





**BACKGROUND** 



#### BACKGROUND

- Numerous requests from Borough President James Oddo and City Council Minority Leader Steven Matteo for STOP controls along Greeley Ave
- Community complaints of speeding
- 2005: Calmed with channelized parking buffers
- 2011: Transitioned from channelized buffer along parking lane to painted center median



Greeley Ave - Hylan Blvd to Father Cap Blvd, SI Injury Summary, 2010-2014 (5 Years)

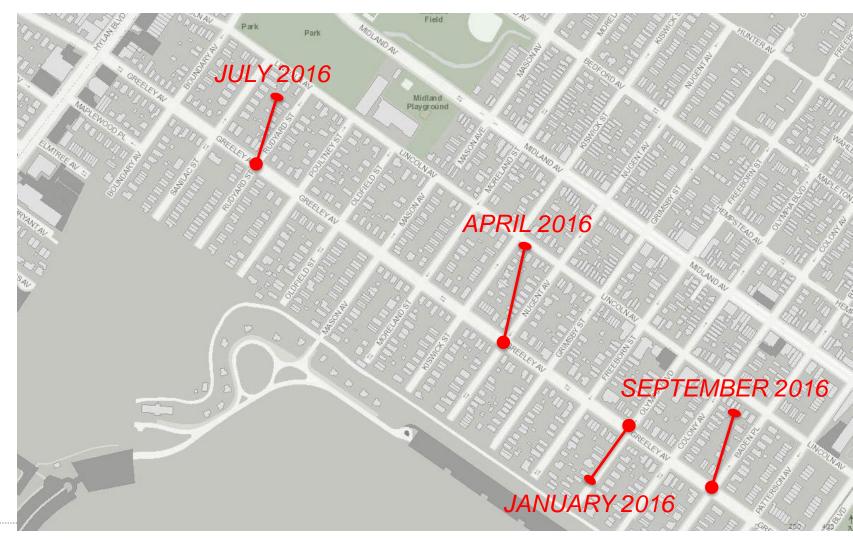
injury curimary, 2010 2011 (c 10010)				
	Total	Severe	Fatalities	KSI
	Injuries	Injuries		
Pedestrian	2	0	0	0
Bicyclist	0	0	0	0
Motor Vehicle Occupant	21	3	0	3
Total	23	3	0	3

Fatalities, 01/01/2010-6/20/2016: None

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

• 3 KSI (2010-2014)

## RECENT CRASHES





- Hylan Blvd is a Vision Zero Priority Corridor
- A portion of Greeley Ave is within a Vision Zero Priority Area



# No traffic controls along Greeley Ave between Hylan Blvd and Father Capodanno Blvd (4,180')



# WHY NOT ALL-WAY-STOP (AWS) SIGNS?

#### **GREELEY AVE**

- AWS controls are installed to determine who has the right-of-way at an intersection – not to control speeding
- DOT investigation shows there is enough time between vehicles traveling on Greeley Ave to allow traffic and pedestrians on side streets to cross or for vehicles to enter the main traffic-flow
- Unnecessary stop signs can increase the frequency of rear-end crashes
- Stop signs add significant delays to travel along corridor during the peak hour



# **GREELEY AVE AT HYLAN BLVD**

#### **ISSUES**

- Heavy right-turns from Hylan Blvd to Greeley Ave
- Many pedestrians crossing Greeley Ave at Hylan Blvd





#### **ISSUES**

Vehicle Volumes:

 High eastbound peak hour volume (1,000 vehicles),
 but low daily vehicle volumes (less than 6,000 ADT)

#### Speeding:

- 98% of vehicles above
  25 mph speed limit
- 85% above 35 mph



# GREELEY AVE ISSUES

 Center buffer pushes vehicles away from each other, reducing friction and encouraging speeding



**CONCEPTUAL PLAN** 



# Repeated analysis shows traditional treatments are not appropriate for Greeley Ave, pushing DOT to look outside the box



## **NEIGHBORHOOD TRAFFIC CIRCLES**

#### **GREELEY AVE TRAFFIC CALMING**

- 24-hour treatment:
   Maintains traffic flow during
   peak hours, slows vehicles
   in non-peak hours
- Decreases number of conflicts points at intersection
- Adds to neighborhood character: Plantings improve aesthetics and reduced speeds create a safer living and traveling environment



Neighborhood Traffic Circle with Landscaping in Arlington, VA

# NEIGHBORHOOD TRAFFIC CIRCLES IN US CITIES

**ARLINGTON, VA** 

- Residential corridor treatment
- Used as an alternative to all-way-stops
- Like Greeley Ave, only minor/dead-end streets are stop controlled







# NEIGHBORHOOD TRAFFIC CIRCLES IN US CITIES

#### CHICAGO, IL

- Used to promote a more consistent rate of travel on streets
- Enhances the quality of the streetscape through landscaping and other enhancements; provides an opportunity for community activity in residential areas, with citizens installing and maintaining planting or enhancements
- It is a self-enforcing treatment, calming two intersecting streets at once





#### **NEIGHBORHOOD TRAFFIC CIRCLES IN US CITIES**

## **SEATTLE, WA**

- Over 1,100 across the city
- Mainly used for collision reduction, study showed traffic circles reduced collisions by an average of 92% when comparing 3 year before and after data
- Can change the look and feel of a street, and impact driver mentality when on neighborhood streets



Seattle Neighborhood Traffic Circle with Landscaping

#### BENEFITS OF NEIGHBORHOOD TRAFFIC CIRCLES

#### **INDUSTRY FINDINGS**



- Neighborhood traffic circles lower speeds at minor intersections
- Best applied in conjunction with plantings that beautify the street and surrounding neighborhood



- Typically built at the intersections of local streets
- Calm traffic and improves aesthetics



- Requires drivers to slow to a speed that allows them to comfortably maneuver around them, found 10% reduction in midblock speed
- No effect on access
- Improves safety, found intersection collisions have been reduced on average by 70% and overall collisions by 28%

# NEIGHBORHOOD TRAFFIC CIRCLES







ALL LEGS YIELD TO EACH OTHER, REQUIRES ALL VEHICLES TO SLOW DOWN





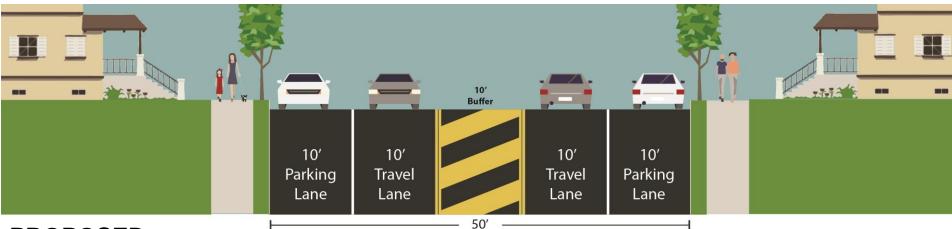
NO CONTROL ON MAJOR STREET, CAN MAINTAIN TRAFFIC FLOW



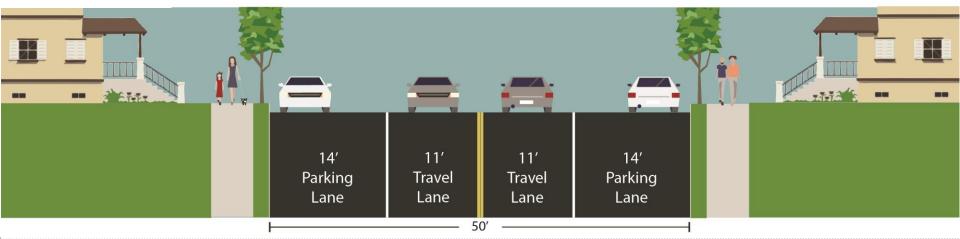
# **CONCEPTUAL PLAN**

Remove flush center median and add wide parking lanes

#### **EXISTING**



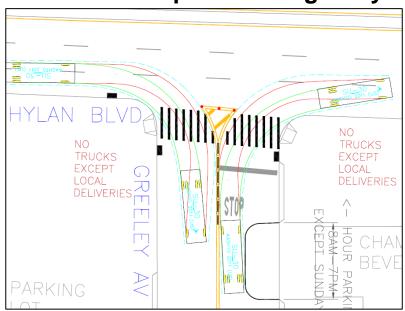
#### **PROPOSED**



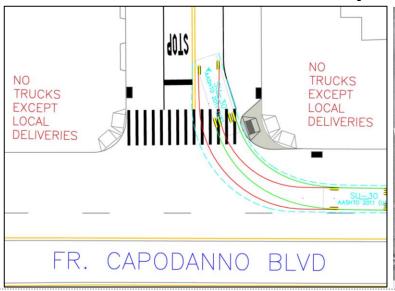
## POSSIBLE GATEWAY TREATMENTS

 Different treatments due to constraints of driveways and catchbasins

#### **Channelized Splitter Triangle: Hylan Blvd**

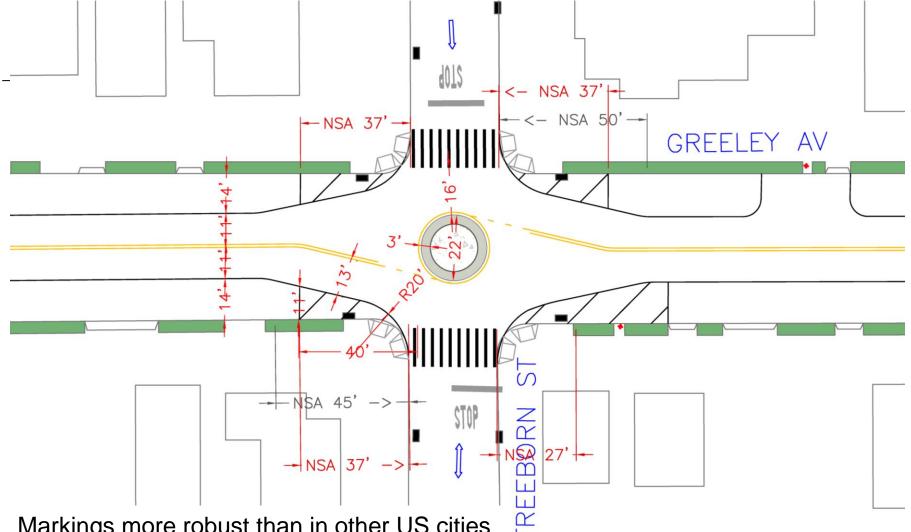


#### Concrete Neckdown: Father Capodanno Blvd





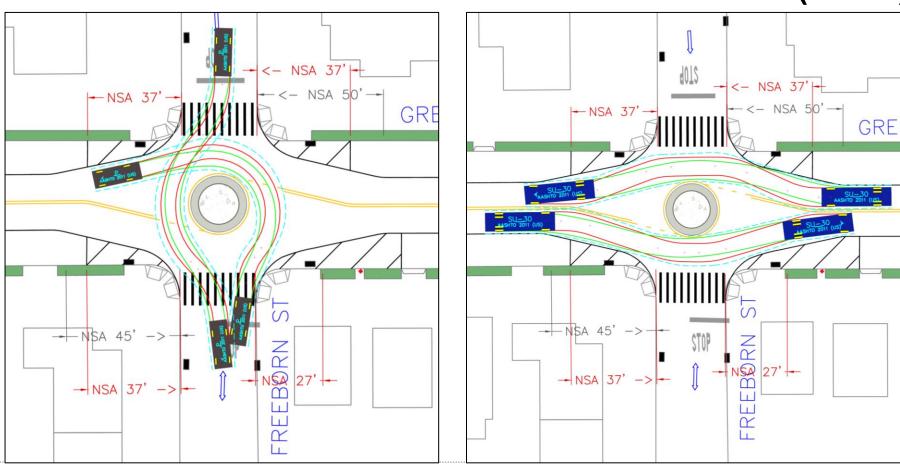
#### **GREELEY AVE NEIGHBORHOOD TRAFFIC CIRCLE**



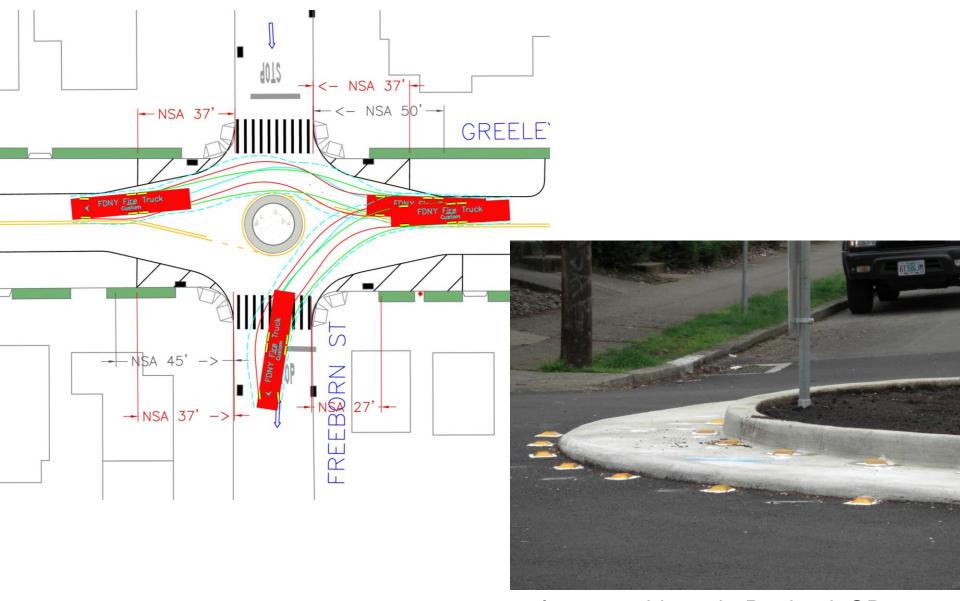
- Markings more robust than in other US cities
  - Improves visibility
  - Enhances traffic calming, even midblock

#### **VEHICLE TURNS**

#### **LARGE CAR SINGLE UNIT TRUCK (SU-30)**



#### **EMERGENCY ACCESS: FDNY FIRE TRUCK**



3 ft. mountable curb, Portland, OR

#### **CIRCLE OPTIONS: MATERIAL**

#### **CONCRETE**

- Durable
- Allows for signage installation
- Large vehicles can drive over exterior ring without harming interior



#### RUBBER

- Quick installation
- Easy to remove



# CIRCLE OPTIONS: PLANTINGS

- Increases visibility
- Adds to neighborhood aesthetic
- Requires partner
- Trees are not feasible due to DEP facilities in the center of Greeley Ave

#### **CONCRETE**



#### **RUBBER**



- Gateway treatments, neighborhood traffic circles slow vehicles speeds, while maintaining traffic flow during peak hours
- Neighborhood traffic circles decrease opportunities for conflicts along Greeley Ave and may discourage heavy vehicle use of Greeley Ave
- Enhances the neighborhood character of the street
- Change from channelized center median to double yellow center line and wide parking lanes calms traffic
- Daylighting changes to improve visibility

# **PLAN BENEFITS**



#### PROPOSED IMPLEMENTATION SCHEDULE

#### **GREELEY AVE TRAFFIC CALMING**

- FALL/WINTER 2016
  - Community Outreach
  - DOT to Finalize Design
- · 2017
  - Implementation of Plan

















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**APPENDIX** 





#### SPEED BUMPS ARE NOT FEASIBLE ON GREELEY AVE

- Too many impeding driveways
- Short block lengths (200-220 ft.)





Many Driveways Along Greeley Ave

## PHASE II TRAFFIC CALMING

Rumble Strips approaching circles

