



NYS 9-1-1 Coordinators Conference

October 22, 2013

GIS Program Office

NYS Office of Information Technology Services

SAM Project Objective

***Create a statewide authoritative
address point database to support
Next Generation 9-1-1
and other purposes***

Statewide Address Point Build: 2 Stages

Stage 1:

State contracts for:

- “Principal” (main structure) point on building footprint
- Parcel centroids for vacant addressed parcels
- Addresses in draft NENA standard

State in-house tasks:

- Outreach to counties for data
- QA/QC of data deliverables



Stage 1
Building Rooftops
Centroids of Vacant Parcels

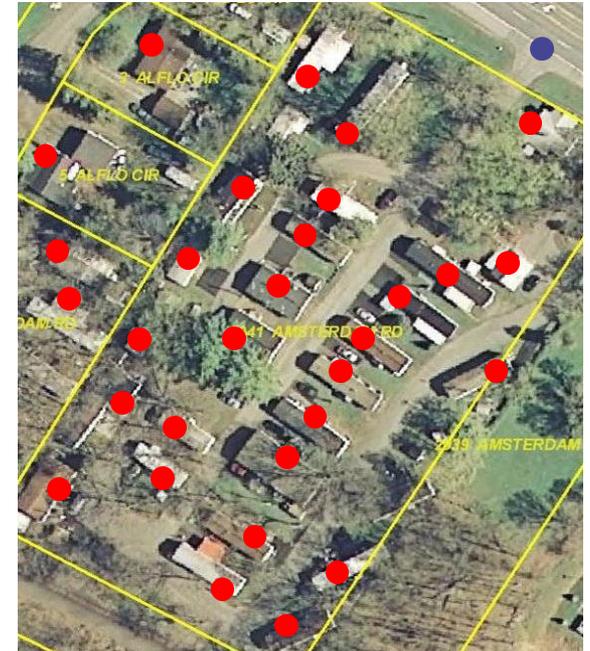


Statewide Address Point Build: 2 Stages

Stage 2:

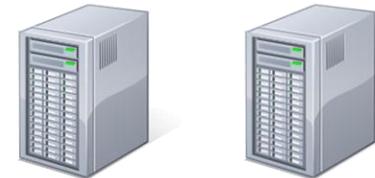
Counties use NENA standards to:

- **Locate** addresses identified in exception report
- **Add new points**
- **Refine** locations
- Map **subaddresses**
- Place **routing points**

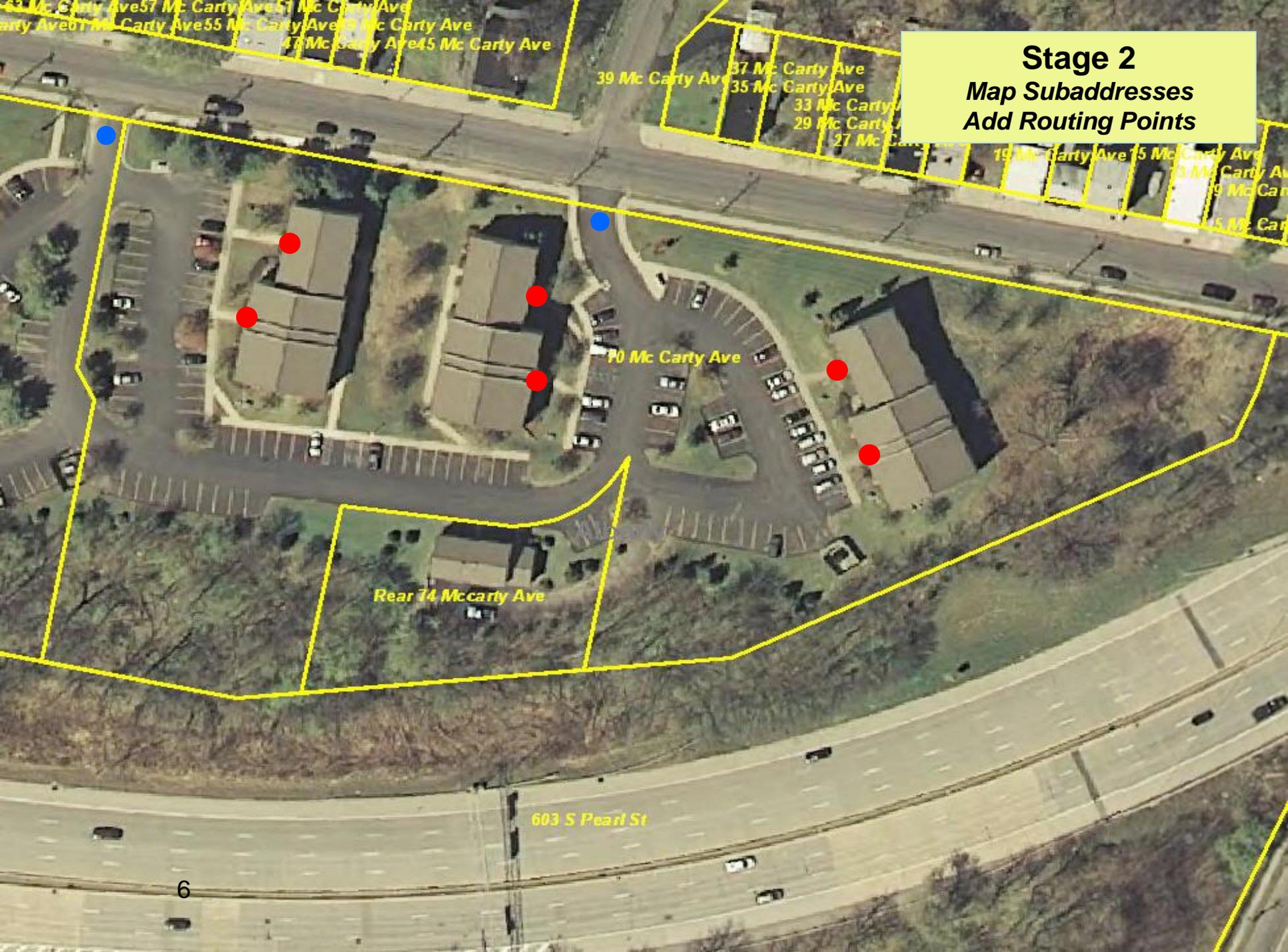


State provides:

- Data maintenance tools
- Data hosting/distribution services



Stage 2
Map Subaddresses
Add Routing Points



61 Mc Carty Ave 57 Mc Carty Ave 51 Mc Carty Ave
49 Mc Carty Ave 47 Mc Carty Ave 45 Mc Carty Ave

39 Mc Carty Ave 37 Mc Carty Ave
35 Mc Carty Ave 33 Mc Carty Ave
29 Mc Carty Ave 27 Mc Carty Ave

19 Mc Carty Ave 15 Mc Carty Ave
13 Mc Carty Ave 11 Mc Carty Ave
9 Mc Carty Ave 5 Mc Carty Ave

70 Mc Carty Ave

Rear 74 Mccarty Ave

603 S Pearl St

Delivery Acceptance

- County-wide review of:
 - Schema compliance
 - Domain values
- ANSI statistical sample
 - Random selection of points to be reviewed
 - Validate positional accuracy
 - Validate attribute accuracy
 - Tightened inspectional only allows 18 errors
- Acceptance/rejection required within 10 days of delivery
- ***Approximately one County delivered every 5-8 days***

Before

11686 State Route 812



11686 State Route 812



Parcel Centroid Point



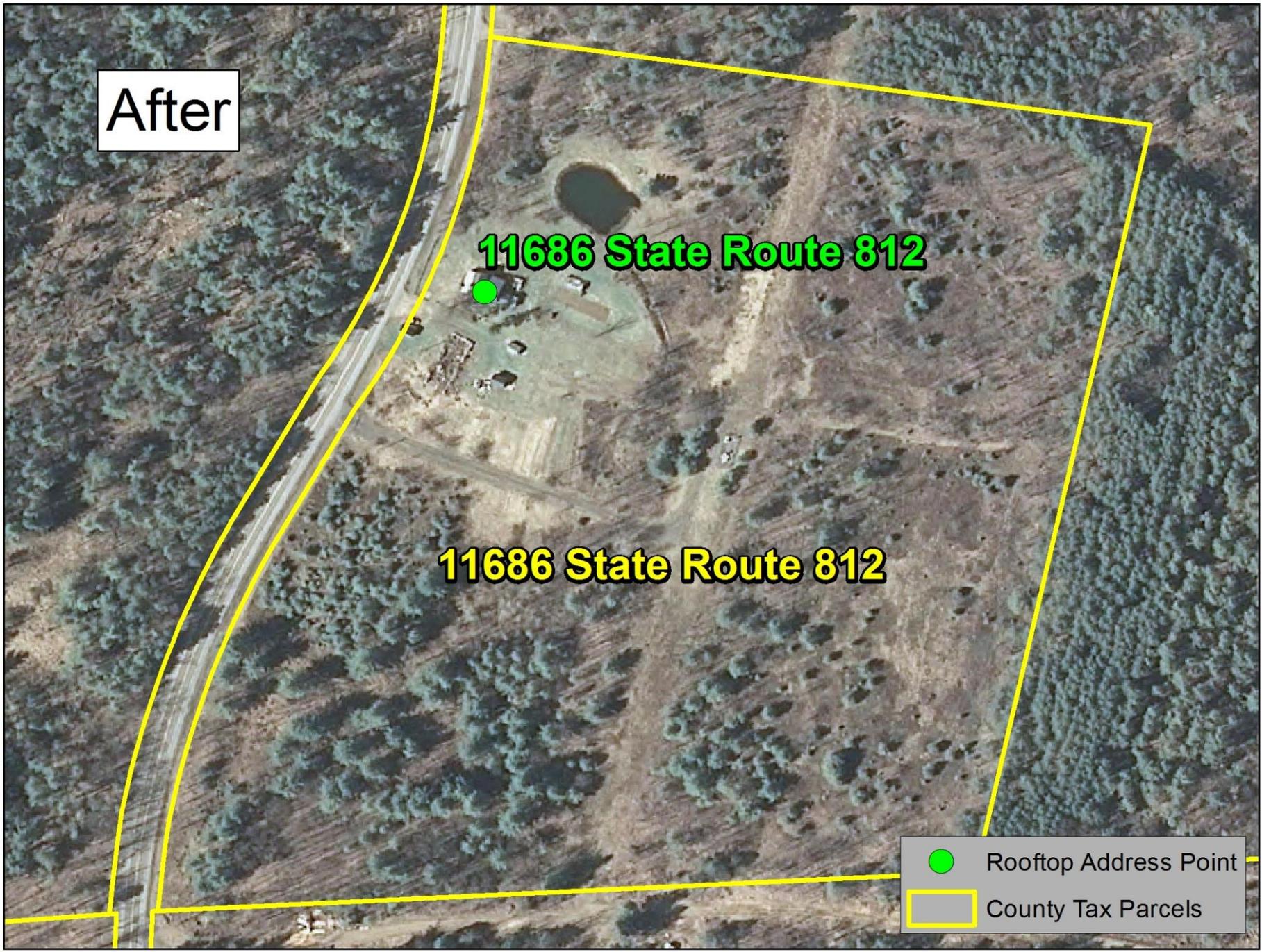
County Tax Parcels

After

11686 State Route 812

11686 State Route 812

-  Rooftop Address Point
-  County Tax Parcels



Before



- Parcel Centroid Point
- ▭ County Tax Parcels

After

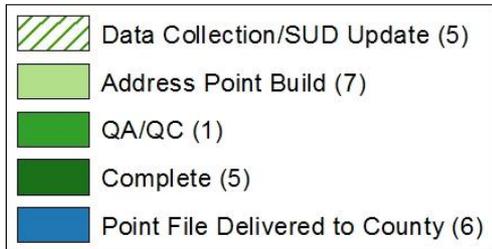
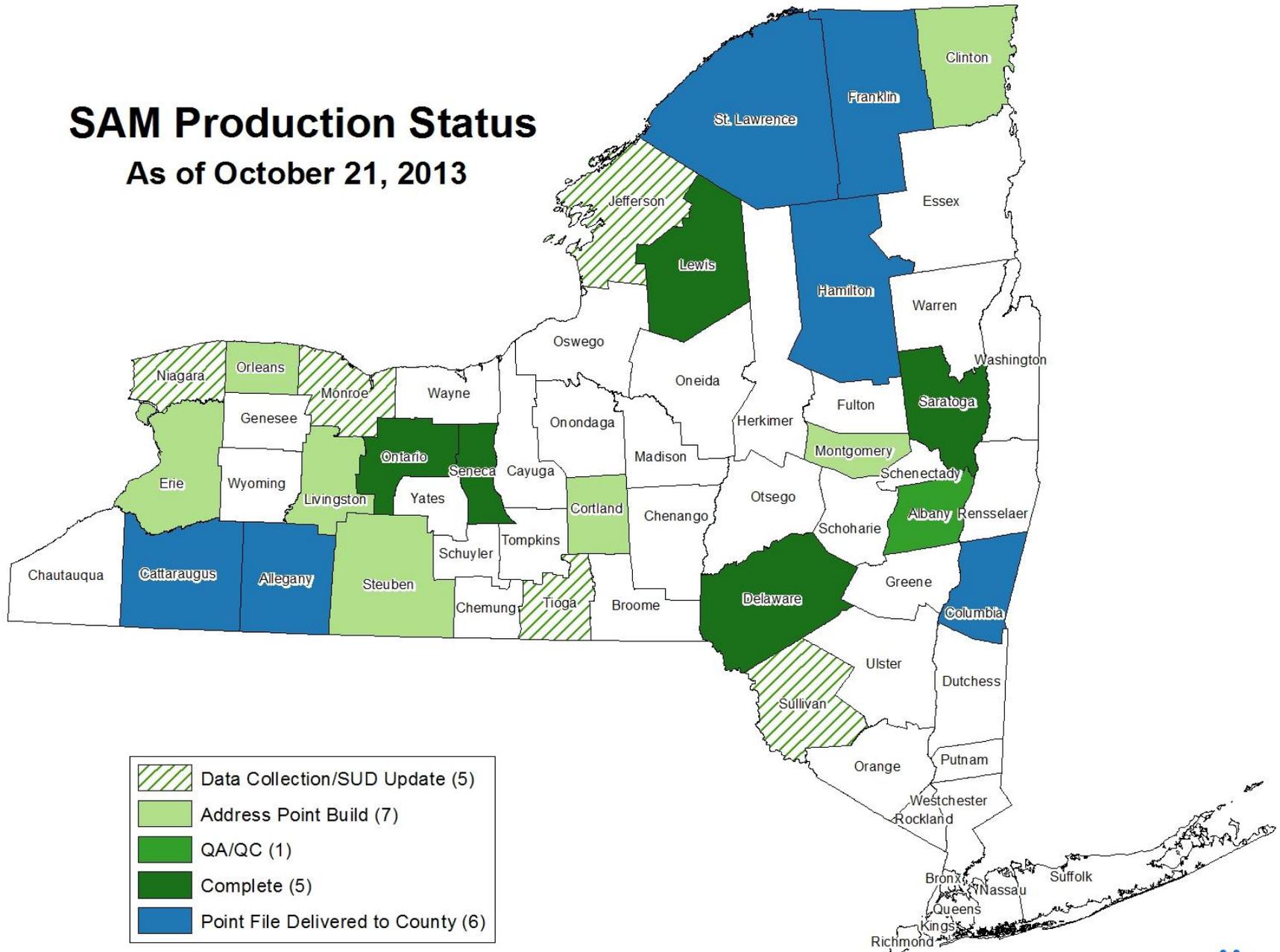


● Rooftop Address Point

▭ County Tax Parcels

SAM Production Status

As of October 21, 2013



Tentative County Order

1 Lewis	16 Clinton	31 Genesee	46 Oneida
2 Hamilton	17 Erie	32 Tompkins	47 Westchester
3 Cattaraugus	18 Livingston	33 Schuyler	48 Suffolk
4 Allegany	19 Montgomery	34 Yates	49 Greene
5 Franklin	20 Tioga	35 Chautauqua	50 Orange
6 Delaware	21 Jefferson	36 Rensselaer	51 Warren
7 Columbia	22 Sullivan	37 Onondaga	52 Madison
8 St. Lawrence	23 Niagara	38 Schenectady	53 Ulster
9 Seneca	24 Monroe	39 Fulton	54 Putnam
10 Saratoga	25 Wayne	40 Chenango	55 Dutchess
11 Albany	26 Schoharie	41 Broome	56 Nassau
12 Ontario	27 Wyoming	42 Otsego	57 Rockland
13 Steuben	28 Cayuga	43 Essex	
14 Cortland	29 Oswego	44 Herkimer	
15 Orleans	30 Chemung	45 Washington	

Post Data Build

- ITS tasks:
 - Error corrections
 - Post processing
 - Build new geocoding locators
 - Review Exception file and error flags
 - Data distribution
 - County address data flow discussions
 - Train Counties to use data maintenance tool
- County Tasks:
 - Spatially Invalid file and Exception file review
 - Submit edits via data maintenance tool or other agreed upon edit submission process
 - Review proposed street and address edits from ITS

Files Provided to Counties



Address Points Deliverable

(symbolized by Point Type)



Address Points Deliverable

(symbolized by Point Type)



Spatially Invalid Address Points

(addresses geocode only to street centerlines)



Spatially Invalid Address Points

(addresses geocode only to street centerlines)



Spatially Invalid Address Points

(addresses geocode only to street centerlines)



Exception Report

(addresses do not geocode to parcels or centerlines)

	A	B	C	D	E	F
1	Address	Unit	Address Source	Reason	Exception Flag	FEEDBACK
2	1 BRANDRETH PARK LONG LAKE		Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
3	1 FOUR CORS		Business Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
4	10 BRANDRETH PARK LONG LAKE		Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
5	100 N ROUTE 28 INLET		Business Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
6	1047 STATE ROUTE 30		Business Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
7	105 GUNDEL CT	3	Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
8	105 GUNDEL CT	4	Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
9	105109 ABRAMS RD		Business Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
10	106 WILD RD		Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
11	107 GUNDEL CT	5	Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
12	107 GUNDEL CT	6	Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
13	108 GUNDEL CT	10	Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
14	108 GUNDEL CT	9	Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
15	11 BRANDRETH PARK LONG LAKE		Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
16	11 CEDAR RIVER RD INDIAN LAKE		Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
17	111 ELM LAKE RD SPECULATOR 12164		Business Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
18	110 WILD RD		Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
19	112 LONE BIRCH CT		Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
20	1123 OLD PISECO RD PISECO		Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
21	113 GUNDEL CT	1	Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
22	113 GUNDEL CT	2	Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
23	114 GUNDEL CT	11	Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
24	114 GUNDEL CT	12	Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
25	114 GUNDEL CT	13	Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
26	114 GUNDEL CT	14	Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
27	115 GUNDEL CT	9	Business Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
28	116 GUNDEL CT	15	Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
29	116 GUNDEL CT	16	Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
30	117 LONE BIRCH CT		Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	
31	119 GUNDEL CT	7	Residential Address	Address was successfully geocoded to NYS Centerlines, but could not be accurately located	NF	

GeoComm Tool

- Web based data maintenance tool
- No cost for counties to use
- Edit data directly
 - Editing limited by geographic footprint
 - Add, delete, or reposition address points
 - Edit attributes on address points and streets
 - Add, delete or realign streets*
- Notification only option
 - Provide information/attachments for needed changes
 - Edits outside of your geographic footprint

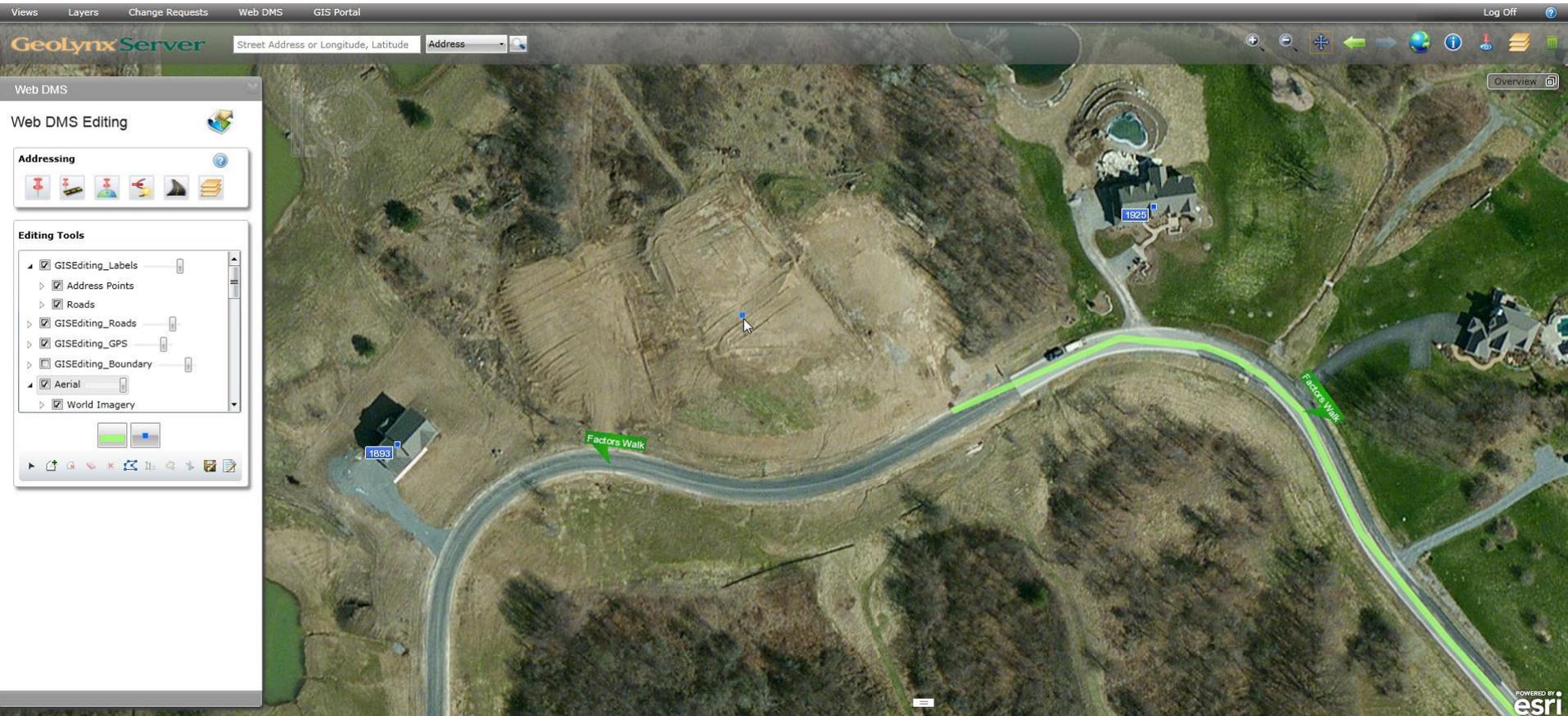
Add/Extend a Street

The screenshot displays the Geolynx Server web application interface. At the top, a navigation bar includes 'Views', 'Layers', 'Change Requests', 'Web DMS', 'GIS Portal', and 'Log Off'. Below this is a search bar labeled 'Street Address or Longitude, Latitude'. The main area is an aerial map showing a residential area with a newly added street highlighted in bright green. The map includes various address points (e.g., 1893, 1925, 1931, 1937, 1941, 1945, 1947, 1881, 1879, 784, 1870, 1668, 1852, 1849, 1880, 8482, 8436, 8574, 8554) and street names like 'Farmers Walk', 'State Route 64', and 'Unnamed Street'. On the left side, a 'Web DMS Editing' panel is open, featuring an 'Addressing' section with icons for address points, roads, and GPS, and an 'Editing Tools' section with checkboxes for 'GISEditing_Labels', 'Address Points', 'Roads', 'GISEditing_Roads', 'GISEditing_GPS', 'GISEditing_Boundary', 'Aerial', and 'World Imagery'. The bottom right corner of the map area features the 'esri' logo and the text 'POWERED BY esri'.

Add/Edit Street Attributes

The screenshot displays the Geolynx Server GIS interface. At the top, navigation tabs include Views, Layers, Change Requests, Web DMS, and GIS Portal. A search bar for "Street Address or Longitude, Latitude" is visible. The main map area shows an aerial view with a cyan street boundary and a green street line. A "Web DMS Editing" sidebar on the left contains "Addressing" tools and "Editing Tools" such as GISEditing_Labels, Address Points, Roads, GISEditing_Roads, GISEditing_GPS, GISEditing_Boundary, Aerial, and World Imagery. An "Attributes" dialog box is open, showing fields for "LeftFromAddress", "LeftToAddress", "RightFromAddress", "RightToAddress", "CompleteStreetName" (set to "Factors Walk"), "PreModifier", "PreDirectional", "PreType", "SeparatorElement", "StreetName", and "PostType". "Update" and "Delete" buttons are at the bottom of the dialog. The top right corner features a "Log Off" button and an "Overview" button.

Add an Address Point



Add Address Point Attributes

The screenshot displays the GeolynxServer GIS interface. At the top, navigation links include Views, Layers, Change Requests, Web DMS, GIS Portal, and Log Off. The main header shows 'GeolynxServer' and a search bar with 'Street Address or Longitude, Latitude' and 'Address' as input. On the left, the 'Web DMS Editing' sidebar contains 'Addressing' tools (pin, delete, add, edit, undo, redo) and 'Editing Tools' (GISEditing_Labels, Address Points, Roads, GISEditing_Roads, GISEditing_GPS, GISEditing_Boundary, Aerial, World Imagery). The central 'Attributes' dialog box is open, showing the following fields: PrefixAddressNumber (empty), AddressNumber (1899), SuffixAddressNumber (dropdown), PreModifier (empty), PreDirectional (dropdown), PreType (dropdown), SeparatorElement (dropdown), StreetName (Factors Walk), PostType (dropdown), PostDirectional (dropdown), PostModifier (empty), and SuffixAddress (empty). 'Update' and 'Delete' buttons are at the bottom of the dialog. The background is an aerial map of a residential area with a road labeled 'Factors Walk' highlighted in green. Address points are marked with blue labels: 1893, 1899, and 1826. An 'Overview' button is in the top right corner. The bottom right corner features the 'POWERED BY esri' logo.

Reposition an Address Point

The screenshot displays the GeolynxServer web application interface. At the top, there are navigation tabs for Views, Layers, Change Requests, Web DMS, and GIS Portal. A search bar labeled "Street Address or Longitude, Latitude" contains the text "Address". The main map area shows an aerial view of a residential area with a road highlighted in green. Several address points are visible, with labels like "1925", "1931", and "1937". A red box highlights the "Parcel Centroid" option in the "PointType" dropdown menu of the "Attributes" window. The "Attributes" window also shows fields for ZipName (Ionia), State (New York), ZipCode (14475), AddressSource (County Building Footprint), DateUpdated (9/10/2013 7:00:00 PM), PrimaryPoint (Yes), CityTownName (West Bloomfield), PlaceName, and PlaceType. The "Update" and "Delete" buttons are visible at the bottom of the window. On the left side, there is a "Web DMS Editing" panel with "Addressing" and "Editing Tools" sections. The "Addressing" section includes icons for various address-related functions. The "Editing Tools" section includes checkboxes for GISEditing_Labels, Address Points, Roads, GISEditing_Roads, GISEditing_GPS, GISEditing_Boundary, Aerial, and World Imagery. The bottom right corner of the map area features the "POWERED BY esri" logo.

Change PointType Attribute

The screenshot displays the GeolynxServer GIS interface. At the top, there are navigation tabs for Views, Layers, Change Requests, Web DMS, and GIS Portal. A search bar labeled 'Street Address or Longitude, Latitude' contains the text 'Address'. The main map area shows an aerial view of a residential area with a road highlighted in green. Several address points are visible, with labels like '1925', '1931', and '1937'. On the left side, there is a 'Web DMS Editing' panel with 'Addressing' and 'Editing Tools' sections. The 'Addressing' section includes icons for various address types. The 'Editing Tools' section has checkboxes for GISEditing_Labels, Address Points, Roads, GISEditing_Roads, GISEditing_GPS, GISEditing_Boundary, Aerial, and World Imagery. On the right side, an 'Attributes' dialog box is open, showing fields for ZipName (Ionia), State (New York), ZipCode (14475), PointType (Rooftop), AddressSource (County Building Footprint), SourceOfData, DateUpdated (9/10/2013 7:00:00 PM), PrimaryPoint (Yes), CityTownName (West Bloomfield), PlaceName, and PlaceType. The 'PointType' dropdown menu is highlighted with a red box. At the bottom right of the map, there is a 'POWERED BY esri' logo.

Update on NENA GIS Standards

- *Civic Location Data Exchange Format (CLDXF) Standard*
 - Parses addresses into smallest data elements
 - To be submitted for publication
- *NG9-1-1 GIS Data Model Standard*
 - Identifies the GIS data layers & defines attributes
 - To be submitted for NENA All Committee Review
- *Site/Structure Address Point GIS Data for 9-1-1*
 - Where to place a point & how many points
 - In development
- Provisioning GIS Data (ECRF/LVF)
 - Loading local GIS data into a national database
 - Completed NENA All Committee Review; public review next
- NENA web site: www.nena.org

Want to Stay Informed?

- SAM Project Webpage:
 - <http://www.dhSES.ny.gov/ocs/streets>
 - Address Points Schema
 - County data build list
 - Status Maps
 - Presentations
- NYS 9-1-1 GIS Workgroup
 - Monthly webinar on 3rd Thursday at 1pm
 - Over 60 NYS 9-1-1 and NYS GIS professionals
 - Review/discuss NENA GIS-related standards
- SAM Newsletter (bimonthly email)

Thank you!

SAM Project Web Page:

<http://www.dhSES.ny.gov/ocs/streets>

