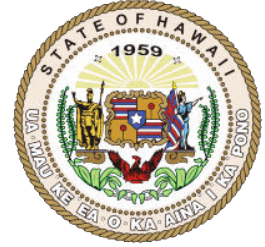




# State GIS Program

## Geographic Information System

Office of Planning, State of Hawaii



### ABOUT THE PROGRAM

*"Improving efficiency and effectiveness in government decision-making through education, facilitation, and coordination of GIS mapping technologies"*

Hawaii's GIS Program is tasked with "...planning, coordinating, and maintaining a comprehensive, shared statewide planning, and geographic information system and associated geospatial database. The office shall be the lead agency responsible for coordinating the maintenance of the multi-agency, statewide planning and geographic information system and coordinating, collecting, integrating, and disseminating geospatial data sets that are used to support a variety of state agency applications and other spatial data analyses to enhance decision making. The office shall promote and encourage free and open data sharing among and between all government agencies." (Hawaii Revised Statutes (HRS) §225M-2(b)(4))

In carrying out its statutory mandate as the lead agency for the statewide GIS program, the Office of Planning (OP) supports and coordinates GIS efforts across state agencies in addition to conducting spatial analysis and mapping for projects and initiatives in OP, the Department of Business, Economic, Development and Tourism (DBEDT), and other State agencies.

### PROGRAM COMPONENTS

#### State GIS Database

OP is responsible for managing the State GIS database. The GIS Program encourages and facilitates sharing of data among agencies to minimize stove-piping of data, thus cutting costs and reducing duplication of effort. The State GIS database contains over 200 data layers, including contributions from federal, state, and county agencies.

#### State GIS Website

The State GIS website (<http://planning.hawaii.gov/gis>) contains a wealth of information for decision-makers, the public, and GIS experts alike. The site has nearly 200 downloadable GIS data layers for use in mapping and GIS analysis, as well as popular downloadable maps and easy-to-use web mapping services. The site is a well-known resource across Hawaii and even the nation. OP's GIS Program was the first government agency in Hawaii to offer public GIS data sets for download at no charge.

#### State GIS Coordination

In executing its statutory mandate as the lead agency for GIS in State government, OP supports and tracks GIS efforts across State agencies. As part of its partnership with the State Chief Information Officer and the Pacific Disaster Center, OP looks forward to even more coordination and collaboration. OP is a founding member and sits on the Board of Directors of the Hawaii Geographic Information Coordinating Council (HIGICC), a non-profit organization consisting of members of Hawaii's geospatial community. HIGICC's goal is to provide coordination of geospatial activities among GIS users from all sectors. OP is also a member of the National States Geographic Information Council (NSGIC), a national organization committed to efficient and effective government through the prudent adoption of geospatial information technologies.

#### GIS Mapping, Analysis, and Technical Support

The GIS Program conducts mapping and analysis for projects and initiatives in OP, DBEDT and other State agencies, as well as providing technical support and GIS guidance to all State GIS users.

### PROGRAM FACTS

Number of Datasets/Layers on State Server  
271

Number of Downloadable Layers on GIS Website  
185

Number of REST Services Deployed  
172

Number of Downloadable Maps on GIS Website  
119

#### Sample Data, Maps, and Services at GIS Web Site

LSB Land Locator, Enterprise Zone Locator, 2010 Census Thematic Maps, Census Interactive Online Maps, Geothermal and Warm Ground Water, Rainfall and Rain Gauge Stations, Solar Irradiance and Radiation, Wind Energy Resource, Tsunami Evacuation Zones, Ocean Recreation Areas, Water Quality Classifications, Agricultural Lands of Importance to the State of Hawaii (ALISH)

#### Hawaii State GIS Partners

**Federal:** NOAA, USGS, US Census Bureau, DOA/NRCS, USFWS, USACE, NPS, NGS

**State/County:** OIMT, ICSD, DBEDT, DOA, AG, DOE, DOH, DLNR, DOT, OHA, HCDA, LUC, County of Hawaii, City and County of Honolulu, County of Kauai, County of Maui

**Others:** Hawaii Geographic Information Coordinating Council, Pacific Disaster Center

Hawaii GIS Program Positions  
3

\* All figures as of September 26, 2013

## KEY ACCOMPLISHMENTS

- With County, State and Federal partners, built the State GIS database, containing data developed and contributed by all levels of government.
- Maintains the State GIS database, adding, updating and organizing data and metadata.
- First government agency in Hawaii to create (non-FGDC) metadata for all public layers, listing data source, date, scale, attribute definitions, etc.
- First government agency in Hawaii to offer public geospatial data for download over the Internet at no cost.
- Participated in (and often helped to organize) several joint funding agreements with other County, State and Federal partners to acquire such critical data sets as TMK parcels, satellite imagery data, and digital topo maps.
- Maintains a State GIS User email list in order to disseminate information about new and updated data and upcoming events of interest to the State geospatial data user community.
- Maintains the State GIS Website, containing nearly 200 downloadable GIS layers, links to other geospatial data providers and links to various web mapping applications developed by the State GIS Program.

## ONGOING INITIATIVES

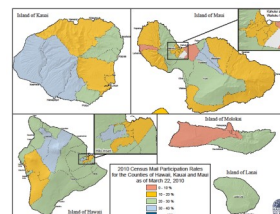
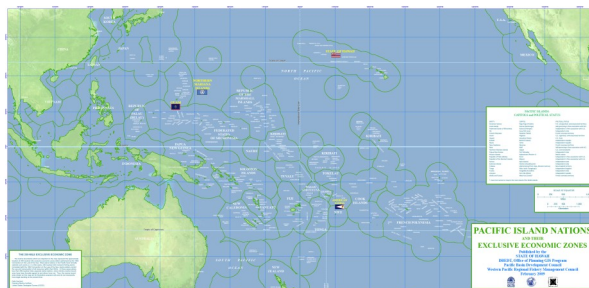
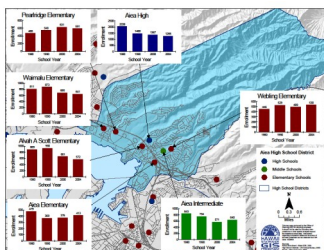
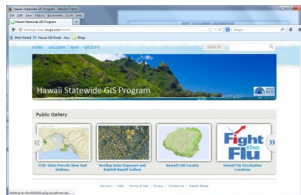
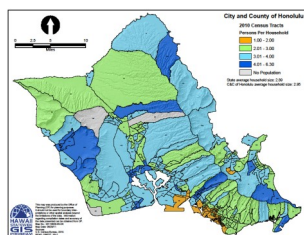
Since establishment in 1988, the Hawaii State GIS Program in the Office of Planning has undertaken a number of initiatives in a variety of areas related to geospatial data and coordination. Currently, the program is involved in the following initiatives:

### Conversion of Hawaii State GIS Database

Although the 200+ layers in the State GIS database have proven to be a great resource for State agencies and the public alike, they will be far more useful to State agencies after they are converted into one or more spatial geodatabases. This conversion is under way, and will make querying and displaying the data much faster due to the more efficient storage and delivery of data in a relational database. As part of this project, the State GIS Program will convert all of the existing metadata documents into metadata meeting federal standards.

### Modernizing Hawaii State GIS

The GIS Program is working closely with the State Chief Information Officer to modernize the State GIS. A Strategic Planning effort for GIS, completed in 2012, included plans to migrate the State GIS database from the 8-year old server on which it resides, to modern infrastructure, including high-end servers and cloud storage. This migration is well under way. In addition, the CIO and GIS Program are delivering the data to users in more efficient and user-friendly ways, including web map and feature services and targeted applications.



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 Office of Planning, State of Hawaii

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