



# **New York State's NG911 Addressing Project**

***Bill Johnson***

New York State Division of Homeland  
Security & Emergency Services

*February 27, 2012*

# Big Picture (1 of 2)

- Next Generation 911 *requires* GIS data
- Huge range of needs for address data statewide
- State-led project is most efficient / least costly
- Building to highest level requirements (i.e. NG911) will support all lower requirements
- Centralized coordination for Census Bureau\*
- We have federal (NTIA) funds to get started

\* Stay tuned for Census Address Panel at 2:00 today!



# Big Picture (2 of 2)

- One master address point database
- Extract versions for different requirements
- 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*
  - *Contain unique IDs*



# **In Addition to 911 Dispatch, the Data will Improve:**

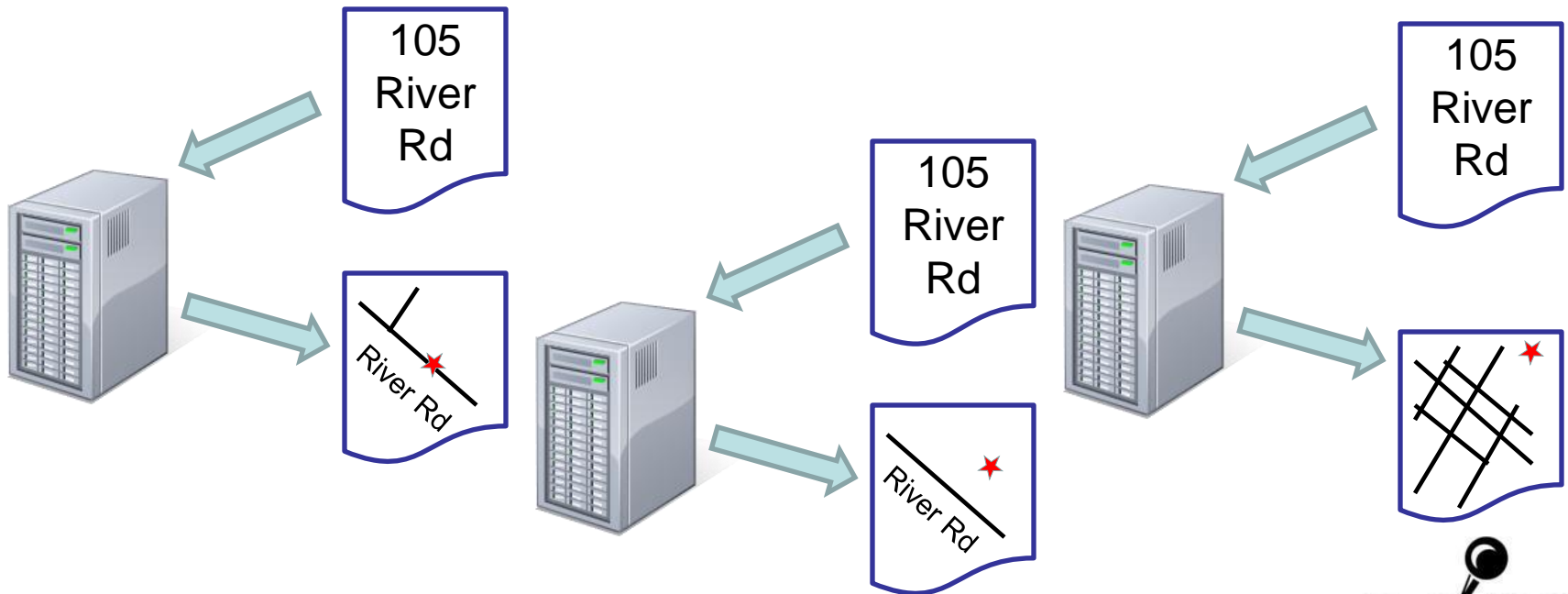
- Sex offender placements by County  
Social Services & Parole Officer casework
- Sales tax collection and distribution
- NYS DEC permitting (e.g. Chemical Bulk Storage Facilities, Pesticide application)
- Welfare to Work programs
- School bus routing

# 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

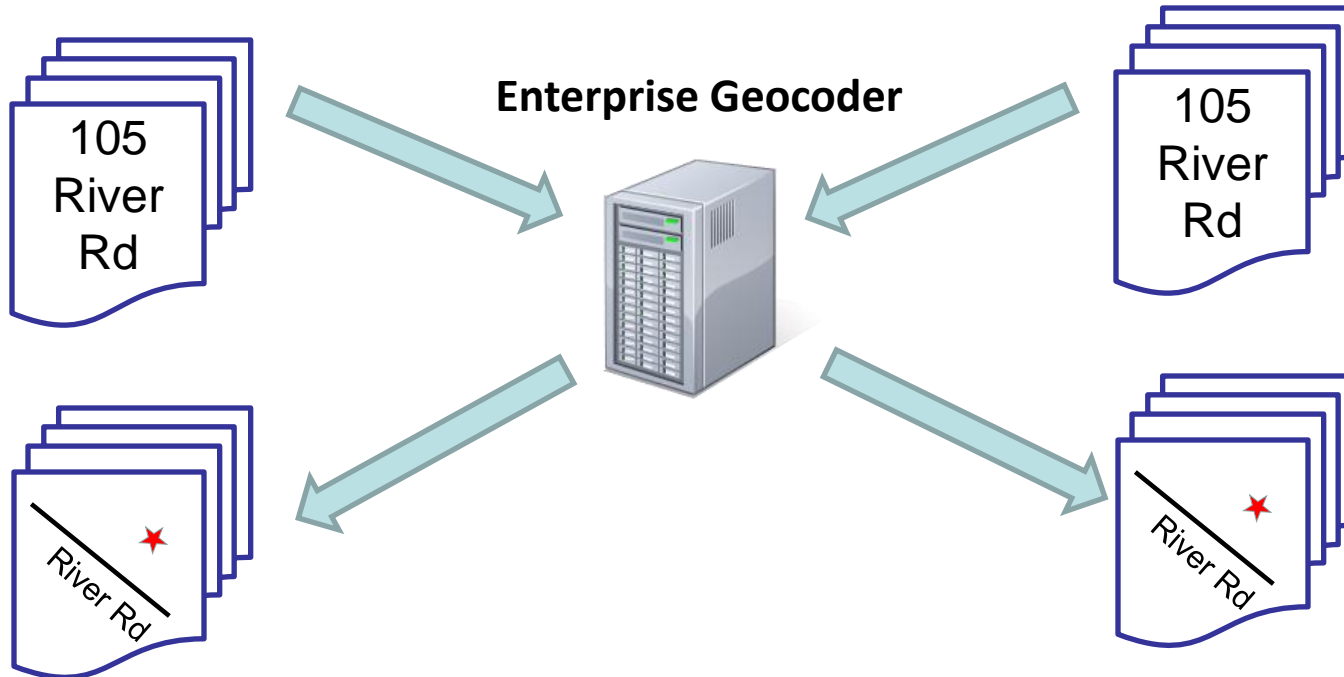


# Geocoding With a Centralized Service

*Identical input addresses yield identical results*

Counties, Cities and Towns

State Agencies



# 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





# NENA Address Standards

- FGDC *US Thoroughfare, Landmark and Postal Address Data Standard (2/9/11)*
  - Parses/breaks out addresses into smaller components
  - Jointly developed by URISA & NENA
  - Includes subaddresses
- NENA version similar
  - *Civic Location Data Exchange Format (CLDXF)*
  - Allows some abbreviations
  - NENA reviewing 200+ public comments on CLDXF
- Mapping 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 the NENA  
standard will resolve...







# 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

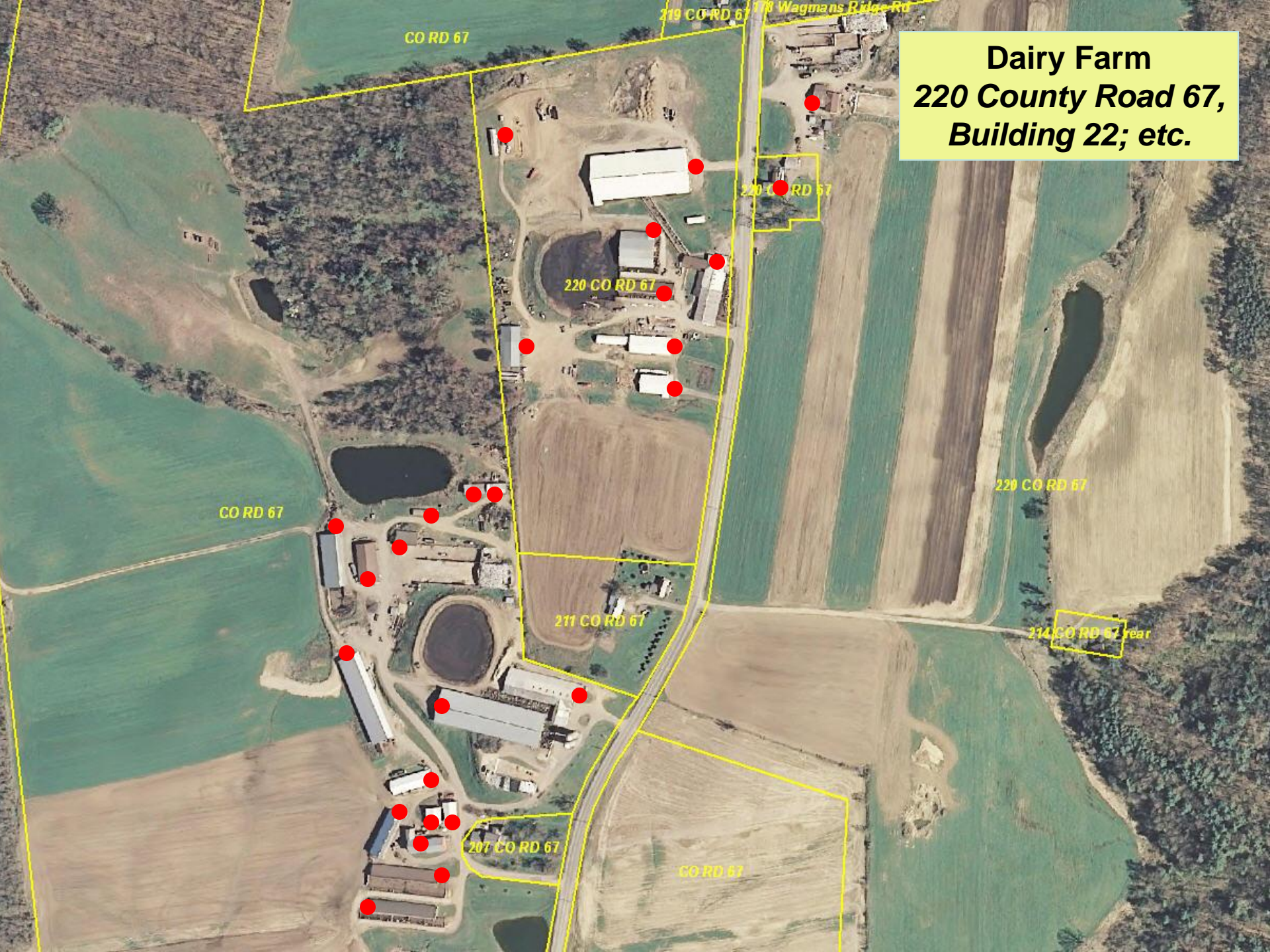
Rear 74 Mccarty Ave

603 S Pearl St

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







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

CO RD 67

219 CO RD 67 Wagmans Ridge Rd

220 CO RD 67

220 CO RD 67

220 CO RD 67

CO RD 67

211 CO RD 67

214 CO RD 67 year

207 CO RD 67

CO RD 67

# Statewide Address Point Build: 2 Stages

## Stage 1:

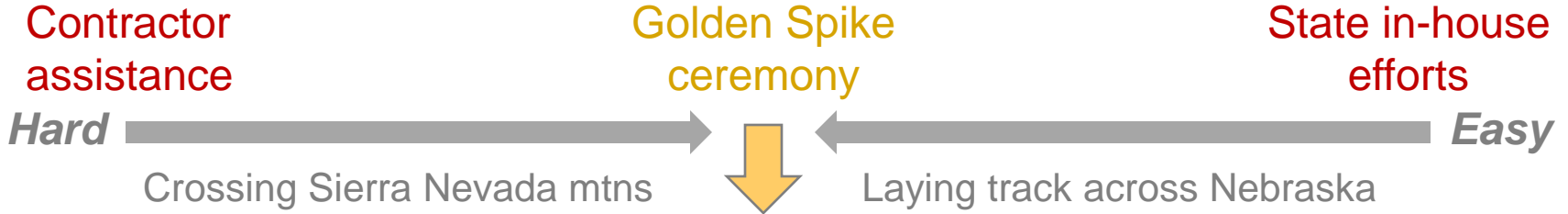
State contracts for assistance in mapping “main structure” address points

- Points on building footprint
  - 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

# Stage 1

## Like building the Transcontinental RR...



Central Pacific  
RR crew

Union Pacific  
RR crew

Promontory Summit, Utah, May 10, 1869

# 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

# Conversion to NENA Standard

Before

| OBJECTID * | Shape * | ADDRESSID | ADDRNUM | PREFIX | STREETNAME     | STREETTYPE | SUFFIX | SUBADDRESS |
|------------|---------|-----------|---------|--------|----------------|------------|--------|------------|
| 3749       | Point   | 3749      | <Null>  | <Null> | STATE ROUTE 13 | <Null>     |        | C ITHACA   |
| 3750       | Point   | 3750      | <Null>  | <Null> | STATE ROUTE 13 | <Null>     |        | C ITHACA   |
| 3751       | Point   | 3751      | <Null>  | <Null> | STATE ROUTE 13 | <Null>     |        | C ITHACA   |
| 3752       | Point   | 3752      | <Null>  | <Null> | STATE ROUTE 13 | <Null>     |        | C ITHACA   |

After

| AddressNumber | PreModifier | PreDirectional | PreType     | SeparatorElement | StreetName | PostType |
|---------------|-------------|----------------|-------------|------------------|------------|----------|
| <Null>        | <Null>      | <Null>         | STATE ROUTE | <Null>           | 13         | <Null>   |
| <Null>        | <Null>      | <Null>         | STATE ROUTE | <Null>           | 13         | <Null>   |
| <Null>        | <Null>      | <Null>         | STATE ROUTE | <Null>           | 13         | <Null>   |
| <Null>        | <Null>      | <Null>         | STATE ROUTE | <Null>           | 13         | <Null>   |

# Conversion to NENA Standard

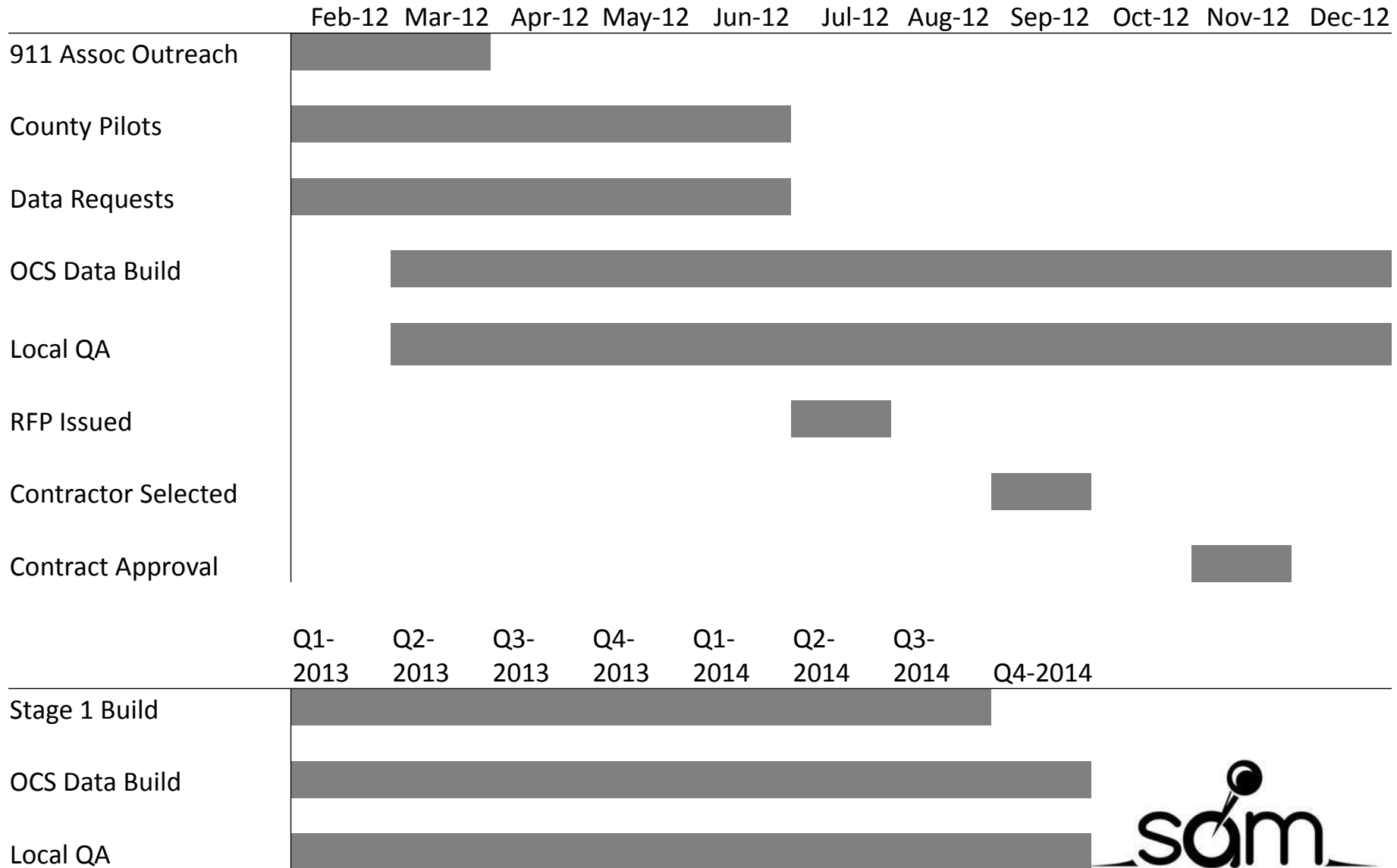
Before

| 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               | BLDG G28 | FL 4  | 2-7  |

# Stage 1 Timeline



**Thank you!**

