



YEARLY ACTIVITY PLAN (YAP) - FY '09 – FY10

Division/Attached Agency:	Office of Planning
Program Name:	Planning and Geographic Information System
Program ID:	G 07 144 B

I. PROGRAM PLANNING

Problem, issue or opportunity statement: Describe the problem, issue and/or opportunity your program is attempting to respond to.

It is Government's fiduciary responsibility to make sound public policy decisions to maintain the public's trust. In order to carry out this duty, government agencies collect and analyze volumes of data because decision makers must have access to good, comprehensive, accurate and current data to make informed public policy and management decisions. How often have we heard the question or even thought to ourselves "how can I make a decision if I don't know the facts?" Our mission is to make *spatial data* readily accessible to anyone facing a decision on a matter dealing with location. Spatial data are especially critical to government operations because the majority of issues that government addresses have some sort of locational component. Specific to the DBEDT Strategic Objectives, spatial data can be used to answer questions such as: where are the best areas to harness natural energy sources such as wind, solar or geothermal? Where strategically, should business districts be located to improve Hawaii's business environment? Where is the most appropriate place for new workforce housing developments? Although these examples are specific to DBEDT, they are typical of the types of questions that government officials in both the Executive and Legislative Branches must face and analyze in their decision making. Since the collection and analysis of spatial data is so widespread, several different agencies are data users and stakeholders. While data sets are collected and created, they are often "stovepiped" or kept within the confines of a Department, Division, Branch or even an individual. Our vision is to continue to discourage stovepiping of data by establishing a state-of-the-art Statewide Enterprise Geographic Information System (GIS) for the State of Hawaii to facilitate and improve state government decision making. The ultimate goal is to put this spatial data at the finger tips of decision makers. To help facilitate the "discovery" of spatial data, we intend to continue to build a centralized database--a one-stop resource.

Need and partners: Provide quantitative evidence to show the scope and nature of the problem or opportunity you are working on. Identify partners you will be working with to address the problem, issue and/or opportunity. Describe why government should be part of the solution.

It is estimated that 80 percent of all data gathered by government agencies include a spatial component (e.g., parcel number, street address, zip code, census tract, etc.). GIS facilitates the use and analyses of spatial data sets by allowing the visual display of complex interrelationships among a number of variables. For this reason, government agencies were among the first to embrace GIS technology as a way to improve work flow and efficiency. Government has become a leader in developing geospatial databases that are of interest to governments, businesses and the general public. In particular, government builds and maintains the framework or base layers that no one else would take the responsibility for doing. Examples of framework layers include transportation, hydrography, boundaries and cadastral data. Government, and particularly the State and OP, must be involved in order to avoid data "silos;" to ensure that there is a comprehensive, shared database to which all State users of spatial data can refer for the most current, comprehensive and correct data. This also helps to reduce the

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creation of redundant data sets – e.g., Agency X creating (or purchasing) data that Agency Y has already created, simply because they are not aware that the data already exists. Similarly, line agencies are necessarily concerned with their specific projects, subject matters and geographic areas of concern, while the State GIS Program and OP have overarching responsibilities and therefore able to take the needs and considerations of the variety of State uses and users into consideration.

By assembling various sources of spatial data, centralizing the database and making it readily available, time is saved in reducing the burden of searching several different sources to find the necessary data sets. There are currently over 200 unique data layers in the State's GIS database. The Office of Planning and the GIS Program's management and implementation of this rich resource leads to efficiencies in various projects within the State government. As stated previously, State agencies are primary users of spatial data and GIS analysis – efficiencies are gained and ultimately money is saved by having GIS data and expertise "in-house" and readily available, rather than having to pay a vendor or consultant any time a map or geographic analysis is needed, particularly if that product is needed quickly. As is often said, "time is money," however, in this particular case, it is difficult to put a dollar figure on how much time and ultimately money is saved by having a one-stop resource for geospatial data for the State of Hawaii. Time also saves lives, particularly in a crisis situation. So it could be argued that the ability to access data in a timely manner to make quick decisions is priceless. As previously indicated, the interest in geospatial data crosses many agencies at all levels. As such, existing and future participants in this effort include other State agencies that have an interest in spatial data such as: DOA, DOD, DOE, DHHL, DOH, DLNR and DOT; Federal agencies such as: USFWS, NRCS, USGS, NOAA and NPS; all four County governments; military; PDC and NGO's such as utilities.

Desired results (outputs, outcomes and impacts): What will success look like? Describe what you expect to achieve in the short-term (0-2 years) and long-term (2-6 years).

Execution of an Enterprise License Agreement (ELA) or some variation such as a mini ELA or a volume licensing agreement to provide better overall coordination and leadership for the program is still a desirable result, however, the current budget situation will likely postpone the implementation of a major contract as originally envisioned. Therefore, execution of an ELA still remains as a long-term goal, however, for the short-term, the program will focus on advancing the system without the benefit of funds to acquire data and/or contract services. To accomplish this, we will strengthen existing, while forging new partnerships in building, improving and updating the database and developing user-friendly applications. We will also be actively seeking outside sources of revenues such as grant opportunities that may fit within goals and objectives of the Statewide Program. Federal and private funding has been received to support the development of the Hawaii Board on Geographic Names web site, which falls under the GIS Program. We hope to continue to apply for and receive grants to support this effort. Finally, while we have met one of our goals by establishing a Special Fund to facilitate support for the program, we still need the Governor's approval to expend collected funds.

Influential Factors: List the factors you believe will support or hinder your ability to impact the problem or opportunity.

The hardships created by the downturn in the economy will be an opportunity to expand relationships because all sectors are experiencing a shortfall of revenues. Therefore, it could be concluded that there would be a high level of interest among all parties that use geospatial technologies to enter into cost-sharing initiatives to enable all to do more with less. As far as seeking outside sources of funding, the number of opportunities could be negatively impacted by the economic situation.

Strategies: List the "best practices" that have helped other programs achieve the kind of results your program promises.

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The City and County of Honolulu has a very successful, nationally recognized GIS program in large part because they have strong support from the mayor and the city council. Having strong, influential “champions” has been the common denominator for the most successful GIS programs throughout the nation. New York, for example, also has a successful program, however, it took the 9/11/01 disaster to make it happen. Prior to 9/11/01, NYC databases were developed and maintained by individual agencies, but sharing data was the exception, rather than the rule. After the attack, the value of sharing data and having it readily accessible was finally understood by the Administrators, who really did not “get it” prior to the incident. Valuable time was wasted in gathering data from various agencies to create the full picture of the City’s layout. Having a well maintained, up-to-date centralized database saves time, money, and possibly even lives. Open sharing of data also prevents redundant development of data sets, which is typically a labor-intensive and expensive process. This involves a conscious effort on the part of data developers to share either by contributing data to a centralized library or making it known what data sets exist. In the latter case, making data discoverable by publishing metadata (data about data) is critical. Establishing formal best data management practices will help lead to higher awareness in the collection of accurate data and subsequent sharing of these resources. Another successful strategy employed in other jurisdictions is the establishment of Enterprise License Agreements (ELA) for GIS software. OP is still interested in establishing an ELA or similar comprehensive software license for the State of Hawaii.

Assumptions: State the assumptions behind *how* and *why* the change strategies you have identified will work. Use ‘If - then’ statements, i.e. “if _____ then _____ happens.”

- If reliable, up-to-date spatial data are available, then there are improved chances for sound decision making.
- If there are mutual benefits to partnering and sharing (such as saving money), then more partners will participate.
- If data are made available to the public, then the public will be better informed to make meaningful input in the decision making process.
- If an ELA or similar mechanism can be implemented, then better coordination among State agencies will occur.
- If a disaster strikes Hawaii, then we will be better positioned to respond.

II. PROGRAM IMPLEMENTATION

Resources: Describe the resources available to support your program.

- Small, but strong, cohesive staff striving for the same goals.
- Strong cooperation among State agency users as well as non-State users—Hawaii Geographic Information Coordinating Council (HIGICC) becoming a strong advocate within the Hawaii GIC community
- National States Geographic Information Council (NSGIC), similar to HIGICC, but serves as a national voice for geospatial technologies; promotes federal legislation and funding
- Grants, both Federal and private have been received to support the geographic names portion of our web site

Activities: Describe each of the activities you plan to conduct within your program.

- Continue data acquisition, data coordination and distribution and promote the use of GIS in State government through technical assistance and training and user group meetings

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- Execute a GIS software Enterprise License Agreement (ELA) or similar mechanism, which would be similar to a master purchase agreement that would facilitate the acquisition GIS software products
- Work with partners to build mutually beneficial databases and applications
- Continue to provide mapping and analysis support to OP, DBEDT and other state agencies as appropriate
- Participate in local and national coordinating bodies and activities
- Maintain, improve, publicize and add more data to the GIS web site and build the native names portion of the State GIS web site

Outputs: For each program activity, identify what outputs you aim to produce.

- Increase State GIS User base by 10%
- Improve coordination of GIS software purchases and software versions
- Implement at least one Internet Mapping application
- Assist agencies in making sound decisions using the best available data
- Continue to maintain and strengthen partnerships with local and national GIS organizations
- Increase the use of the state GIS Web site

Outcomes: Identify the short-term (0-2 years) and long-term (2-6 years) outcomes you expect to achieve.

- Continue development of a one-stop comprehensive, geospatial data library built upon collaboration and coordination among and between State, local, federal and other partners.
- Improve coordination and collaboration among State agencies in both data acquisition and development, and other GIS activities and projects
- Create easy to use applications to facilitate and enhance data analysis and decision making
- The short-term goal is to continue to build capacity including data resources, and the long-term goal is to make GIS a desktop tool accessible and usable to the highest levels of decision makers, both while reducing duplication of effort in data creation and State agency GIS activities

Impact: Describe the lasting impact you anticipate.

Improvement of the existing system along with easy-to-find and accessible spatial data would result in better efficiency and more informed decisions by policy makers.

III. PROGRAM EVALUATION

Indicators: Describe what SMART ('specific; measurable; action-oriented; realistic; and timed') indicators can be collected that would convey the status of your program.

- State GIS User base increased by 15 users
- Acquired 95% of all remaining DOQQ gaps
- Acquired LiDAR data for 75% coastal areas up to 15 meter elevation
- Added/updated 15 data layers
- Increased the number of hits to GIS Web site by 10%

