21st Street (Hoyt Ave S to Queens Plaza)
Corridor Safety Improvements

2015

VISION ZERO
NEW YORK CITY
DOT

Project Location

- Two-mile corridor between Hoyt Ave S and Queens Plaza

- 60-foot wide road with two travel lanes in each direction

- Northern end of corridor within Astoria Senior Area

- Through truck route with large and heavy truck traffic

- Mix of industrial, commercial, institutional, and residential uses

- Q66, Q69 and Q100 bus routes serve the corridor
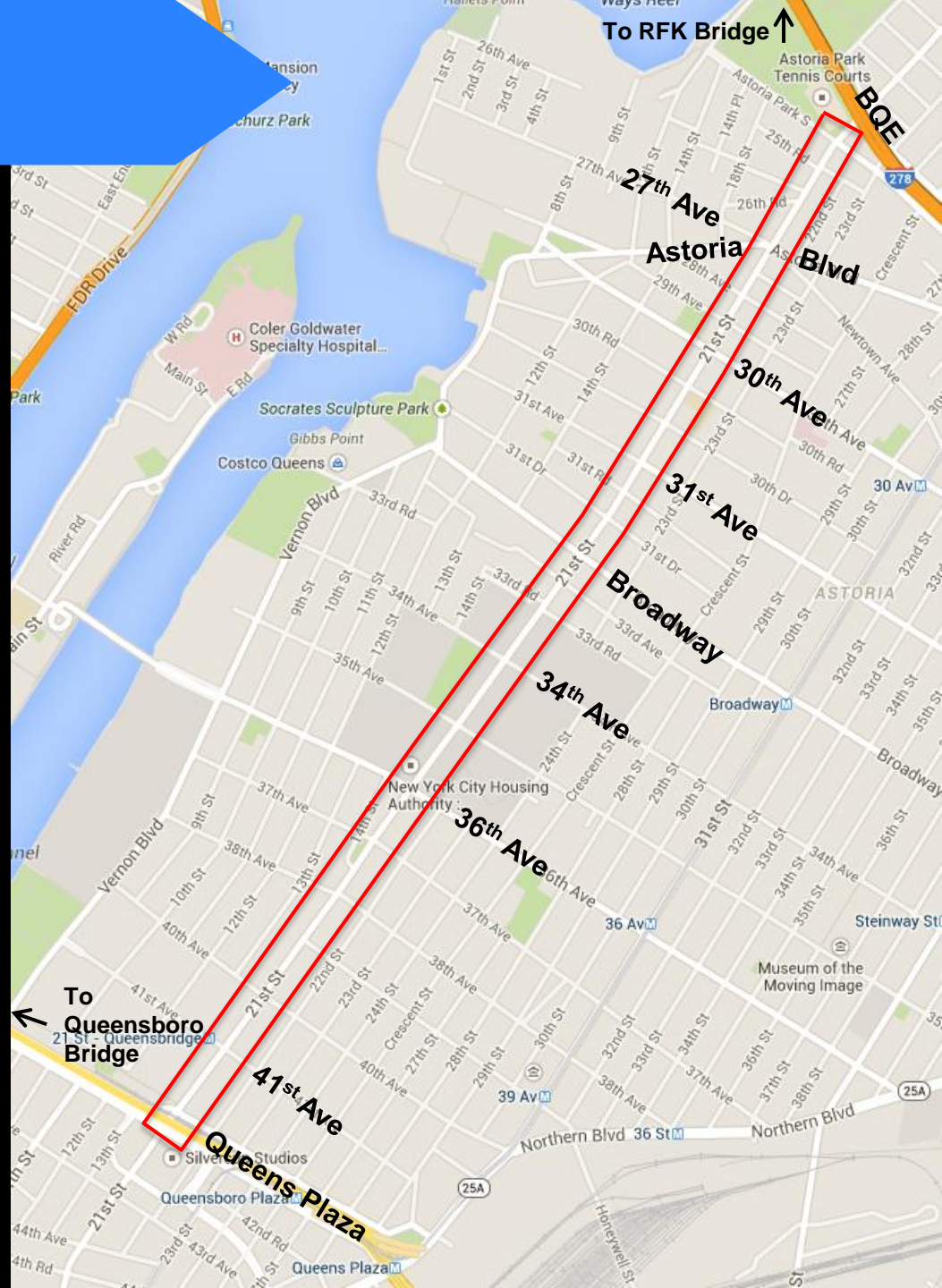
Existing Conditions

- Heavy traffic between the RFK and Queensboro bridges and truck traffic lead to high volumes throughout the day

- 60-foot street width creates long crossing distance for pedestrians

- Long sections without signals lead to speeding and jaywalking

- Empty parking spaces create wider moving lanes that contribute to speeding

- Left turns restricted during 7:00a-9:00a and 4:00p-7:00p

Safety Data: Project Need

- High severity crashes: 5 fatalities and 19 KSI (2009-2013)

- Designated High Crash Corridor in the top third of Queens corridors

- Increasing share of pedestrian injuries
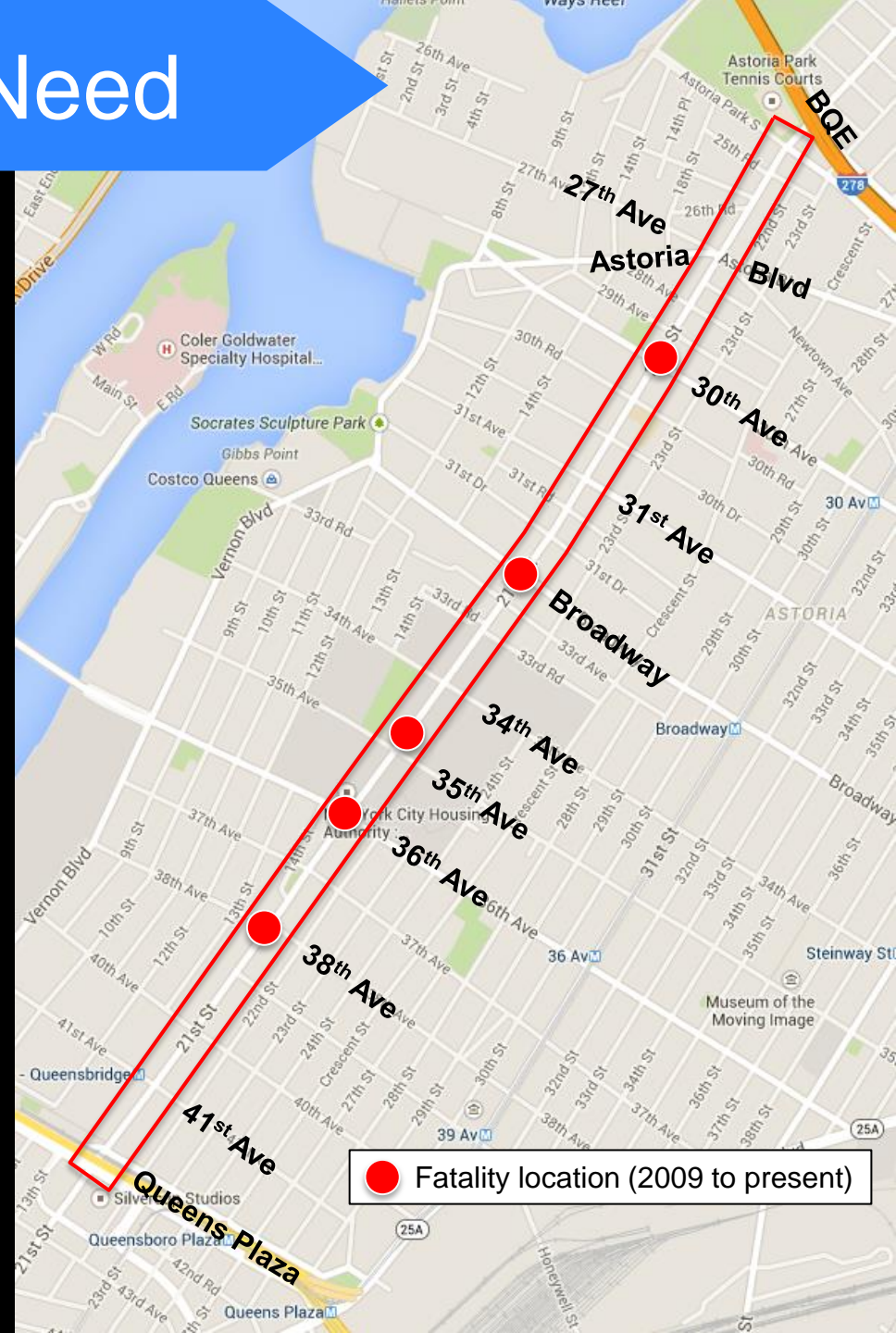
21 St - Hoyt Ave S to Queens Plz N, QN

Injury Summary, 2009-2013 (5 Years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	45	5	2	7
Bicyclist	11	1	1	2
Motor Vehicle Occupant	173	8	2	10
Total	229	14	5	19

Fatalities, 01/01/2009-1/12/2015 : 5

Source: Fatalities: NYCDOT
Injuries: NYSDOT
KSI: Persons Killed or Severely Injured

Pedestrian:	2
Bicyclist:	1
Motor Vehicle Occupant:	2



Fatality location (2009 to present)

Implemented: Leading Pedestrian Intervals

- Leading pedestrian intervals (LPIs) provide **pedestrian-only walk time** before vehicles receive a green light

- **7-second LPIs installed** (2/4/15) to give pedestrians a head start crossing 21st St

- **Installed at 10 intersections** on 21st St:
  - 30th Ave
  - 31st Ave
  - 31st Rd
  - 31st Dr
  - 34th Ave
  - 36th Ave
  - 37th Ave
  - 38th Ave
  - 40th Ave
  - 41st Ave

- LPIs **reduce pedestrian-vehicle conflicts**

- Existing LPI at 21st St and Broadway

New LPI Locations
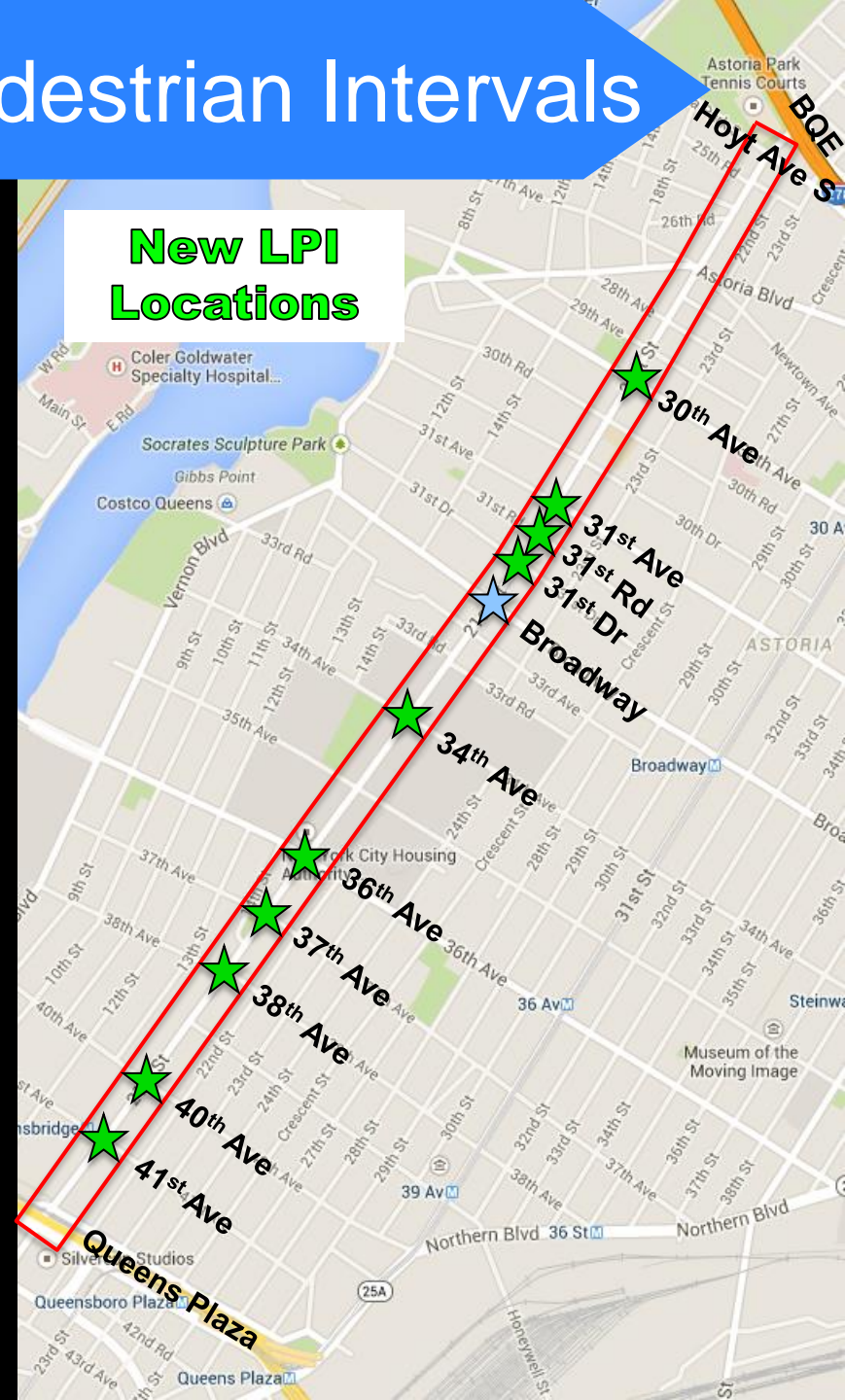
Planned: New Traffic Signal

- **New traffic signal** approved for the intersection of **21st St and 29th Ave**

- Adds **new pedestrian crossing** between 30th Ave and Astoria Blvd
  - Currently, 1,000 ft between pedestrian crossings at 30th Ave and Astoria Blvd

- Safer crossings for vehicles traveling on 29th Ave

- 28th Ave, 30th Rd, 33rd Ave, and 39th Ave:
  - Studied for new traffic signals, but studies determined that signals are not warranted at these locations at this time
  - Signal studies can be reopened as conditions change
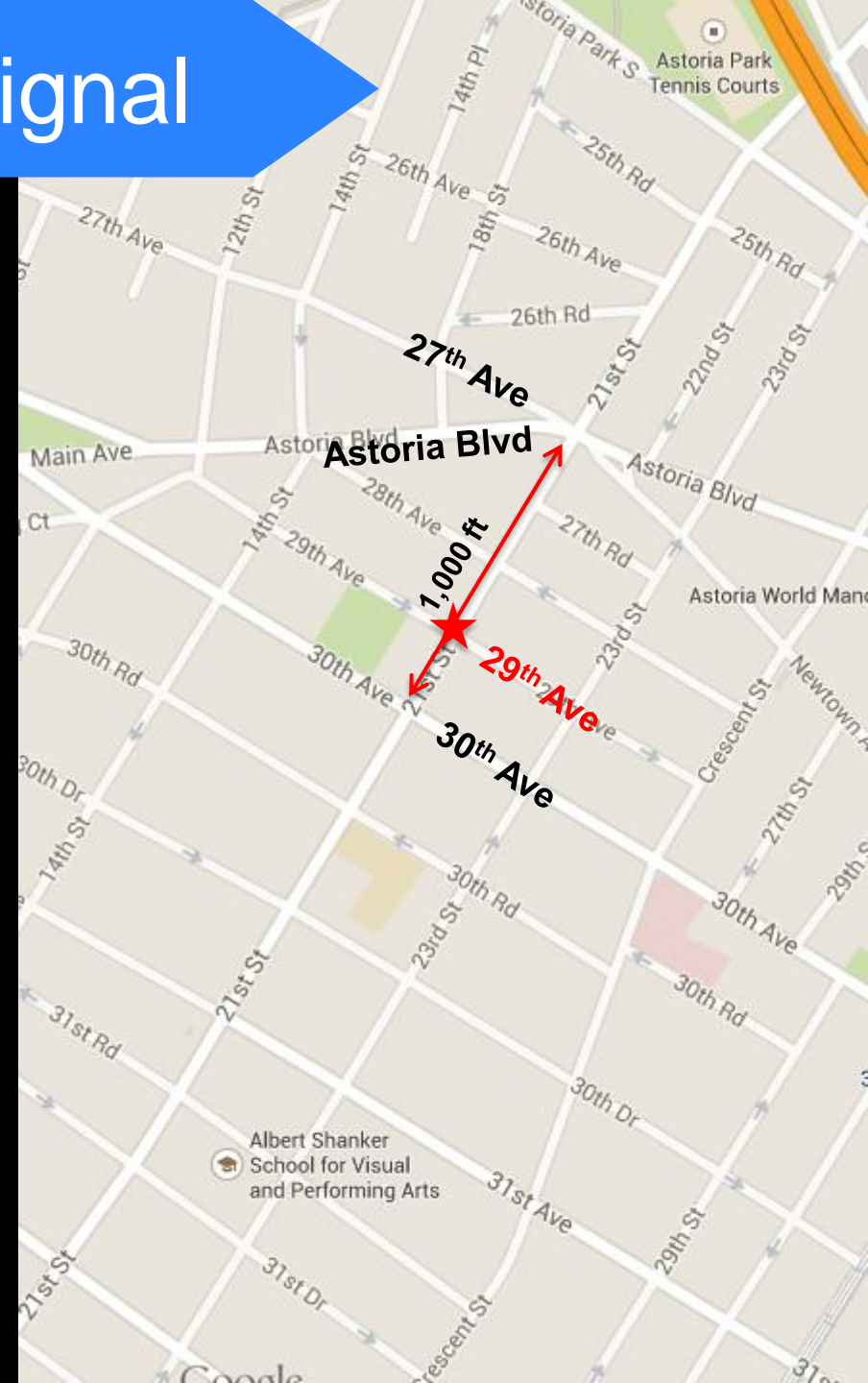
Planned: Street Lighting

- Majority of fatalities occurred during non-daylight hours

- Planned: **Enhance lighting on 21st St to improve visibility at night**

- Upgrade all existing street lights to **brighter LED lights**
(Queens Plaza to Hoyt Ave S)

Proposal: Markings

- **Crosswalks refurbished and upgraded** to all high-visibility markings during Summer 2014

- Proposal: **install parking lane stripe** along the corridor
  - Better defines moving lanes
  - Calm traffics and helps reduce speeding

Proposal: Painted Curb Extensions

- **Install 12 painted curb extensions** along 21st St at the following 9 intersections:
  - 41st Ave (remove 2 parking spaces to accommodate turning vehicles)
  - 40th Ave
  - 35th Ave
  - Broadway
  - 31st Dr
  - 31st Rd
  - 30th Dr
  - 29th Ave
  - Hoyt Ave S

- Maintenance partner needed to keep painted areas clean

Example of painted curb extension:

Benefits of Proposal

- LPIs provide safer pedestrian crossings by reducing pedestrian-vehicle conflicts and giving pedestrians a head start before vehicles get the green light

- New traffic signal at 29th Ave allows for safer pedestrian and vehicle crossings

- Enhanced street lighting improves visibility for all road users

- Parking lane stripe defines moving lanes and helps calm traffic

- Painted curb extensions shorten crossing distances and slow turning vehicles

Questions?

Thank You

Contact:
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