

**NYS GIS State Agency Advisory Group**  
**Meeting Report**  
Virtual WebEx Meeting  
January 11, 2022

**Roundtable Discussion Regarding Use of and Experience with ArcGIS Hub and Needs for Access to Real-Time Satellite Imagery.** This meeting's go around included two topics requested by attendees. Members introduced themselves and noted their organization's experiences with ArcGIS Hub, then discussed details about their need to access real-time satellite imagery.

- **Eric Herman – NYSTA:** No experience with ArcGIS Hub; Real-time imagery would have been useful for Cuomo Bridge project, and some interchange reconfigurations – engineering plans help, but imagery is the preference for multiple nuanced details
- **Mike Schifferli – SHPO:** No experience with Hub, though hoping to leverage in some way; Real-time imagery would be great, since desktop reviews of topics rely heavily on imagery
- **Anyée Fields – NYSTA:** See Eric's notes; Real-time imagery would have been useful for new exit ramps and other areas
- **Robert Zitowsky – NYSDOT:** No use of Hub and no need for real time in Traffic Safety
- **Anthony Calabrese – NYS Senate:** No comments on these technologies
- **Arjita Rai – DOH:** Don't use Hub, but interested in learning about it; Not much use of real-time imagery in past, but with COVID more widespread, epidemiologists were looking for more data like air quality given that there were strong relationships
- **Brent Kinal – DEC:** Started experimenting with building a Hub for sharing data outside of DEC; Real-time imagery need is big – looking for forest and aquatic ecosystem changes; Would be useful to model change detection and for property trespass issues
- **Christina Croll – ITS (Parks):** Agency does use Hub and has been rolling it out for Parks as a whole; Same comments as Brent, especially use for identifying pest threats; Also looking at flying drones for before and after comparisons; Lots of development issues and could see results after announcements/show changes; Also useful for forest fire damage analysis
- **Carol Hockeson – DOH:** No experience with Hub; Real-time imagery would be useful for working with critical infrastructure as related to evacuation zones
- **Gwen LaSelva – DOH:** See Arjita's comments
- **Gerry Engstrom – GPO:** No use of Hub that he's directly aware of; Most law enforcement agencies have drones to satisfy immediate needs
- **Katherine Barnes – DEC:** No Hub use in her bureau; Agency has a program with drones, though concerns about drones impacting wildlife could be reason for satellite
- **Mark Giddings – DOH:** Nutrition has no use of Hub so far, and no know use for real-time imagery
- **Matthew Shepherd – SHPO:** Haven't use Hub in Division; Use of imagery would be beneficial – would like to see current images to know existing conditions
- **Melissa Albino-Hegeman – DEC:** Not using Hub for anything; Not a lot of requests for satellite, but good for restoration effort, coastal flooding
- **Michele Golden – DEC:** Division of Water is not using Hub; No need for imagery now
- **Peter Lauridsen – DOS:** Division doesn't use Hub but may consider it for the latest iteration of the Gateway; Real-time may be used for consistency determinations and identifying change in land-use and project status
- **Rebecca Newell – DOS:** See Peter's comments; Interested in Hub as it's being considered for the Gateway – interest in collaboration with communities for sharing data about key meetings/getting feedback; Real-time imagery useful for consistency reviews & regulatory information post-disaster

- **Stephanie Rockwell – Canal Corp:** Looking at ways to use Hub now in agency; Live imagery would be beneficial for rain events along the Canal, as well as permit engineers for catching unpermitted uses of property along the canals; Have a drone, but little experience
- **Tim Daly – ITS (DEC):** No direct Hub use, but have looked at it briefly and would look at more and support if there was interest; Could see possible used at the agency for real-time mages
- **Tabassum Insaf – DOH:** Hub could be useful for working with CDC grants and sharing many of the agency's datasets; Real-time satellite imagery use of EPA/NASA/NOAA's CyAN (Cyanobacteria Assessment Network) dataset (based on Sentinel imagery) for algal plume evaluations
- **Todd Nelson – ITS (GPO):** Unable to participate in audio portion
- **Tim Ruhren – ITS (GPO):** Deferred to Jason Baum for any Hub information (though very interested in it as a possible replacement for Clearinghouse site; Real-time satellite interest if available would help support OEM
- **Temilayo Adeyeye – DOH:** Epidemiology does not use Hub; Real-time imagery would be useful
- **Jeff Herter – DOS:** Joined after this portion
- **Amanda Stevens – NYSERDA:** Joined after this portion
- **Douglas Done – DOH:** Joined after this portion

**Access to “Close to Real-Time” 3rd Party Imagery.** Tim provided some more follow-up in this topic. He'd had a separate meeting with federal imagery users and agreed that there's a need to look at satellite resources that are available. He clarified that real-time means more like “near to today”. There are plenty of commercial sensors out there now, and he could possibly put together a presentation about some of the resources with more information later. Some companies can obtain daily coverage and have archival holdings for various timeframes. There are some questions that would need to be considered beforehand: Could a state contract be established (procurement would take too longer otherwise)? What would go into the contract? Do agencies have funding to support their needs? Would drones be a feasible alternative? There are a wide range of resolutions, products, and cost models that any procurements would need to take into consideration.

Brent mentioned that free federal data (like Landsat) is useful for overall state of health, then higher resolution data could be used to home in on specific locations. He also noted that drones have a significant limitation, since they must stay within line of sight, and that he has talked to some providers about subscriptions. Tabassum noted that her organization uses daily historical data from NASA & NOAA and that many products are available. DOH has found current conditions for air quality, climate, hazards, and flooding data—much is freely available, with the federal agencies looking for partners.

Time noted that it's important to know what type of data you're looking for. Some feeds may be real-time but show clouds (like weather); most satellites (other than weather) are not geostationary, and you get about once/day. He said he could gather a list of interests, and that agencies certainly may procure data on their own. When federal agencies are involved for large disasters, there is access available to the federal imagery feeds. Many companies are on contract with the federal government. Stephanie notes that USGS's Earth Explorer also has options for access to data.

**Ortho/LiDAR Updates.** Tim then went on to update attendees on the 2021 orthos flown this past spring. All eastern zone counties should be available through the web services and for downloading by Friday morning. The four western zone counties should be available by the middle of next month. The 2022 collection will include the remainder of 2017 counties, all but the 5 northwesternmost counties that were flown in 2018, and NYC. Warren is expecting to upgrade to 6” resolution. The GPO has also stood up new service for 2019 NAIP imagery at its full 60 cm resolution. The statewide imagery was flown in October, and is available in color and CIR. In September 2021, the NAIP program flew NY again and

covered all but some of the Catskills (which had snow). LiDAR capture is planned for the spring in Rockland, Orange, Dutchess, and Ulster Counties.

**NYSDOT's Crash Location and Engineering Analysis Repository (CLEAR).** Robert gave an overview of NYSDOT's new CLEAR application. This is a suite of applications used to analyze crash data. It is composed of two phases. The Phase 1 focus is to replace the legacy ALIS (Accident Location Information System) application; Phase 2 replaces SIMS (Safety Information Management System and PIES (Post Implementation Evaluation System). It will include multiple datasets on crashes, roads, and capital projects. CLEAR includes a suite of applications that work together to analyze the data. The CLEAR Crash Data Viewer is a map-focused interface that's used for querying crash data. Phase 1 was planned for January 21 (will be delayed). Phase 2, "CLEAR Safety" should be out around April. Access will be provided to government employees through ny.gov (request access online). Information will be on the [DOT website](#) and updates website with updates and guidance.

**GIS & Climate and Health Initiatives at DOH.** Arjita discussed the large variety of climate-focused applications DOH is involved with. These cover a wide variety of topics. The first was improving precipitation and temperature assessments using grids of remotely sensed data. The NYS Heat Vulnerability Index looks at characteristics that make a community vulnerable to heat, paired with cooling center locating, to protect health. A Story Map highlighting Extreme Heat and Health in NY is on the [DOH website](#), with the ability to see how conditions have changed. Arjita also reviewed County Heat and Health Profile reports, collaboration with OTDA promoting their cooling benefit program, and how the heat index varies with recipients. She showed how climate data relates to various datasets for their analytics. Arjita noted a temperature and health threshold analysis to look at how specific diseases increase with heat, revised heat advisories, and an Environmental Public Health Tracking Portal, being revised to better track trends. She discussed how flooding and precipitation impact emergency room visits, and provided an overview of water quality impacts, as floods contaminate private wells. She finished with an overview of an upcoming Flood Risk Vulnerability Assessment Tool and Story Map.

**NYSERDA's Climate Change Impacts and Adaptation GIS Research.** Amanda Stevens talked about the Environmental Research Program's mission and focus on providing scientific foundations for good policies. Amanda's concentration is on impacts and adaptation. She noted shoreline monitoring, cooling, renewable resources, and migration modeling. She then went on to discuss some past projects including a Hudson River Flooding Impact Decisions Support System, a Coastal NY Future Floodplain Mapper, and modeling marsh migration. NYSERDA has been working with CIESIN at Columbia University to focus on mapping building footprints within flood zones. She noted the Natural Resource Navigator project with the Nature Conservancy and the [NY Climate Change Science Clearinghouse](#), which also includes a simple GIS mapping tool. Interested parties can check out the [NYS Climate Impact Assessment](#), as well as an up-to-date information guide of projected impacts of climate change and actionable information for adaptation.

*A recording of the meeting is here: [State Agency Advisory Group Meeting-20220111 1432-1](#)  
Contact Eric (email listed below) for the password.*

*The next meeting is tentatively scheduled for April 19, 2022, from 9:30am-12:00pm via WebEx. 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](mailto:eric.herman@thruway.ny.gov).*