

Acknowledgements

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Cover Page

The cover page depicts a Wordle graphic within an outline of the State of Maine. The graphic was created using <http://wordle.net> from the full text of this strategic plan. The words displayed are scaled in size based on their frequency of occurrence in the text. Although the graphic has been modified for artistic purposes, the emphasis on data, coordination, communication, funding, state, Board, GIS and portal remain the same as in the original graphic.

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1. EXECUTIVE SUMMARY

GIS is important to Maine because

(At the request of the Maine GeoLibrary Board, this opening statement will be completed by the Maine GeoSpatial User Community through the Maine GeoLibrary Board at a future date as part of its continual strategic planning and implementation process.)

1.1 Why Is GIS Important to Maine?



Why are geographic information systems (GIS) important to the State of Maine? That is the first question that each reader of this report should ask. No, it's not because the technology is spectacular! It's because the technology provides users from all walks of life with a tool that can make their lives better or their businesses more cost effective and more efficient. It's also because the world is just starting to understand the strategic value of GIS and how much this powerful technology is rapidly becoming deeply imbedded in our everyday lives.

Whether it's the use of a car navigation system providing the latest information on restaurants, places to stay or cultural attractions in a community or the use of Google Earth (or Microsoft's Virtual Earth) to look at an area while sitting in the comfort of your home, this technology is rapidly becoming accessible to a greater and greater number of people in each state each day. If geographic information isn't available in your state, then your state is less able to compete.

Looking for a place to locate a business or an industry? Companies start by searching the Internet for locations that meet their criteria in terms of site, access, labor costs, and labor skill. Making your state accessible to these organizations using GIS improves the likelihood that a new company will consider locating in your state.



Responding to an emergency?

GIS can improve the ability of emergency management agencies to respond effectively in a coordinated manner to disasters. It can:

- Project flood and storm inundation and automatically notify residents of the need to evacuate to safe grounds.

- Quickly show road closures and provide communities with evacuation routes or location of shelters during a crisis.
- Save lives by providing a useful tool to coordinate forest fire fighting resources.
- Assist emergency responders in coordinating activities with utility companies during major snow and ice storms.
- Assist in coordinating emergency responders in wilderness rescues through the use of mobile mapping devices.

Providing public safety improvements?

GIS can assist in protecting communities. It can:

- Provide simple, effective crime analysis techniques that help police solve crimes and, more importantly, prevent crimes.
- Help police departments save money by more cost effectively deploying their valuable resources.
- Identify patterns of diseases to determine impact and best intervention strategy.

What else can GIS do?

GIS can provide the tools to:

- Attract high-income jobs to the State by building on Maine's heritage as a leading innovator in this field.
- Protect valuable natural resources from over development.
- Save school districts money by optimizing bus routes for safe and efficient services for children.
- Streamline government permitting processes as well as save time and costs by reducing the need to send staff into the field to obtain or verify data.
- Study the impact of change on our communities.
- Help visitors find a place to stay or things to do while on vacation.



Do you use Google Earth or Microsoft's Virtual Earth? Have you noticed the difference between the imagery of southern Maine where you can see the houses versus the imagery of northern Maine where you can see only blobs? Where do you think Google and Microsoft get their data? Without a statewide GIS program, the imagery of the entire state would probably be just blobs simply because there is little market demand for that information in Maine. But without it, wouldn't the State be at a disadvantage in the economic marketplace? Shouldn't Maine continue to fund a program to improve the information about northern Maine and keep the State competitive?

1.2 What Is the State's GIS Vision?

GIS and related technologies will be fully coordinated across the State of Maine resulting in: (1) costs savings and better services from all levels of government; (2) improved access to data for private industry to make Maine more competitive with other states and more inviting for new businesses; and (3) an improved capability to manage the State's unique natural resources.

1.3 Is the Plan Realistic?

The plan recognizes the current economic climate and recommends several low or no cost items that can be put in place over the next two years that will improve GIS coordination across the State and position the State to be able to take better advantage of future growth opportunities.

1.4 How Was the Plan Completed?

The Maine GeoLibrary Board engaged James W. Sewall Company to provide a clear strategy for it to pursue. The Board also established a Project Team composed representatives from the Board and federal, state, county and local government and an independent project manager to oversee this project provide reviews of submissions respond to questions and provide direction for the project.



The project was initiated with a scoping meeting with the Board, followed by a series of public forums, meetings with various federal agencies, discussions with representatives from academia pursuing major geospatial initiatives, an open, on-line survey, and presentations to the Maine Society of Licensed Surveyors, the Maine Municipal Association, and the Maine GIS User Group (MEGUG). Some 245 individuals participated in the on-line survey; 130 participated in the forums held in Auburn, Augusta, Bangor and South Portland.

Findings and analyses were presented at bi-weekly Project Team meetings and monthly GeoLibrary Board meetings as they were completed. Issues and gaps were identified and confirmed with the Board and potential solutions reviewed for accuracy and practicality. As material was developed, it was posted to the GeoLibrary web site. As part of this process, a stakeholder list of 550 individuals was established along w a statewide List Service to aid in communicating findings. Material was sent to participants in the forums and surveys and to those who had registered on-line to receive it. Comments were welcomed and incorporated into the review process. The two draft strategic plans and a final plan were developed, presented to the Board and modified in accordance with their comments. In addition, drafts of the plan were distributed to the stakeholders for comment as well. All comments were incorporated in the documents as deemed appropriate by the Project Team.

1.5 What Was Discovered?

The GeoLibrary was established in 2002 by statute and provided \$2.3 million in funds to deliver a statewide program to enhance GIS capabilities across the state. Despite limited funds, the GeoLibrary Board has done an outstanding job of creating standards, delivering geospatial data, developing a parcel grant program for local governments and pulling together a framework to make geospatial data available across the State. In 2004, the Board established a program to provide statewide digital orthoimagery (an essential data layer for GIS). In addition, the Board, working with the Maine Office of GIS (MEGIS) and the University of Southern Maine, is currently

developing a statewide GIS portal (GeoPortal) to deliver geospatial data and GIS services across the State.

However, the study also found that there was significant room for improvement in statewide GIS coordination and outreach. It also became clear that there was a need for new and updated geospatial data as well as better access to existing State and local geospatial data. Furthermore, the study found that there was a significant need for better communication on such topics as geospatial data development, training opportunities and the availability of grants. ***Lastly, the study determined that the Board, with its original funding almost exhausted, is in dire need of sustainable funding sources to deliver geospatial data and other essential initiatives to the Maine geospatial community.***

1.6 What Is Recommended?

- Expand participation
Expand participation on Board initiatives by establishing a series of work groups composed of leaders, experts, and those impacted by the initiatives representing both diverse sectors and geographies across the State.
- Hire a statewide GIS Coordinator
As soon as it is realistic (given the economic climate), hire a statewide GIS Coordinator to implement the Board's initiatives, serve as the Board's spokesperson across the State, and facilitate cost savings through the sharing of geospatial data, applications, training, and innovative ideas.
- Improve statewide GIS coordination
Establish an outreach program to promote the use of GIS to meet both public and private business needs to prospective users and potential supporters across the State. Encourage the sharing of geospatial data, applications, innovative ideas, and training. Encourage the use of the GeoPortal, the posting of geospatial data, and providing on-line access to that data as well.
- Improve access to geospatial data
Working with the Chief Information Officer (CIO), county and municipal governments, academia and others, implement policies to facilitate the sharing of geospatial data by: inventorying it on an annual basis; providing notification of future geospatial projects and updates to existing geospatial data; notifying others of updates; and initiating a major campaign to provide access to the most current geospatial data from across the State through the GeoPortal.
- Develop and maintain statewide geospatial data
Establish a program to provide continual updates of digital orthoimagery across the State. Following the recommendations in the Board's study to establish an integrated land records information system, establish a program to develop and maintain parcel geospatial data meeting statewide standards. Work with the Department of Transportation and the Public Utilities Commission to bring together two statewide roads geospatial datasets into one integrated roads and addressing geospatial dataset. Develop high-resolution elevation

geospatial data for the State. Establish various geospatial standards as required to assure geospatial usability. Hire a staff person to assist in the implementation of the integrated land records information system and to gather geospatial from across the State for the GeoPortal.

- Lower the barriers to the use of GIS
Lower the barriers to the use of GIS by local government and others by developing easy-to-use applications that are shared via the GeoPortal to meet the business needs of local government. Promote the use of the GeoPortal as a means to eliminate the cost of geospatial data storage and other infrastructure for local government.
- Improve communication
Improve communication by the Board by expanding the services provided on their website (e.g., developing a calendar of events, adding information on impending projects) and judiciously keeping it up-to-date; growing the registration on the Board's new List Serve; regularly posting geospatial news from around the State; and developing an on-going program to speak about GIS and the Board's initiatives on a regular basis across the State.
- Improve access to training/education
Work with educators from across the State to develop a new area on the website to post training opportunities and curricula from across the State.
- Develop champions
Implement a communications plan. Establish a focus group of key individuals identified during the study to provide advice on potential champions. Identify key individuals from various sectors who can benefit from the use of geospatial technologies to attain their goals. Work with those individuals to demonstrate how geospatial technology can meet their needs. Provide them and key State officials with strong business cases to enlist their aid in supporting the GeoLibrary Board initiatives.
- Establish sustainable funding
Work with the CIO, champions, the Governor's office and legislators to establish appropriate funding mechanisms to support both operating and capital expenses. Establish long-term budgets with consistent funding needs for long-term Board initiatives. Document successes in measurable terms and develop a key message on the Board and the need for its initiatives.
- Address the low or no cost issues first
Considering the severity of the nation's economic climate, concentrate on solving the low or no cost issues first. Document these successes and use these to position the GeoLibrary to move forward with more robust activities in the future!