



NYSLGITDA Spring Meeting

May 15, 2012

NYS Division of Homeland Security &
Emergency Services
Office of Cyber Security

SAM Project Objective

Create a statewide authoritative address point database to support next-generation 9-1-1 and other purposes

SAM Partners

- DHSES (incl. State 911 Board)
- NY 911 Coordinators Association
- New York State Association of Counties
- NENA
- US Census Bureau
- US Postal Service
- NTIA



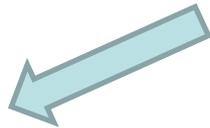
Big Picture

- Building to highest level requirements (i.e. 911) will support all lower requirements
- Next Generation 911 **requires** GIS data
- Huge range of needs for address data statewide
- Not a re-addressing project; we're just mapping what you've got
- Address point data will...
 - *Support 9-1-1 dispatch*
 - *Be publicly available for widespread uses*
 - *Support high-quality geocoding*
 - *Contain no personal or sensitive information*

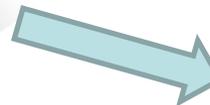
In Addition to 911 Dispatch, the Data will Improve:

- Sex offender placements by County
Social Services & Parole Officer casework
- Sales tax collection and distribution
- Welfare to Work programs
- School bus routing
- Address Geocoding (GPS navigation, online driving directions)

Geocoding – adds a longitude and latitude (x/y) to an address string using a geocoding service



1220 Washington Avenue
Albany, NY



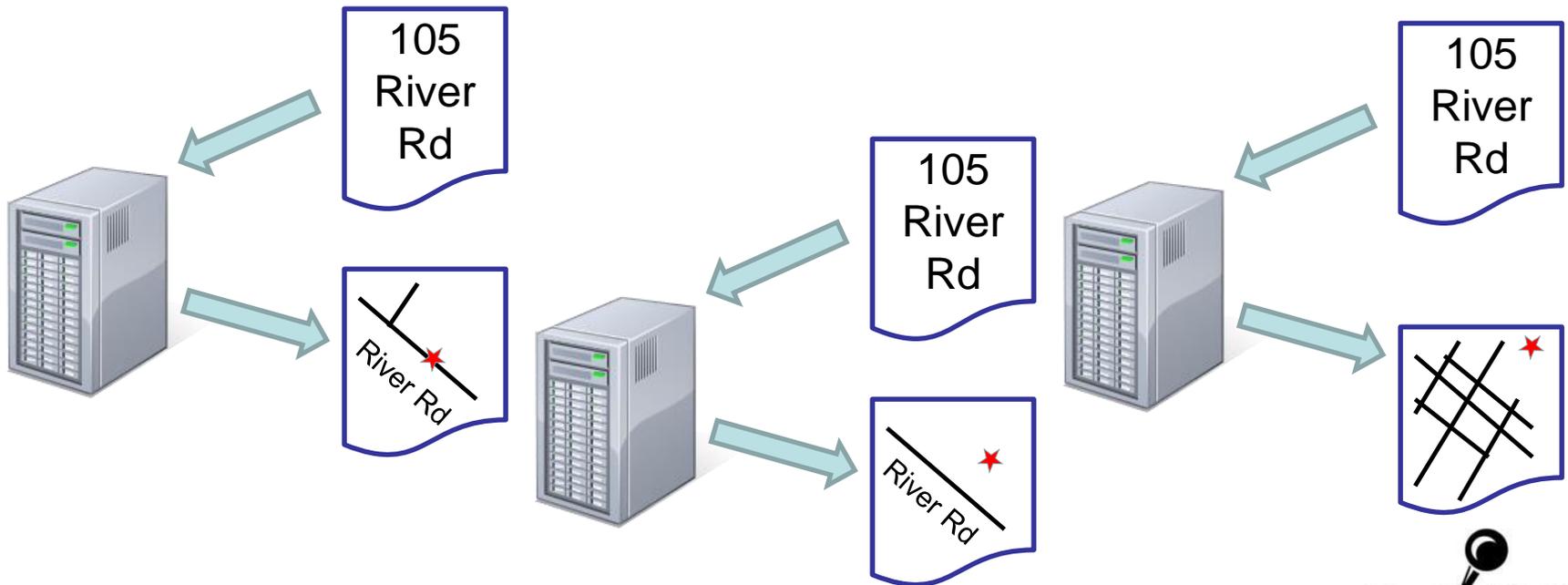
1220 Washington Avenue
Albany, NY 12242, 42.680349,-73.810409

Current Geocoding Status Across the State

Identical input addresses yield different results!

Counties, Cities, Towns and State Agencies

Each hosts a geocoder which returns different results



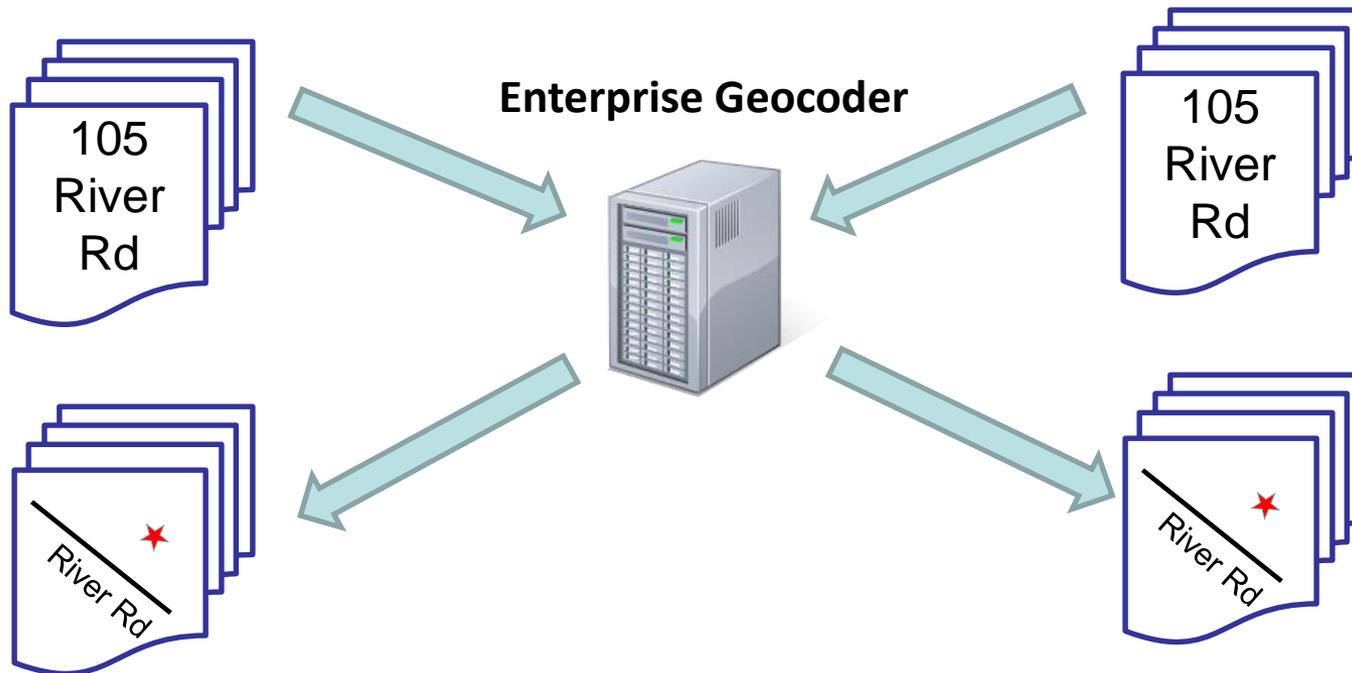
Geocoding With a Centralized Service

Identical input addresses yield identical results

<http://gisservices.dhSES.ny.gov/arcgis/services>

Counties, Cities and Towns

State Agencies



Colorado “Lower North Fork” Fire

April 6, 2012, Associated Press

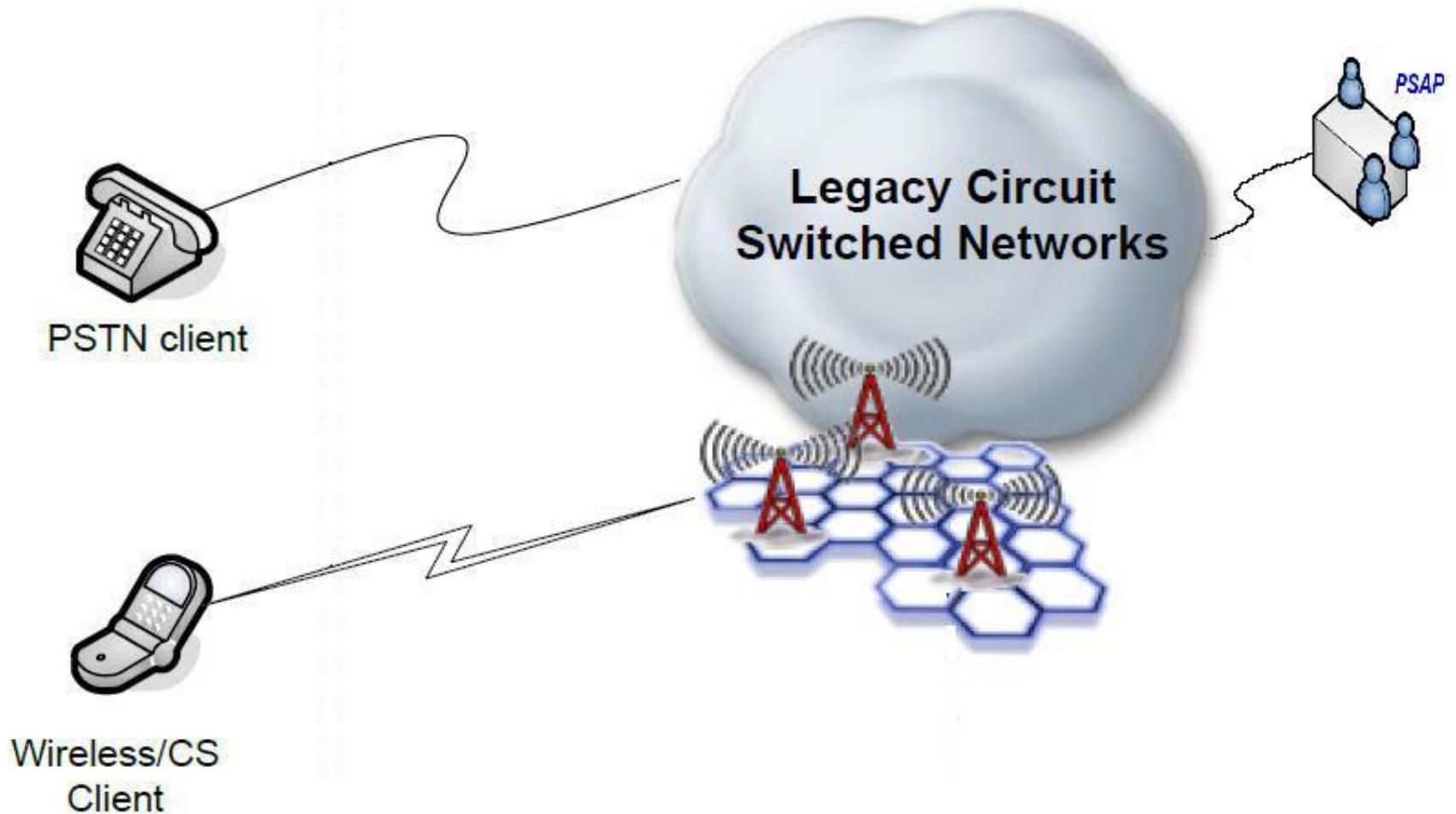
- Emergency notification system did not call all affected residents (88%)
- Emergency notification system called some in unaffected areas
 - increasing return call 9-1-1 volume
- An unrecognized or missing place name (Morrison) caused homes to be listed with unknown location.
- 3 people died



NG911 Game Changers

- More than voice (audio)
 - Text
 - Email
 - Images
 - Video
- Systems are IP based (Internet)
- IP Security
- Phones move and transmit their location
- GIS data is at the core

Today's 9-1-1 Architecture



NG9-1-1 Architecture

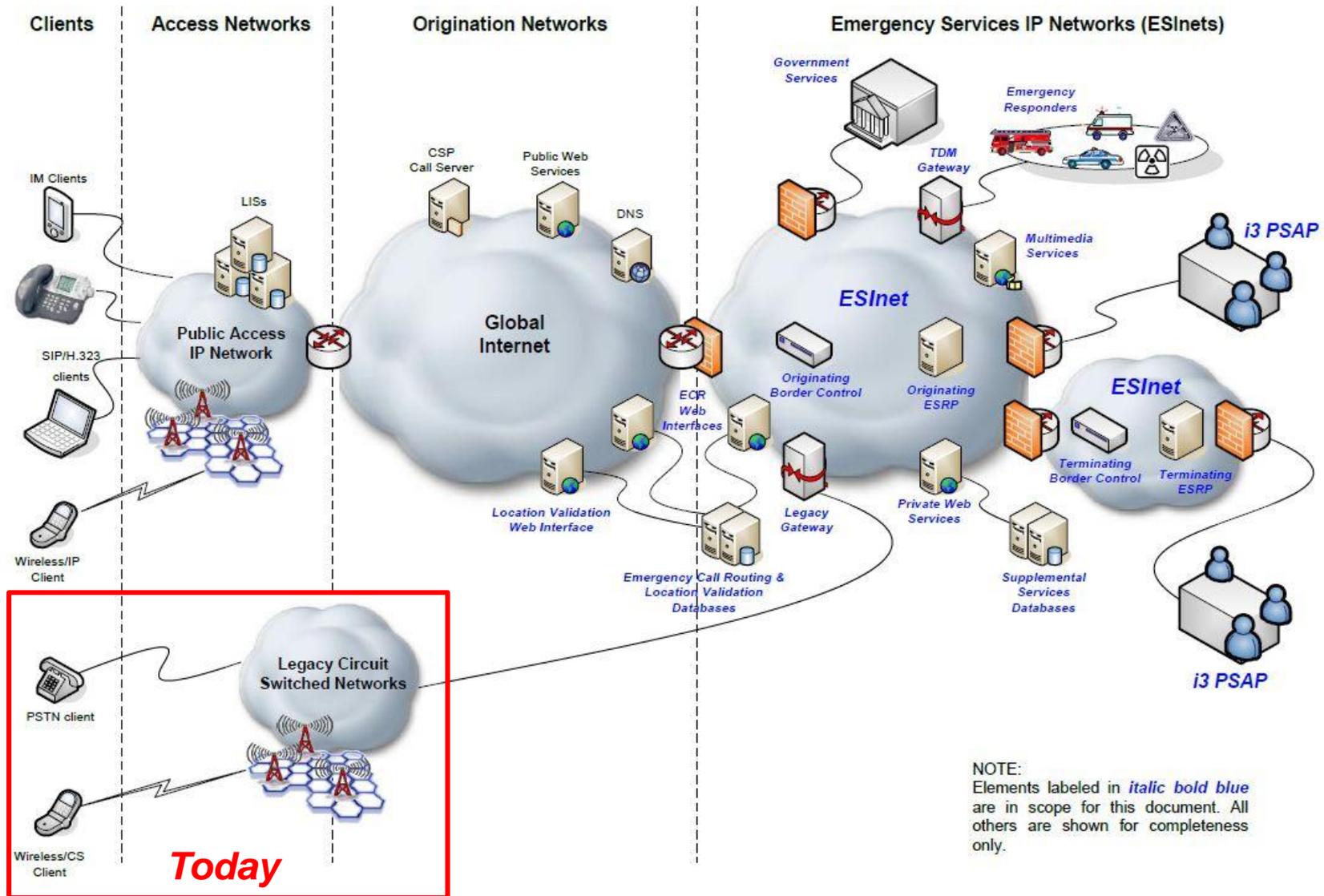


Figure 4-3 Example i3 Physical Architecture

Address Standards

- FGDC Standard(*February 2011*)
 - Parses/breaks out addresses into smaller components
 - Jointly developed by URISA & NENA
 - Includes subaddresses
- NENA version
 - Allows some abbreviations
 - NENA reviewing 200+ public comments
- Mapping (location) standard for address points lacking
 - Where to place a point & how many points?
 - NENA standing up a work group
 - Will follow NENA standards development process

Some examples of what address standards will resolve...





600 ft.

What's a Subaddress?

- 123 Main Street, **Apartment 101**
- U.S. Dept. of Agriculture Building, **Floor 7, Room 324**
- 800 West Mountain Road, **Building 6, Suite 450**
- Suburban Office Park, **Building 12, Mezzanine, Suite 200**
- Five-Star Hotel, **East Tower, Penthouse**
- General Hospital, **Cardiac Wing, Room 224**
- Metro Airport, **Terminal A, Gate C27**
- Batavia Downs, **Barn 12**

Some examples...





Duplex
10A Limerick Ave
& 10B Limerick Ave



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

**Apartment Building
Complex
70 Mc Carty Ave
Building 1, Apt 1;
Building 2, Apt 4; etc.**



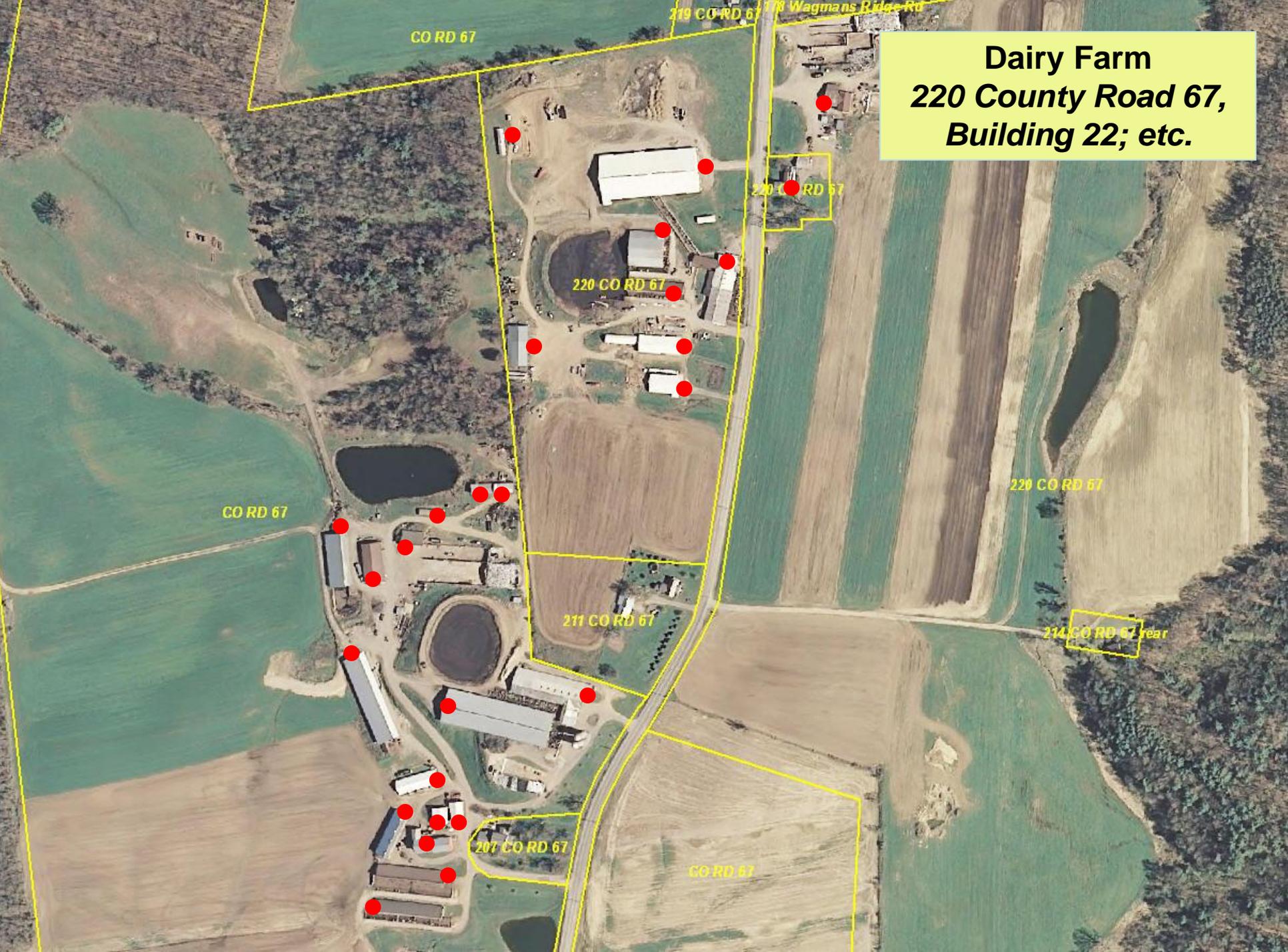
70 Mc Carty Ave

Rear 74 Mccarty Ave

603 S Pearl St

Trailer Park
2941 Amsterdam Rd,
Lot 1, Lot2, Lot 3, etc.





Dairy Farm
220 County Road 67,
Building 22; etc.

Conversion to NENA Standard

Before

ADDRUNITS	APUNIT
132 GRANT EGBERT BLVD E BLDG G28	2-7 FL 4

After

AddressNumber	StreetName	PostType	PostDirectional	Building	Floor	Unit
132	GRANT EGBERT	BLVD	E	BUILDING G28	FLOOR 4	2-7

Statewide Address Point Build: 2 Stages

Stage 1:

State contracts for assistance in mapping
“Principal” address points

- Points on building rooftop
 - not including supplemental points
 - not including subaddresses
 - (unless they already exist in county data)
- Address will be in NENA standard

State migrates existing county address points
data to NENA standard

Statewide Address Point Build: 2 Stages

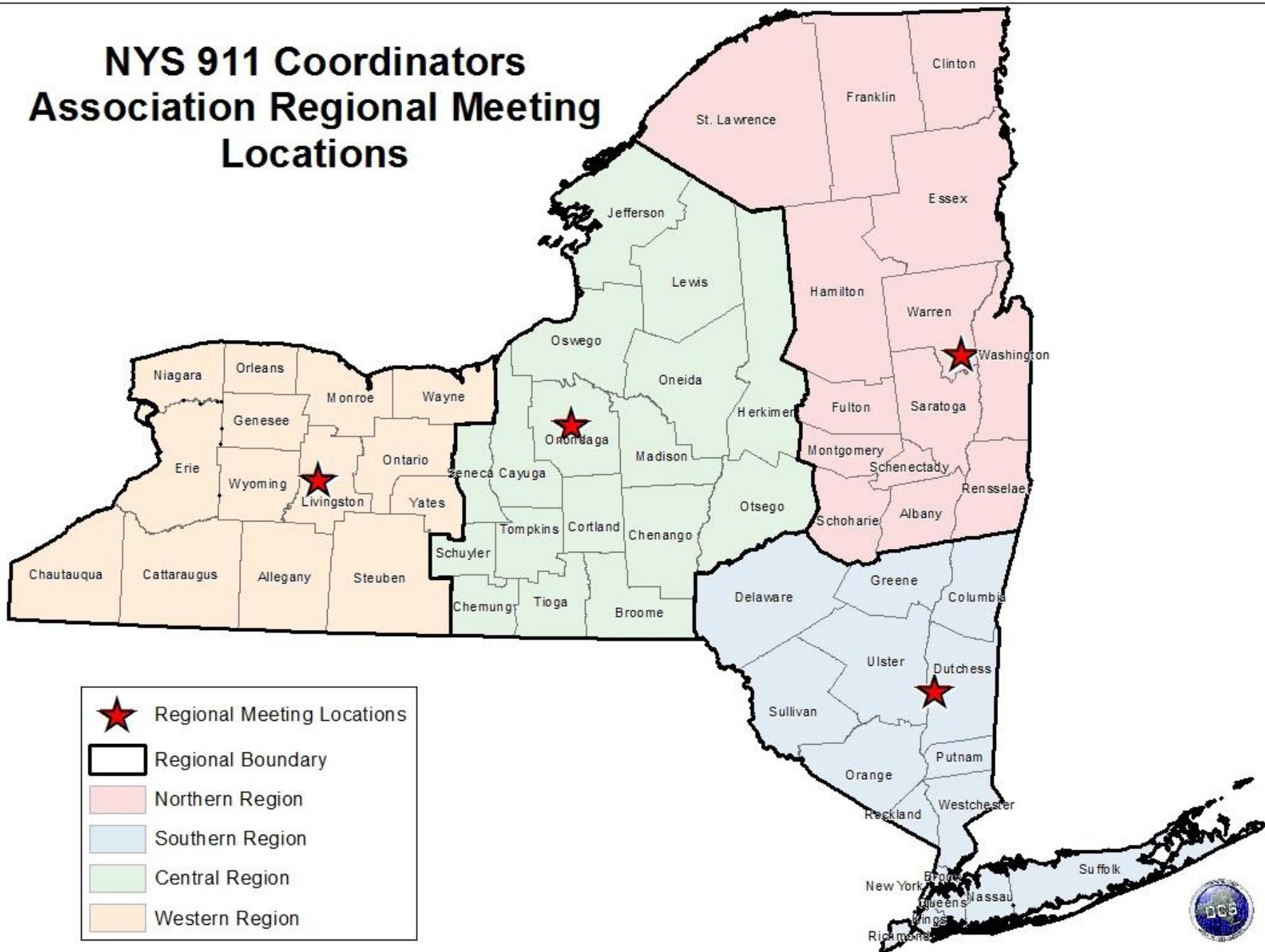
Stage 2:

Using the pending NENA standards

- Refine locations
- Map **subaddresses**
- Place **supplemental points** (driveways, entrances, etc)
- Potential State grant funding (via 911 Board) based on future NENA standards

Where are we now...

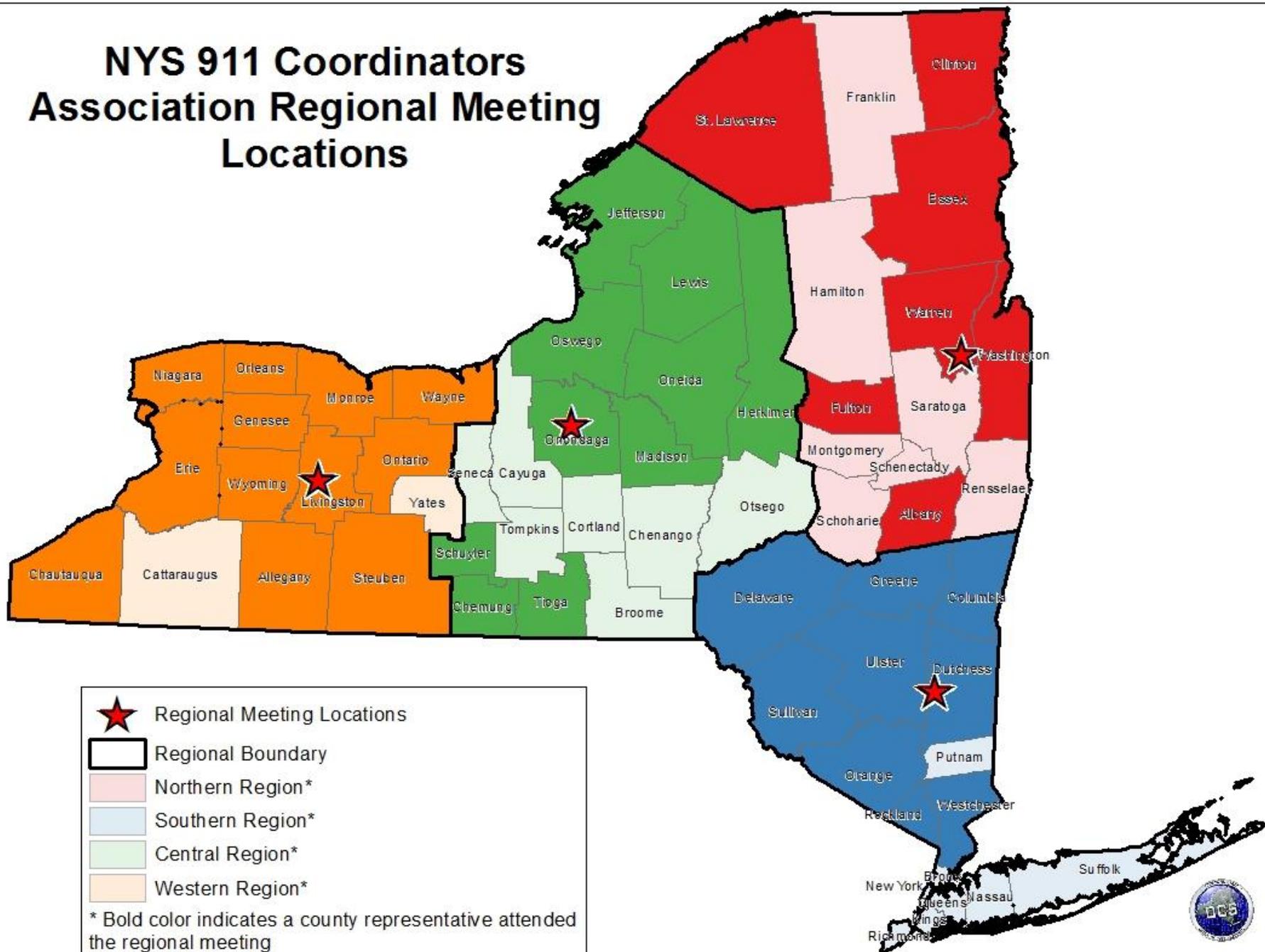
NYS 911 Coordinators Association Regional Meeting Locations



- ★ Regional Meeting Locations
- ▭ Regional Boundary
- Northern Region
- Southern Region
- Central Region
- Western Region



NYS 911 Coordinators Association Regional Meeting Locations



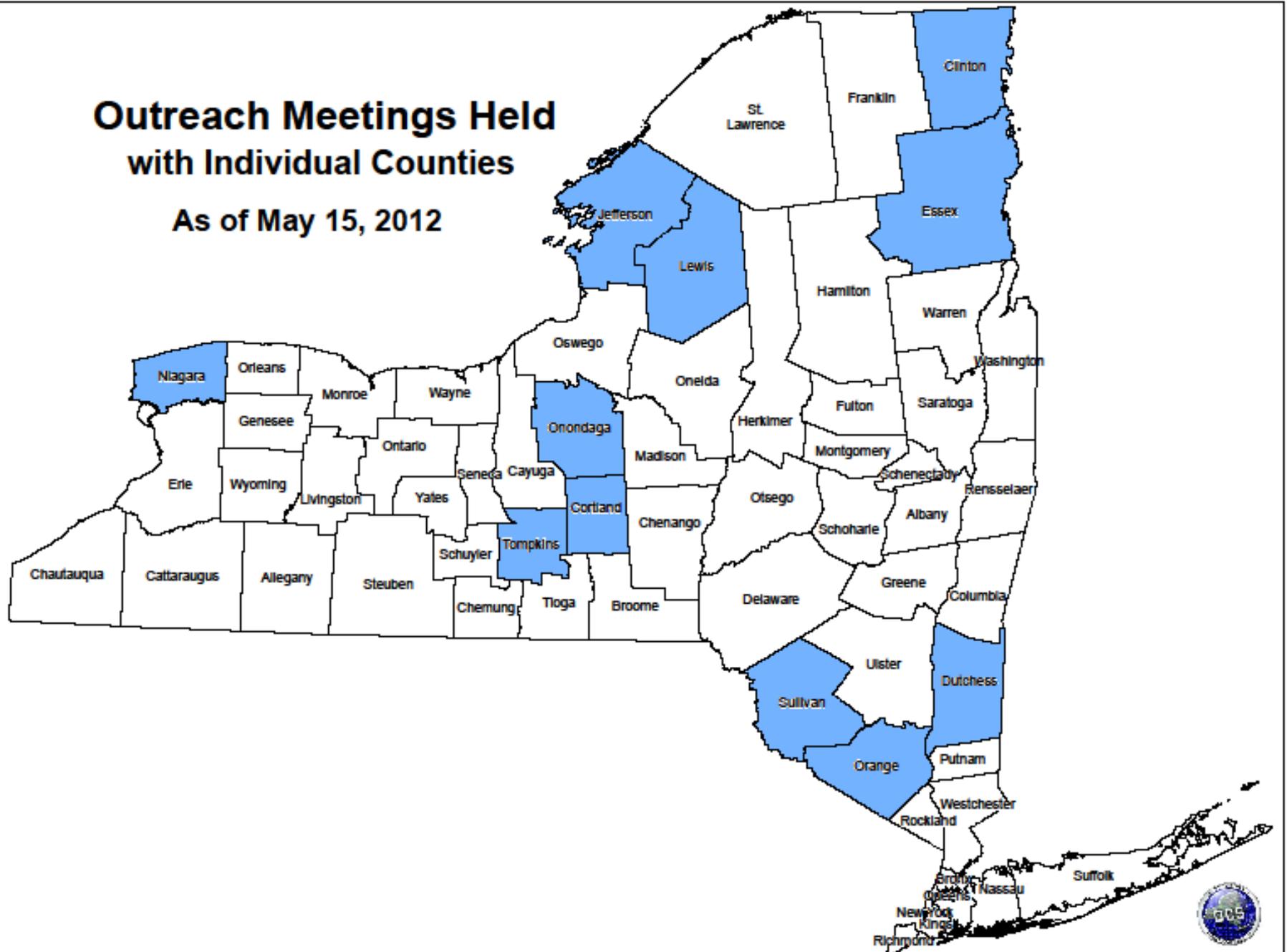
-  Regional Meeting Locations
-  Regional Boundary
-  Northern Region*
-  Southern Region*
-  Central Region*
-  Western Region*

* Bold color indicates a county representative attended the regional meeting



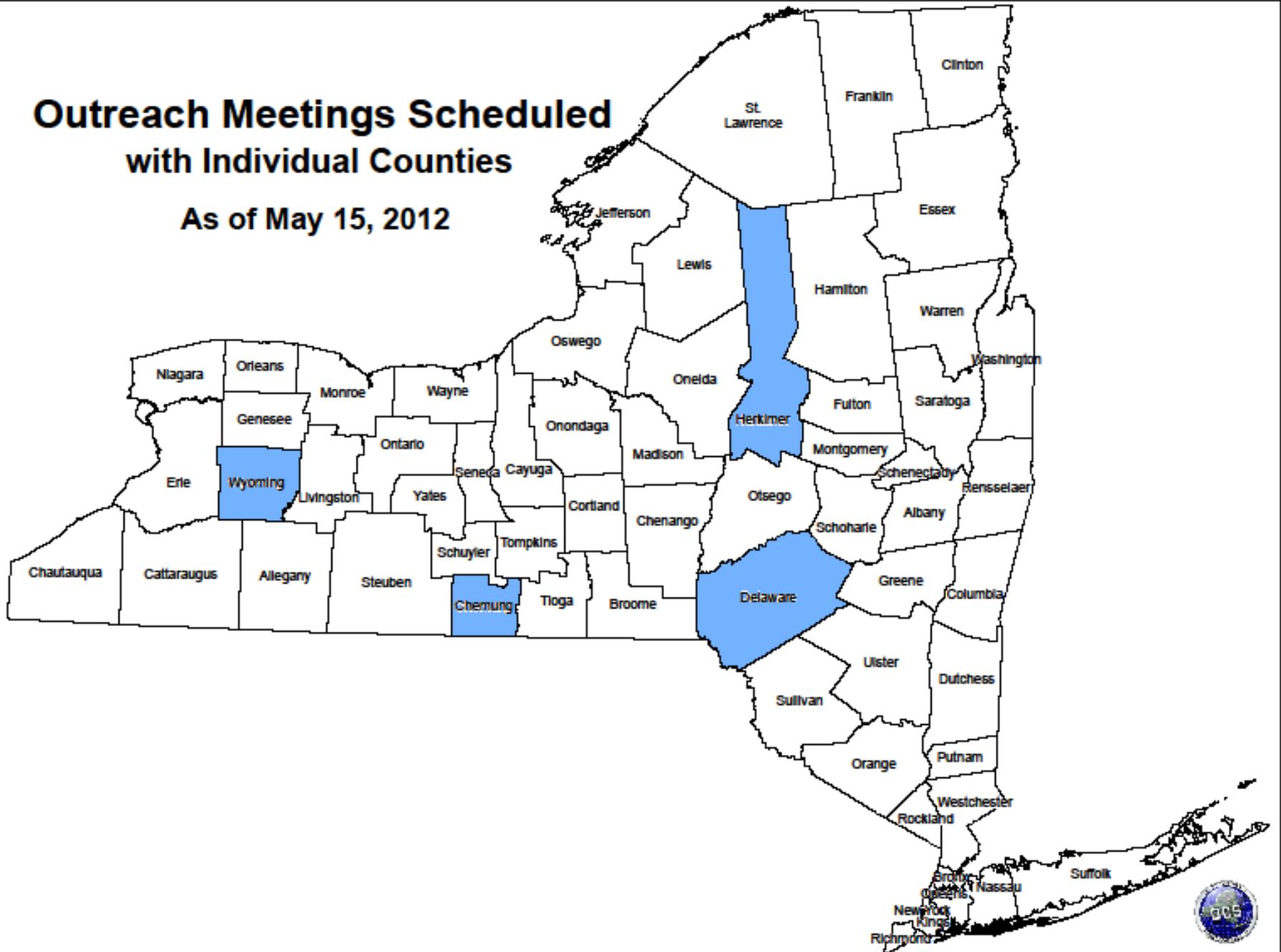
Outreach Meetings Held with Individual Counties

As of May 15, 2012



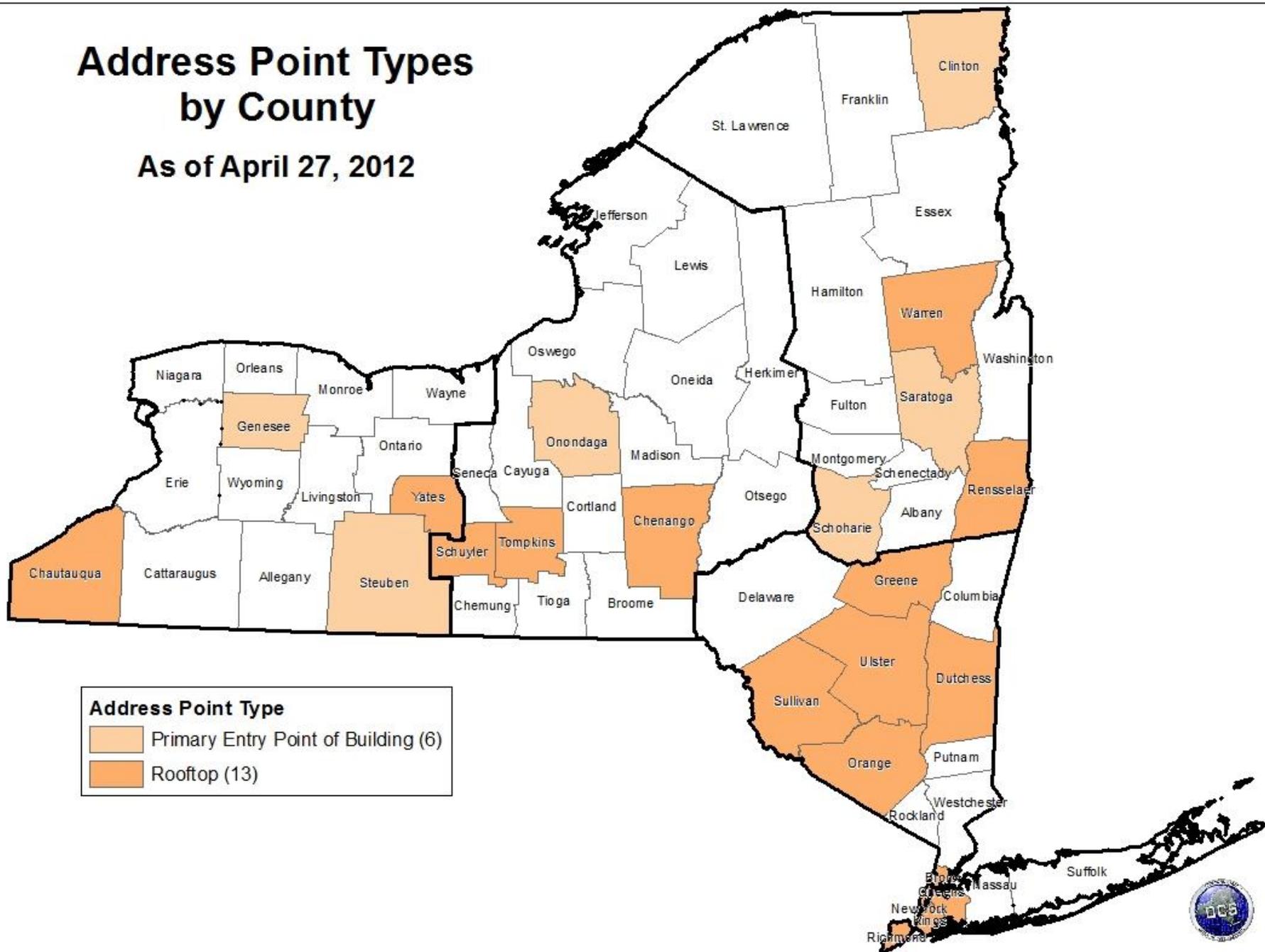
Outreach Meetings Scheduled with Individual Counties

As of May 15, 2012



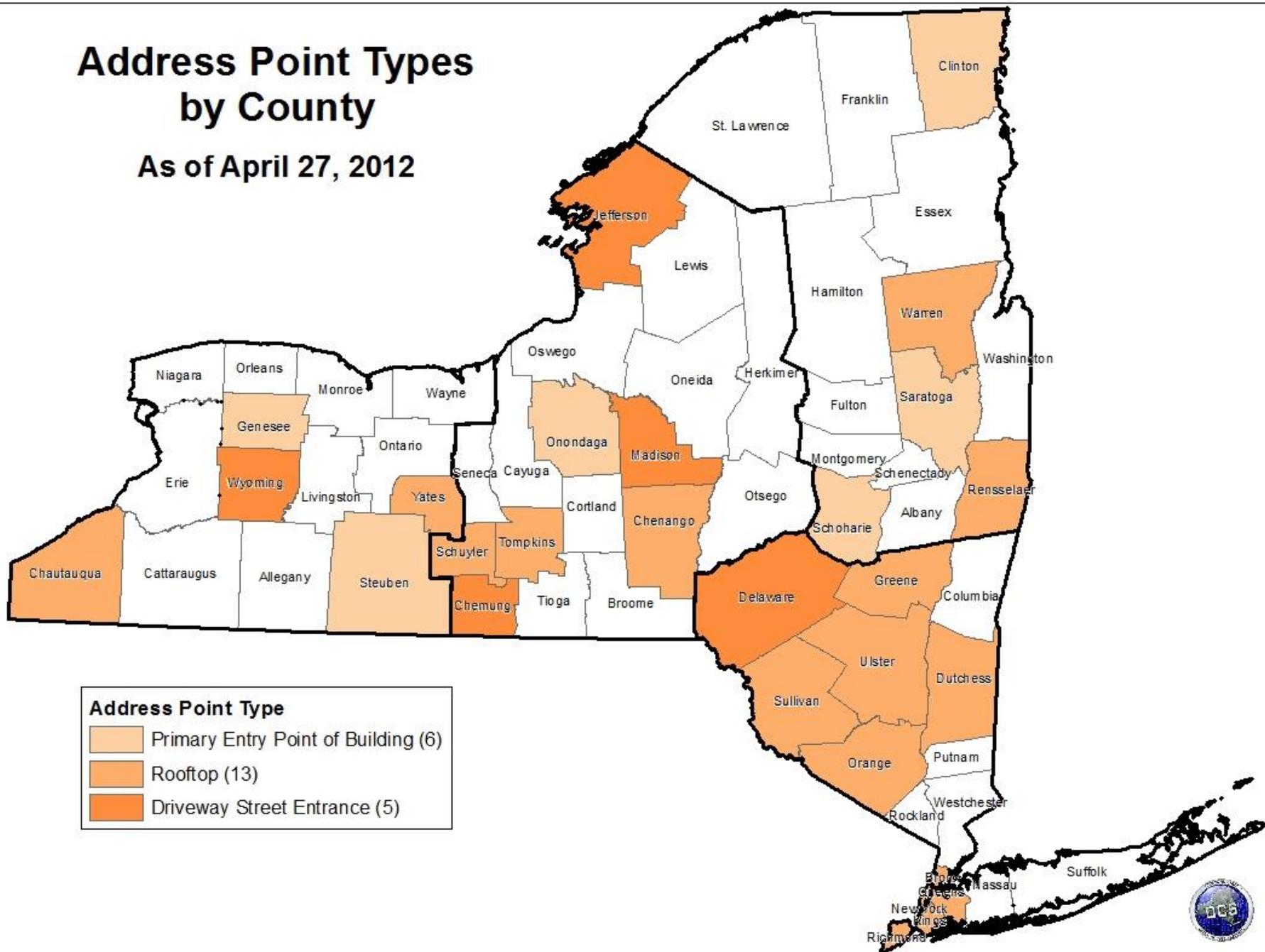
Address Point Types by County

As of April 27, 2012



Address Point Types by County

As of April 27, 2012

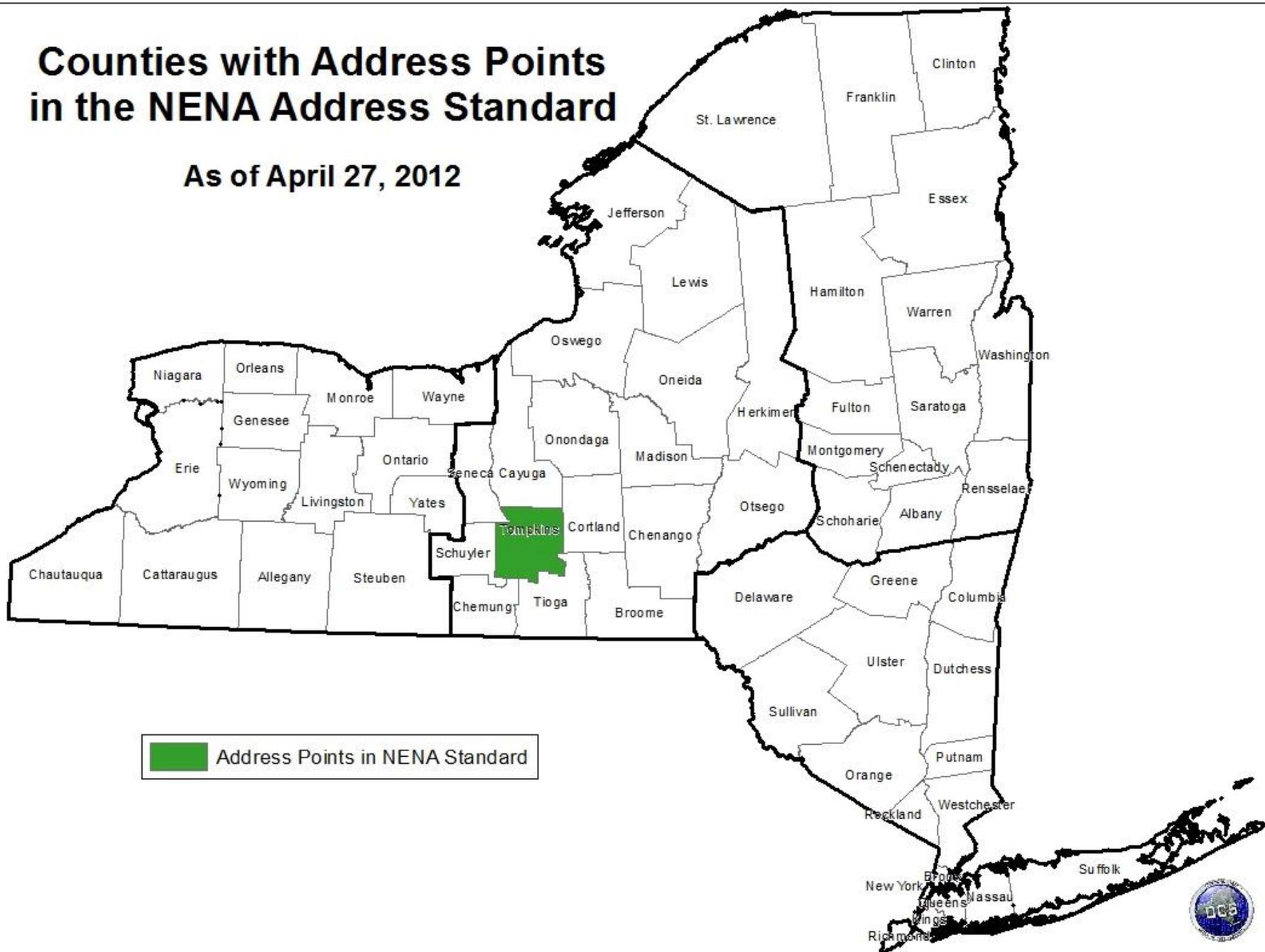


Pilot Project Status

County	Total Points	Points Completed	Time	Points Processed per Hour
Warren	32,885	13,873 (point location)	144 hrs	96.3
Lewis	25,986	3,399 (point location & NENA standard)	108 hrs	31.5
Tompkins	38,182	all (NENA standard)	75 hrs	509.1

Counties with Address Points in the NENA Address Standard

As of April 27, 2012



Take-Aways

- Come to SAM informational meeting
- Consider SAM project and new address standard when building new or upgrading address centric information systems
- Tune in to what is happening with NG-911
- Build or strengthen relationships with 911 offices and GIS units
- Make sure your CAD vendor is informed and has a plan

Thank you!

**Greg and I will stick around for
questions?**