

NYS GIS State Agency Advisory Group
Meeting Agenda
at NYS Thruway Authority, Building 10
May 7, 2019

Welcome/Roundtable Discussion of Basemaps Used by Agencies. The group went around the room, introduced themselves, and noted basemaps that are currently being used in their agencies:

- **Eric Herman – NYSTA:** NYSTA pays for Microsoft's Bing Maps, which is the default basemap used in GIS applications; He noted that older Esri interfaces access older, outdated Bing Map tiles
- **Henry Kovacs – ITS (DOT):** DOT has been using an in-house map (mostly for good route shields) in desktop applications; Most web viewers use Esri basemaps
- **Jerry Brotzge – U Albany:** Manager of NYS Mesonet; Basemap topic not applicable
- **Mark Giddings – DOH:** Division of Nutrition defaults to Esri's basemap (nothing public)
- **Scott Geis – ITS (GPO):** Researching basemaps, and has used huge variety
- **Mary Susan Knauss – DOT:** Focus on data collection, using toolbar with cached DOT basemap; For support for AVL, would have liked access to DOT map outside firewall
- **Rebecca Newell – DOS:** Office of Planning & Development uses standard Esri basemaps; The Gateway also uses Esri basemaps
- **Peter Lauridsen – DOT:** Although Planning & Development uses Esri's basemaps, basemaps often slow performance, and Peter often doesn't use one
- **Ray Faught – ITS (GPO):** Doesn't tend to use basemaps, but uses orthoimagery services extensively
- **Doug Heim – OTDA:** Use Esri, when they use basemaps; Have developed a library of shapefiles for various districts with labels, etc. that are often used instead
- **Katherine Barnes – DEC:** Recreational areas use NYS Streets vector network, symbolized to meet needs
- **Michele Golden – DEC:** Division of Water- tends to just use orthoimagery
- **Matt Kendall – APA:** APA uses a basemap created internally; Many different options to use as needed (color and B&W); May be able to post as a public service; Use NYS Streets a lot
- **Molly Jordan – APA:** Took over from John Barge; Lots that were created in house, with a focus on the park; Lots of internally-hosted layers; Use the orthoimagery services a lot; Often use others (including Esri suite), as needed
- **Melissa Albino – DEC:** Default to Esri oceans (though lots of labeling errors, which cause issues); NOAA seamless raster navigational chart; Also use an internal shoreline file that has very high level of detail
- **Hieu Nguyen – CCF:** Tend to use Esri basemaps with school districts, BOCES, etc. overlaid for in-house work; Public-facing KWIC site uses Esri basemaps
- **Christina Croll – OPRHP:** Use mostly Esri map; Many public maps fail in terms of park boundaries; Would love something with state that has accurate boundaries, as boundaries are typically a problem with the staff using basemaps; No public services currently available

- **Frank Winters – ITS (GIO):** Lots of effort went into basemaps years ago, and it was hard to compete with publically available basemaps, causing the shift in the state
- **Gwen LaSelva – DOH:** Environmental Health’s online cancer maps use Google Maps
- **Anyée Fields – NYSTA:** Bing Maps are used for internal applications, but Internet sites use Google for public interface

State Basemap Efforts. Scott gave a presentation discussing the research that he’s been doing regarding a standardized basemap for the state agencies to use. All existing maps seem to be lacking in some aspect. Scott’s assembled a list of user requirements, and has compared about 90 basemaps to look at content, cost, legal aspects, etc. He discussed various aspects of the maps, and gave a demonstration of using OpenStreetMap features as a backdrop to a state-created service showing highway route shields. He noted that the best solution may end up being a menu of various layers that users can turn on and off. Though OpenStreetMap incorporates changes very quickly, there would be an issue of duplicating new alignments in a state layer, and corporate. Research continues.

NYS Mesonet. Jerry Brotzge manages the Mesonet through the University at Albany, and provided a presentation about this weather sensor network. Mesonet weather stations are designed for weather phenomena on the order of 3-100 miles in size, and each station collects data simultaneously, every 5 minutes. NY is highly vulnerable to economic damage due to weather, and has the best Mesonet system of all states. There are 126 standard sites across the states, supplemented with a variety of other site types. Full-time staff maintain the sensors, and real time data is displayed to the public. Access to the data is free for NYS agencies, but provided for a fee to other entities. Jerry provided numerous maps, images, and overviews of the equipment. This network is a direct response to the storms of the past several years (Irene, Lee, Sandy), and used for emergency management. Those interested in further information should contact Jerry at jbrotzge@albany.edu.

ShareGIS Proof of Concept. Frank reviewed the status of the ShareGIS Proof of Concept (PoC) for Phase 2, which seeks to test the scaling and elasticity of the environment. Hits against these services have already increased to tens of millions per month. The focus has been on scaling for demand, since these services experience very “lumpy” demand, with big spikes and lulls in use. This PoC is a perfect case for assessing elastic scaling in the cloud. The PoC was looked at Amazon Web Services, which is the platform for the Boundless stack of software (just acquired by Planet Labs, Inc.) for static data sets, and the Google Cloud, through GeoRobotix’ OpenSensorHub, which hosts live data streams. The public cloud performs well, and looks quite promising with an attractive price point.

Use of Collector for NYSDOT Culverts. Mary Susan gave a quick presentation about the NYDOT field data collection efforts being done with Collector for ArcGIS. Past collections include 1 million signs, 100,000 street lights, guiderail, ITS equipment, and large culverts. The agency is now in the process of collecting small culvert locations, and hopes to have the data available by July 4. Mary Susan demoed the application, which uses the my.ny.gov single sign-on ID, and accesses the application on the DOT Portal site. This integration allows for an easy to use interface from the field and from the web applications. Contractors and state forces access the application and data the same way. She also noted that they have been very happy

with using the US National Grid to provide unique feature IDs, as discussed in the [May 1, 2018 meeting](#).

DOS Resilient NY Efforts. Peter then provided an overview of DOS's current efforts around Resilient NY—an initiative from the Governor. The work focuses on resilience planning and use of a risk assessment tool to identify assets within communities across the state. Resilience focuses on the capacity for a community to withstand extreme events/disasters, quickly recover from them, and develop ongoing adaptability to rapidly changing environmental conditions. He delved into the risk mapping currently underway in the Lake Ontario area, and using a variety of flood hazard maps, soil maps, etc. to perform assessments in the area. This includes the construction of a dynamic natural shoreline layer. Layers are put together to determine and rank areas based on level of risk. DOS is working with OEM for current concerns regarding potential Lake Ontario flooding.

General Discussion of Noteworthy Projects.

- Mary Susan mentioned the Upcoming NYSATE conference for transportation engineers from May 8-10 in Tarrytown. She also noted an upcoming class on using the USNG for Asset IDs.
- Eric reminded people of the recent listserv notice that 2018 tax parcels for 20 counties are available for state agencies on SharePoint, and that the remaining counties should be available by the end of July.
- Ray mentioned that the GPO is working with USGS to update the National Hydrography Dataset (NHD), expecting to become stewards of this data. There are ArcMap toolbars and web services available for working with the data. The GPO is also working with DEC to review infrared orthos at 5,000 scale to identify and digitize missing small lakes and ponds.

The next meeting is tentatively scheduled for Tuesday, September 17, 2019 from 9:30am-12:00pm at the NY State Thruway Authority Offices. If you have any ideas for topics or would like to provide a demonstration at this meeting, please let us know. Send any questions or concerns about any of these issues to the Advisory Group Chair, Eric Herman at the NYS Thruway Authority (518) 471-5890, or eric.herman@thruway.ny.gov.