

NY State Geospatial Advisory Council
Agenda for September 10, 2020 Meeting
WebEx

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

Via Phone: Svetla Borovska, Christina Croll, Mickey Dietrich, Keith Ducett, Emily Fogarty, Eric Herman, David Jorgensen, Mary Susan Knauss, Todd Nelson, Julia O'Brien, Chris O'Connor, Matthew Owen, Lindi Quackenbush, Chris Rado, Randy Rath, David Richardson, Heather Weller, Frank Winters

Absent: Ana Hiraldo-Gomez, Carrie Wiley, Richard Reichert

Special Guests: Tim Ruhren, Jan Vink, Kurt Menke

Minutes: Christopher O'Connor

9:00 Welcome / Agenda Review / Approval of Minutes (Weller, Croll)

- Welcome message from Christina Croll, Wheeler reviewed agenda
- Dave motion to approve previous meeting minutes, Mickey seconds, all in favor
 - Previous minutes were not distributed but were posted on gis.ny.gov

9:30 GIS.ny.gov Rebuild update (Tim Ruhren)

- (PowerPoint presentation)
- Appreciated participant feedback on redesign
- Ruhren and team is aligning feedback with a process, beginning with breaking into difference categories
 - Rebranding
 - Move to supported code platform
 - Information content
 - Data access content
 - Application redesign (could be part of previous item)
- Information and Data Access may be approached as parallel paths; could potentially leverage the NYS ITS site for the more “informational” content
- Significant site changes and new site functionality (as opposed to a migration of the application’s code base)
 - Landing page as a map interface
 - Should work on mobile devices
 - Messaging regarding updated data
 - Messaging regarding data needing updates
 - Increase technical support information
 - If passwords still used, allow users to maintain themselves
 - Possibly remove locked data
- Current and Near-Term Steps
 - Identifying resources and assignments in the GPO

- Identify resources in ITS
 - Web page development
 - Data access development
 - Application development
- Prioritize and schedule
- Possibly outreach to data suppliers
- Update to GAC in December meeting
- Q & A
 - Request for a schematic for overall direction that could be used as a communication piece to elicit more input during outreach
 - No confirmed timeframe at this stage, but the current application is running on an antiquated code base with very limited support
 - Target audience is very diverse – government agencies, private industry (technical and non-technical); with an expansion of focus beyond GIS practitioners (e.g. general public, software developers)

9:40 Reports

State Agency Advisory Group report (Herman)

- Last meeting was in mid-January; COVID-19 impact has resulted in postponed meetings
- Looking to potentially begin conducting virtual meetings
- See previous meeting notes online at the NYS GIS Clearinghouse
(<https://gis.ny.gov/coordinationprogram/workgroups/details/index.cfm?ID=7>)

NYSGISA report (Knauss)

- October 21 (time to be announced shortly) – very first virtual association meeting; elicited feedback on timing/duration; looking for award nominees
- Reorganizing at committee level, particularly on the education tract
 - Elections held online

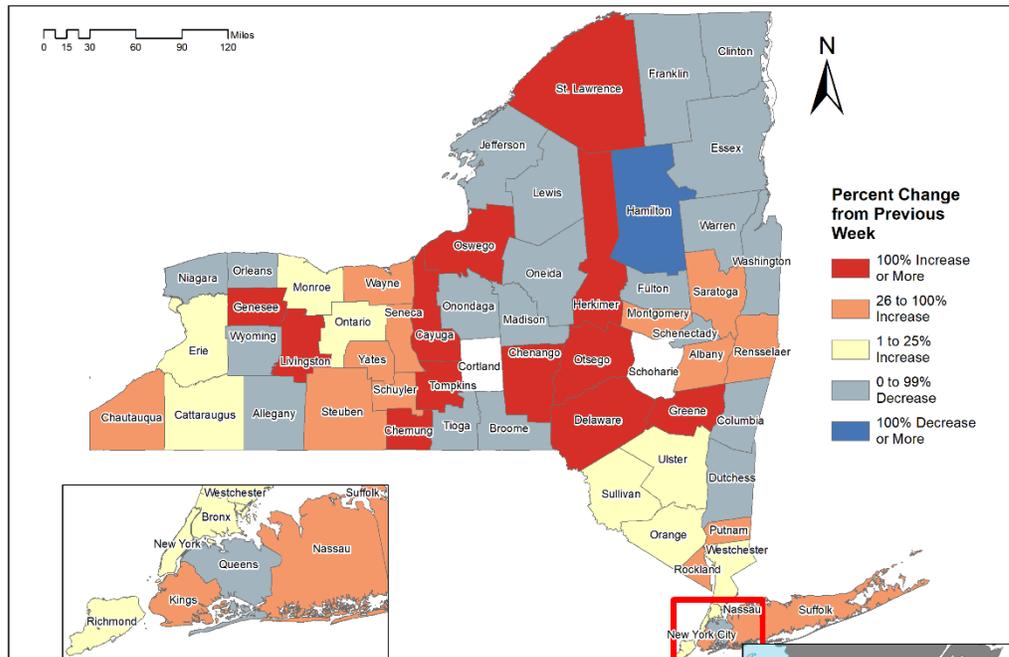
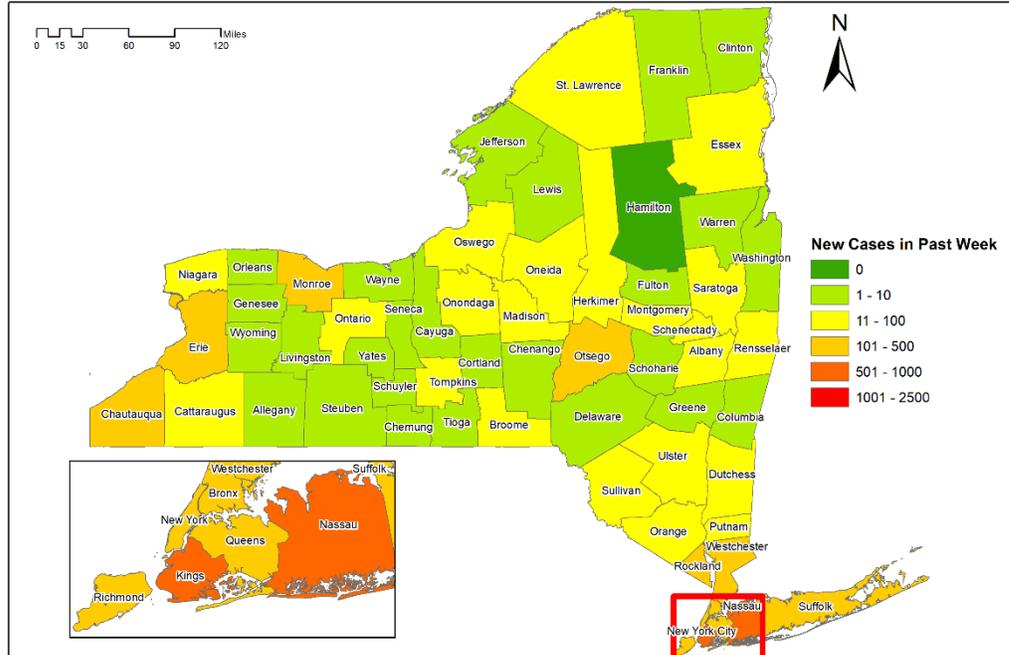
Federal report (O'Brien)

- Status of National Flood Insurance Plan Studies
 - The FEMA Region II Risk Mapping site is here:
<https://fema.maps.arcgis.com/apps/MapSeries/index.html?appid=39e87438546249d988a85fc3085cab0e>
 - The Federal Emergency Management Agency (FEMA) Region II office has created this site to support your community through the Risk Mapping, Analysis, and Planning (Risk MAP) program. Risk MAP is a national FEMA program that works with states, tribes, and local communities to evaluate and better understand their current flood risks, as well as the actions that can be taken to mitigate those risks and become more resilient.

- This site now also contains the reports that come out of the Discovery projects as they are completed.
- COVID-19 Response
 - FEMA and HHS have been responding to COVID-19 since March of 2020. FEMA Region II's Regional Response Coordination Center (RRCC) was activated from March 16-August 30 to be able to respond quickly to needs identified by the state. Geospatially, the response included mapping cases and deaths, tracking the status of alternate care sites, tracking the opening of testing sites, and the locations and capacity of mortuary assets. FEMA HQ now has an epidemiologist on staff and created a HUB for COVID-related data and applications. HHS temporarily made much of GeoHEALTH available to the public.
 - Although the RRCC is deactivated at this time, the Geospatial Resource Center continues to monitor change in case numbers by county.

COVID-19 Positive Case Change Over Past Week in New York: (09 September 2020, 1200 EST)

FEMA-4480-DR-NY: COVID-19



Coordinate System: WGS 1984 World Mercator
 Projection: Mercator
 Datum: WGS 1984
 False Easting: 0.0000
 False Northing: 0.0000
 Central Meridian: 0.0000
 Standard Parallel 1: 0.0000
 Units: Meter

Source Data: FEMA, NY GIS, NYSDOH
 Map Created by: R2 GRC

- (PowerPoint presentation)
- Street and Address Mapping
 - ~5,000 – 15,000 edits / week; attributed to broad partnerships
 - Reviewed update frequency map
- Civil Boundaries
 - Topology issues were addressed
 - Minor boundary updates and corrections
- Statewide Parcel Map Program
 - Suffolk County is now shareable with State Agencies
 - 2019 GIS tax parcels for State Agency use, 21 for public use
 - Outreach for 2020 GIS tax parcel polygons is underway
 - Continued work on the benefit statement / presentation for counties sharing tax parcel data with the public
 - COVID-19 use case for data availability – activities to measure COVID rates based on data from sewer treatment facilities required property data
 - Shared with NYS Economic Development Council
- Census 2020
 - NYS is lower than some other states on census return; partially due to timing coincident with COVID
- Orthoimagery
 - (reviewed status map)
- 2019 and 2020 LiDAR Status
 - (reviewed status map)
 - Included 3DEP data, USGS-FEMA projects, and USGS
- National Hydrography Dataset
 - (reviewed status map)
- GIS Web Services
 - 99M+ requests since last meeting
- NSGIC Council of Councils is 9/16; GAC members are invited to participate to discuss GIS coordination organizational frameworks

10:00 Break

10:15 Census 2020 and differential privacy update (Jan Kasper Vink)

- (PowerPoint presentation)
 - Value statement of census data
 - Overview of Census 202 Workflow
 - Trying to complete data collection
 - Significant focus on data verification and quality control (planned through 12/31, with potential Congressionally directed postponement)
 - Data corrections (count question resolution) targeted to end October 2023
 - “Non responses” issues and questions discussed

- Group Quarters data collection issues and questions discussed
 - Privacy (esp. FERPA), non-cooperation
 - College Students
 - Service Based Enumeration (e.g. homeless)
- Impacts of COVID-19 on counts
 - Needed to establish a dedicated quality control team
- Disclosure Avoidance System
 - Census cannot release any data that could identify a person
 - Census was able to reconstruct 17% of their 2010 data collected and not compliant with Title 13
 - Looking for a top-down differential privacy algorithm
- Stakeholder Involvement
 - Multiple touchpoints for stakeholder involvement
 - Trying to understand different use cases
 - Considering reducing the amount of data, and seeking feedback on data quality (including disclosure avoidance)
 - Much work still needs to be done
- Reviewed example of published metrics on error, including school district data; take away was that some of the errors are quite large
- Discussed bias being introduced in data including age, race groups, Hispanic origin, and even gender
- Provided examples of implausible outcomes in the data
- Decisions still need to be made on the Differential Privacy front
 - What numbers are invariant (not subject to noise)?
 - What are the important use cases?
 - What accuracy is good enough?
 - Do population and household tables need to be consistent with each other?
 - Privacy budget and distribution of that budget?
 - What tables are being published and at what level of geography?
 - What guidance do data users get?
- Fitness for use vs. Accuracy
 - Emphasis on fitness-for-use, which is not the same as accuracy
 - Data has less attention on accuracy
- Reviewed Count Question Resolution plan
 - Census is not looking at the differential privacy -related data issues
- Discussed Revising Geographies
- Q&A
 - Potentially the data quality issues could be brought to the NYS GIS Association; specific use cases around use of data and concern over data quality would be more helpful than broad statements
 - Differential Privacy is new to the decennial census

11:30 Getting to know QGIS (Kurt Menke - Birds Eye View GIS)

- (PowerPoint presentation)
- QGIS is leading desktop open source GIS package
- Why use it?
 - Great interoperability
 - Many tasks easier
 - Developing rapidly
 - New takes on how to work with spatial data (editing in place, geometry generators)
 - Incredible cartographic tools
 - Fast Processing (64-bit)
 - Enjoy working with the community
 - I have new features added – helps me do my job!
- Key Benefits

<ul style="list-style-type: none"> ○ Multi-platform ○ Highly interoperable (including geodatabases), hundreds of file formats, and can import Esri MXDs (SLYR plug-in) ○ Geoprocessing capabilities with Python console ○ Graphical Modeler ○ Improvements (akin to Esri Model Builder) 	<ul style="list-style-type: none"> ○ Editing in Place ○ Interactive Styling Dock ○ QGIS Renderers ○ Blending Modes ○ Custom Legend Patches ○ Expression Engine ○ Geometry Generators ○ 3D ○ Temporal Controller ○ It is free and Open Source
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- QGIS PDL plug-in for natively handle manipulation of cloud point data

12:00 Break for lunch

1:00 Authoritative data in the hands of GPS and wayfinding companies (Winters)

- (presented PowerPoint)
- Background (use cases)
 - Federal Highway Administration put out a grant program for work zone data transfer. Work zone safety should get into the hands of GPS and wayfinding companies
 - In parallel, NYS head of traffic safety was concerned about bridge clearance, where GIS and wayfinding software not flagging risk based on vehicle type
 - 911 and emergency response scenario where responders are using information from personal wayfinders that may be providing erroneous information
 - Exit number changes on highways and conflict with wayfinding data, which could result in an increase in accidents
- DOT was interested in improving wayfinding data for NY, but it was a one-off fix; there's a broader need for automation – most of the data exists in some government system; the challenge is connecting the dots in a consistent fashion (e.g. standard schema)
- Kickoff at March NISGIC Meeting to Discuss, highlights include:
 - Considering an incremental approach; could leverage the Work Zone Data Exchange (WZDx) Specification

- (To GAC) > Are we missing use cases or things to bring to the discussion?
 - How is the universe of wayfinding providers being identified? Participants will include Google (owns Waze), Apple, TomTom, Here, Mapbox, MakeRoute, Esri; not sure about MapQuest, Garmin, OpenStreet Map
 - Concern about timeline for data updates – traditionally map changes can take weeks or months
 - Potentially add the following for consideration:
 - Detours
 - Weight limitations for bridges
 - Thruway ramp changes
 - Seasonal roads
 - Railroad crossings closed for repair
 - Construction contractor data
 - Ex. road constriction, schedule for onsite construction workers
 - Potentially invite insurance industry participation

1:45 Brainstorming Topics for Future Meetings (briefings and discussions)

- Tim Ruhern to return with updates on the gis.ny.gov website redesign
- Looking for volunteers for joining a Nominating Committee
 - Anyone interested could send an email to Weller
 - Weller to send out information on the slots
- Open to subjects for December meeting, send Weller ideas
- Winters to book room at State Office Campus for potential in-person meeting / could use the Dig Safely facility for future meeting location

2:00 Meeting adjourns