



# Hillside Avenue Safety Enhancements

Presentation to Queens Community Board 13 Transportation Committee

September 2023

# Hillside Avenue, 241<sup>st</sup> St to Langdale St

## Presentation Overview

- Background
- Existing Conditions
- Project Proposal
- Next Steps



Pedestrians cross Hillside Avenue

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## Background

# 1



# Background

## Planning Framework

- Freight Mobility Unit is committed to strategies outlined in *Delivering New York: A Smart Truck Management Plan for NYC*
  - **Safety**: improve the safety of truck travel at intersections and along corridors
  - **Sustainability**: foster the sustainable and environmentally responsible movement of goods
  - **Freight Efficiency**: Improve the efficiency of freight movement to, from, and within NYC
  - **Partnerships & Knowledge**: Grow public and private partnerships to increase knowledge about freight
- The Freight unit aims to address 1) truck safety priority corridors - streets where there is a concentration of truck involved crashes with vulnerable road users (pedestrians and cyclists) and 2) improve safety on existing truck routes for all road users
- In response to several local laws, DOT is actively working to continue to increase the number of loading zones citywide and undertake efforts to consolidate deliveries



[Delivering New York Plan](#)



[Delivering Green](#)



# Freight Mobility Unit Overview

## Freight Toolkit

**What We Do:** Reduce the impacts of trucks on communities and infrastructure while improving the efficiency of truck deliveries

### Manage Demand

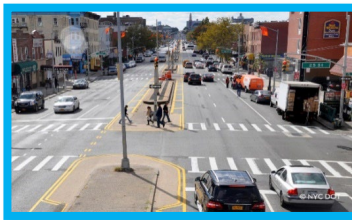


Off-Hour Deliveries

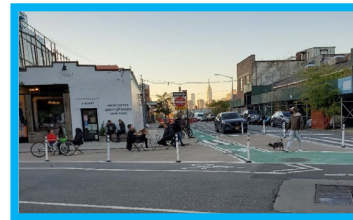
### Enhance safety, network connectivity & curb access



Expand Loading Zones



Truck Route Enhancements



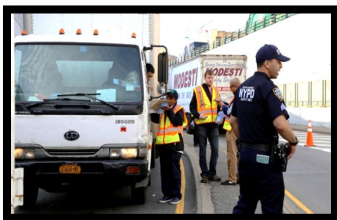
Street Improvement Projects



Truck Electrification & Decarbonization



Truck Safety Education, Outreach, & Partnerships



Truck Safety and Compliance Enforcement Coordination



Microdistribution Hubs



Commercial Cargo Bike Program



Blue Highways

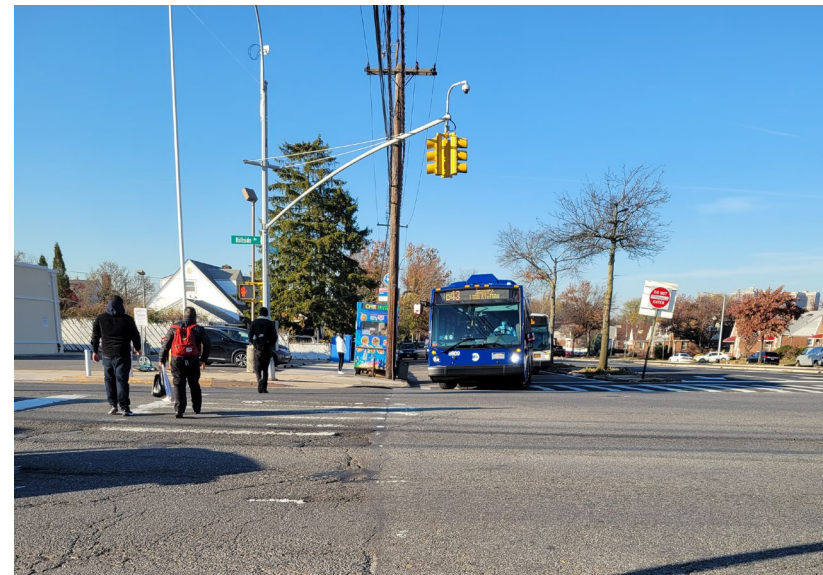
# Hillside Avenue Corridor

## Floral Park and Bellerose Sections

- Hillside Avenue features a variety of land uses between Langdale Street and 241<sup>st</sup> Street including residential, commercial, and public institutions
- Hillside Avenue is a major through truck route that connects New York City to Long Island
- The Q1, Q36, and Q43 bus routes connect Hillside Avenue to other bus routes and MTA/LIRR trains
- During peak hours, more than 3000+ vehicles may travel via Hillside Avenue (many seek to access the Cross Island Parkway); approximately 10% of vehicles on Hillside Avenue are trucks during the AM peak (7:45-8:45AM) and 6% during the PM peak (4:30-5:30 PM)



Double parked trucks unloading in a travel lane on Hillside Avenue and 256<sup>th</sup> Street



Pedestrians crossing Hillside Avenue and Little Neck Parkway

# Project Motivation

## Corridor Limits

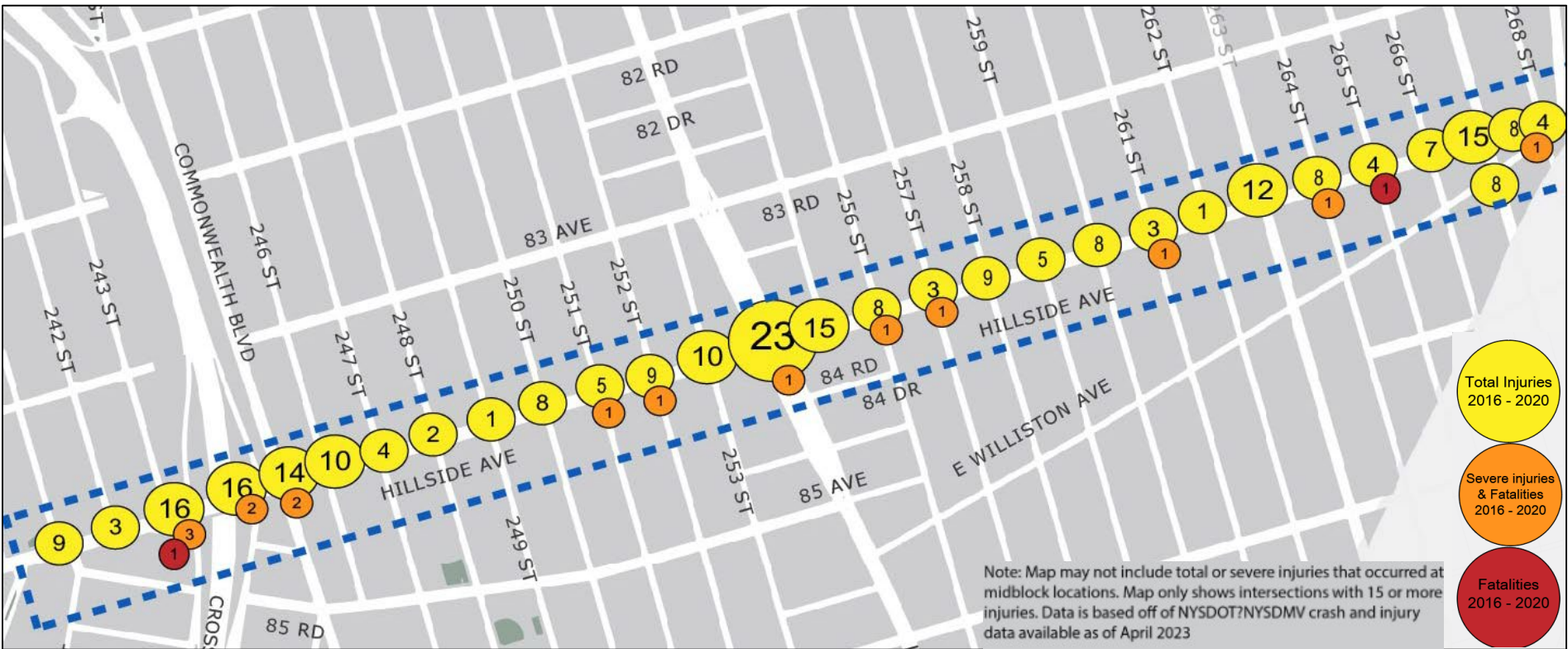


- Vision Zero corridor with 17 individuals killed or severely injured between 2016 and 2020
- Corridor features many deficiencies regarding pedestrian safety
- The corridor is marked by speeding, a lack of truck loading zones, long crossing distances, faded markings, lack of vehicles yielding to pedestrians, and complex geometries at some intersections
- DOT recently completed improvements further west on Hillside Avenue (Hollis Court Boulevard to 212th Street)
- Recently, rehabilitation work (capital work) for the Cross Island Parkway overpass commenced



# Crash History Overview

Hillside Avenue, 241<sup>st</sup> Street to Langdale Street



From 2016-2020, there were 272 injuries along the corridor resulting from crashes

# Crash History

## 2016-2020 (5 Year Summary)

- 17 road users (4 pedestrians) have been killed or severely injured (2016-2020)
- 35% of pedestrian related injuries are associated with pedestrians crossing with the signal in their favor
- 23% of crashes involve right-angle crashes
- Severe injury crashes are concentrated around the Cross Island Parkway, Little Neck Parkway, and close to the City limits (268<sup>th</sup> Street and Langdale Street)

Injury Summary, 2016-2020 (5 Years)

Mode	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	33	4	0	4
Bicyclist	7	0	0	0
Motor Vehicle Occupant	232	11	2	13
Other Motorized	0	0	0	0
Total	272	15	2	17

2016-2020 crash data for Hillside Avenue, 241<sup>st</sup> Street to Langdale Street



Pedestrians at 251<sup>st</sup> Street and Hillside Avenue

# Engaging Local Businesses

## Merchant Survey Results

- Surveys completed in February and March of 2022
- **Incoming Deliveries:** Businesses typically receive deliveries between 9am-3pm (Peak: Monday – Wednesday)
- **Outgoing Deliveries:** Nearly 40% of outgoing deliveries are made by 3<sup>rd</sup> parties (i.e. Uber Eats, DoorDash, etc.) via personal vehicles (commonly double park)
- **Parking/Loading:**
  - Most delivery vehicles park in metered parking spaces, in front of hydrants or in bus stops
  - Larger businesses (i.e. supermarkets) that receive multiple deliveries from larger trucks often use metered parking spaces



### Reported Delivery Schedule (Incoming Deliveries)

Hillside Avenue, Langdale St to 241st St

Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun
5 AM - 7 AM	5%	2%	5%	3%			
7 AM - 9 AM	5%	2%	5%	3%	3%		
9 AM - 11 AM	17%	10%	16%	17%	12%	5%	2%
11 AM - 1 PM	19%	16%	21%	21%	21%	5%	2%
1 PM - 3 PM	10%	12%	17%	16%	9%	2%	
3 PM - 5 PM	10%	9%	10%	10%	12%	3%	
5 PM - 7 PM	2%	2%	3%	2%	3%		
7 PM - 11 PM							
11 PM - 5 AM							

% of businesses reporting deliveries

< 10%	10%-20%	> 20%
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Data based on 58/108 businesses surveyed who answered 'yes' to receiving deliveries; blank cells contain no data



# Community Outreach

## Merchant Survey Results

- Multiple businesses stated delivery vehicles either double park, park at a fire hydrant, or park in bus stops to make their deliveries while customers often double park for quick pickups
- Many participants without adjacent parking available stated they have no control over where delivery vehicles park
- Merchants have more control over delivery times when they bring in their own products due to the availability of parking and/or off-street unloading space behind many buildings
- Speeding, double parking, and lack of commercial parking were all commonly heard issues



NYC DOT's street ambassador team conducted merchant surveys at multiple businesses on Hillside Avenue

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## Existing Conditions

# 2



# Existing Conditions

## Hillside Avenue Corridor



**Double parking**



**Long crossings for pedestrians**



**Geometry that encourages speeding**



**High volume of deliveries**



# Existing Conditions

## Hillside Avenue Corridor



**Illegal turns**



**Blocked bus stops**



**Missing crosswalks**

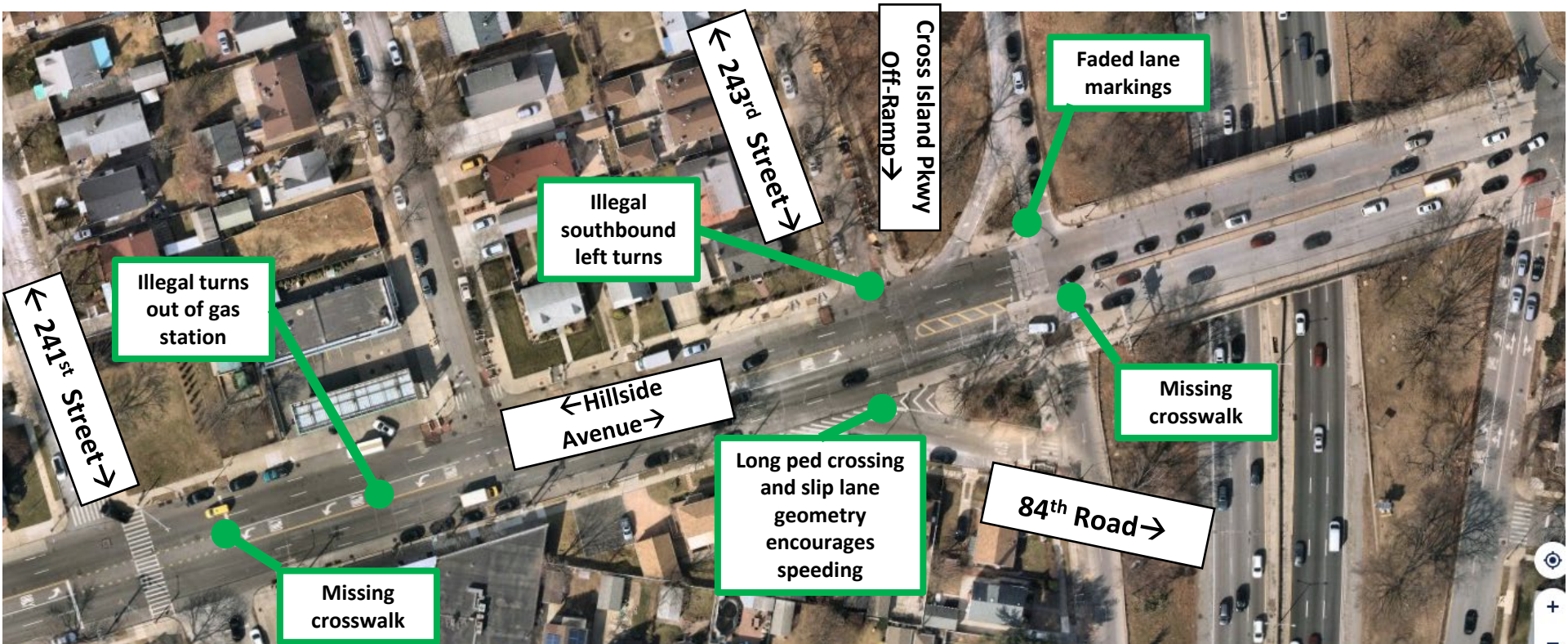


**Geometric constraints**



# Hillside Avenue Avenue – Existing Conditions

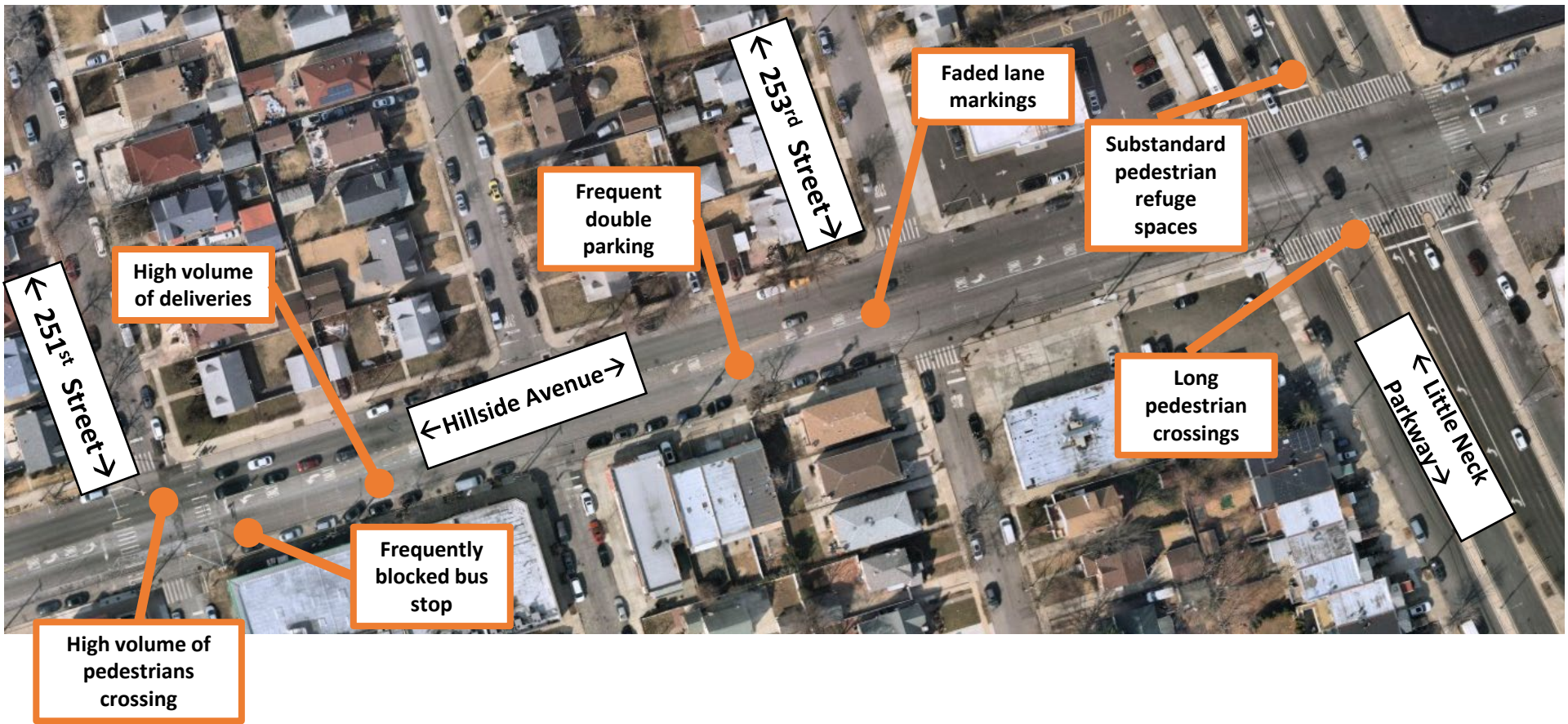
## 241<sup>st</sup> Street to Cross Island Parkway Off-Ramp





# Hillside Avenue – Existing Conditions

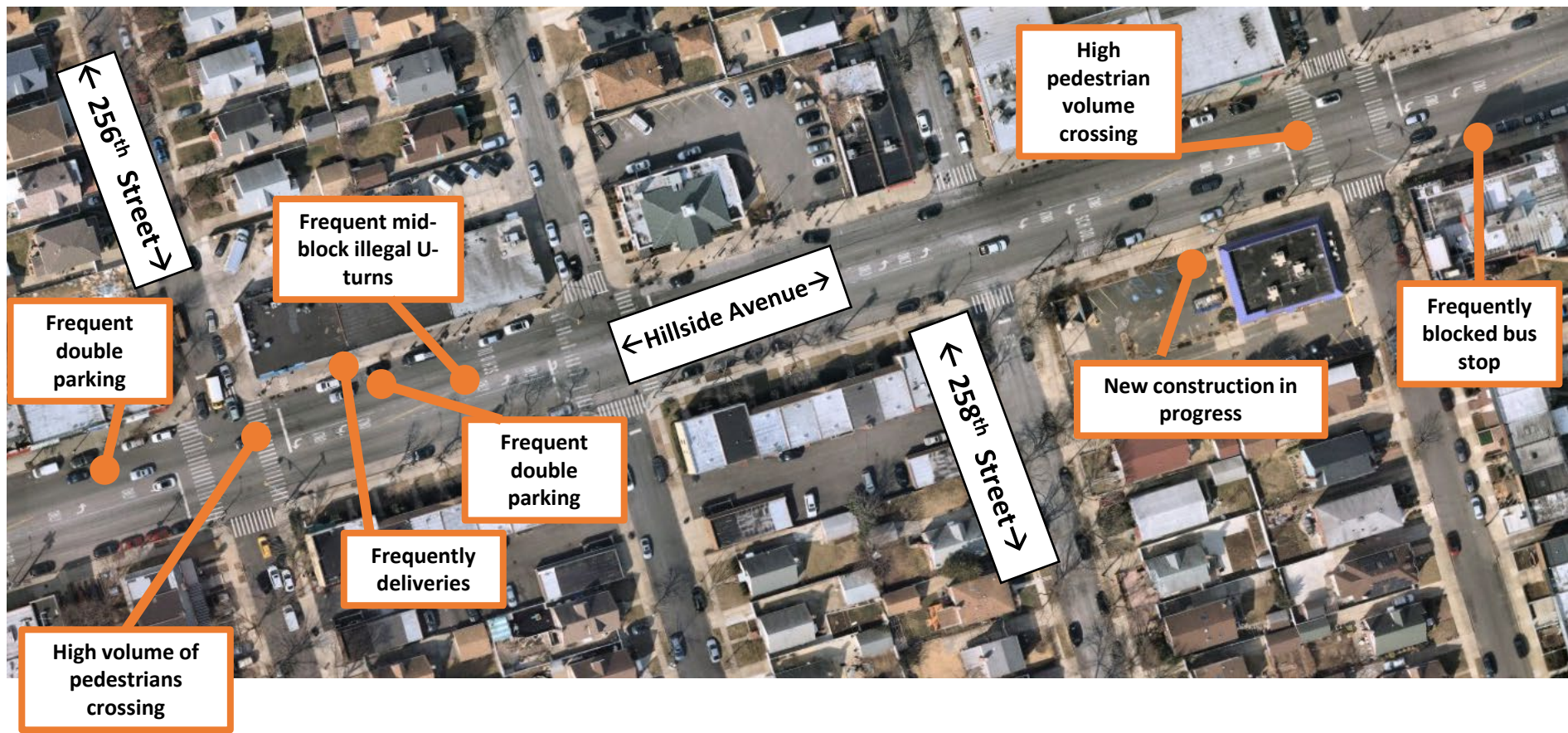
## 251<sup>st</sup> Street to Little Neck Parkway





# Hillside Avenue – Existing Conditions

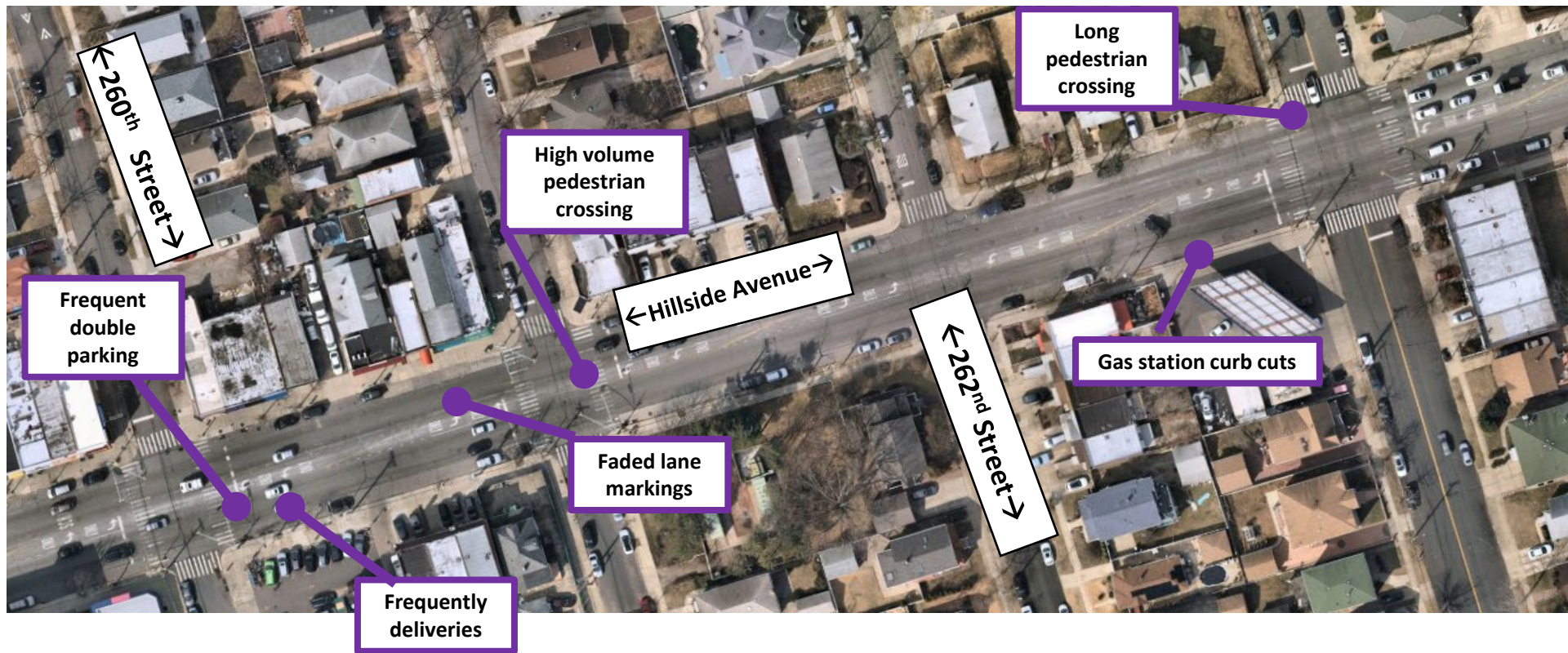
## 256<sup>th</sup> Street to 259<sup>th</sup> Street





# Hillside Avenue – Existing Conditions

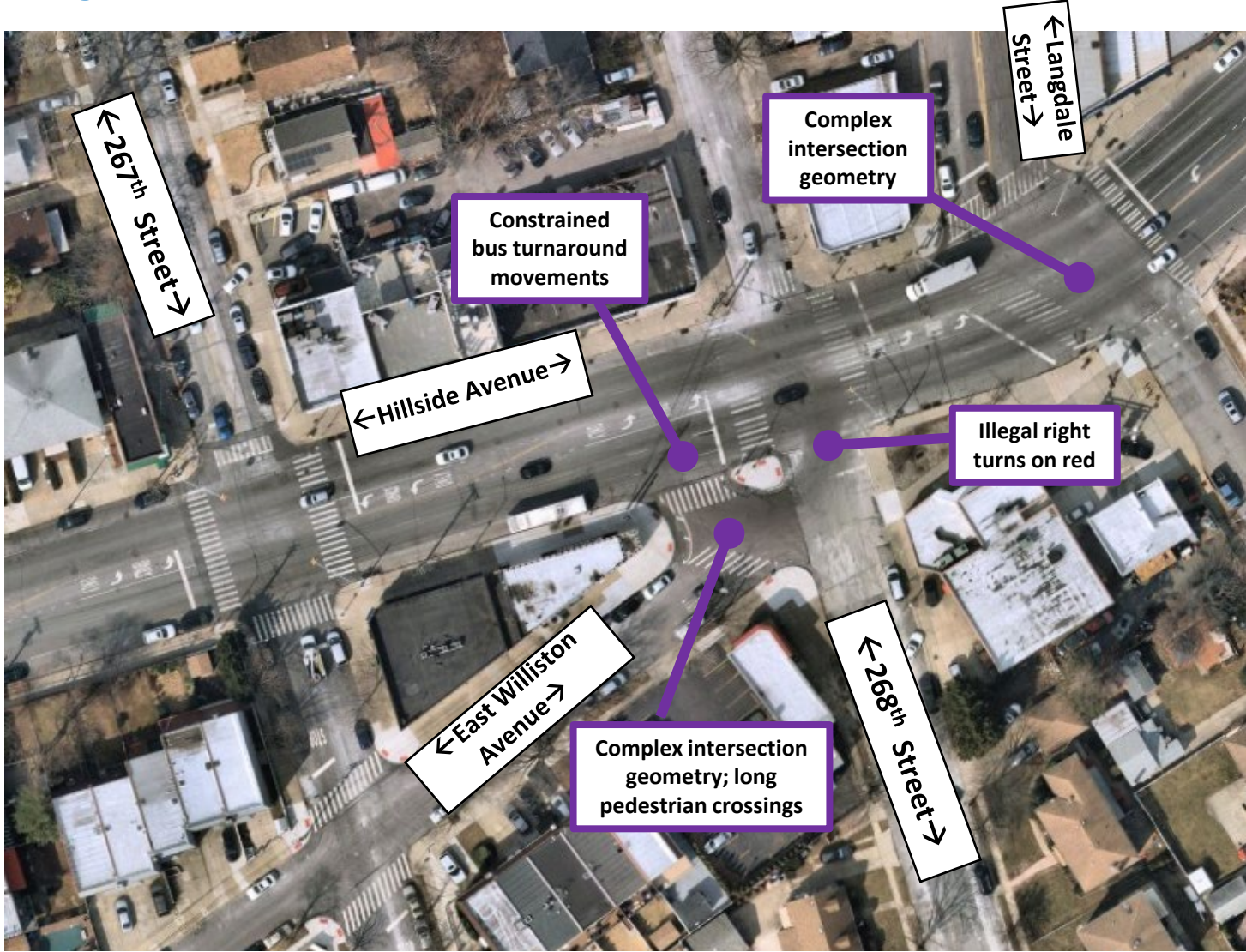
260<sup>th</sup> Street to 263<sup>rd</sup> Street





# Hillside Avenue – Existing Conditions

## 267<sup>th</sup> Street to Langdale Street





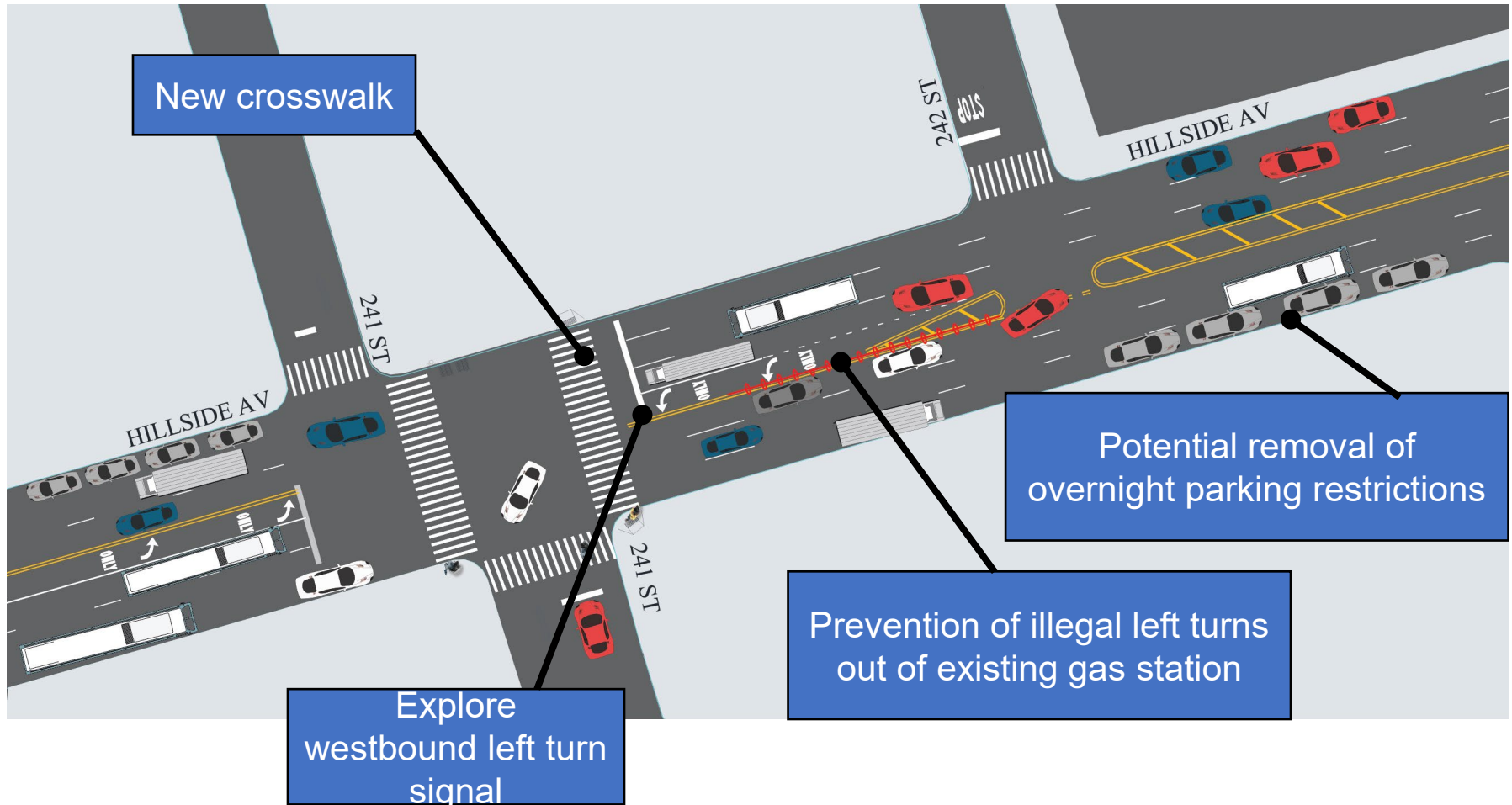
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## Project Proposal

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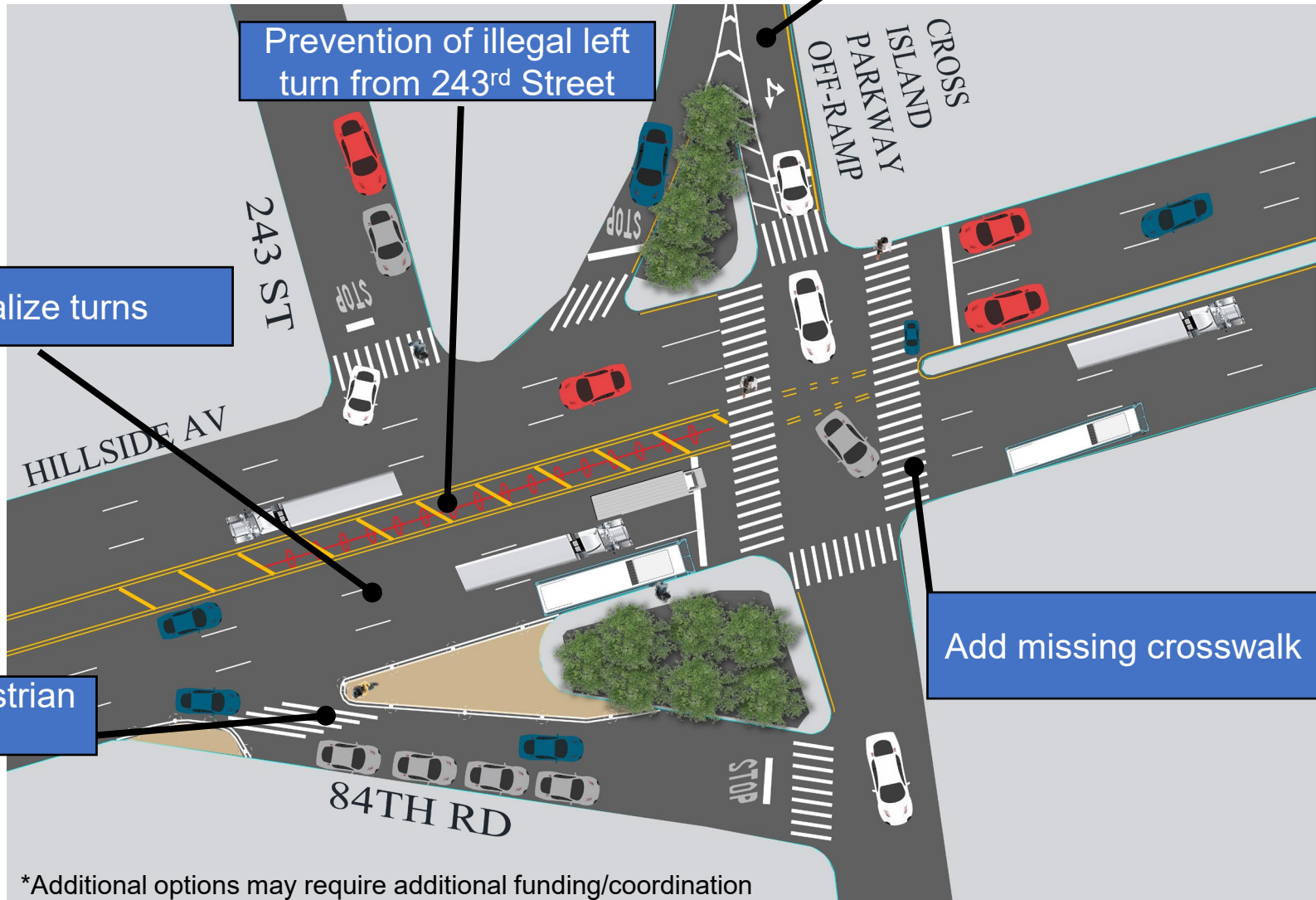
# Proposed Safety Improvements

## Hillside Avenue 241<sup>st</sup> Street to 242<sup>nd</sup> Street



# Proposed Safety Improvements

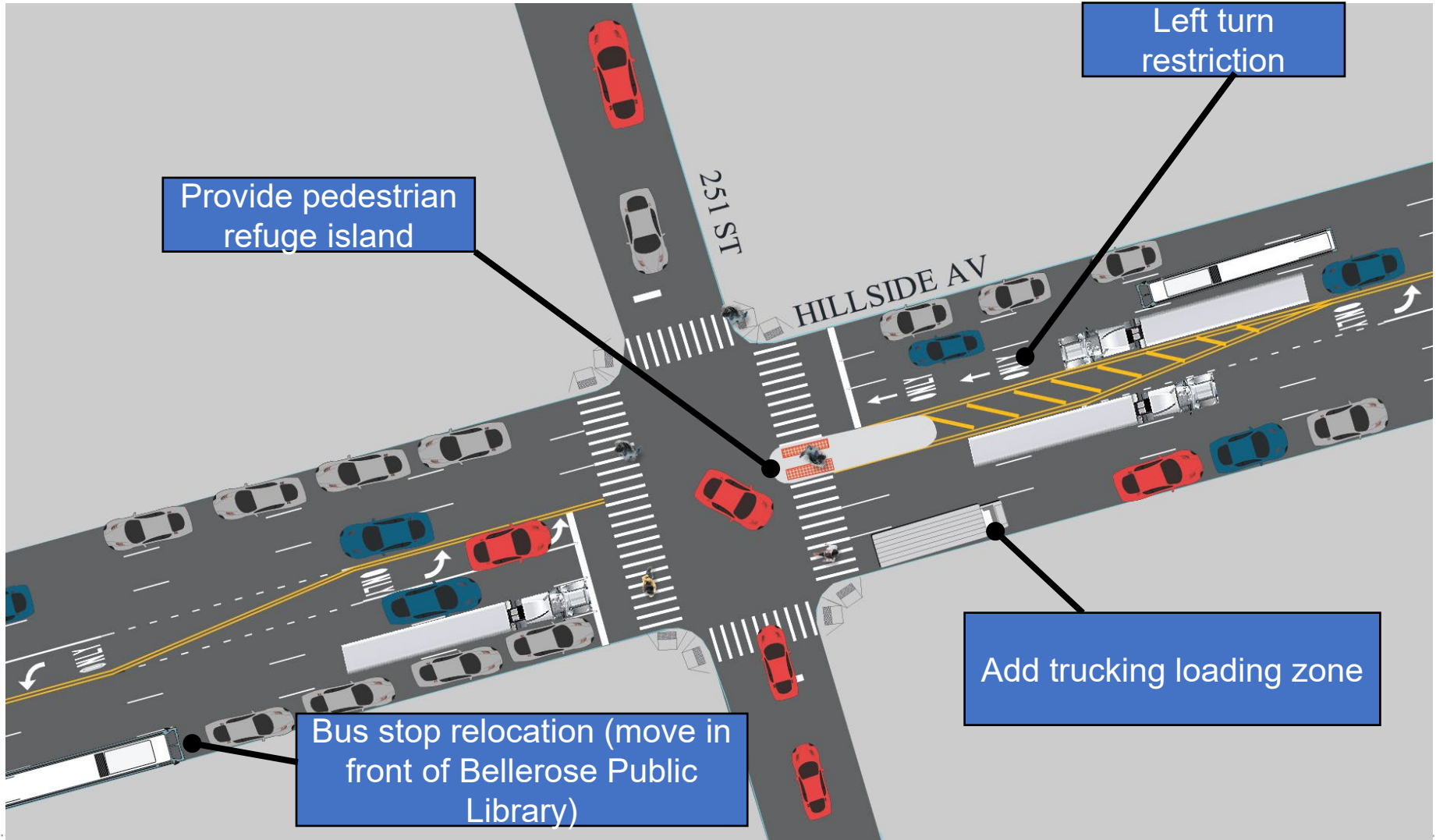
## Hillside Avenue, 243<sup>rd</sup> Street to Cross Island Parkway





# Proposed Safety Improvements

## Hillside Avenue and 251<sup>st</sup> Street

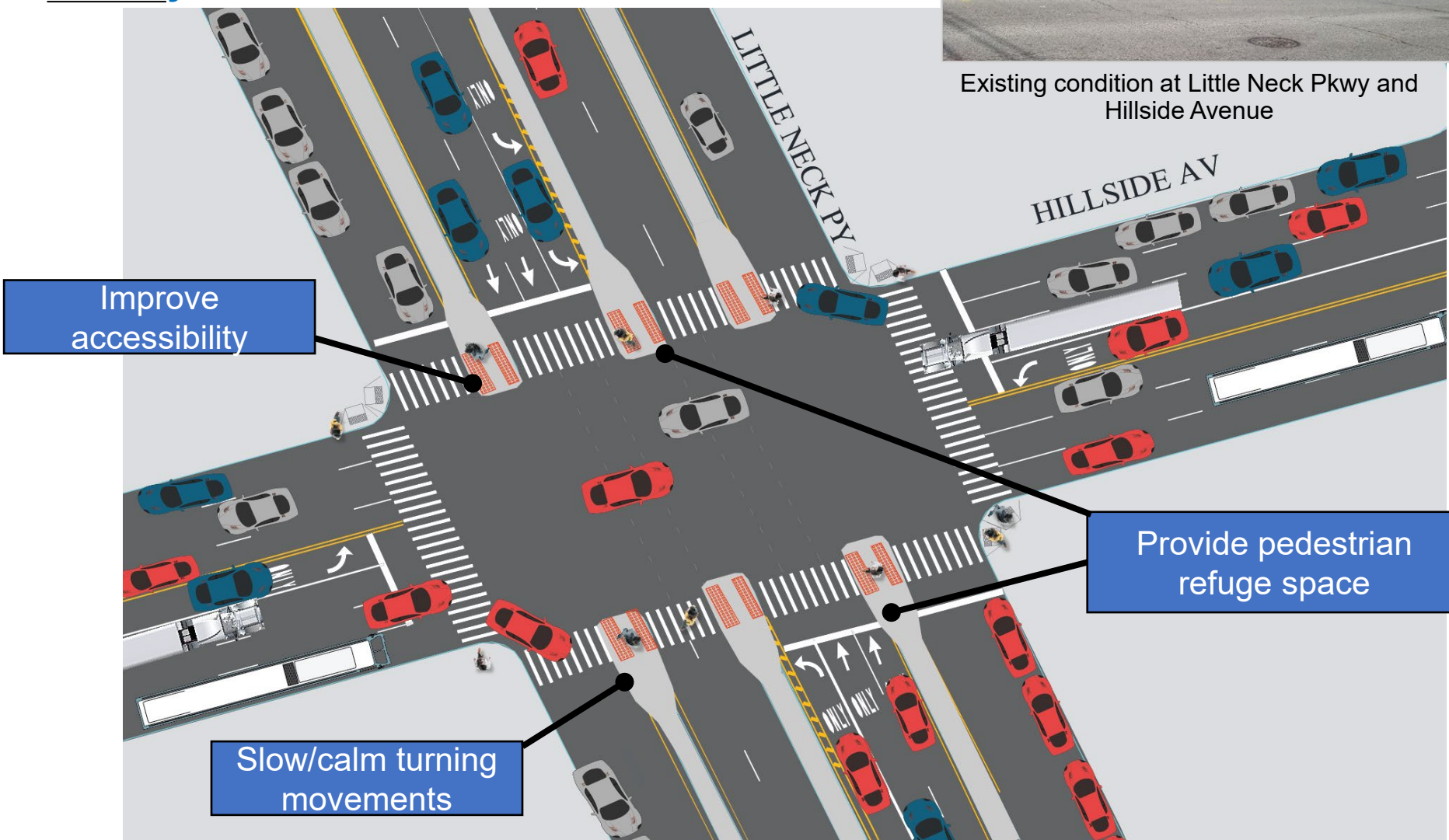


# Proposed Safety Improvements

## Hillside Avenue and Little Neck Parkway



Existing condition at Little Neck Pkwy and Hillside Avenue

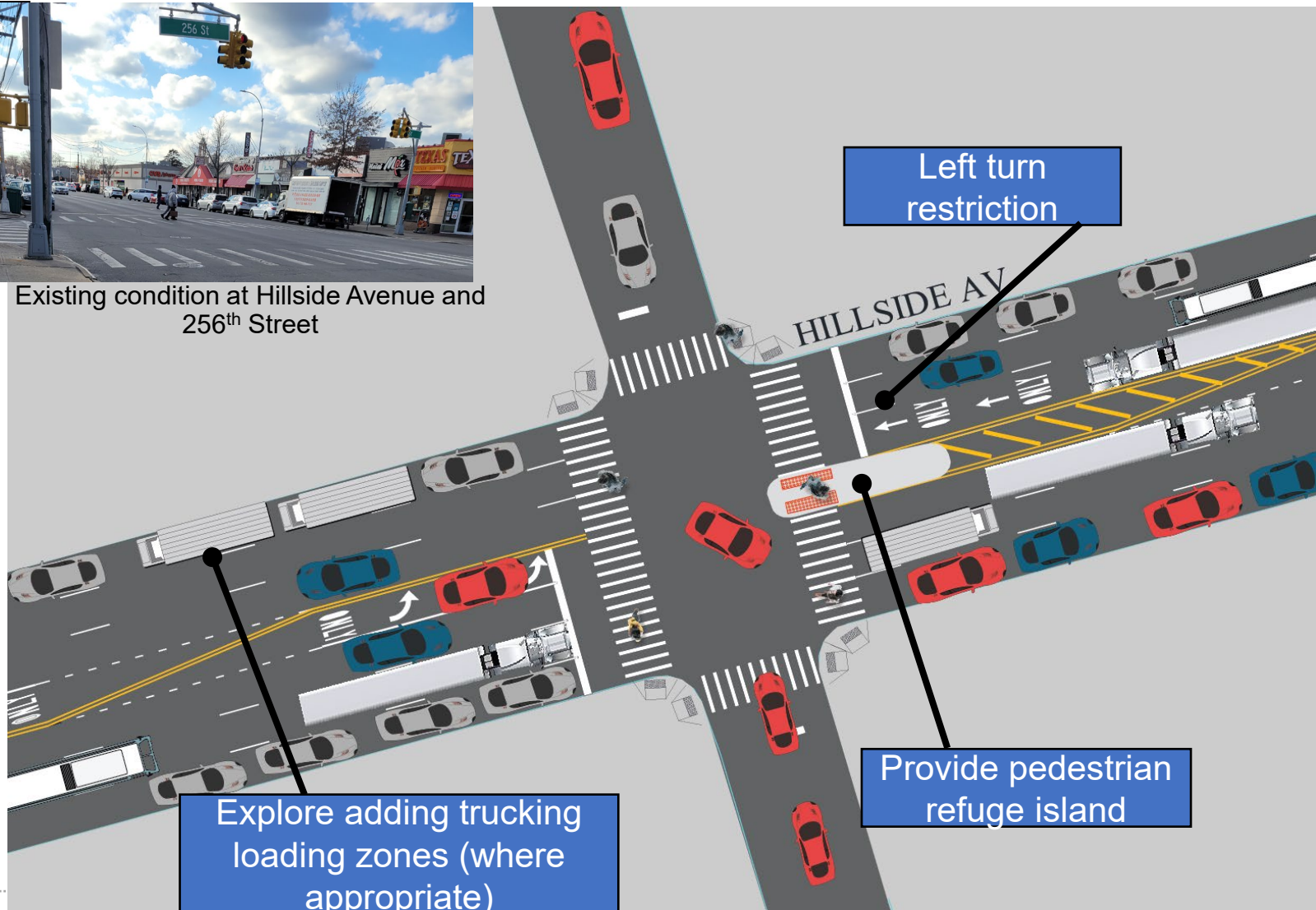


# Proposed Safety Improvements

## Hillside Avenue and 256<sup>th</sup>, 261<sup>st</sup>, and 264<sup>th</sup> Streets – Pedestrian Islands at Westbound Approaches



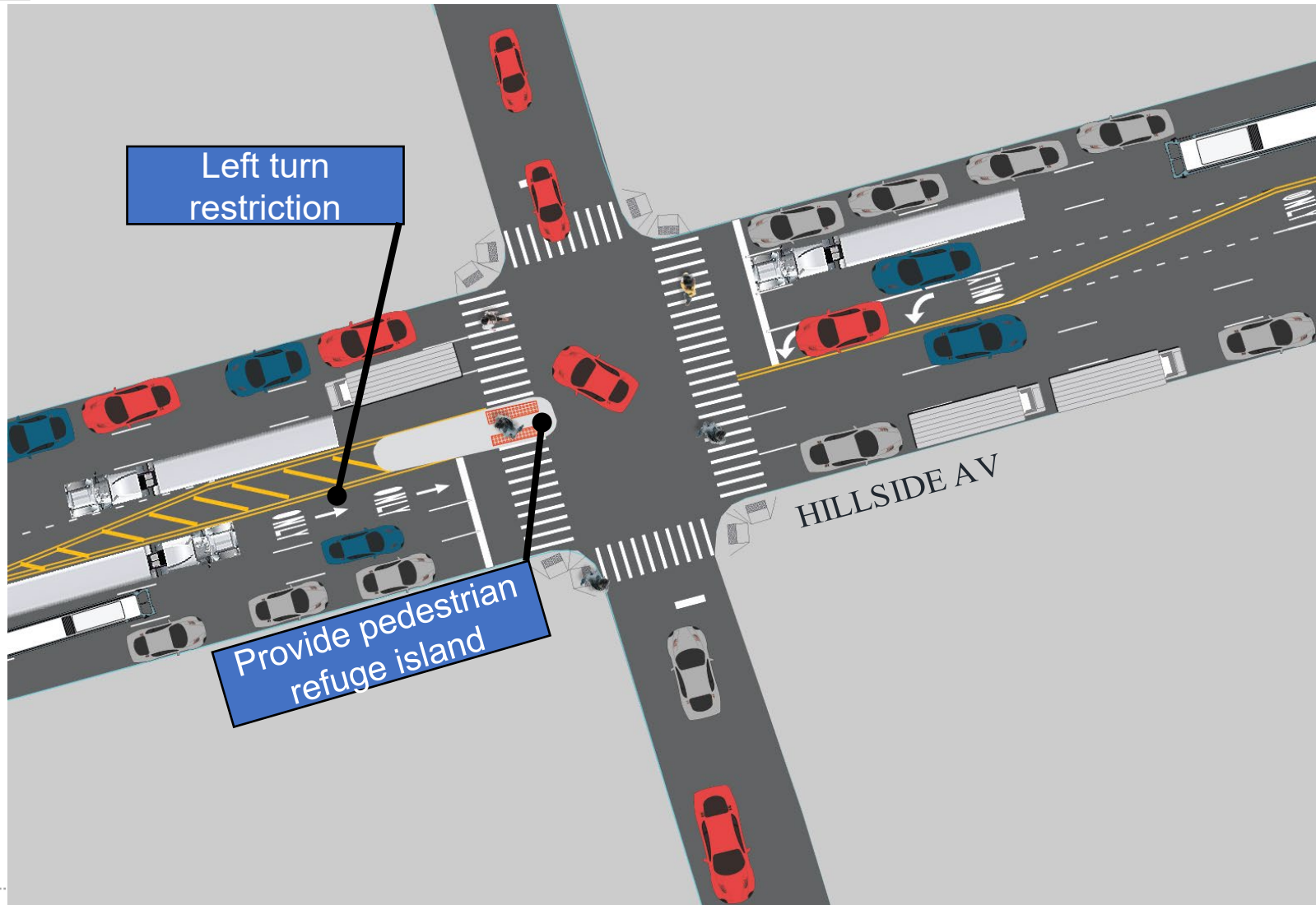
Existing condition at Hillside Avenue and 256<sup>th</sup> Street





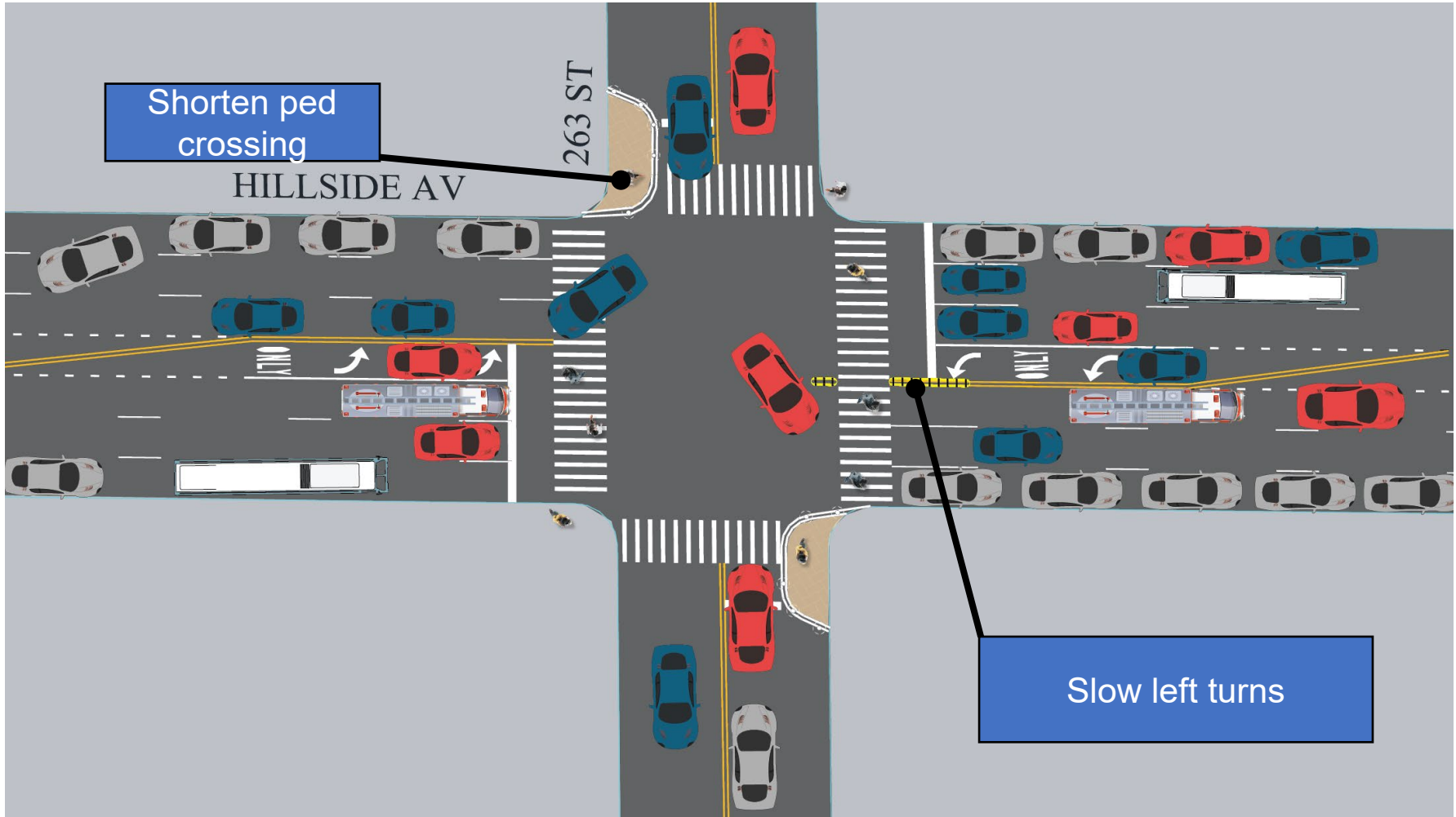
# Proposed Safety Improvements

## Hillside Avenue and 259<sup>th</sup> and 266<sup>th</sup> Streets – Pedestrian Islands at Eastbound Approaches



# Proposed Safety Improvements

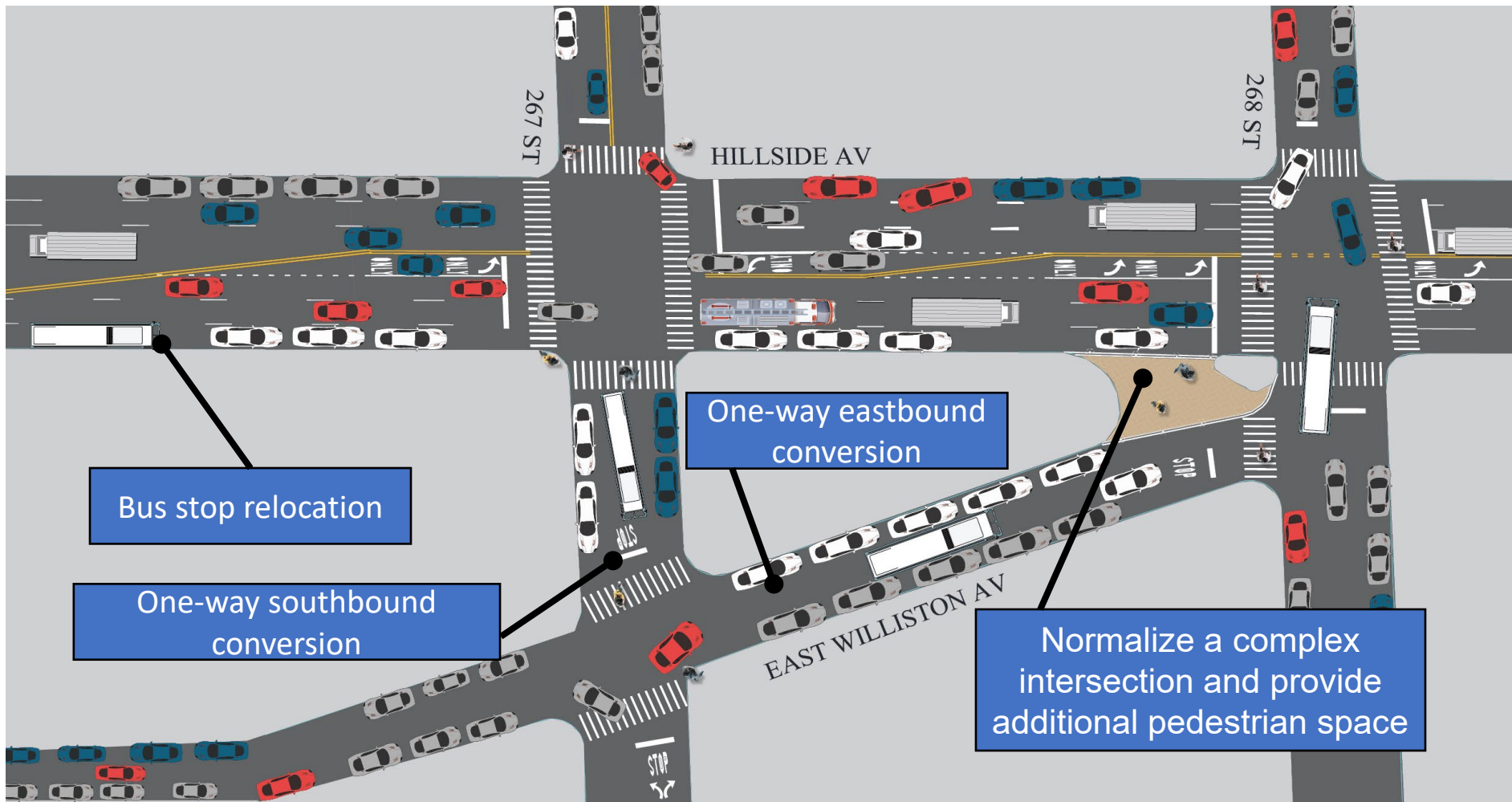
## Hillside Avenue and 263<sup>rd</sup> Street





# Proposed Safety Improvements

Hillside Avenue, 267<sup>th</sup> Street to 268<sup>th</sup> Street and East Williston Avenue, 267<sup>th</sup> Street to 268<sup>th</sup> Street



# Proposed Safety Improvements

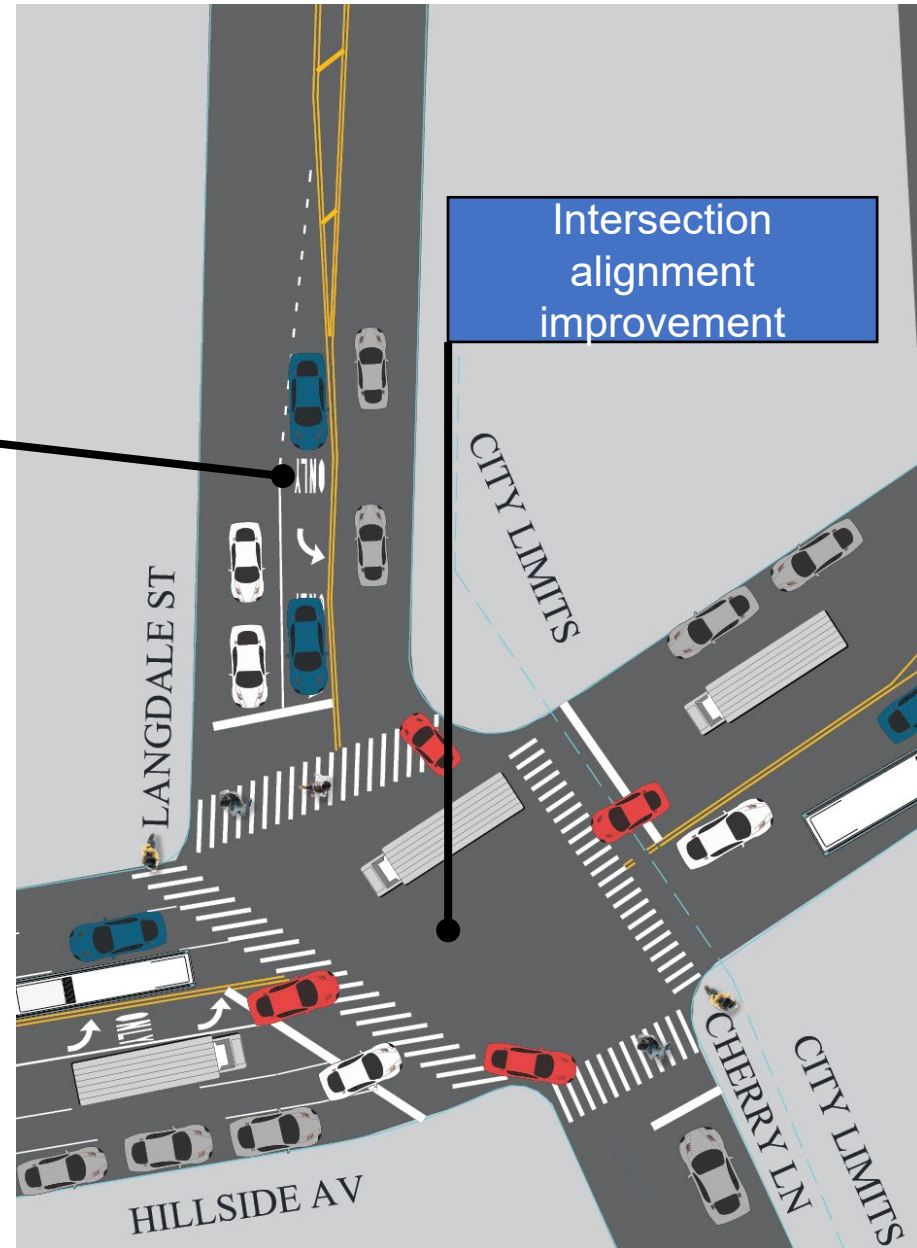
## Hillside Avenue and Langdale Street

Left turn bay addition

Intersection alignment improvement



Existing condition leaves little room between opposing left turns from Langdale Street/Cherry Lane to Hillside Avenue





# Project Benefits Summary

## Improving Corridor Safety

- Shorten crossing distances for pedestrians
- Provide pedestrian refuge space
- Calm/slow turns
- Improve curb management
- Introduce conflict reducing designs



Proposed condition (median tip extensions) for Hillside Avenue and Little Neck Parkway (Photo: Linden Boulevard and E 98<sup>th</sup> Street, BK)



Proposed condition where pedestrian refuge islands are proposed (Hillside Avenue and Sutphin Boulevard, QN)

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## Next Steps




# 4



# Proposed Implementation Strategy

## Proposed Project Phasing



-  **Phase 1: 251<sup>st</sup> St to 259<sup>th</sup> St;** pedestrian refuge islands (x3), concrete median tip extensions, bus stop relocation, truck loading zones, markings refurbishment
-  **Phase 2: 260<sup>th</sup> St to Langdale St;** pedestrian refuge islands (x3), painted curb extensions, truck loading zones, bus stop relocation, one-way conversions, slip lane closure, intersection alignment improvements, markings refurbishment
-  **Phase 3: 241<sup>st</sup> St to 250<sup>th</sup> St;** crosswalk additions, turn restrictions, painted curb extensions, turn calming, signal timing changes\*, markings refurbishment

\*corridor wide improvement

# Next Steps

## Timeline

**Spring 2024:** Planned implementation to start with Phase 1

**Summer 2024-Fall 2025:** Continuation of implementation through a phased approach

### Safety

- Promote safety for all road users via street design through a phased approach

### Communication

- Follow-up and address issues and/or concerns identified by local stakeholders

### Continued Monitoring

- Continue to monitor conditions on Hillside Avenue as implementation takes place



Hillside Avenue and Little Neck Parkway

# Thank You!

Questions?



NYCDOT



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NYCDOT



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## Appendix

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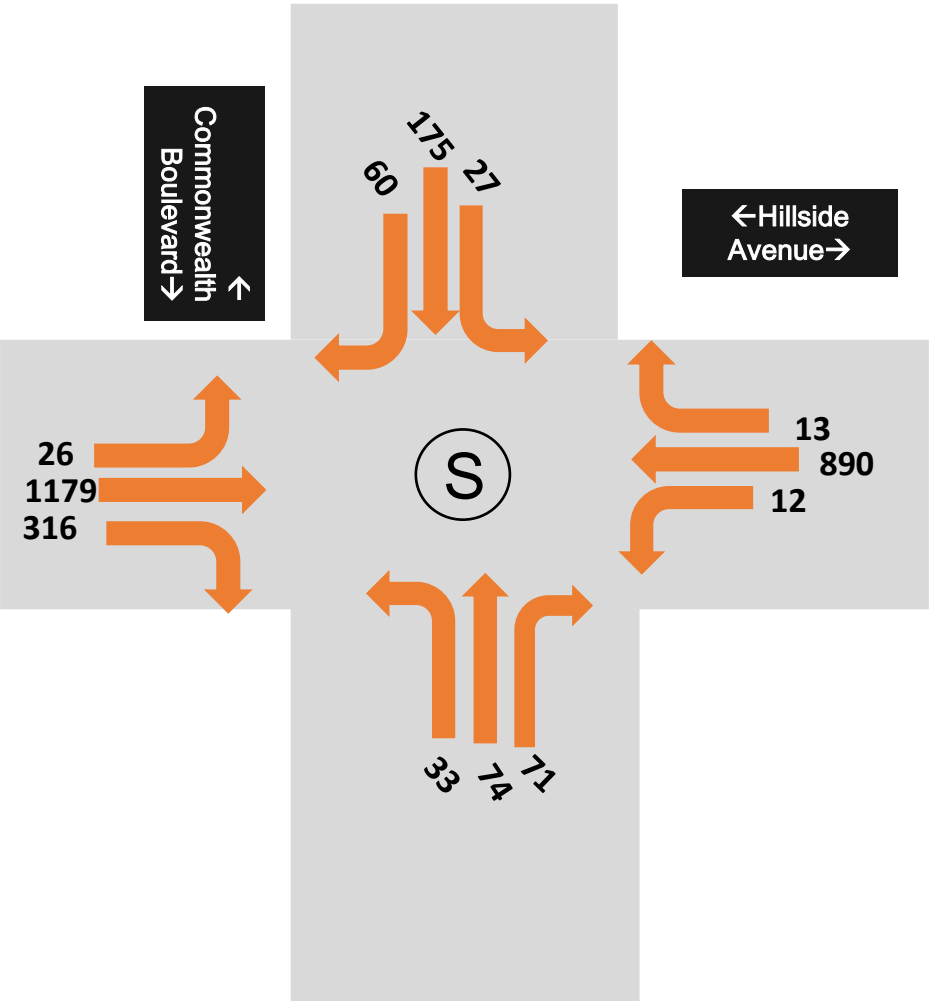
# Existing Conditions – Sample Intersection Counts

## Hillside Avenue and Commonwealth Boulevard

- Volumes are highest within the project area during the PM peak (4:30 PM-5:30 PM) with over 3000 vehicles passing through a given intersection (during a one-hour period)
- Around 7% of all vehicles passing through the intersection during peak periods are trucks
- A significant proportion of automobiles passing through the intersection are accessing the Cross Island Parkway (30%) after this intersection



Hillside Avenue and Commonwealth Boulevard



# Left Turns Bans – Counts and Alternative Routes

## Hillside Avenue Pedestrian Refuge Islands

At intersections where concrete pedestrian refuge islands are to be installed, constructability checks have been completed for all intersections (all proposed locations are feasible); alternative intersections may be used for left turns

### Hillside Av and 251st St

Proposed ped island in WBL turn bay feasible – restrict WBL

- AM Peak: 7 (+3 WBL at 252<sup>nd</sup> St, +4 WBL at 250<sup>th</sup> St)
- PM Peak: 20 (+10 WBL at 252<sup>nd</sup> St, +10 WBL at 250<sup>th</sup> St)

### Hillside Av and 256th St

Proposed ped island in WBL turn bay feasible – restrict WBL

- AM Peak 7 (+7 WBL at 257<sup>th</sup> St)
- PM Peak: 14 (+14 WBL at 257<sup>th</sup> St)

### Hillside Av and 259th St

Proposed ped island in EBL turn bay is feasible – restrict EBL

- AM Peak 5 (+2 EBL at 258<sup>th</sup> St, +3 EBL at 260<sup>th</sup> St)
- PM Peak: 9 (+4 EBL at 258<sup>th</sup> St, +5 EBL at 260<sup>th</sup> St)



# Left Turns Bans – Counts and Alternative Routes

## Hillside Avenue Pedestrian Refuge Islands

At intersections where concrete pedestrian refuge islands are to be installed, constructability checks have been completed for all intersections (all proposed locations are feasible); alternative intersections may be used for left turns

### Hillside Av and 261st St

Proposed ped island in WBL turn bay is feasible – restrict WBL

- AM Peak 4 (+2 WBL at 262<sup>nd</sup> St, +2 WBL at 260<sup>th</sup> St)
- PM Peak: 7 (+3 WBL at 262<sup>nd</sup> St, +4 WBL at 260<sup>th</sup> St)

### Hillside Av and 264th St

Proposed ped island in WBL turn bay is feasible – restrict WBL

- AM Peak: 0
- PM Peak: 19 (+10 WBL at 263<sup>rd</sup> St, +9 WBL at 265<sup>th</sup> St)

### Hillside Av and 266th St

Proposed ped island for EBL turn bay is feasible – restrict EBL

- AM Peak: 7 (+3 EBL at 265<sup>th</sup> St, +4 EBL at 267<sup>th</sup> St)
- PM Peak: 6 (+3 EBL at 265<sup>th</sup> St, +3, EBL at 267<sup>th</sup> St)