

Information Technology Policy

Geospatial Information Systems (GIS)

ITP Number ITP-SFT004	Effective Date February 22, 2017
Category Software	Supersedes None
Contact RA-ITCentral@pa.gov	Scheduled Review February 2018

1. Purpose

The purpose of this IT Policy (ITP) is to establish a primary Geospatial Information Systems (GIS) software standard. Computer Aided Design (CAD) software and Global Positioning System (GPS) equipment are not covered by this policy.

2. Scope

This Information Technology Policy (ITP) applies to all departments, boards, commissions and councils under the Governor's jurisdiction. Agencies not under the Governor's jurisdiction are strongly encouraged to follow this ITP.

3. Background

GIS software provides a means for the commonwealth to perform its core functions and line of business where location and spatial analysis is a key factor. Locational based problems require spatial thinking and it is difficult to visualize latitude and longitude coordinates from a spreadsheet. GIS software provides the commonwealth with the ability to visualize, question, analyze, and interpret data to understand relationships, patterns, and trends.

Furthermore, locational and spatial capabilities rapidly evolved into the hands of citizens through commercial propagation as standard built-in functionality within tools used by individuals on a daily basis, such as the cell phone and in-car navigational and automated emergency response features.

4. Definitions

- **Geographic Information System or Geospatial Information System (GIS):** a system designed to capture, store, manipulate, analyze, manage, and present all types of spatial or geographical data.
 - GIS is a broad term that can refer to a number of different technologies, processes, and methods. It is attached to many operations and has many applications related to engineering, planning, management, transport/logistics, insurance, telecommunications, and business. For this reason, GIS and location intelligence applications can be the foundation for many location-enabled services that rely on analysis and visualization.

5. Objective

To maintain product quality and performance, measurement, collating knowledge, assuring compatibility, and articulating a vision of the industry.

6. Policy

Agencies requiring geospatial software are to use the current standards as defined within the following technology roadmaps.

- ArcGIS Desktop:
http://downloads.esri.com/support/product%20life%20cycle/arcgis_desktop/arcgis_plc.pdf
- ArcGIS Server:
http://downloads.esri.com/support/product%20life%20cycle/server_gis/ArcGISServer_PLC.pdf

Additional standards include: Google Maps API Premier, Google Earth Pro, Safe Software FME, ERDAS Imagine, LizardTech, MrSID, GeoExpress, Feature Analyst, and eCognition.

7. Responsibilities

Agencies are required to adhere to the policies presented in this ITP.

8. Related ITPs/Other References

Commonwealth policies, including Executive Orders, Management Directives, and IT Policies are published on the Office of Administration's public portal:

<http://www.oa.pa.gov/Policies/Pages/default.aspx>

- Management Directive 205.34 *Commonwealth of Pennsylvania Information Technology Acceptable Use Policy*
- ITP-SFT000 *Software Development Life Cycle (SDLC) Policy*

9. Authority

Executive Order 2016-06, Enterprise Information Technology Governance

10. Publication Version Control

It is the user's responsibility to ensure they have the latest version of this publication, which appears on <https://itcentral.pa.gov> for Commonwealth personnel and on the Office of Administration public portal: <http://www.oa.pa.gov/Policies/Pages/default.aspx>. Questions regarding this publication are to be directed to RA-ITCentral@pa.gov.

11. Exemption from This Policy

In the event an agency chooses to seek an exemption, for reasons such as the need to comply with requirements for a federally mandated system, a request for waiver may be submitted via the Commonwealth of PA Procurement and Architectural Review (COPPAR) process. Requests are to be entered into the COPPAR Tool located at <http://coppar.oa.pa.gov/>. Agency CIO approval is required.

This chart contains a history of this publication's revisions:

Version	Date	Purpose of Revision
Original	02/22/2017	Base Document Moved to Software domain from Infrastructure, including ITP number change Replaces ITP-INFGT001 <i>Geospatial Information Systems (GIS)</i>