

NYS Geospatial Advisory Council

June 13, 2017 Meeting

10B Airline Drive, Albany, NY, Pride of NY Room

Mission: Advise the State on effective use of geospatial technology resulting in tangible benefits to NYS.



Attendance

In person:

Linda Rockwood, Alex Chaucer, Eric Herman, David Jorgensen, Sheri Norton
Todd Nelson, Douglas Freehafer, Mike Rossum, Matt Owen, Tim Morrissey, Jeff Herter, Frank Winters

Via Phone:

Ross Baldwin, Mickey Dietrich

Invited Guests

Todd Harbour (Chief Data Officer for NYS), Jason Baum (ShareGIS Project Manager, GPO), Tim Ruhren (Manager of ITS Services, GPO), Steve Schoenhaus (ShareGIS, GPO), Elizabeth Nolan (ShareGIS Team Technical Lead, GPO), Toni Slyer (ShareGIS, GPO), Scott Geis (ShareGIS Integration Specialist, GPO)

10:40am Welcome/Agenda Review/Approval of Minutes (Alex Chaucer)

- Corrections
 - o Eric Herman's name misspelled on last page
 - o At the 11:05am mark in the meeting minutes "Map" and "Analytics" are capitalized making it appear that "Map Analytics" is a product. Clarified that it is not a product, so capitalization will be removed.
 - o Motion to approve the minutes was passed unanimously

10:51am Chair Update (Alex Chaucer)

- NY GeoCon 2017 will be October 17 – 19 in Lake Placid
- Filling of Council Vacancies:
 - o Seats vacated this past spring will be brought to the next nominating committee in September.
 - o Alex Chaucer will be on the committee because there is an academic position up and he is the only other academic representative.
 - o Dick Johnston has stepped down.
 - o Michael Naughton has stepped down.
 - o Ann Deakin stepped down as a representative for education.
 - o Colin Reiley has stepped down and was replaced by Tim Morrissey
 - o Recommendations will be solicited from the NYS GIS Association (Association).

Discussion:

The Association has their election in September and is also involved in their conference planning at that time. Concern voiced that it may be difficult to accommodate their schedule and solicit input for GAC nominations.

- Discussion to move GAC nomination schedule to a fiscal calendar and align process a quarter off from the Association
 - Mickey Deitrich – after Association conference may be good because this is where networking takes places and candidate names may be fresh in people’s minds, Association nominations will also have been proposed by then.
 - Suggested - Push back GAC October 15 nomination deadline to November
 - Determined that pushing back the deadline to November may make things more difficult for the GAC nominating committee.
 - Proposed and accepted that the date should be left as October 15 and flexibility for nominations should be allowed.
- Charge to the GAC – all those going to the conference make an effort to network and think of nominees.

DISCUSSION: Jeff Herter - concern about the election process and vacancies

- When “terms” were established at 3 years there was an intent to split things up into 3 rotating election cycles, this was to reduce large turnover at any one time.

QUESTION: Are the vacancies starting over a new term?

ANSWER (Eric Herman): No, they are completing the term created by the vacancy.

- With this the case there is the chance for a large turnover potential because new members will have shortened terms. E.X., Anne has one year left so her replacement will have their first term = 1 year.

QUESTION: Is the intent to have new members taking over a shortened term created by vacancy able to follow that up with 2 full terms of their own?

ANSWER (Eric Herman): Yes, this is the intent. New members will finish out the term created by the vacancy and receive 2 full terms of their own.

- For the 4 terms expiring in 2017 (Matt Owen, Jeff Herter, Todd Nelson, and David Jorgensen) three of the four are eligible for re-nomination.
- Those interested in being on the nominating committee should think about ways to shape the body and incorporate things like geographic diversity, sectors, etc.
- Additional groups to reach out to for nominations:
 - GIS SIG
 - Long Island GIS – Ross is president of this

- Nominations will mostly will revolve around Association nominations because they have a list serve as well as modes of engaging people from all over the state.

11:18am Federal Budget Update (Doug Freehafer)

- Proposed 2018 federal budget is not very pleasant for non-defense federal agencies.
- Bad News (there is some doubt that these numbers will stick):
 - USGS 15% reduction.
 - National Hydrography Dataset Program 19% reduction.
 - National Resource Conservation Service 23% reduction.
 - EPA 29% reduction – big concern is EPA funds Chesapeake Bay Foundation and Great Lakes restoration programs.
- Good News:
 - NHD plus high res
 - Now available for 25% of the U.S.
 - Older NHD plus was at 100k, NHD plus high res is at 24K.
 - National hydrography dataset merged with elevation dataset and another dataset so now considered 3d elevation program data.
 - For NY its is available for Hudson, Delaware, Susquehanna and Housatonic.
 - Currently in beta testing but wanted to get it out there for QC, and want it to be easy for users to report problems.
 - There are added attributes for stream navigation, stream catchments that are quite small, precipitation, runoff, temp, flow direction grids, and flow accumulation.
 - DEMs have been hydro enforced, meaning stream network has been cleaned up so that the water will flow through culverts that exist.
 - National geographic providing a service so you can print U.S. topos. Basically added a hillshade to older topo maps.
 - Not sure why older maps are being used (possibly because they had a mapping product already and it was easy). Not known if they have plans to switch to newer topos.
 - Natural Resource Conservation Service is funding a regional conservation project (proposed \$1.2 million) to do estuary planning in the Peconic Estuary in Long Island.
 - Possibly about controlling non point source pollution from agricultural practices.
 - State partner unknown at this time.
 - Suffolk County Economic Development and Planning is the main project partner.
 - Fish and Wildlife Project - Eastern Long Island

- Collecting 1m low bad imagery.
 - Also happening along the CT border.
- University of RI Project
 - Impetus is for mapping SAV.
 - Several studies over the years looking at habitat trends, juvenile marine life and sediment control.
- National Landslide Preparedness Act introduced in March 2017
 - Would create the National Landslide Hazard Reduction Program.
 - Bipartisan legislation.
 - Likely introduced by republicans from the west due to landslides being experienced out there.
 - Would be run by USGS – directs USGS to implement a 3d elevation program (which has already been in place for 2 years).
 - Use of LIDAR data has been able to really improve ability to predict where landslides will happen.
- USGS is working with the GPO (Tim Ruhren and Jeff Langella) to get two LIDAR collections from 2014 and 2015, which are quality level 2, and wants to get them into the 3d elevation program

11:30am Jeff Herter Update

- USGS was on a call about Lake Ontario levels so DOS is looking into this. Jeff's group has been doing reports almost daily.
- Overview – Due to extreme weather conditions, rainfall events and some measures taken over the winter to control ice for shipping, we are at record high water levels on Lake Ontario.
- An inundation on Lake Ontario is different than an inundation from Sandy; with Sandy the inundation is gone in several days, however Lake Ontario levels stay up for weeks to months.
- Significant impact with long term balancing and planning.
- Those controlling the release of the dam water have to consider the effect of people in Montréal and Québec.
- Thousands of people have been displaced by this event.
- Shipping Concerns: Loss of industry efficiency is millions of dollars; Release of water can make it dangerous for ships to navigate waterways.

11:37am Presentation on CUI (Todd Harbour)

- CUI = Controlled Unclassified Information.
- Program goes back to 911 after which Pres Bush called for a survey of U.S. data holdings. Findings:
 - A lot of US data not protected, or inconsistent controls among different agencies.
 - New security reform needed.
 - CUI – is the largest info reform program in the last 65 years.
- Program goals:

- ID all the data that needs to be controlled.
 - Over 2,200 separate survey responses received.
 - Survey results were combined with legal research to determine what is required by law (way of normalizing the data).
 - There were 188 categories and sub categories of data identified.
- Implement a new federal regulation.
- Way for government employees to work explicitly with their data using markings, syntax and other labels to make data shareable and to protect it.
- Two types of CUI data: Basic vs. specified
 - “Basic” means there is a fed law that says a certain type of data needs to be protected but up to the recipient on how to protect.
 - “Specified” has rules for protection spelled out by congress.
 - Limitations on applicability.
- Timeline: as early as this summer (August) the federal government is going to start unloading a payload of new syntax/identifying marks on all U.S. data.
- Impact
 - This is affecting foreign governments, local state tribal businesses and academia.
 - There are tags for “no contractor” and “no foreigner” that exist.
 - Controlled environments to ensure compliance will be required.
 - FAR = legal document used by feds. to purchase everything. FAR is being modified to say “anyone in receipt of federal dollars” (even if you outsource and hire someone) is responsible for adhering to the CUI standard. Feds. will claim any data (so state or academic data) developed with federal funds is federal data and will need to meet the requirements for protecting data.
 - New destruction procedures; cross cutting shredders encouraged.
 - Legislatively mandated data is what is being targeted right now, no other datasets.
- Benefits of program
 - Input for security.
 - Standardized safe guard techniques at both the physical and data generation level.
 - Reinforces existing law and statute.
 - Archives.gov/cui - This is the CUI registry.
 - Clear machine and human readable distribution communication
 - This should not impede data sharing especially when data is intended to be made public
- **Discussion Questions:**
 - 1) How will this increase data sharing?
 - The CUI data will be put in improved safe keeping and storage environments
 - We need to understand FOIL implications

- For data sharing to be effective there first needs to be a catalog of the data that we have and understanding what people are doing with that data.
- Todd discussed the idea of data hubs where we can request and track data

2) Does Todd foresee all data in NYS being tagged?

- Todd would like to see everything get cataloged.
- Does not think a separate NYS system of tagging it would be inefficient to maintain two separate schemes, so adherence to the federal model is best option.
- To tag everything NYS will need a web service registry.
- Suggests a classification for employees.
- Tags for data, if catalogued could be search for data discovery.
- Will also open the door for more analytics – we don't know what data we have.
- Some datasets may have tags applied to columns of data – so can this happen with existing datasets or will there be new standards?
 - Won't happen overnight.
 - Metadata will be key.
 - And there will be some method of integrating the old with the new.

3) Will there be tracking of who uses the data?

- For some groups yes its required, others no.

4) How do you tag data visualizations?

- Many questions still unanswered in this area. Possibly with attributes in an image. Blurred data? Popups? TBD.

5) How would a portal that connects to the Federal Marine Cadastre or something from BOEM work? Does the originating portal have the onus on them to do the tagging or, as a pass through, does a State portal become obligated to create tags or pass markings along with the data?

- There are no technical requirements yet for GIS. Todd is happy to take all GAC questions and report back in the future.
- It is possible that through a grant proposal NYS be the first to tackle these topics and could develop the criteria for the GIS aspect of CUI.
- Todd will connect the group with an NGA rep. to see what they are doing on the GIS front

- Invitation from Todd – there will be a 2-day data summit in early September. Todd is attempting to get a stakeholder list for input and is curious who should be involved. So feel free to contact Todd with suggestions.
- Frank would like to see CUI introduced to the GIS Strategic Plan.

Adjourned for lunch and meet up again at 1:45pm

1:50pm NYS GIS Overview (Eric Herman)

- During the September planning session there was a thought that there are a number of new people to the group and going over the rules would be helpful.
- Main tangible benefits of the GAC are in the advisement of NYS, and in the goal of enhancing GIS in NYS across all industry sectors.
- By design the GAC is made up of various sectors, 25% NYS gov't, 75% does not work for NYS = academia, non profit, other business, feds, etc.
- GAC is the mechanism by which the GIS community can provide feedback into NYS programs.
- Full membership = 21
- Several vacancies (5).
- Two terms served, then a gap year needed and can serve more years but not to exceed 6 years total.
- There are 5 ex officio positions.
- Operates under the auspices of the NYS Office of ITS; operates with the support and approval of ITS, ITS asked for this group to come together to get feedback on GIS.
- Group provides info to the GIO and the GPO.
- GAC works on:
 - o GIS Clearinghouse/gis.ny.gov
 - o Ensures ortho and elevation imagery aligns with local needs.
 - o Aggregation of county parcels state wide.
- Current Council topics:
 - o Need to update the website to Kate's new graphic.
 - o Evolution of the cooperative open data world.
 - o Encouraging open sharing of parcel data.
 - o ShareGIS – assuring infrastructure to provide GIS web services to local communities and businesses.
 - Reduction of redundant sources.
 - Leveraging high level attention.
 - Data sharing.
 - Frank added onto this with what the GIO and GPO does
 - GIS Team – Frank to provide GAC a list of who is on this team (FOLLOW UP ITEM)
 - State Agency GIS professionals (5 years ago this fall) were consolidated from individual agencies into ITS. So now each of the state agencies are clustered by ITS.
 - The GIS Team represents the people at the ITS cluster level who are responsible for GIS activities for the agencies in that cluster.
- Discussion and notes:
 - o GAC members would like to get Eric's presentation on the schedule for the upcoming Lake Placid meeting.

- Presentation doesn't mention GAC mechanism for getting things done, which is working groups. GIS Association is an offshoot of working groups. Update presentation with this in mind.
- Eric's presentation is also needed on the GIS Clearinghouse.
- Diagram doesn't show arrow from NYS Government and the NYS GIS Association. Idea is that the GAC is the conduit for information to pass from one to the other.
- Take away:
 - Alex should present this at the upcoming conference
 - Add more to graphics
 - Frank will give an overview of the GIS Team – who members are, groups and clusters they are in, and a graphic to accompany the GAC role graphic – Frank will present at September GAC meeting and then things will filter out to present at the Lake Placid conference.

2:15pm Ortho Update (Tim Ruhren)

- LIDAR

- Proposed fed budget cuts will affect the elevation program.
- 2018 is where Tim's group is faced with using state or federal resources to fill the gap (gap = Hamilton County), or to begin replacing some of the original data that was flown.
- Tim would like to hear from regions on what is needed, what is wanted, and where can efforts be made that are cost effective.
- Monroe County flew their own; Monroe County does their own 4-inch photo spectrometry on the same cycle as the state.
 - Monroe will generate some publically available stuff.
 - The count noted the FEMA standard and wanted to go better.
- Timeline Update:
 - FEMA has a plan to do part of Onondaga county and update Cayuga county.
 - Niagara county is not the best data even though it is from 2008 so idea is to replace it.
 - More data collection and modeling will occur.
 - Hamilton county has never been done, so the question becomes do we fill holes where things have never been flown?

- IMAGERY

- Many wondering if better than 6 inch pixels is available – i.e. 3 inch; TBD.

- Update on Hydrography for Great Lakes – Boots on the ground

- Stood up an ArcGIS online to feed the data collector.
- Going door to door to see how people are doing.
- Office of fire prevention and control stood up a group of national guardsmen to go door to door, first week was 1000 residences.
- Disaster apps for fields response – is this the model going forward?
 - Is this being farmed out? TBD
- Information being collected:

- Are you ok?
 - How many people live here?
 - Is this your primary residence?
 - Do you need water pumped out?
- Coordination needed – SeaGrant with Cornell, DEC, Parks, Homeland, and more.

2:30pm Update on New Elevation Web Service (Frank Winters)

- A new elevation service has been published on the ShareGIS environment representing a big win.
- ShareGIS team will watch demand and see how it performs.
- Initial response has been very positive; Eric Herman added “this is exactly what we needed.”
- Provides the benefit of eliminating redundant storage.

2:44pm State Agency Advisory Group Report (Eric Herman)

- Last met on April 25th with 19 people, started off talking about GIS formats.
 - Most using FGDBs stored on local servers, handful using SDE but interesting with the realization that SDEs are going away.
 - Many still talk about shapefiles, which is ancient but still the standard.
 - One agency (health) still using map info format files.
- Bob Gerhart talked about the new civil boundaries web services now on the ShareGIS environment and on clearinghouse.
 - Boundaries do change.
 - Lots of work done.
 - Feature services are available.
- Kate Kiyanitsa talked about Parcel Data
 - 65 attributes came across from local assessor’s offices.
 - Codes being added to show how information is verified.
 - Owner type updates; school info updates.
 - All but 3 counties are now available to state agencies.
 - 18 counties available to the public.
 - Holdouts are Suffolk and Putnam, and very close on Rockland.
 - Legislative districts are also available as a web service.
- Jason Baum provide an update on ShareGIS
 - Phase I complete = consolidation
 - Phase II is focused on building an enterprise class web service environment.
 - AppGeo architectural design has been finalized.
 - Jeff Langella talked about access to DEMs through ShareGIS.
 - GIS workstation recommendations have been discussed with ITS.
 - Presentation on standardization of maps being produced for the executive chamber.

- Chamber requests have been frequent so GPO has standardized an approach for fulfilling requests. This approach is being shared with the GIS team and agencies in other clusters to empower the data owners to be able to fulfill chamber requests.
- Eric Herman presented a computer aided dispatch project that he is working on.
- Kevin Hunt talked about DOT pursuing VDIs.

2:53pm NYS GIS Association Update/Legislative Map Day (Mickey Dietrich)

- Conference planning underway.
 - If there are presentations the GAC thinks would be good, let them know.
 - Need for volunteers for committees.
 - Communications needs someone familiar with Instagram.
 - Professional development committee needs some help to keep things moving.
 - Board adopted that gold and platinum sponsors of the conference will get a webinar time slot after the conference and publicity (30 min and hour webinars available)
- Legislative Map Day
 - Held on May 9th, went well
 - Next year will be May 8th, 2018
 - Good showing, lobbyists, legislators, etc.
- Emerging GIS Project
 - Wrapping this up
 - Working with the village of Croghan
 - Following the progress of the village in the implementation of a GIS program from the ground up
- Questions?
 - Is the GIS Association working on policy related stuff or legislation related to GIS? Anything coming?
 - The Association does have a draft legislative agenda, and once changes added from the board they will adopt the agenda for the Association
 - Some things through the federal level related to HUD restricting data being available, been told it will die in committee. Association will continue to monitor and if it gains momentum they will advise to garner support to prevent.

3:10pm GIO/GPO Report (Frank Winters)

- GIO update
 - Need a backfill for Director of GPO which will also be the Deputy GIO.
 - Marty Goldblatt retired – was the lead over the GIS Programs for the GPO.
 - Lead for ShareGIS has never been filled
 - GPO Secretary retired in September.

- With all the hiring issues, we have been looking for ways to affect state policy at the higher level.
 - Governor's requests have provided value.
 - Governors water quality initiative is the next step – connecting water quality samples and help for people, so GIS technology needs to be the foundation and this represents a long term initiative.
- Frank will provide a draft of the GIS Strategic Plan to the GAC and others, and will include how it dovetails with ITS and the Public Safety Cluster.
- ShareGIS Conceptual Design has concluded.
 - This was an engagement with AppGeo who received input from the GPO on functional and non-functional requirements for an enterprise level shared services offering.
- Questions?
 - Is there anything in Todd's CUI presentation that is concerning to the GIO? – Jeff Herter
ANSWER: No – feeling is we can secure things very well.
 - Do we feel we will be fighting perception vs. reality when the topic of cloud based solutions is introduced – Jeff Herter
ANSWER: Yes, this is likely the case
- GPO Report
 - SAM address points
 - 2nd and 4th Friday of each month the points are updated and so is the NYS Geocoder.
 - City points have been incorporating well into our structure
 - Some counties have provided zip code files to update zip
 - Census program is looking to take a sample of 9 counties for SAM points
 - Question
 - Address points for Westchester and Nassau; what's going on? - Dave Jorgensen
 - GPO will have to get back to group on this.
 - Points are participating in the Geocoder

4:10pm Meeting Adjourns

Action Items:

- Get slides from Todd, Eric, and handout/notes from Douglas.
- Todd will connect GAC with NGA to see what they are doing with GIS and CUI.
- Frank to provide list of GIS Team members to the GAC.

Topics for Next meeting

- Crowd Sourcing (Jeff Herter)
- Update on GIS Team (Frank Winters)

- Training for Local Governments – YouTube videos, blog, how to drop orthos into ArcMap.
- Creation of more working groups.
- Nominating committee needs to be formed at September meeting.