

**PA State Geospatial
Coordinating Board**

**GIS Strategic Plan
Draft
2017**

**Geoboard Presentation
Version
Meeting 5/8/2017**

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Executive Summary

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PA State Geospatial Coordinating Board

The 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”. The GeoBoard leverages its diverse membership to take advantage of opportunities that exist because they are working together.

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.*

Mission Statement

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 Statement

GEOBOARD VISION STATEMENT GOES HERE

Task Forces

As laid out in its official duties and powers, the Geoboard may develop task forces as needed to formulate recommendations and perform actions. To date, three task forces have been established by the Geoboard:

Data Program Task Force – The mission of the data program task force is to identify initiatives and approaches that remove barriers to sharing geospatial data across the commonwealth and promote cost-effective approaches to data sharing driving operational efficiencies and value-add solutions.

Governance Task Force – The mission of the governance task force is to document the geospatial governance process in the Commonwealth (to include all governmental entities), establish a list of major priorities or initiatives to address the needs of the broader geospatial community, evaluate approaches to accomplishing initiatives within existing budget constraints, identify opportunities for collaboration to meet common objectives and coordinate activities across other geospatial governing bodies.

Service Delivery Task Force – The mission of the service delivery task force is to evaluate how geospatial services are delivered today in the Commonwealth, evaluate how other states and counties deliver geospatial services and identify recommendations for how geospatial services should be delivered in the commonwealth to maximize investments.

Purpose of the GIS Strategic Plan

The Commonwealth of Pennsylvania currently lacks an up-to-date, comprehensive GIS strategic plan. By creating a plan, the GeoBoard, and the Commonwealth’s GIS community, intend to develop a collaborative, purposeful, and effective asset for Commonwealth citizenry.

Current Assessment

An assessment of GIS in Pennsylvania is ongoing to provide background on the State’s GIS capabilities. This assessment covers the state of Pennsylvania’s GIS community including: history and development, lessons learned, and the current state of GIS within the Commonwealth. The highlights of this assessment are:

Accomplishments:

- Pennsylvania was one of the first four states in the US to develop and deploy a free public access GIS data clearinghouse, PASDA, which has operated uninterrupted for 21 years.
- Many Pennsylvania state agencies were early adopters of GIS technology and have highly advanced and innovative GIS architectures and services.
- Many county governments incorporate innovative and highly developed GIS data and services into their daily operations.
- Pennsylvania has a vigorous private sector GIS community consisting of a wide array of businesses and industries.
- Pennsylvania’s academic institutions have sophisticated GIS education and research programs – advancing the science and training the next generation of GIS professionals.
- Nonprofit organizations, from watershed conservation to human services, are using GIS technologies in their efforts.
- The PAMAP program (2001-2008) resulted in the creation of invaluable ortho-imagery and LiDAR data
- In 2014 the Pennsylvania Legislature passed Act 178 establishing the State Geospatial Coordinating Board (GeoBoard) within the Office of Administration to renew collaboration which had suffered during the financial crisis of 2008-2014.
- Geoboard convened 3/7/2016 and meets quarterly.

Challenges

- Budget and governance issues in 2008 eliminated state geospatial leadership for a period of time, limiting state wide collaboration and stunting the unified efforts from of years 2001-2008.

This led to low expectations, redundant and inefficient data development, and a general lack of direction.

- Significant spatial data holdings exist, but some core data layers are fragmented, without defined stewardship and ownership necessary for comprehensive adoption and integration.
- Key governance aspects including sustainable funding, leadership and associated accountability, investment optimization and planning, and performance evaluation must all be defined.
- An organized and consistent education and outreach process must be implemented to ensure broad and sustained awareness of the value of collaborative GIS investment and operations.
- Effective long-term governance must include representation from, and shared decision with, local, city, county, and state representatives.

Opportunities

- Next Generation 911 (NG911)– cannot operate without GIS support
 - County-generated data is critical to success
 - State-operated call routing requires changes to data and work flows
 - PEMA strategic plan & projects offers unique collaboration opportunities
- Big Data – how to manage and make sense of massive amounts of data being collected daily
 - The need for greater integration and processing of sensor networks
 - Changing Federal Mandates – evolving reporting requirements
 - Cloud Computing – shift away from large investment in publicly managed computing infrastructure
- Customer Expectations – public demand for advanced technology and innovative services
 - Access to data – access to everything, everywhere, at any time
 - Demand for Accountability/Transparency – expectation to be able to justify decisions and actions
 - Changing Social Interaction Patterns – greater reliance on digital communication
- Long-term Budget Constraints/Fluctuations – lasting state and local government budget limitations
 - Inter-Organizational Cooperation – share responsibilities to lessen costs and improve results
- Environmental Changes – evolving floodplain management, invasive species impacts, scientific advancement

Desired Future State

The current state of Pennsylvania’s GIS community, combined with the business drivers in today’s world, lends itself well to the coordination and standardization that can be achieved through a statewide GIS strategic plan. Implementation of this strategic plan will position Pennsylvania as a leader in the future and will create more effective and efficient GIS operations throughout the Commonwealth. This future state is envisioned to contain the following characteristics:

- Geographic information is acknowledged as a public asset by a broader constituency.
- The Commonwealth’s base layers are seamless across the entire state, current, accurate, and freely accessible.
- Data is maintained over time and archived consistently for future use.

- Collaboration, cooperation, and coordination among the Commonwealth’s entities are the norm.
- Duplication of effort is effectively eliminated; data should be created once, maintained as necessary, and used many times.
- Resources are allocated to support GIS operations and projects across the Commonwealth in a sustainable, long lasting manner.
- Pennsylvania’s GIS industry attracts and retains talent by fostering personal and professional growth through employment, academic research, education, and participation opportunities.
- All levels of government (federal, state, county, and local) as well as universities, nonprofit organizations, and the private sector can be involved in planning, creating, distributing, funding, and enhancing the geospatial capabilities of the Commonwealth.

Path to Future State

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Key Tenet: Sustainability of GIS in the Commonwealth

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Sustainable Funding

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Sustainable Personnel

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GIO Office

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Geoboard Future

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Key Tenet: Cooperation, Collaboration, and Coordination

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Phased Implementation

Implementation plans of grouped goals, objectives, and tasks will be created jointly by the task forces and approved by the Geoboard prior to enactment.

Phase 1: Building Understanding

Phase 1 consists of goals & objectives requiring minor investments of resources (monetary, staffing, and / or time), initiatives that emphasize collaborative efforts, or those which are critical to the success of subsequent items.

Phase 2: Leveraging Existing Opportunities

Phases 2 consists of goals and objectives proceeding from (or are discovered in) Phase 1, are moderately complex, or require dedicated resource investments (monetary, staffing, and / or time).

Phase 3: Creating New Opportunities

Phase 3 consists of goals and objectives proceeding from (or are discovered in) Phases 1 or 2, are highly complex, or require considerable resource investments (monetary, staffing, and / or time), and benefit from extensive planning & development.

Future Phases

Future phases are expected to be created to allow for growth as the Strategic Plan is revisited, new projects are envisioned, and previous phase goals are accomplished.

Strategic Plan Implementation Phases

Phase I	Goal:	
		Objective 1:
		Objective 2:
		Objective 3:
	Goal:	
		Objective 1:
		Objective 2:
		Objective 3:
	Goal:	
	Objective 1:	
	Objective 2:	
	Objective 3:	
Phase II	Goal:	
		Objective 1:
		Objective 2:
		Objective 3:
	Goal:	
		Objective 1:
		Objective 2:
		Objective 3:
	Goal:	
	Objective 1:	
	Objective 2:	
	Objective 3:	
Phase III	Goal:	
		Objective 1:
		Objective 2:
		Objective 3:
	Goal:	
		Objective 1:
		Objective 2:
		Objective 3:
	Goal:	
	Objective 1:	
	Objective 2:	
	Objective 3:	

Measuring Success

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Ensuring Continued Progress

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(section will contain reoccurring review & update strategic plan details)

Final Conclusions

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**Appendix
Current Geoboard Members**

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Current Task Force Members

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Definitions

Base layers – A consistent set of ubiquitous geospatial data that can be used collectively and is too costly to duplicate among various levels of government and the private sector.

Commonwealth – The geographic expanse of the State of PA

State Agencies – The collective agencies of the Pennsylvania State Government.