquired. In addition, we have received some unique data that reflect different issues across the state. These include Allegheny County, City of Pittsburgh and USGS landslide data, Berks County Future Land Use, PA DEP breached dams, DCNR Geoheritage and 3D geologic surface of the Mesozoic basin. In addition, PASDA added USDA statewide soils, Natural Resources Conservation Service Major Resource Land Area, USGS 3DHP for Erie, and USGS Allentown Lidar.

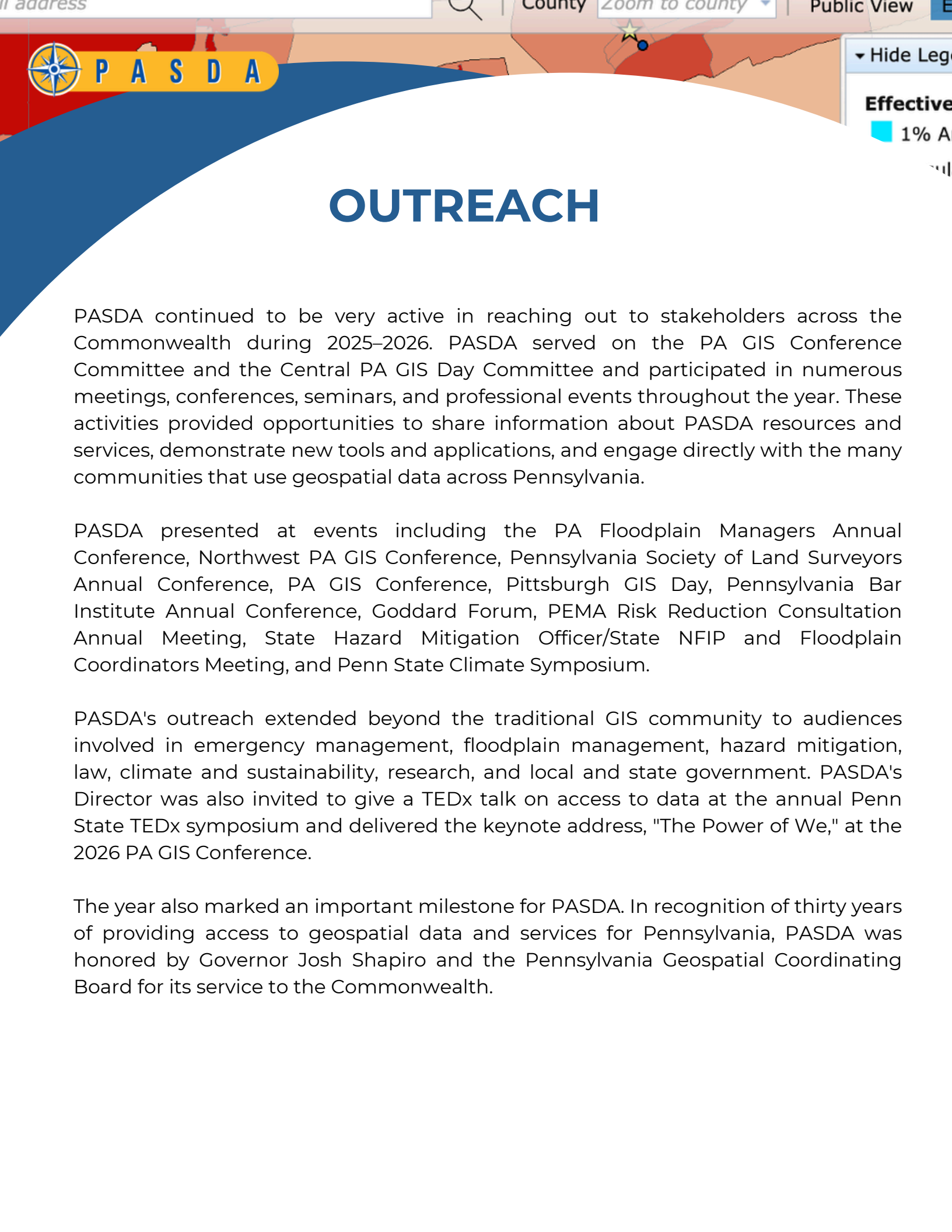
LIDAR	Lidar from Penn State and Centre County City of Philadelphia 2025 USGS Allentwon Lidar
Imagery	Historic Aerial Photos: Susquehanna River Basin Commission, Cambria County, Penn State, State College, Johnstown Flood 1977 and 1978, South Beltway PA, Southwest PA Commission, PA DEP historic coastal imagery for Lake Erie Current Aerial Photos: Delaware Valley Regional Planning Commission 2025 Imagery, Penn State and Centre County
Federal Agencies	Homeland Infrastructure Foundation-Level Data (HIFLD) (80+ datasets), National Weather Service Historic Data 1950-2024 Hail and Wind, Natural Resources Conservation Service, NIDIS Data: Historic Drought Data for PA 2000- 2025, USDA PA Cropland Data for 2024, Allegheny National Forest.

SYSTEM ARCHITECTURE

PASDA utilizes storage and services managed by Penn State's Institute for Computational and Data Sciences (ICDS). It is housed on the Roar Collab which incorporates a heterogenous architecture (including both traditional multi-processor and GPU nodes), over 20 PB of high-bandwidth solid-state storage, and a rich collection of open source and proprietary software, providing a strong and scalable base for PASDA.

PASDA currently maintains 10 map services servers, two web servers, three VMs, and manages approximately 850tb of data.

- PASDA has continued working toward development of 3D PA capabilities. Work includes:.
- Evaluation of Skyline PhotoMesh and Skyline Server for reality mesh generation.
- Evaluation of ArcGIS Pro and ArcGIS Enterprise for publishing LiDAR point cloud services.
- Development of immersive 3D flood visualization prototypes with the Penn State Center for Immersive Experiences using CityEngine.
- Evaluation of statewide LiDAR and orthophotography as foundational datasets.
- Assessment of future statewide imagery acquisition strategies, including the importance of preserving raw aerial imagery.
- Investigation of software architectures capable of supporting statewide public dissemination of large 3D datasets.



OUTREACH

PASDA continued to be very active in reaching out to stakeholders across the Commonwealth during 2025–2026. PASDA served on the PA GIS Conference Committee and the Central PA GIS Day Committee and participated in numerous meetings, conferences, seminars, and professional events throughout the year. These activities provided opportunities to share information about PASDA resources and services, demonstrate new tools and applications, and engage directly with the many communities that use geospatial data across Pennsylvania.

PASDA presented at events including the PA Floodplain Managers Annual Conference, Northwest PA GIS Conference, Pennsylvania Society of Land Surveyors Annual Conference, PA GIS Conference, Pittsburgh GIS Day, Pennsylvania Bar Institute Annual Conference, Goddard Forum, PEMA Risk Reduction Consultation Annual Meeting, State Hazard Mitigation Officer/State NFIP and Floodplain Coordinators Meeting, and Penn State Climate Symposium.

PASDA's outreach extended beyond the traditional GIS community to audiences involved in emergency management, floodplain management, hazard mitigation, law, climate and sustainability, research, and local and state government. PASDA's Director was also invited to give a TEDx talk on access to data at the annual Penn State TEDx symposium and delivered the keynote address, "The Power of We," at the 2026 PA GIS Conference.

The year also marked an important milestone for PASDA. In recognition of thirty years of providing access to geospatial data and services for Pennsylvania, PASDA was honored by Governor Josh Shapiro and the Pennsylvania Geospatial Coordinating Board for its service to the Commonwealth.

OUTREACH

Conferences, Presentations & Outreach	Service & PA Geospatial Coordinating Board Engagement
Presented, Open Science Boot Camp, Penn State	Member, Central PA GIS Day Committee
Presented, Goddard Forum on Flooding in the Mid-Atlantic	Member, PA GIS Conference Committee
Presented, PA Floodplain Managers Association Annual Conference	Co-Chair, PA GeoBoard Services Delivery Task Force
Presented, Keystone Emergency Management Association Conference	Member, PA GeoBoard Governance Task Force
Presented, Pittsburgh GIS Day	Organizer, PA GeoBoard/PASDA Seminar Series, <i>Flooding, Data, and Decision Making: Lessons from the Front Line</i> , June 25, 2026
Presented and exhibited, Northwest PA GIS Conference	Co-organizer, PA GeoBoard/PASDA/PEMA Seminar, <i>Landslides in PA</i> , Parts 1 and 2, February 26 and March 13, 2026
Presented, Pennsylvania Society of Land Surveyors Annual Conference	Organizer, PA GeoBoard/PASDA Seminar Series, <i>Crisis Ready & Direct Relief: Using Data, Partnerships, and Real-Time Intelligence to Strengthen Community Resilience</i> , January 30, 2026
Presented, <u>TEDxPSU</u>	Hosted, <i>GeoAI & AI-Driven Workflows</i> seminar, September 12, 2025
Keynote presentation and exhibit, PA GIS Conference	
Presented, Pennsylvania Bar Association Conference	

USER SUPPORT

PASDA provides user support via email, phone, and in person. In FY 2025/26 PASDA received over 2000 email inquiries. Below is a list of just some of our contacts this FY.

Sector	Examples
Engineering & Environmental Consulting	Michael Baker International, Gannett Fleming, HDR, ARM Group, Larson Design Group, Tetra Tech
Pennsylvania State Government	PennDOT, DEP, DCNR, PEMA, Game Commission, Fish & Boat Commission, DOH, State Police, Insurance, PUC
County & Regional Government	County GIS departments, county planning commissions, county flood plain managers, county
Higher Education	Temple University, Carnegie Mellon, University of Pittsburgh,
Municipal Government	City of Philadelphia, boroughs, townships, municipal departments
Nonprofit, Conservation Organizations, K-12 Schools	Western Pennsylvania Conservancy, WeConservePA, Chesapeake Bay Foundation, Natural Lands Trust, Kittatinny Ridge, Western PA Conservancy, HopeWorks
Utilities & Energy	PPL, UGI Utilities, Duquesne Light, People's Gas, Range Resources, Pennsylvania General Energy
Technology & Software	Esri, Oracle, Microsoft, Hexagon, CoreLogic, LightBox, Google
Federal Government	USGS, EPA, Forest Service, FEMA, NWS, US Army Corps, USDA, FWS, DHS
Healthcare & Medical	Hershey Medical Center, Reading Hospital, Mt. Nittany Hospital, Geisinger
Private Industry & Other Organizations	Financial institutions, mining companies, media organizations, sports, real estate, manufacturers, surveyors, and other private-sector organizations

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