

## **NYS GIS Strategic Planning Project North Country Stakeholder Meeting**

### **Lake Placid, NY**

Meeting Date: July 24, 2007

A representative cross-section of different levels of government and the private sector was in attendance (see registration list for names of attendees). The following is a chronological transcription of notes taken at the meeting by Rich Grady from Applied Geographics, Inc.

#### **Suggestion to consider incorporated areas as urban for purposes of orthophoto resolution**

There was a question from a county representative about getting better resolution for areas that the State considers non-urban. The State uses USDOT Federal Aid Boundaries (urban areas get more aid). The county representative suggested adding incorporated areas under the rubric of urban for the purposes of determining orthophoto resolution.

#### **Need for orthophotos in SDE/Oracle ready format**

Another question was asked about delivery format, i.e., can the State provide the orthos in an SDE/Oracle ready version, as well as the current format. The answer was “yes, upon request.”

#### **Northern counties not shown in default display on website; bug identified and is being addressed**

It was observed that the northern parts of the State’s northern counties are not “on” by default when accessing the orthophoto web services. Tim was familiar with the issue and identified it as a known software bug that is being worked on.

#### **Participant noted performance issues when displaying orthophotos and local layers on website**

Concerns were noted about performance issues when users are combining orthos with their own layers (assumedly, using Web Services).

#### **Google Earth suggested as potential public access for best imagery in State**

Google Earth was mentioned by the rep from the City of Plattsburgh as an exemplar for the State, in terms of ease-of-use and apparent seamlessness of coverage. It was suggested the NYS look into proactively providing Google with the State’s best imagery to enhance public access.

#### **Natural orthophoto color preferred by participants but IR still of interest**

An interesting discussion about types of imagery took place, with various preferences expressed for natural color and color infrared. About one-quarter to one-third of the attendees raised their hand in favor of color IR. The general consensus seemed to be that the public prefers natural color, of which Google Earth is an indicator (they do not use

color IR or panchromatic). It was noted that raw four band digital imagery can be used to create both “natural color” and IR images with a bit of image processing.

### **FEMA using orthophoto images to support flood mapping**

It was also noted that FEMA is using the State orthophoto imagery to support flood re-mapping, according to the attendee from Baker Corp.

### **Suggestion for leaf-on flyovers for forest inventory work**

A request was made for occasional summer or fall flyovers (leaf on) as part of the State ortho program, to help support forest inventory work.

### **Suggestion to extend orthophoto coverage across counties and into Canada**

The gentleman from Clinton County requested that “more of the lake” be included in the next ortho (the county boundary goes to the center of the lake). Similarly, additional “overlap” area into Canada should be considered. Tim stated that the State is working with its vendor to adjust the overlap distances for the orthophoto program.

### **Need for homogenous, statewide orthophotos to support wide area analysis**

It was noted that the different types of imagery across New York make wide area analysis difficult. A suggestion was made to consider a statewide product that is more homogenous.

### **Need expressed for statewide 10 ft elevation contours**

A suggestion was made that the State should make 10 foot contours available, statewide. There seemed to be general agreement that this would be useful, and could be derived from the 10 meter DEM. John Barge pointed out that the Adirondack Park Agency (APA) had produced 10 foot contours for the Park (assumedly from the DEM), and found them to be very useful for planning applications.

### **Need expressed for updated, high quality DEM**

APA also derives slope from the DEM, and noted that they have discovered certain anomalies in DEM values when comparing to actual landforms. For example, the “old” DEMs don’t have road cuts, and there have been lots of changes on the land since they were compiled. John stated that “it is time for a new high-quality DEM.”

### **FEMA expressed need for 2ft contours; potential cost sharing with counties**

According to the Baker Corp attendee, FEMA is looking for 2 foot contours to support flood mapping. There was a suggestion to look at this on a watershed basis, and if counties are interested, to seek cost sharing.

### **Vector elevation contours preferred but growing interest in elevation surface data**

This audience expressed more general interest in vector contours than elevation surfaces derived from the DEM, but that demand was growing for elevation surfaces as awareness grows of the applications (such as planning, wind energy, and hydrology studies).

### **Suggestion to combine orthophoto and elevation data initiatives**

It was recommended that the State's orthophoto and elevation initiatives be closely coordinated. Currently, the State does not readily distribute the same DEM that it uses to support orthophoto imagery production. Instead, they use a DEM built from spot elevations and breaklines. There might be some merit in combining the models. Tim said the State would make available the DEM used for the orthophotos upon request.

### **Need expressed for specific hydrography features**

Interest was expressed in the following hydro features (mainly by one of the gentlemen from Plattsburgh):

- State waters
- Class of stream
- Stream flow info
- Dam info
- University projects (e.g., UVM and their Lake Champlain work)
- Wetlands

### **Need for statewide, high-resolution wetlands data**

There was a considerable amount of discussion about wetlands. A higher resolution of wetlands is needed for regulation. For example, APA uses 1 acre polygons as their threshold, and they have regulatory responsibilities.

### **National Wetland Inventory included in DEC habitat database**

The DEC Master Habitat Database in Albany includes the national wetlands inventory; apparently, developers do not want DEC updating wetlands maps.

### **Need for centralized database of wetland determinations made for subdivision plans**

Wetlands determinations are done for subdivision plans – a question was asked about the whereabouts of such determinations after submittal. Apparently, there is no database for these, and multiple parties are involved, so collection and coordination is complicated for purposes external to the required subdivision process itself.

### **Need for statewide well location point data**

A request was made for a statewide point data set for wells (e.g., from well digger logs), with annual updates. Apparently, DEC has a tabular database of wells, but there is no point location data set.

### **National Hydrography Dataset complete for State**

The 1":24,000" NHD is complete for the State (from quads and dlgs).

### **Need for vertical integration of hydrography data**

Vertical integration of hydrography data is important (e.g, streams should align with ravines in the DEM). The ALIS data are best at aligning with orthos, but NHD has more streams and network connectivity, according to John Barge.

**NYS DOT web portal has geodetic control points from State; Local points not available because not input into GIS format**

The NYS DOT Portal has points monumented and captured by the State, but local control points are not currently included.

Locally, on the ground “flaggings” are usually put onto plans, but not into GIS. If they were, they potentially could be harvested and included in the State portal, which has scale trapping for different densities of control points.

**Need for mechanism to capture county and local level control points and make available through State website portal**

Counties perform control themselves, typically, for road work but there is no existing mechanism to record and inventory these control points. There seems to be an opportunity to harvest lower level control points from local sources, where they exist, and include them in the State portal.

**Participant noted that NYS receives regular address updates from Census Bureau**

There was a question and discussion about the Census Bureau’s Local Update of Census Address (LUCA) program. NYS is one of the few states with an MOU with Census to get updates on address ranges from the LUCA process for State use (minus individual address data, assumedly).

**Discussion of MMNT system; training scheduled for Fall 2007**

The State’s new Web-based Map Maintenance Notification & Tracking (MMNT) application was discussed, with training and outreach to accelerate in the fall timeframe.

**Need for clarification on allowable distribution of data at state, county and local levels; TeleAtlas road name example**

The representative from Clinton County expressed concern over the copyright of the road name data that is managed by TeleAtlas under contract to the State. He would like to provide such names to companies that make maps of the county, to make sure they have the accurate names. Since TeleAtlas is getting monthly updates from the State, it is perhaps the most accurate data set. Bill Johnson indicated that this was permissible, as long as the *data* are not packaged for redistribution. If the State is asking for local input to update the data, but then the data are copyrighted once they go to TeleAtlas, it causes some confusion. The counties would benefit from knowing more about allowable uses for supplying road names from the State’s partnership with TeleAtlas to third parties. It was strongly stated that the “location and name” of roads should remain in the public domain (while it is understandable that segment-based addressing and navigation data may be legitimately proprietary).

**Road detour and bridge closure information available from Counties**

Counties are providing input on certain roads, such as detours and bridge closures.

**Suggestion to map wilderness roads, trails and gates statewide but should distinguish from passable roads**

There was some discussion about wilderness roads, jeep trails, and gates as important to northern counties and the APA. While these need to be mapped, they should not be depicted as roads. APA also mentioned such “linear segments” while not formally considered as roads, can serve as such in an emergency (e.g. missing person search; fire fighting, etc.). The woman from Jefferson County mentioned that they had mapped some of their gates that prevent access to roads/trails.

**Suggestion to map private forest roads with attributes indicating ownership/maintenance**

Similarly, there are also many private roads in the State (e.g, forest roads owned by forest products companies). In general, the private/public ownership issue has bearing on what kind of access is provided and what services are provided (e.g., snow plowing, road maintenance) and attributes that indicate ownership are important.

**Suggestion to enhance statewide ALIS street centerline model to allow for more attributes**

It was remarked that some cities and counties have their own centerlines, and they do not necessarily match ALIS. Plattsburgh has such data, for example, and they are interested in adding specific attributes, including:

- Average daily traffic counts
- Level of control at intersections
- Maintenance responsibilities
- As-built records

A suggestion was made that, if the State did more with such attributes (e.g. providing a standard for housing the attributes), then the locals could follow the format on an individual basis.

**Suggestion that Counties submit entire road network on regular basis although concern expressed regarding cross-county discrepancies in quality**

Currently, counties are expected to report “only changes” as part of the road updating process. If a county has a good road base, and keeps it current through its own efforts could that county provide the road network wholesale to TeleAtlas, which might be simpler than having to extract only changes? While there was some merit in this hypothetical, Frank Winters commented that this would make sense to do only if there as an actual and clear improvement in the linework. He also raised the point that this would introduce potential conflation/edgematch issues where such county linework would then need to be matched neighboring county data which may have lesser accuracy.

**Need for broader parcel collection from Counties; suggestion to use incentives**

Almost all parcels for the State are in some electronic form at the county level, but only 18 are currently supplied to the Clearinghouse. There was some discussion on why more counties were not supplying data to the State? Beyond the fact that it is voluntary, there seems to be reluctance for various reasons, including privacy concerns, and questions about quid pro quo. There was some discussion of potential incentives (i.e. quid pro quos) to get more counties to supply parcel data. One gentleman suggested that he would willingly “trade” his local parcels for Pictometry data (oblique aerial imagery).

### **25% of Participants managing or actively using parcel data in various digital formats**

About a quarter of the attendees are managing or heavily using parcel data, using a mix of ESRI products, AutoCAD Map, and Bentley MicroStation.

### **Need to disseminate existing digital parcel standard to counties**

There is a draft standard for cadastral data from the State coordinating body, but awareness of it seems to be low. ORPS has a standard only for hard-copy maps.

### **Disconnect exists between parcel data and CAMA attribute data because managed at different government levels**

Assessment is done at the city and town level, but parcel mapping is done at the county level. Therefore, one party is focused on attributes, while the other is focused on the map. The two need to be tied together. The Jefferson County representative expressed many of these parcel data and attribute linking issues. She said she can't afford to tailor the attribute data from every town when it is done differently from place to place with different CAMA systems.

### **Parcels as source for identifying protected and State land; DEC and Adirondack Park lands available**

There was discussion about how parcel data are a key ingredient for accurately showing protected lands. A specific suggestion was made that the State owned portion of local parcel data be "harvested" to more accurately depict protected and State owned lands. It was observed that the DEC Clearinghouse shows DEC lands, with positional quality attributes data regarding sources. It was also observed that the APA has a land parcel layer for the Park.

### **Participants note that data sharing does exist between adjacent counties although edge-matching and conflation issues exist**

There is also some peer-to-peer data sharing going on, between adjacent counties. There were acknowledged county-to-county edge-matching and conflation issues (including the earlier discussed issue of road names, and the lack of accuracy in the municipal/county boundaries discussed below).

### **Need to improve accuracy of local and county boundaries**

The current GIS depictions of civil and county boundaries are not survey accurate, and were harvested from the USGS 1":24,000" topographic quadrangles.

### **Inaccuracies in municipal and county boundaries make statewide parcel mapping difficult; example from Arizona for reconciling boundary discrepancies**

Since there are no authoritative, survey accurate statewide administrative boundaries it is very difficult for individual counties to reconcile their tax maps across county boundaries (i.e. there can be overlaps or gores between the parcels at county edges). One attendee noted that other regions of the country, such as Tucson, AZ, require deeds to be reconciled with administrative boundaries as part of a land transaction. This is obviously

not the case in NYS, and the lack of firm, accurate county boundaries would make this difficult even if it was politically feasible.

**Participant notes that NY administrative boundaries are still in flux as towns and counties incorporate new lands**

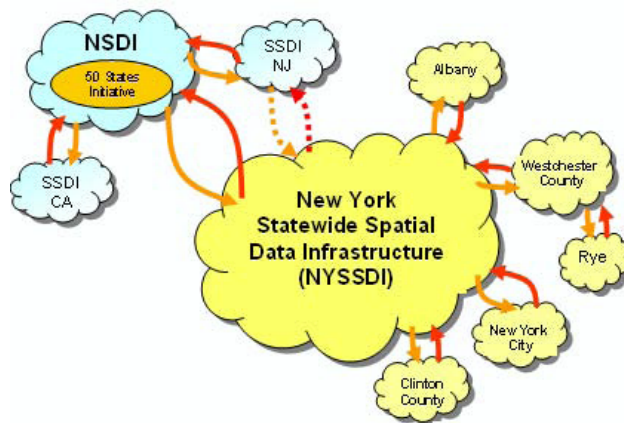
NYS still has annexation and incorporation occurring so the administrative boundary layer is somewhat dynamic.

**Participant noted spatial accuracy issues with local parcel data sets**

It was noted that there are **significant accuracy issues** with some local parcel data sets. One county measured distances from buildings to intersections for an E911 application, and was “astounded” that the parcel maps were no where near accurate when aligned with the street centerlines and these measurements (i.e. some buildings were not contained within their own parcel representation).

**Participants noted lack of statewide special districts in digital format**

Special Districts (e.g. schools) were also discussed, and they are not available electronically on a statewide basis, either.



**Participants:**

John Barge (NYS Adirondack Park Agency)  
Paul Capone (NYS ORPS - Saranac Lake Office)  
Carol Cady (St. Lawrence University)  
Eileen Allen (Center for Earth & Env Sci, Plattsburgh State Univ. of NY)  
Paul Rooney (ESRI)  
Guy Johnson (Rochester Institute of Technology)  
Kevin Farrington (City of Plattsburgh Engineering & Planning Department)  
Glen Cutter (Clinton County Planning Department)  
Jason Pfothenhauer (St. Lawrence County Planning Office)  
Paul Loner (City Of Plattsburgh Municipal Lighting Dept.)  
Jon Montan (St. Lawrence County Planning Office)  
Thomas Dashnaw (Town of Chazy Planning Board)  
Heather Baker (Jefferson County Department of Planning)  
Joe Racette (NYSDEC)  
Thomas Gunn (Lewis Couny IT and E911 Director)  
Eric Fenske (NYS Adirondack Park Agency)  
Linh Le (New York State Department of Health)  
Michael Crino (Baker Engineering NY, Inc.)  
Alan Miner (Clinton County Real Property Office)  
David Brown (CITY OF PLATTSBURGH)