

RESOLVE 23
Report to Joint Standing Committee on Natural Resources
BRIEF of STRATEGIC PLAN to ESTABLISH
THE MAINE PUBLIC LIBRARY OF GEOGRAPHIC INFORMATION

Overview:

Geographic Information Systems (GIS) are critical tools for addressing issues of Economic Development, Environmental Protection, Homeland Security and Sensible Growth and are being used by governments everywhere. Over the past decade Maine has made a significant commitment to GIS, and now needs to apply a series of targeted investments to advance and consolidate this technology for maximum utility.

During the First Regular Session of the 120th Legislature, Resolve 23 was passed to initiate the planning and design of a cost-effective, coordinated statewide GIS strategy. The Resolve stressed that the system must be useable by all levels of government and address the fundamental issues of: Standards Creation, Data Accuracy and Distribution, Roles of Public and Private Stakeholders, Privacy Concerns and Funding Options. The GIS Steering Committee established by Resolve 23 achieved unanimous agreement on an approach for addressing all of these concerns.

To characterize the status of GIS in Maine, the Steering Committee conducted more than 65 interviews with all major users of GIS technology in the State, and received feedback from over 400 individuals in every region, profession, and level of government.

Current ISSUES:

- **Few standards exist** to guide this complicated technology, even for data developed with State dollars. *Result: Outside of their original applications much data cannot be used, impeding regional or statewide analysis and stranding the investments that created them.*
- **Structural inefficiencies** exist in the distribution of and access to GIS data currently maintained by the State. *Result: Users cannot access valuable, existing data.*
- **Inadequate technical support** is available at many levels to assist users in performing critical local, regional and statewide analyses. *Result: Simple, technical bottlenecks stall users.*
- **Coordination is lacking** among the users and maintainers of geographic data. *Result: Wasteful and redundant initiatives consume limited funds and undermine the delivery of standard services.*
- **Important data gaps** prevent essential analysis. *Result: Maine is hindered in its ability to address regional issues such as sensible growth and economic development.*

Recommended SOLUTIONS:

The Steering Committee unanimously recommends the creation of a Maine Public Library of Geographic Information (MPLGI) built on five pillars of identified need:

1. **Standards:** Creation of strong statewide GIS standards on a layer-by-layer basis that will allow the development of a uniform database from the efforts of multiple participants.
2. **Improvements in data warehousing infrastructure:** Addressing the structural inefficiencies of the current system using best available warehousing and distribution technology and practices.
3. **Strategic investments in new data layers:** Creation and completion of key statewide data sets to plug existing gaps and enable important regional and statewide applications. These include: new higher-resolution aerial photography, parcels, zoning, land cover and protected open space.
4. **Strategic investments in basic applications:** Developing tools to validate the quality of information in the library and creation of a general-purpose, web-based tool for browsing data in the library.
5. **Improvements in education, outreach and coordination:** Investing explicit state resources to further the education, coordination and outreach functions. This includes the creation of Regional GeoCenters to provide support to all parts of Maine.

Summary:

The Legislature recognized the critical need for a statewide GIS infrastructure in creating Resolve 23. This strategic plan, prepared with the unanimous support of the Resolve 23 Steering Committee, provides benefits to all stakeholders. At its core, the plan provides state support to local governments to help establish their GIS programs and critical local data sets such as parcels and zoning. The state receives the enormous benefit of being able to collect and validate these data so that they can be applied to critical regional and statewide issues such as *sensible growth, economic development, homeland security and environmental protection*. ***By acting now, Maine avoids further divergence of independent programs and capitalizes on the present sense of urgency to apply the best of breed technology to steward our infrastructure, economy, security and environment.***

Funding:

Investments in GIS and geographic data are appropriately viewed as “public infrastructure” for the 21st century much like roads and rails were in the 19th century. Toward this end, the Steering Committee recommends the following composite investment strategy involving multi levels of government and the private sector:

- A proposed \$6 million component of the Environmental Bond issue for 2002 will fund establishment and foundation layers of the Maine Public Library of Geographic Information. This will largely be accomplished through incentive grants to local governments for parcels, zoning and protected lands automation.
- A fee increase in the state agency Enterprise Network Service Rate will yield \$300,000 in Year 1 and \$600,000 in Year 2, to cover startup and operational costs associated with technical support, coordination and resource development.
- Leveraging of resources from the federal government and other partners, including the potential use of up to \$1.6 million available from USGS with an appropriate match from the state.

The following spreadsheet summarizes the proposed funding strategy:

ONE TIME CAPITAL EXPENDITURES:	TOTAL Cost	New 2002 Bond	Other Funding Sources (1)
1. Standards			
Statewide data standards development	\$200,000	\$100,000	\$100,000
2. Data warehousing			
Infrastructure improvements	\$200,000	\$200,000	
3. Statewide data development			
Participation in USGS NAPP program for new orthophotography . Program would complete 1997-1998 mapping and initiate more detailed mapping for a 2003-2004 program.	\$4,200,000	\$1,800,000	\$2,400,000
Development of statewide land cover	\$750,000	\$250,000	\$500,000
Parcel automation grant program	\$3,500,000	\$2,000,000	\$1,500,000
Zoning & conservation/open space automation grant program	\$750,000	\$750,000	
Road centerline improvements	\$400,000	\$400,000	
4. Facilitating application development			
Standards conformity validation tools/application	\$100,000	\$100,000	
On-line Internet-browser based access to Library and application development platform for delivery of Library data to third parties	\$150,000	\$150,000	
Development tracking application development	\$250,000	\$250,000	
GRAND TOTAL ONE-TIME EXPENDITURES	\$10,500,000	\$6,000,000	\$4,500,000

ONGOING, RECURRING OPERATIONAL EXPENDITURES:	TOTAL 5-Year Cost	FY2003 (2)	FY2004 (2)	FY2005 (3)	FY2006 (3)	FY2007 (3)
2. Data warehousing						
Ongoing infrastructure support: staff, H/S maintenance, disk storage	\$1,200,000	\$100,000	\$200,000	\$300,000	\$300,000	\$300,000
5. Outreach, education, and coordination						
Active, directed staff support for inter-governmental and intra-governmental coordination, education & outreach	\$1,200,000	\$100,000	\$200,000	\$300,000	\$300,000	\$300,000
Coordination, technical assistance and outreach through funding of Regional Service Centers (eventually 10 Centers @ \$40,000 per annum)	\$1,500,000	\$100,000	\$200,000	\$400,000	\$400,000	\$400,000

5-YEAR GRAND TOTAL, all investments, all funding sources:	\$14,400,000
Potential investments from grants or funding matches:	\$4,500,000
TOTAL 5-YEAR INVESTMENTS BY STATE OF MAINE:	\$9,900,000

- (1) Other funding sources include, but are not limited to: federal agency grants, partnerships with utilities and land trusts, and matching funds obtained from municipalities.
- (2) FY2003 and FY2004 would be funded through state government’s Enterprise Network Service Rate and library dissemination fees.
- (3) To be determined following 2-year program evaluation.