GIS MEETING MINUTES

INFORMATION							
DATE:	12/19/2019	**START TIME:**	2:00PM	**END TIME:**	3:30PM	**LOCATION:**	DoIT, 27 Hazen Drive, Room 148
SUBJECT/ PROJECT:	GIS Committee Meeting						
PURPOSE:	Scheduled Meeting						
FACILITATOR:	Denis Goulet, CIO						
COMMITTEE MEMBERS:	Committee Members 1. Adjutant General – alternate, Captain John Petro 2. Agriculture, Food & Markets – Dave Rousseau 3. DOE – alternate, Amy Clark 4. Office of Strategic Initiatives – Kenneth Gallager 5. DES - alternate Ham McLean 6. Fish & Game – Katie Callahan 7. DoIT – Commissioner Denis Goulet 8. Dept. of Natural and Cultural Resources – Jonathan Horton 9. DOT – Commissioner Victoria Sheehan, alternate Glenn Davison 10. The director of UNH's geographically referenced analysis and information transfer (GRANIT) system, or designee – Fay Rubin, David Justice and Mary Martin 11. A municipal GIS manager, appointed by the NH Municipal Association – Fash Farashahi, sitting in for Sarah Siskavich 12. A representative from the NH Association of Regional Planning Commissions – Jay Minkarah, Executive Director 13. DOC – Linda Socha 14. Dept. of Natural and Cultural Resources – Tanya Krajcik 15. DHHS – David Wieters 16. DRA – James Gerry, Director of Municipal & Property Division 17. DOS – Richard C. Bailey, Jr., Assistant Commissioner						
ABSENT:							

ITEM #	MINUTES
I.	Welcome – DoIT Commissioner Denis Goulet, committee chair New member was introduced: Director James Gerry, Representing the Department of Revenue Administration.

DRAFT

II.	Motion to accept minutes from 6/26/19 meeting. Motion made to approve the minutes, motion seconded and minutes approved. No abstentions. Motion passed.
III.	Charter and membership of the Advisory Committee – Ken Gallager Ken has been designated Chairman of the GIS Technical Users Group. Reviewed Draft GIS Advisory Committee Charter with Committee. Motion was made to accept charter as written. Motion seconded and approved. Cindy will prepare final document for Commissioner Goulet's approval.

State of New Hampshire

GIS Advisory Committee Charter

Draft: 10/24/2019

Authority

The NH GIS Advisory Committee derives authority from the NH Geographic Information System Committee established under RSA 4-F (2016).

Purpose

To serve as the liaison between the legislatively created standing NH Geographic Information System Committee, identified herein as the NH GIS Steering Committee, and the larger GIS user group, identified herein as the NH GIS Technical User Group, in order to facilitate GIS collaboration among state, regional, and local organizations as well as the broader GIS community, identified herein as the NH GIS Community, and to coordinate GIS projects as may be directed or requested by the NH GIS Steering Committee.

Responsibilities

In accordance with the strategies identified in the NH GIS Action Plan as adopted by the NH GIS Steering Committee:

1. Provide recommendations to the NH GIS Steering Committee for the development, use, and coordination of geospatial data and resources by the GIS Community.
2. Provide recommendations to the NH GIS Steering Committee for the development and management of statewide clearinghouse to support centralized storage, access, and sharing of GIS data and resources.
3. Advise the NH GIS Steering Committee on geospatial needs of public and semi-public agencies; identify avenues where legislation may further efficiencies through enhanced cooperation.
4. Research, facilitate and execute projects and tasks as requested by the NH GIS Steering Committee subject to resource availability.

Deliverables

1. Input to the NH GIS Steering Committee's annual report of development and coordination of geospatial data & resources by the NH GIS Community.
2. Recommendations for updates to and prioritization of the NH GIS Steering Committee's NH GIS Strategies.
3. Coordinated review of federal grant opportunities that support significant data or technology procurement.

Meetings

The NH GIS Advisory Committee will meet at least quarterly and in advance of scheduled NH GIS Steering Committee meetings. A simple majority of named members will constitute a quorum. The Committee shall take action by vote of a simple majority of members present and constituting a quorum. For motions on official Committee recommendations to carry, a simple majority of named members must vote in the affirmative.

NH GIS Advisory Committee Chairperson

The Chairperson, Vice Chairperson, and Secretary will be nominated by the NH GIS Advisory Committee each year. The responsibilities of the Chairperson include, but are not limited to:

1. Facilitate the development of deliverables, subject to available resources.
2. Keep the NH GIS Community informed of important decisions, needs and directions.
3. Coordinate agenda items, times, and locations for Committee meetings.

In the event that the Chairperson is not available for an extended period of time, the responsibilities become those of the Vice Chairperson.

Standing Members

The Advisory Committee will consist of 9 regular members[1], as follows:

- University of New Hampshire/GRANIT
- NH Office of Strategic Initiatives (OSI)
- NH Department of Transportation (NHDOT)
- NH Department of Environmental Services (NHDES)
- NH Department of Safety (NHDOS)
- NH Fish & Game (NHF&G)
- NH Regional Planning Commission Representative (RPC)
- 2 seats reserved for members at large

[1]Members as of December 2019: Fay Rubin (GRANIT Director, University of New Hampshire), Ken Gallager (Principal Planner, OSI), Glenn Davison (Data and Systems Manager, NHDOT), Hamilton McLean (Project Manager and Innovation Administrator, NHDES), Sean Goodwin (GIS Administrator, NHDOS), Catherine Callahan (GIS Specialist, NHF&G), Sara Siskavich (GIS Manager, Nashua RPC), Sheena Connolly (Emergency Preparedness, Eversource), remainder (1) to be named.

Approved:

_____ _____

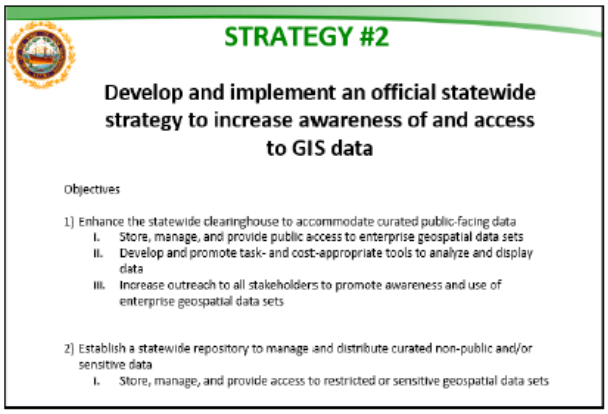
Denis Goulet, Chair, NH GIS Steering Committee Commissioner — Date

IV. GRANIT GIS Clearinghouse Proposal – for approval, Fay Rubin

Fay presented the GRANIT Clearinghouse Project Proposal to the Committee for review and discussions. Fay is retiring in January, at which time GRANIT will be handled by David Justice and Mary Martin.

Motion was made to approve proposal as written. Motion seconded and approved.

GRANIT Clearinghouse Enhancement: NH Geodata Portal
December 19, 2019
Project Proposal



Summary

The goal of the proposed project is to modernize and enhance the GRANIT public GIS clearinghouse as defined by Strategy #2 of the NH GIS Steering Committee. This will accomplish the following objectives:

- Easily discoverable data, applications, dashboards, and resources
- Expanded and convenient tools to access data and resources – from any device, from anywhere, at any time
- Expanded data holdings from state agencies, regional planning commissions, and other partners
- Improved documentation of data sets
- Enhanced, curated notifications to users of data, project, and resource updates

Background

The New Hampshire Geographically Referenced Analysis and Information Transfer System (NH GRANIT, http://www.granit.unh.edu) has served as the state's de facto public-facing GIS clearinghouse since the mid 1980's. A collaborative effort between the University of New Hampshire and the NH Office of Strategic Initiatives (OSI), the GRANIT System is housed at the Institute for the Study of Earth, Oceans, and Space in Durham. Its core function is to serve as a centralized data repository – creating, maintaining, storing, and sharing a statewide geospatial data base serving the information needs of state, regional, and local decision-makers, non-profit organizations, the private sector, the educational community, and the general public. GRANIT's role as the state's public GIS repository promotes efficient geospatial data discovery by state agencies and other users, ensures that users are aware of and utilize the most current and comprehensive version of each authoritative data set, and eliminates inefficient and redundant data storage, all of which help to ensure that decision-makers have rapid access to current, comprehensive, and accurate geospatial data.

More specifically, the suite of geospatial services GRANIT delivers includes:

- data development – current projects include development of digital contour data, impervious surface data, and conservation lands data.
- data hosting and distribution – examples include road centerline and associated transportation data for NHDOT, environmental data and metadata for NHDES, wildlife data for NH Fish and Game, and recreation data for NH OSI.

- data synthesis – current efforts include mapping to support investment in broadband access and working with coastal communities to understand areas vulnerable to flooding and other hazards.
- online data services – frequently-requested data sets are available for state agency and public viewing and querying through GRANITView (http://granitview.unh.edu) and the NH Coastal Viewer (http://nhcoastalviewer.unh.edu). In addition, GRANIT hosts a number of online image viewing services that make large data catalogs available to users at no cost. Current quarterly usage statistics indicate that these services are accessed in excess of 8,000 times/day. Finally, GRANIT participates in an international catalog of hosted geospatial data sets via our registration of data with ArcGIS Online, thereby providing another mechanism for making data publically available.
- training and technical support – GRANIT staff deliver, participate in, and/or sponsor training opportunities as requested.

In addition, GRANIT staff are active in a broad range of coordination activities in the state, including participation in state coordination committees (NH GIS Steering Committee, NH GIS Advisory Committee, and NH GIS Technical User Group) and serving on various project advisory committees. Staff also assist in regular data procurement initiatives, most recently assisting in the acquisition of statewide aerial photography and statewide LIDAR topographic imagery.

While the GRANIT website and data distribution system successfully delivers data and services to a broad constituency of users, it was developed a number of years ago and does not take advantage of newer technologies that enhance data discovery and access, and offer a range of associated benefits to its constituents. Thus, in accordance with Strategy #2 of the NH GIS Steering Committee, this proposal seeks funding resources to modernize the GRANIT clearinghouse and construct the NH Geodata Portal to meet the needs of the current and growing constituency of geospatial data users in New Hampshire.

Proposed Project

The goal of the proposed 2-year project is to modernize and enhance the GRANIT GIS clearinghouse through the implementation of esri's ArcGIS Hub technology and the development and population of the NH Geodata Portal. ArcGIS Hub is a cloud-based environment that fosters the discovery and sharing of geospatial assets to the GIS community, including data, web applications, initiatives, and events. Specifically, ArcGIS Hub will be used to deploy a new GRANIT web site which will describe GRANIT's resources as well as those of its partner agencies, list current events, promote data standards, and, most importantly, provide a convenient and comprehensive mechanism for users to discover and access spatial data and resources across agencies and organizations in NH (see Figure 1).

Figure 1. Proposed New Hampshire Geodata Portal providing access to data, applications, and other geospatial assets in the state.

GIS data discovery will be enhanced by implementing the integrated Open Data feature of ArcGIS Hub. This feature allows the site manager to organize and present data, applications, and other content in an easily understandable, structured format that is readable across any platform. Users can then search for data by theme keyword, by data originator, and/or by geography (see Figures 2). Once identified, data sets may be previewed in an interactive mapping environment, and then accessed and/or downloaded in a number of common formats (see Figure 3). A significant benefit of the Open Data environment, and one that we propose to implement, is that frameworks can be established to allow for trusted users in the state to contribute their holdings to the Hub and thereby expose their data to a wide audience of potential users.

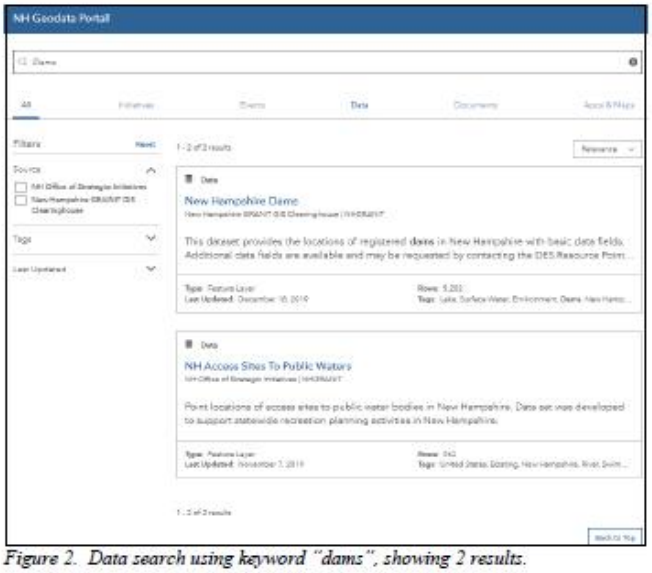


Figure 2. Data search using keyword "dams", showing 2 results.

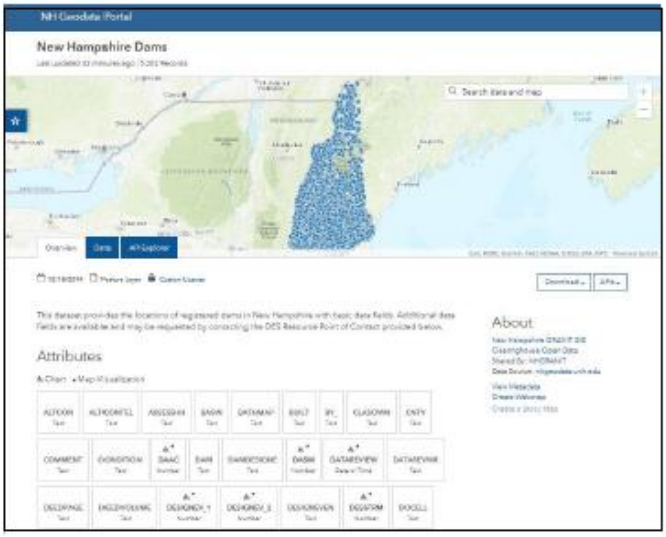


Figure 3. Screen display after clicking on "New Hampshire Dams" in search results box above, showing the data in the top window, the attributes below, and the various access/visualization options.

In addition, the Hub technology can serve as a site for collaborations among communities of users, provide quick links to targeted web apps and/or data sets, serve as a means to inform the general public about progress on a particular project or task, and deliver feedback to and from a trusted community of users who choose to follow or participate in an initiative. For example, an ArcGIS Hub initiative could be launched to allow the GIS community as well as the general public to monitor the progress of the upcoming 2020 statewide aerial photo acquisition project in NH. In a second example, the NH Stonewall Mapper is a collaborative effort between NH GRANIT, NHDES, and a network of volunteers with the goal of mapping stonewalls throughout the state. An ArcGIS Online web app is currently used by the public to map the stonewalls using LiDAR-based hillshades as the primary data source. One of the challenges of the present effort is a convenient means to verify and curate the data. An ArcGIS Hub initiative offers a mechanism to provide controlled access to the data for review and verification by users who are chosen to curate the data. Through the use of dashboards, web pages, and story maps, the initiative would be a convenient way to promote the effort and provide followers with constant updates. We expect that the Hub will provide a platform that promotes the use of authoritative GIS data and generates dynamic interaction among GIS users throughout the state. To foster this collaborative environment, we propose working with the major state agency GIS users to identify, document and promote their data holdings that are likely of broad interest to the GIS community. We also intend to approach smaller state agencies to assist them in exposing their valuable data assets through the new site.

This proposed effort will include promoting geospatial resources developed by the nine regional planning commissions (RPCs) to demonstrate the multi-jurisdictional nature of the Hub. This component will reinforce the value of a modern portal to promote the sharing, distribution, and responsible use of resources that exist from the State's investment in GIS, as well as extend the breadth of content beyond state agency-originated resources. The New Hampshire RPCs have a long history of GIS practice dating back to the 1980s, and geospatial data, maps, and spatial analysis are now ubiquitous in NH regional planning. RPC work products frequently use NH state imagery, its derivatives, and other NH state agency data and are therefore particularly advantageous to highlight within the NH Geodata Portal.

The specific activities we propose undertaking are presented below. All activities will be reviewed and prioritized with the NH GIS Advisory Committee at regular meetings (likely quarterly) convened by the Advisory Committee chairperson. GRANIT staff will deliver an update on the status of the project at each meeting and will look to the Committee to provide important strategic direction and assistance throughout the proposed 2-year effort.

Work Plan

Developing and populating the NH Geodata Portal public-facing site will be accomplished primarily by staff affiliated with NH GRANIT at UNH. GRANIT will work in close coordination with state agency partners (current and new) as well as regional planning commission staff to identify and prepare data sets appropriate for inclusion in the public portal. Specific GRANIT activities over the proposed 2-year project include:

a) Update content of GRANIT website and migrate to NH Geodata Portal environment
   - Develop look/feel, implement style(s)
   - Review/update content of current web pages, migrate to new environment and maintain
   - Add new elements to NH Geodata portal – current agency initiatives, agency apps
   - Populate OpenData database with current holdings – estimated 160 layers – and maintain
     - Review/update metadata
     - Convert metadata to ESRI format as required
     - Create map document for each layer, stylize, publish service
   - Implement and maintain geodetic control database lookup functionality
   - Develop and maintain customized tools to facilitate access to data
     - Image subsetting tool
   - Establish data sharing framework and guidelines for participating organizations in coordination with the Advisory Committee
   - Create mechanism/interface for streamlining submission of data

b) Coordinate with GIS Advisory Committee
   - Participate in regular (quarterly) meetings
   - Prepare status materials for Advisory Committee and Steering Committee

c) Conduct outreach and coordination with state agencies
   - Update/promote metadata standards
   - Work with partners to prioritize and document existing data using standard templates
   - Work with partners to expose/share data based on guidelines
   - Identify new agencies/organizations with data holdings of broad interest; explore data sets and identify those suitable for sharing
   - Work with new agencies/organizations to document and share data
   - Work with partners to promote "initiatives" that are underway, including establishing new site(s) with user-contributed data

d) Integrate the NH Geodata portal with regional GIS resources *
   - Inventory existing maps, apps, and other regional authoritative ArcGIS Online content using ESRI Hub
   - Organize content using standardized tags and other NH Geodata portal best practices
   - Highlight the use of NH Geoportal resources by supporting the development of new ArcGIS online resources by regional stakeholders

*This work will be accomplished via a single subcontract between UNH/GRANIT and Nashua RPC, with Nashua RPC executing and coordinating sub-agreements with their 8 RPC counterparts in New Hampshire.

Budget (draft)

The proposed budget for the 2-year effort is provided below.

	Year 1	Year 2	Total
Personnel	$99,301	$65,923	$165,224
Fringe/FICA	$44,034	$29,665	$73,699
Travel - 4x/month to Concord	$1,949	$1,949	$3,898
Computer Use	$2,000	$2,000	$4,000
Supplies (software licenses)	$1,500	$1,500	$3,000
Subcontract - Nashua RPC	$40,000	$18,000	$58,000
Total Direct	$188,785	$119,036	$307,821
Facilities & Administrative Charges	$61,172	$35,564	$96,736
Total	$249,956	$154,601	$404,557

The proposed budget includes 62 weeks of staff time in year 1 (project director for 10 weeks, 2 GIS analysts for 26 weeks each), and 40 weeks of staff time in year 2 (project director for 8 weeks, 2 GIS analysts for 16 weeks each). Additional components of the budget include weekly travel to Concord, a modest allocation for computer use, support for annual software licensing costs (Geocortex), and the subcontract with the Nashua Regional Planning Commission.

V.	Update on the DOT/DES Agency Map Viewer pilot project, Glenn Davison Glenn discussed the status of the Joint Agency Map Viewer Project. He feels the project is behind schedule due to DOT's other commitments through the project period. Now that DOT's 10-year plan is complete, we will focus more effort.
VI.	Follow-up on aerial imagery, Glenn Davison Glenn reported that there is enough funding to move forward with the 2020 high res orthophotography collection. This will commence in spring given agreeable conditions. There is about a 3 week window of opportunity between snow-melt and leaf-out.
VII.	2020 GIS Goals for Steering Committee and for Advisory Committee – All • GIS Goals for 2020/2021 – Continue and deliver on existing projects - Deliver on GIS Clearinghouse in partnership with GRANIT - Budget planning for 2020-2023 - Develop a more sustainable model for GRANIT funding * Study feasibility of GRANIT contract rationalization - Manage the delivery of updated imagery
VII.	Motion to Adjourn

ACTION ITEM(S)

ITEM #	DESCRIPTION	ASSIGNED TO	DUE DATE

Next meeting: TBD

DRAFT