

Maine Library of Geographic Information Board Meeting

Date: Wednesday, April 21st, 2010

Time: 10:00 AM to 12:30 PM

Place: Burton M. Cross Building, Conference Room 105.

AGENDA

1. Approval of the March 17th meeting minutes – Chair
2. Presentation from Tora Johnson & Charles Colgan
3. GeoPortal Demonstration – Christopher Kroot
4. Board, Committee, and Workgroup membership – Chair & All
 - Committee membership list
 - Workgroup membership list
5. Strategic Plan Implementation Groups
 - Coordination & Communication – Mike Smith, Dan Walters
Status of legal inquiry regarding meeting minutes for workgroups/committees
 - GeoParcels – Nancy Armentrout
 - Education & Training – Tora Johnson (or designated Board member)
 - Geospatial Data – Joseph Young (or designated Board member)
Orthoimagery Recommendations
6. Committee Reports
 - Financial – Larry Harwood
 - Policy & Marketing – Marilyn Lutz
Listserv Policy
Web Content Coordination Policy
 - Technical – Christopher Kroot
Status of GeoPortal

NEXT SCHEDULED MEETING: Wednesday, May 19th, 2010, 10:00 a.m. – 12:30 p.m., Burton M. Cross Building, Conference Room 105.

Maine GeoLibrary Board
April 21st, 2010
Meeting Minutes

Present

Michael Smith
Marilyn Lutz (by phone)
Greg Davis (by phone)
Gretchen Heldmann, Chair
Kenneth Murchison (by phone)
William Hanson, Co-Chair
Judy-Colby George
Jon Giles
Aimee Dubois
Christopher Kroot

Staff

Larry Harwood

Visitors

John Auble, representing Delorme
Brian Stearns, Sales Engineer, Delorme
Charles Colgan, University of Southern Maine (USM)
Tora Johnson, University of Maine Machias (UMM)
Anji Auger, Maine Office of GIS (MEGIS)
Steve Weed, Assessor Town of Bar Harbor
Joseph Young, State Planning Office (SPO)
Michael Shillenn, Photo Science

The meeting was called to order at 10:02 AM.

1. Approval of the March 17th meeting minutes

The Chair entertained a motion to approve the minutes. Aimee Dubois moved to approve the minutes as written. Mike Smith seconded. The Board voted 8¹ in favor, none opposed, no abstentions. The motion carried. (Unless otherwise indicated, the Chair abstains from all votes.)

2. Presentation by Tora Johnson and Charles Colgan

Tora Johnson, University of Maine Machias and Charles Colgan, University Southern Maine gave a joint presentation on their collective work on GIS or more broadly geospatial technologies (GST) in educational curricula.²

¹ Due to Board members arriving and departing at different times, the numbers may change.

² The following is an outline. To view the complete presentations go to http://megischamps.org/workforce_summit.html

Tora Johnson began by describing the three-year project begun in 2008 and funded by the National Science Foundation aimed at meeting the growing need for workers skilled in geospatial technologies in Maine. The object is to develop educational programs that are more accessible and applicable to the needs of a rural workforce, to increase the number of students enrolling in GST courses and to increase the number of students receiving two year degrees and certificates in GST. In addition to UMM, the Geospatial Curriculum Consortium partners are University of Maine Presque Isle, University of Maine Fort Kent, Eastern Maine Community College, University of Maine Farmington, Kennebec Valley Community College, University of Southern Maine, Washington County Community College, Southern Maine Community College and University of Maine Augusta.

Project Partners & Advisors

Maine GIS Users Group

Maine Office of GIS

CREST CCLI Project

Maine Dept. of Education

Maine Learning Technology Initiative

Maine GeoLibrary Board

Maine State GIS Stakeholders Group

Maine Emergency Management Agency

Center for Community GIS

Maine Geographic Alliance

Maine Land Conservation Alliance

Maine Association of Planners

Maine Municipal Association

Maine 4H Extension

Greenland Point Center

Maine Sea Grant

Maine Dept. Marine Resources

ESRI Inc.

Partnership for Environmental Technology Education

AgrowKnowledge

Marine Advanced Technology Education Center

From national discourse on the future of geospatial technology education

- Rural areas & small schools have unique challenges & mandates
- We serve primarily ancillary users
- Applications of geospatial technology are different
- Schools, businesses, organizations & agencies are smaller

Four initiatives:

- 1 Workforce Study
- 2 New Programs & Curriculum
- 3 Outreach & Student Competition
- 4 Virtual Geospatial Technology Institute

Workforce Study on Education Needs

- Focus on ancillary users in a variety of fields
- Focus group interviews
- Survey research
- Including:
 - Employers
 - Current users
 - Current non-GIS users

Previous studies show need for more accessible and applied education, esp. for ancillary users:

- Municipal employees
- Land conservation professionals
- Marine conservation professionals
- Preliminary workforce education survey

Preliminary Workforce Survey

- 94 responses
- Over half (54%) were ancillary users
- 38% were geospatial specialists
- Majority said GST will be increasingly important in their field and growing demand
- Ancillary users perceived to be in greater demand

Preliminary Workforce Survey - Barriers to using GIS

- High cost of education was most cited barrier to using GIS
- Distance from training facilities
- Lack of time
- Lack of curriculum focusing on their needs & applications
- Widespread desire for more flexible training/ education

Workforce Study- Focus Group Interviews & Survey

- How are people using GIS?
- What content, schedules, formats & programs do people need?
- What skills or training are in demand in the workplace?
- How can we best help people get started with GIS & advance their skills?
- What are colleges & universities doing right?
- What is missing & what can be improved?

Workforce Study -Phase 1 - Focus Group Interviews

- Maine Municipal Association
- Maine Land Trust Alliance
- Maine State GIS Stakeholders Group
- GeoLibrary Board

Workforce Study- Preliminary Results. How GST is used?

- Vast majority are ancillary users, not specifically GIS techs.
- Vast majority focus on very basic map-making, citing lack of training as barriers to doing more.
- Many industries are not using GIS as much as they could
- Upper and middle management are often not using GIS and often don't understand its uses & potential of the technology

Workforce Study- Preliminary Results. For those who use it, how did they learn GIS?

- Many learned by the “seat of the pants”
- These say major pieces are missing, ie fundamentals & advanced applications
- Many reported taking one class in college and/or tutorials, instructor-led courses through software providers
- Many state employees have taken training developed by DEP
- Many forget/ lose GIS skills because they don't use it often

Workforce Study- Preliminary Results. Common complaints about courses:

- Not applicable to specific applications (most common)
- Needs to be taught in smaller “chunks”
- Difficult to adapt to academic schedules
- Software provider courses are too “cookbook”

- Entry-level employees with GIS coursework do not have expected proficiency & independence

Workforce Study- Preliminary Results. Need more instruction in:

- Addressing technical glitches & finding workarounds
- Managing data and using databases
- Cartographic & geographic principles underlying GST

Workforce Study- Preliminary Results. What would accessible & applicable education programs look like?

- Directly applicable to the workplace and discipline
- Real-world, open-ended problem-solving experience
- Integrated into education in core disciplines
- Produce independent, competent, and experienced users
- Possibly shorter courses or workshops
- Convenience & accessibility of distance ed with the personalized attention of on-site courses

Charles Colgan gave a brief synopsis of his work surveying the state's GIS workforce. The survey is still ongoing and has been extensive in scope. Rather than present the details, on this occasion he gave a summary of the conclusions.

Who

- The current workforce is older and more predominantly male
- In the sample: Professionals with GIS > GIS Specialists
- Government Primary employer
- Education
 - Bachelors and Masters
 - High rate of continuous education
 - Employer paying a key

Where

- On own and Colleges for Initial Training
- In-person preferred, online possible

What

- Specialists
 - Remote Sensing
 - Geocoding - Linear Referencing
 - Theory
 - Statistics
- Professionals
 - Remote sensing
 - Software

Barriers

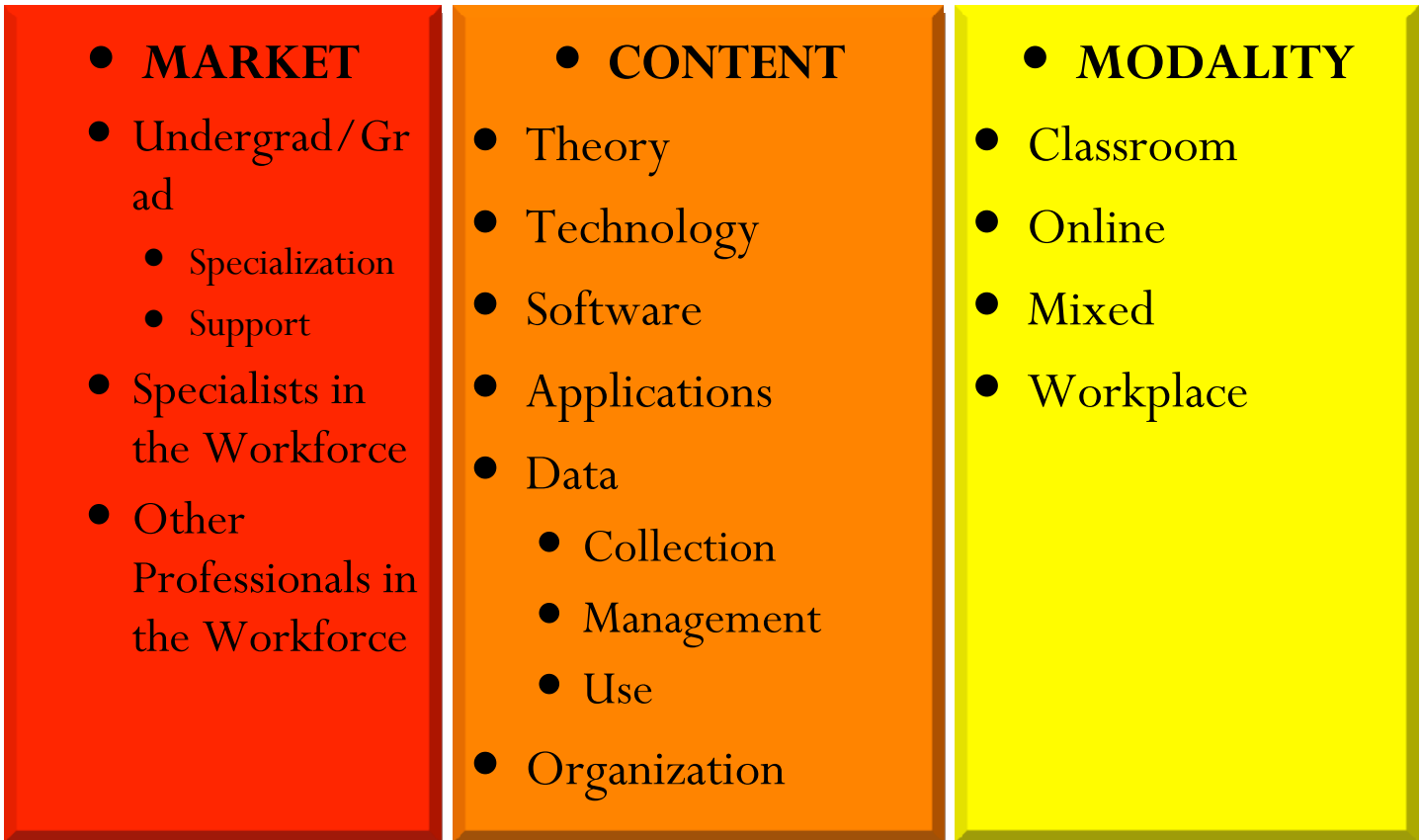
- Time
- Money

Key Themes for the Future

- Data Management
- Web/Internet

- Expand Uses Beyond Natural Resources and Land Use
- Flexibility
- Communication

GIS/GST Education: The Ingredients



New Models for GST Education

Tora Johnson noted that a mass of data had been collected and consequently a number of recommendations on new models for GIS education.

For Learners:

- Work more independently
- Linkages to real-world via service learning/ internships
- Customized/ targeted curriculum & work flows
- Learn basics & fundamentals
- Learn image processing & data warehousing
- Be exposed to broad array of applications
- Understand how to qualify for GISP certification
- Understand their role as trainers in the workplace

For Colleges & Universities:

- Use CCs' ability to address workforce needs
- Provide greater variety of formats, incl. continuing education, hybrid, distance
- Provide opportunities for discipline-specific curriculum
- Provide more options at the master's level
- Bring smaller schools together, increase efficiency with distance education
- "Grease skids" between K12/ CC/ 4yr schools/ graduate:

- Clearer Career Pathways (focus of current proposal)
- Articulation
- One-stop "Marketplace" for GIS education
- Outreach to High School Seniors & Early College Opportunities
- More collaboration and coordination among schools
 - Reach K12:
- Geographic/ Spatial Literacy
- Basic GIS (or not-so-basic), overcome "Mac problem"
- Change Maine Learning Results
- Work with teachers
- Get GIS into voc tech

Recommendations:

Further research:

- More Conversations with Graduates of Current Programs
- More conversations with industry and managers
- Look for models/ best practices outside of Maine
- Define career pathways and core competencies

Other ideas:

- Help desk/on call support options for students
- Outreach to managers and employers

Current Initiatives:

- Virtual Center for Geospatial Technology
- Plans for a new, shared master's in applied GIS
- Website: gis.maine.edu - clearinghouse for GIS ed
- Proposal for MTI cluster project with GST employers
- Proposal to develop materials on tech careers in Maine
- Research & PD on teaching and learning GIS
- Hybrid & distance courses & programs are now available
- Evaluation of Mac-based options for GIS on MLTI laptops

Q: In the surveys did employers desire a GISP when hiring?

A: It never came up. In most cases the position was not GIS oriented and hiring was based on other factors.

Q: Who or what certifies one as a GISP?

A: There are two national organizations of which one is emerging as the defacto leader. (GIS Certification Institute <http://www.gisci.org/> ³)

Q: How do advanced degrees like M.S. and PHD fit into this training and certification?

A: GISP certification is not directly related to a formal degree. A certificate would be a bachelor's plus a sequence of courses in GIS/GST.

Q: Does the University system still have the surveying-engineering sequence?

A: Yes, that one is still available but not heavily GST oriented.

Q: Was the workforce the only source of data on un-available GST courses?

A: No we actually checked on that and they are not available.

Q: You indicated there is a problem in the workforce with former students functioning independently?

A: There is anecdotal evidence of that. If that is the case why exactly is uncertain.

³ This is according to my research, no names were mentioned. L.H.

3. GeoPortal Demonstration

The demo not having been entirely prepared, the Chair tabled this item to the next meeting.

4. Board, Committee & Workgroup membership

The Chair called the Board's attention to the updated lists of members on standing committees and Implementation Workgroups (Attachment A) and asked if there were any suggested changes. Hearing none the Chair asked the Board to review the lists and submit any changes.

5. Strategic Plan Implementation Groups

Coordination and Communication

Status of legal inquiry regarding meeting minutes for workgroups/committees

The question had been raised as to whether or not Board committees, subcommittees and other subgroups were legally required to take minutes of their meetings. Co-Chair Bill Hanson had asked one of his colleagues at Rudman & Winchell, John Hamer, Esq to give an informal opinion on this. The opinion was read out as follows:

“It is possible that the group may not be considered a public agency, but even if it was, there is nothing in the FOA⁴ that *requires* that the group make minutes. Public agencies are only required to make written records of “the conditional approval or denial of an application, license, certificate or any other type of permit” and for non-renewal of certain contracts or dismissal of public officials.”

GeoParcels

Mike Smith reported that the grant money for the Hancock County Integrated Land Records System pilot project has officially arrived.(NSDI CAP⁵ grant, category 4). This is a 3 part project to collect the county parcel data into one unified database, to develop a maintenance process and to develop a web application to provide public access. Of these the second part will be the most difficult. The Group is meeting again today at 1:00.

Education and Training

Tora Johnson reported that the Workgroup had met earlier to review the Mission Statement and the goals for 2010. The immediate focus is on web-based GIS educational resources, especially higher educational resources. Marilyn Lutz has provided a comparison of the main GIS websites: the Geolibrary, the Maine Office of GIS, the Maine GIS Users Group and the GeoPortal. The group will provide an update at the next Board meeting.

Geospatial Data

Geospatial Inventory.

Joe Young reported that in 2006, the Maine Office of GIS polled agencies known or thought to have GIS data that was not published or shared with other agencies. The group has reviewed those surveys and new spreadsheets have been sent back to the agency contacts for a review. The group is also working on the outline of a policy for regular data inventories.

The Digital Parcel Standards group has completed their update of the existing state standards. They should have a report for the Board at the next meeting. Technically this is a subgroup of the GeoParcels Workgroup but there are overlapping interests and membership and they cooperate closely.

⁴ Freedom of Information Act, properly abbreviated FOIA but commonly as FOA.

⁵ National Spatial Data Infrastructure, Cooperative Agreement Program

Orthoimagery Report & recommendations

The full Orthoimagery Report & Recommendations (hereinafter referred to as Report) had been presented at the last meeting. Since then there had been some suggestions that would probably call for the Workgroup re-examining the Report. Discussion centered on whether or not the Report should be voted on now so as not to delay the search for funding or after the report had been re-examined and possibly amended. The need to start the search for funding found consensus.

Christopher Kroot moved to forward financial portion of the Report to the Finance Committee with the reservation that there may be minor amendments to the specifications. Mike Smith seconded. The Board voted 10 in favor, none opposed, no abstentions. The motion carried.

There was a brief discussion of how the orthoimagery proposal could be funded. The most probable approach, given the current economic situation, would seem to be encouraging the towns to pool their funding. Logically the county governments would organize this and it would be a great benefit to the individual towns. The lure would be the 'buy-up' option for towns to get higher resolution and/or higher accuracy imagery at a minimal expenditure compared to doing it alone.

6. Subcommittee Reports

Financial

Larry Harwood presented an updated one-page financial statement color coded to show the grouping of the major project expenditures, orthoimagery, parcel grants, land cover and GeoPortal. Although some items have changed category (voted, encumbered, spent) the available funds remain the same at \$33,311.50

Policy and Marketing

Listserv Policy

Marilyn Lutz presented the updated policy on Maine GeoNews Mailing List Guidelines (attachment B). GeoNews it will be recalled is designed to be the Maine GIS community list server, combining Geolibrary, MEGUG and MEGIS list servers. The document had been reviewed before and discussion was minimal

Mike Smith moved to accept the Maine GeoNews Mailing List Guidelines as written. Aimee Dubois seconded. The Board voted 10 in favor, none oppose, no abstentions. The motion carried.

Web Content Coordination Policy

The Chair showed a graphic depicting the overlapping relationships between the four prominent GIS content websites in the state. The proposed solution is to market the Geolibrary as a one-stop place for all geographic information in Maine and achieve this by active, regularly maintained links to the other main GIS websites. The detailed text (see attachment C) will be forwarded to the Policy Committee to be fashioned into a policy document and brought back to the Board.

Technical

Status of the GeoPortal

Christopher Kroot gave a brief outline of the status of the GeoPortal.

- The portal is running, stable and all functions work almost all of the time. A number of bugs have been identified and fixed.
- Mike LaChance, the intern paid to work with municipalities, has been very active in getting the towns to upload metadata and shape files. To date, about three hundred metadata files have been uploaded to the portal.⁶
- The shape file up-loader is working well and USM has been paid for that part.

⁶ As of 4/23/2010 327 files have been uploaded according to the portal administrator

- About May 1st the current mapping interface will be replaced with MapFish⁷. Among other things this will give more control over the map legend, turning layers on and off for example, and a better printing routine.
- On-going tech support for the portal will be an issue in the future and the Board should begin thinking about how to approach that.
- Finally the full technical evaluation of the portal is in process after which a decision on payment can be made. Gretchen Heldmann has completed her evaluation and Christopher needs to complete his. Any help would be appreciated however it is a long process with innumerable items to check.

Q: Who will decide whether or not the specifications have been met.

A: Ultimately the Board of course has the authority. However the detailed technical evaluation is very intensive and not something the Board as a whole could easily review. The Technical Committee could come back to the Board with a recommendation after the review.

Jon Giles moved to empower the Technical Committee to review the items in the GeoPortal evaluation spreadsheet, to authorize payment if the evaluation is acceptable and to report to the Board at the next meeting. Ken Murchison seconded. The Board voted 10 in favor, none opposed, no abstentions. The motion carried.

Marilyn Lutz volunteered to assist in the evaluation. The Board was invited to view the GeoPortal again and make any comments or suggestions to Christopher Kroot.

Additional Business

Mike Smith reported that the estimates for collecting LiDAR on the Northeast LiDAR Project were higher than expected. Consequently, since no more funding is forthcoming on short notice, it will be necessary to reduce the area covered or the 'footprint'. Mike passed out a graphic⁸ depicting the proposed footprint reduction. Basically the approach was to keep the coastal coverage but reduce the coverage to parts of towns as opposed to entire towns. In some sections, e.g. the Narraguagus River, whole townships are required as a condition of the funding. He wished to inform the Board and get input but must proceed immediately due to time constraints.

Q: Will some of the island be dropped from coverage?

A: Possibly some of the more remote ones, they are expensive to fly.

Q: Can you do the organized as opposed to unorganized areas?

A: Not easily, it's difficult to sort them out.

Q: Doing part of a town is bad from the municipal standpoint. Can you do fewer towns?

A: No because the object of the exercise is coastal collection; it ties in with larger issues like sea level rise, coastal flooding, etc.

Q: What is FEMA's position on this; is there any more money?

A: They are also looking at coastal collection and inland in areas that flood of course. The funding is used up for now.

The meeting was adjourned at 12:35

⁷ MapFish is an open source shareware for producing online mapping applications

⁸ http://mapserver.maine.gov/lidar/proposal_map.pdf.

Attachment A

WORKGROUPS

April 2010

Coordination and Communication

Michael Smith, MEGIS, Co-Chair
Dan Walters, USGS, Co-Chair
Gretchen Heldmann, Town of Hampden
Marilyn Lutz, University of Maine
Jim Page, James Sewall Co.

GeoParcels

Nancy Armentrout, PUC, Chair
Michael Smith, MEGIS
Bill Hanson, Rudman & Winchell
Paul Hoffman, Sheepscot Valley Conservation
Association
Dan Walters, USGS
Diane Godin, Somerset County Registry of Deeds
Steven Weed, Town of Bar Harbor
Judy Mathiau, Town of Rockport, former MRS staff
Laurie Thomas, MRS

GeoParcels Pilot Project Subgroup

Nancy Armentrout
Aimee Dubois
Steve Weed
Mike Smith

Parcel Standards Sub-Group

Steve Weed, Bar Harbor Assessor
Ellen Jackson, LURC
Anji Auger, MEGIS
Patrick Johnson, ??? (MDOT)

Education and Training

Tora Johnson, UMM, Chair
Bridgit Kirouac, MEGIS
Marilyn Lutz, University of Maine
Vinton Valentine, University of Southern Maine
Christopher Kroot, MEGIS

Geospatial Data

Joe Young, State Planning Office, Chair
Dan Walters, USGS
Greg Davis, Time Warner Cable
Greg Copeland, City of Biddeford
Larry Harwood, MEGIS
Nancy Armentrout, PUC
Elizabeth Hertz, SPO
Tom Marcotte, MDOT
Janet Parker, SPO
Don Katnik, IF&W
Brian Norris, James Sewall Co.
Claire Kiedrowski, Kappa Mapping
Tanya Johnson, MDOT

Orthoimagery Sub-Group

Dan Walters, Chair
Sarah Tucker, Town of Bethel
Tom Marcotte, DOT
Brett Horr, Town of York
Greg Miller, Maine Forest Service
John Root, City of Rockland
Larry Harwood, MEGIS
Brian Norris, James Sewall Co.
Ken Murchison, NMDC
Sean Gambrel, City of Bangor

COMMITTEES

Finance Committee

Gretchen Heldmann, Chair
Mike Smith
Larry Harwood

Policy Committee

Marilyn Lutz, Chair
Nancy Armentrout
Greg Copeland
Bill Hanson

Technical Committee

Christopher Kroot, Chair
Gretchen Heldmann
Ken Murchison
Greg Copeland
Dan Coker
Mike Smith

Attachment B

Maine GeoNews Mailing List Guidelines

The following topics are covered in this message:

1. What is the Maine GeoNews List ?
2. How do I subscribe to Maine GeoNews List?
3. How do I post a message to Maine GeoNews List?
4. What types of messages can I post?
5. How are messages stored?
6. How do I reply to posted messages?
7. How do I change my email address?
8. How do I unsubscribe from Maine GeoNews List?
9. Questions?

1. What is the Maine GeoNews List?

The Maine GeoNews List is Maine GeoLibrary's newest active communication tool. It is an unmoderated mailing list that allows members to send email messages to the entire group of subscribers using this single address GEOLIBRARY-L@LISTS.MAINE.EDU. Messages can be read by anyone on the list

2. What is the purpose of the Maine GeoNews List?

The purpose of the Maine GeoNews List is to provide the Maine GIS community with an easy way to exchange information on GIS related events, issues, and training opportunities around the state as well as around the world. It has also been established to provide an easy means to lower the barriers for the use of GIS by allowing GIS users to ask questions when they need assistance and to obtain answers from others that have already addressed those issues and are willing to share what they have learned.

3. How do I subscribe to Maine GeoNews Mailing List?

To subscribe to the Maine GeoNews List, please send a message to: GEOLIBRARY-L-Subscribe-Request@LISTS.MAINE.EDU. The subject line and body of such a message are ignored and may be blank. On receiving your subscription request, a confirmation request will be sent to you. Click on the link provided in the message to confirm your subscription, and you are subscribed.

You can also subscribe at the GeoNews List web:

<http://lists.maine.edu/archives/geolibrary-l.html>

4. How do I post a message to the Maine GeoNews List?

To post a message to the Maine GeoNews List, you must subscribe to the list. The email posting address is: GEOLIBRARY-L@LISTS.MAINE.EDU.

You can also post an email at the GeoNews List web:

<http://lists.maine.edu/archives/geolibrary-l.html>

5. What types of messages can be posted?

Feel free to post any message on GIS and mapping related topics, including upcoming events, reviews, commentaries, notice of newly available datasets, etc. No personal or off-topic messages should be sent. The list should not be used for commercial purposes such as advertising a particular software product or a company's services. However, GIS related training whether done by commercial vendors or by educational institutions are encouraged.

The list may be used to post ads for the sale or trade of used GIS related equipment such as computers or plotters. The list may also be used to post related internship or job opportunities in Maine.

The list shall not be used as a technical help source because there are already designated lists for this purpose such as MAPINFO-L, ESRI-L and so forth.

GeoLibrary Board meeting minutes will be posted. Articles of interest to the GIS Community are encouraged as well.

6. How do I reply to posted messages?

If you believe your reply is of interest to the entire group, feel free to respond directly to the list email address. Otherwise, reply just to the original sender. Refer to your email program's "Reply" and "Reply To" functions to determine the best way to send your reply.

Please remember, however, that when you reply to the list, the reply will be sent to a large number of people! If the reply is intended only for a specific individual, please delete the list address in the To: field and type in the individual's address before sending.

7. How do I change my email address?

Please send any email address changes to the list owner at: GEOLIBRARY-L-request@LISTS.MAINE.EDU, including your name, old email address and new email address. Please title your e-mail, "Change E-Mail Address."

8. How do I unsubscribe?

To unsubscribe to the list, please send an email sign off message to: GEOLIBRARY-L-Unsubscribe-Request@LISTS.MAINE.EDU. Please title your e-mail, "Remove E-Mail Address." You will be removed from the list shortly thereafter.

You can also unsubscribe from the list at the GeoNews List web:
<http://lists.maine.edu/archives/geolibrary-l.html>

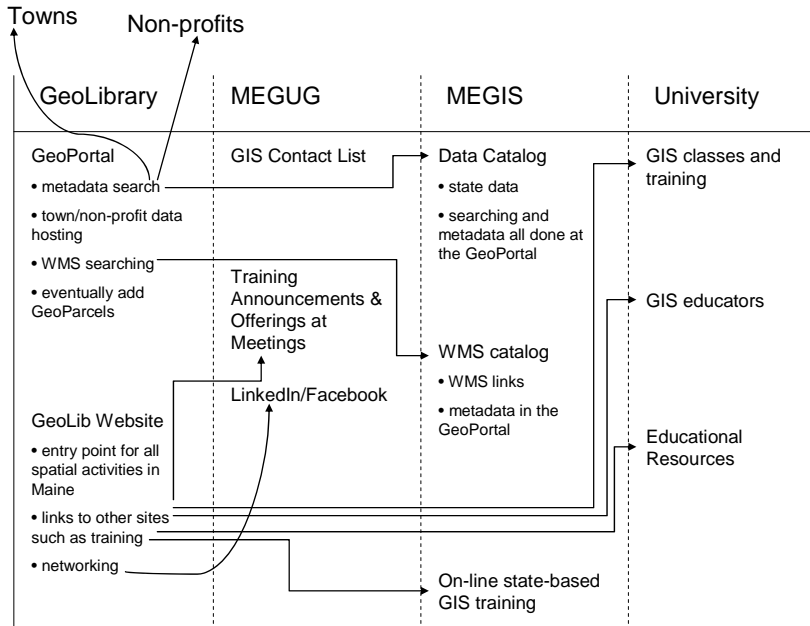
9. Questions?

Please contact the list owner at GEOLIBRARY-L-request@LISTS.MAINE.EDU for more information.

Rev. February 2010

Attachment C

The issue: There are a few predominant websites to go to for information about geographic resources in Maine. There appears to be some duplication of information across the websites – is there a way to consolidate this information? Further, should folks really have to visit multiple sites to find information – or, how do new folks to the GIS scene know where to go?



The proposed solution 04/2010: This diagram shows how the GeoLibrary can be a true catalog of all geographic information in Maine, by coordinating with the other websites and groups out there. It would be virtually impossible to try to consolidate information, as there would be no way for the GeoLibrary to require or enforce that sites do certain things or post certain material. This allows for cooperation and coordination of web material available at different sites. Although there appears to be duplication of efforts, such as in training, the groups that offer training have different goals and audiences. For example: MEGUG offers training to its members whether they be GIS professionals or small town officials just trying out GIS, MEGIS offers a web-based GIS training aimed primarily at state agency employees though a public end will be available, and UMS is geared towards higher education for traditional and non-traditional students. The GeoLibrary can effectively coordinate all of those offerings by linking to each website from the GeoLibrary website. It is up to the GeoLibrary Board to brand and market itself as the one-stop place for all geographic information in Maine – the one place to go as a catalog of information, to then link out to other sites from there. It would also be an enormous task for the GeoLibrary to offer its own trainings, as the Board has no funding nor staff to be able to offer such a thing. The Board does have the capability of managing its website and ensuring that all offerings are available and the links are active. This also requires cooperation from each group (MEGUG, MEGIS, UMS, more as they arise) in that each group should work with the GeoLibrary to ensure the links remain valid and working and to provide new links as necessary.

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