



Metropolitan Ave at Union Turnpike

CB 6 Transportation Committee

April 27, 2023

Project Background

- Frequent community requests for analysis, including in 2018 and 2022
- Jackie Robinson Parkway entry and exit points
- Residential neighborhood: Forest Hills and Kew Gardens
- Forest Park access route



Safety Data



Metropolitan Ave and Union Turnpike

Injury summary. 2016-2020 (5 years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	3	1	0	1
Bicyclists	2	0	0	0
Motor Vehicle Occupant	67	3	0	3
Total	72	4	0	4

KSI: Persons Killed or Severely Injured

3 pedestrian injuries since 2016

72 total injuries since 2016

Existing Conditions

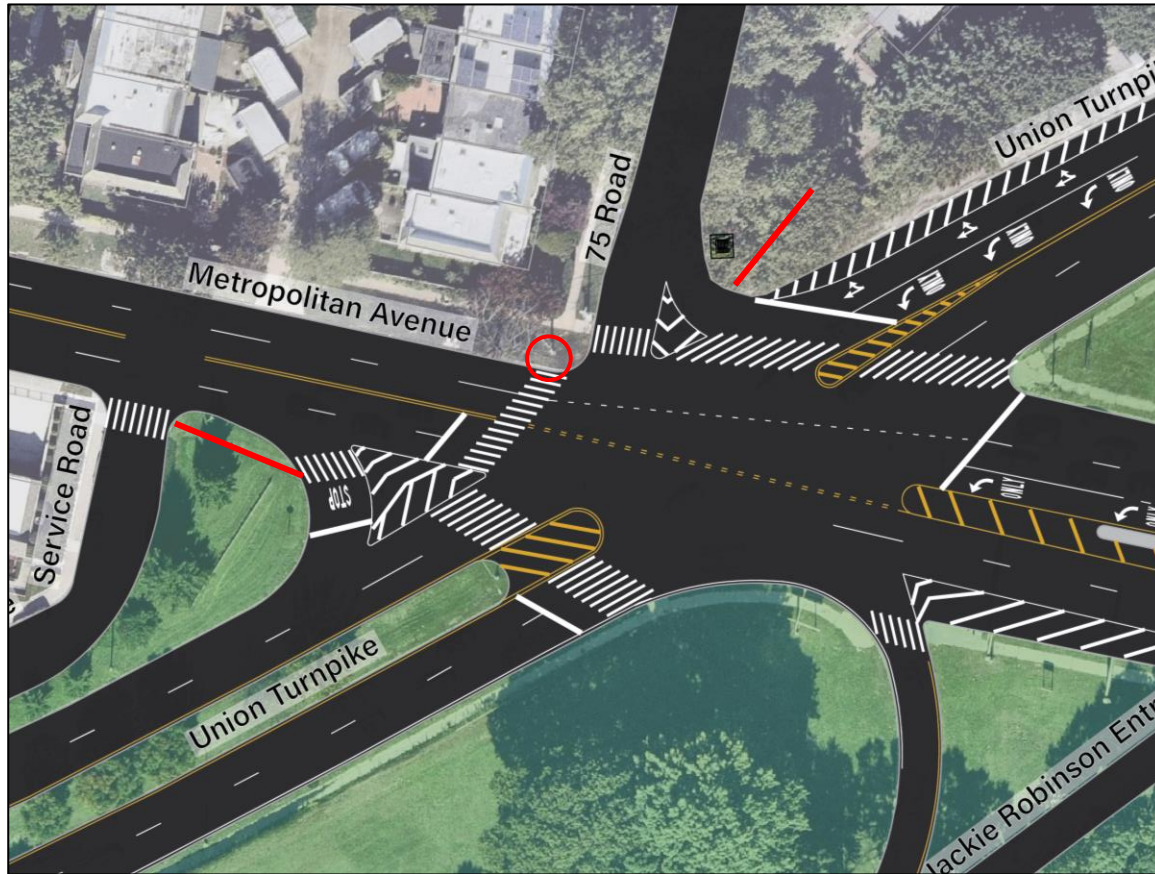
Existing Conditions



Existing Conditions

Missing Pedestrian Features

- Missing ramps and sidewalks



Dirt pathway connects street to sidewalk

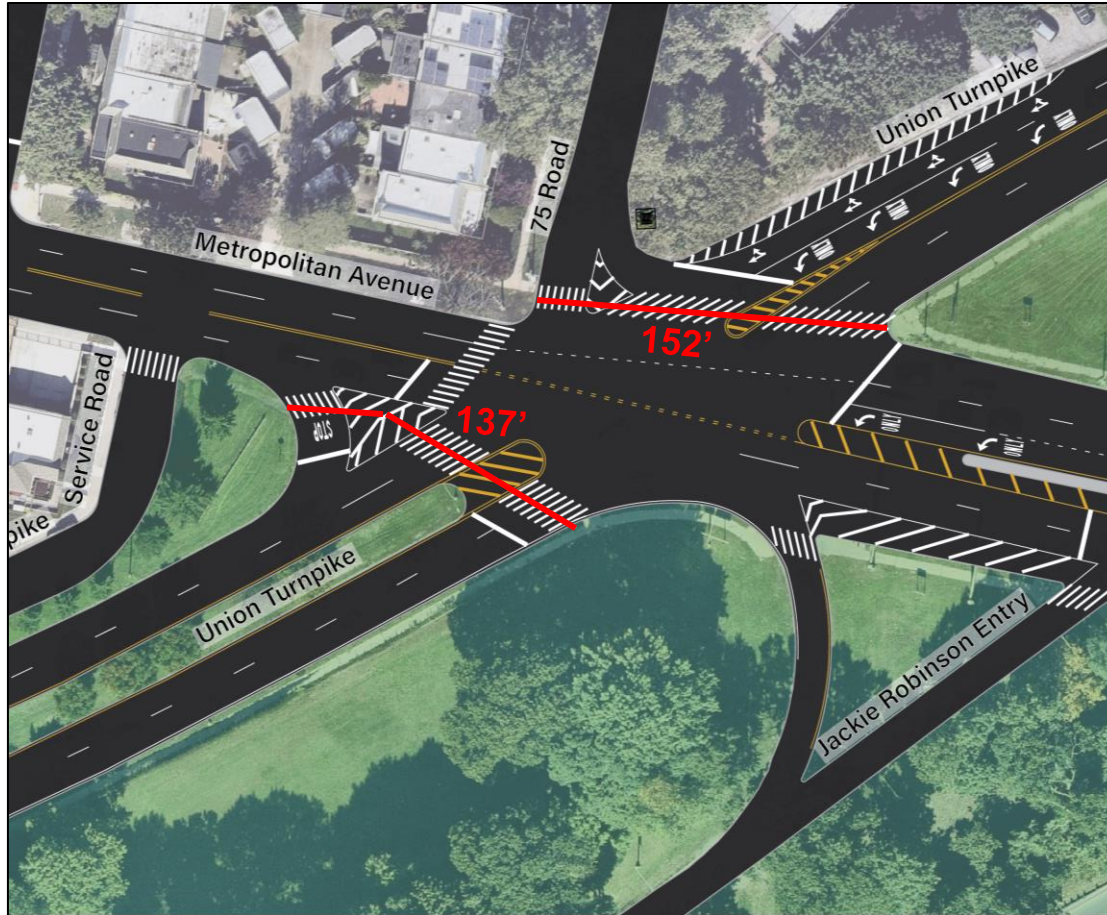


No sidewalk/ramp to west crosswalk

Existing Conditions

Long Crossing Distances

- Long crossing distances with no pedestrian refuge



North ped crossing at Union Turnpike and 75 Rd

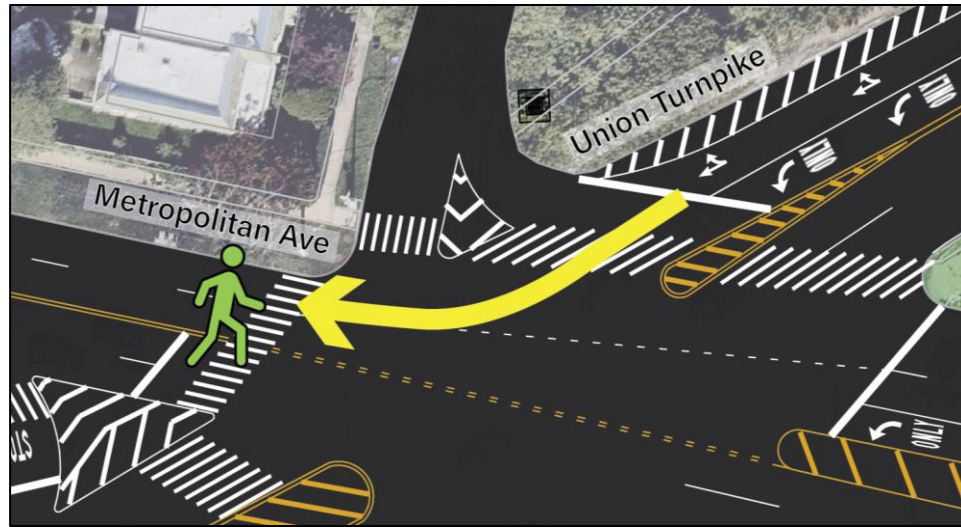


South ped crossing at Union and Metropolitan

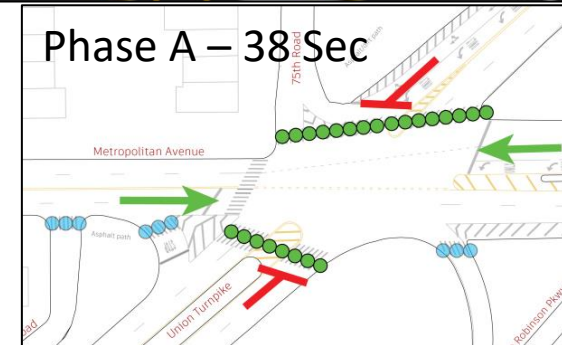
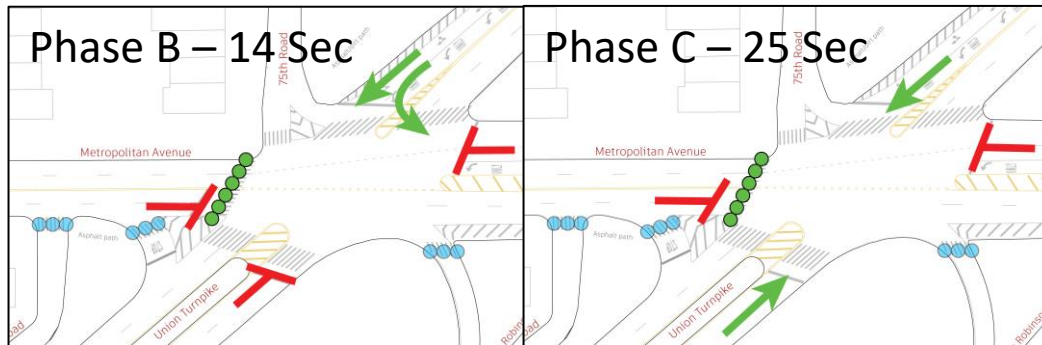
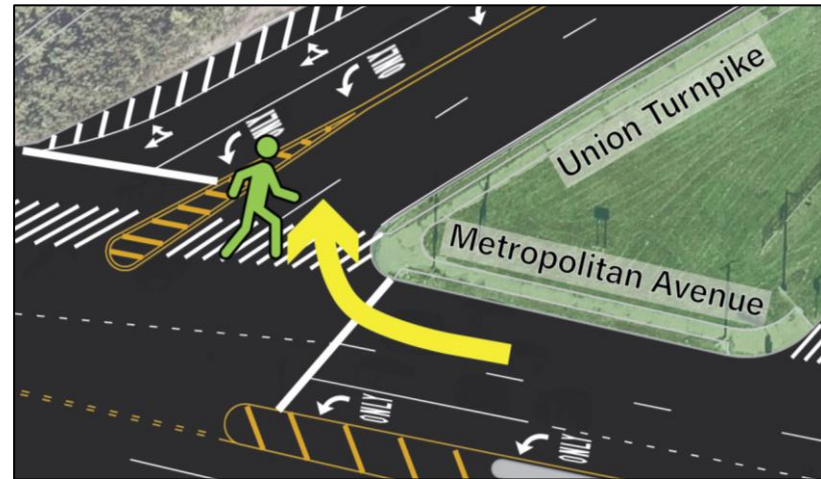
Existing Conditions

Right Turns and Pedestrian Conflicts

1. Soft right turns from Union Turnpike southbound to Metropolitan Ave westbound conflict with pedestrians in west crosswalk:



2. High vehicle volumes from Metropolitan Ave to Union Turnpike conflict with pedestrians in north crosswalk:

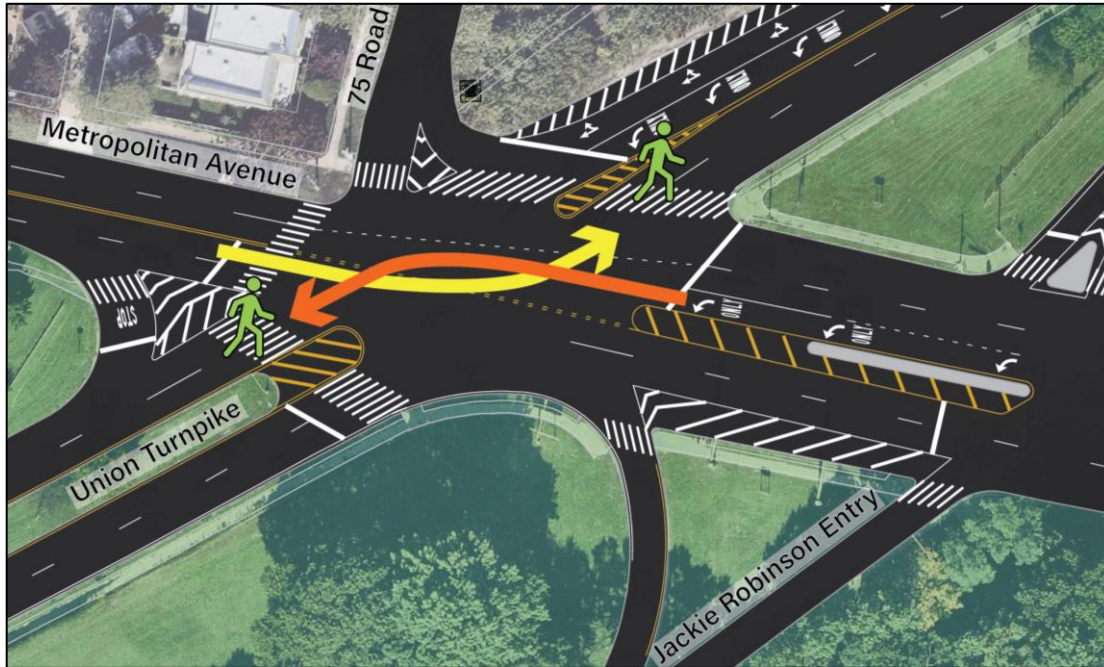


— Red / held traffic
 ●● Free flow (not part of signalized intersection)
 → Green/traffic flow
 ●●● Ped Walk

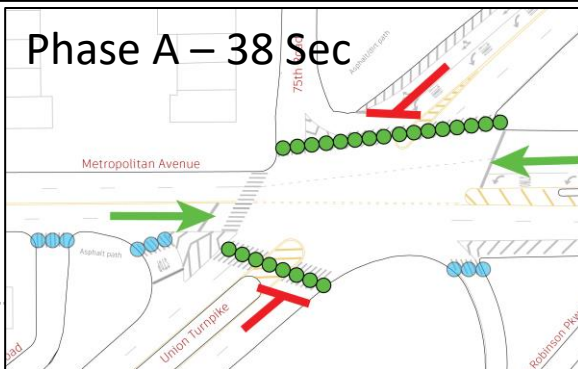
Existing Conditions

Left Turns and Pedestrian conflicts

Left turns from Metropolitan onto Union Turnpike are misaligned, have high volumes, and conflict with pedestrians



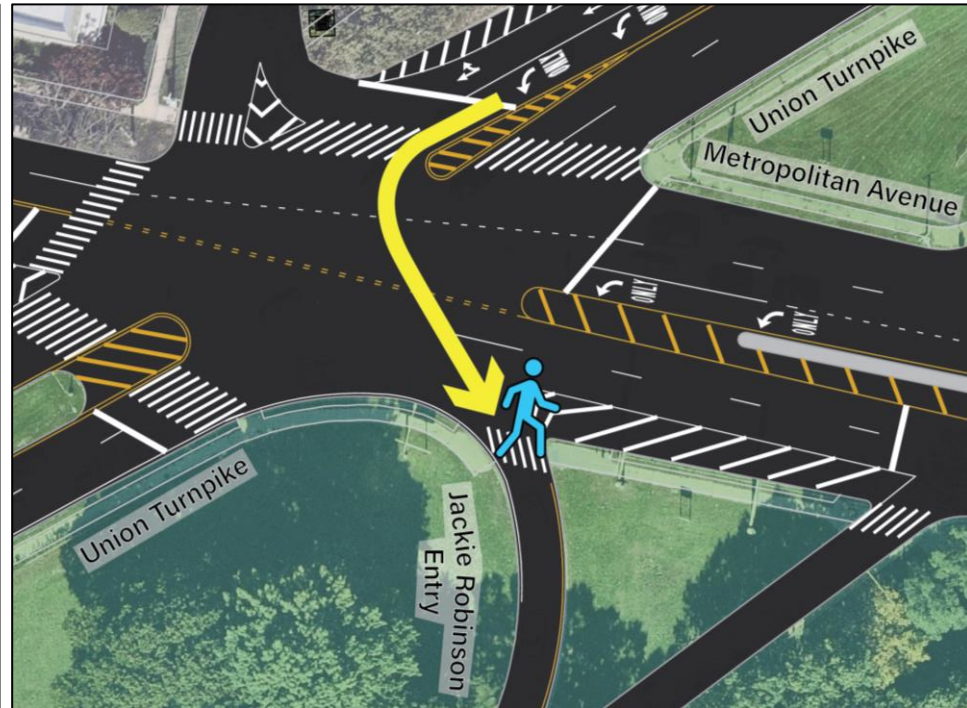
Phase A – 38 Sec



Existing Conditions

Entry Ramp Conflicts

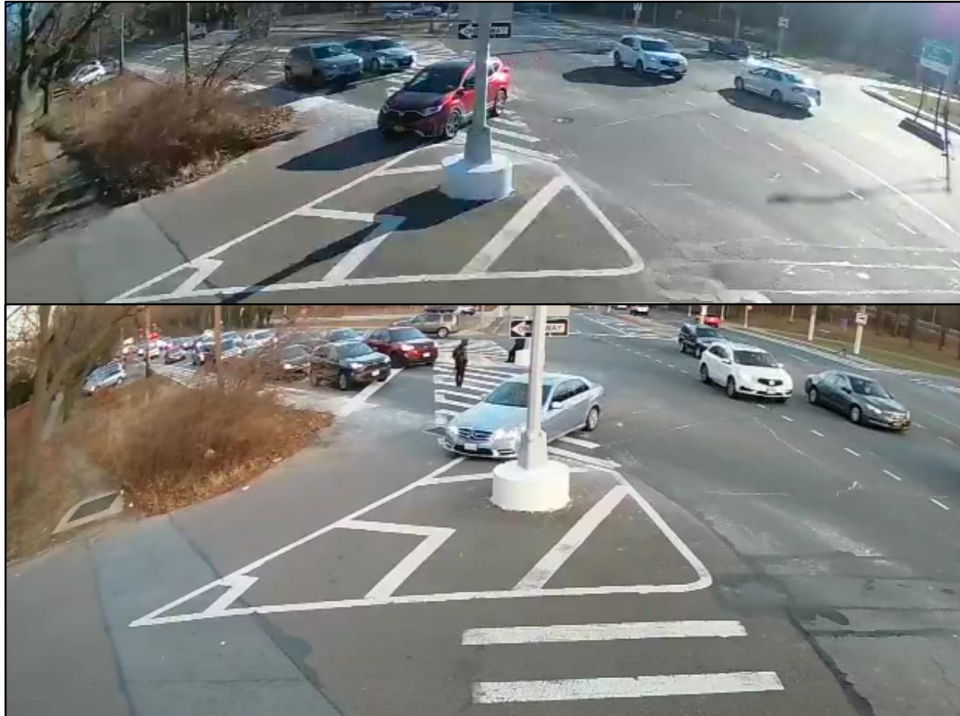
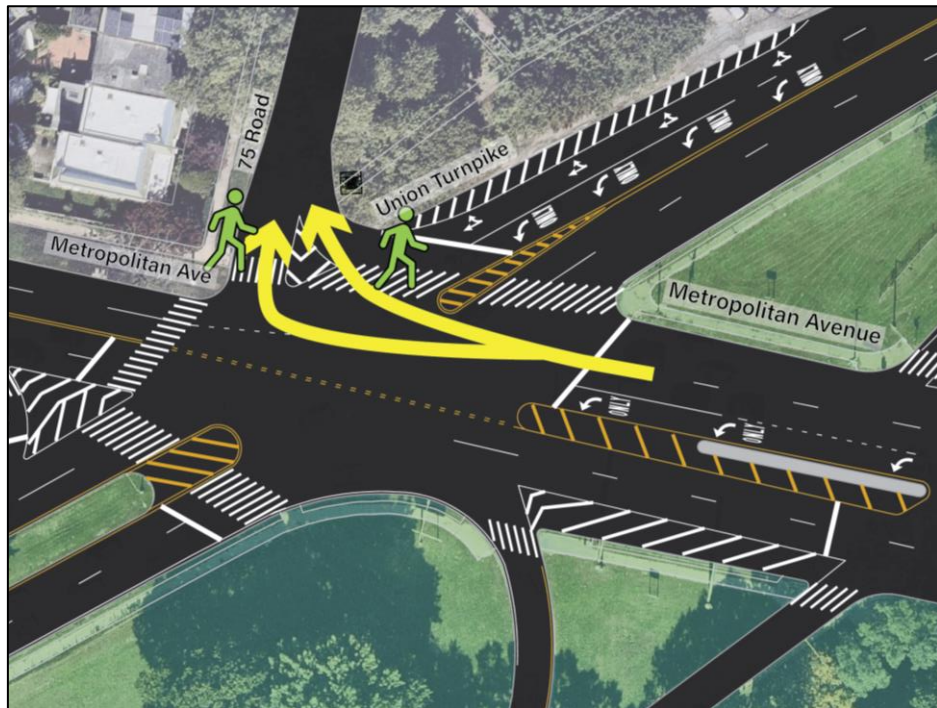
- Left turning vehicles have a long, straight approach to crosswalk
- Straight approach causes vehicles to accelerate into crosswalk



Existing Conditions

Unclear Vehicular Turns, Redundant Slip Lanes

1. Turns onto 75 Rd are unpredictable with which slip they turn through
2. Creates problem for pedestrian visibility and conflict in the crossing
3. 75 Rd is a low volume road



Existing Conditions

Mid-intersection merge

- AM Rush hour no parking, all other hours parking allowed
- Two lanes westbound on Metropolitan merge into one lane causing mid-intersection congestion



Proposed Design

Toolkit



Concrete



Traffic Regulations



Curb Regulations



Street Markings



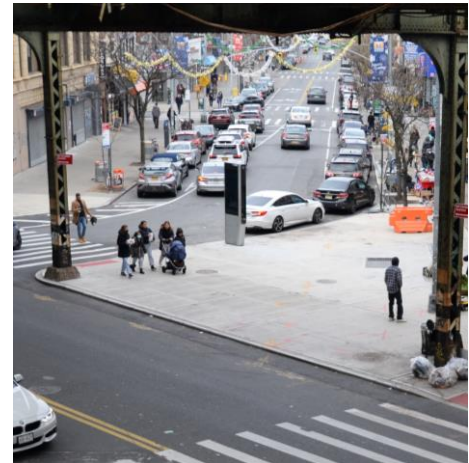
Signals



Lane Assignments

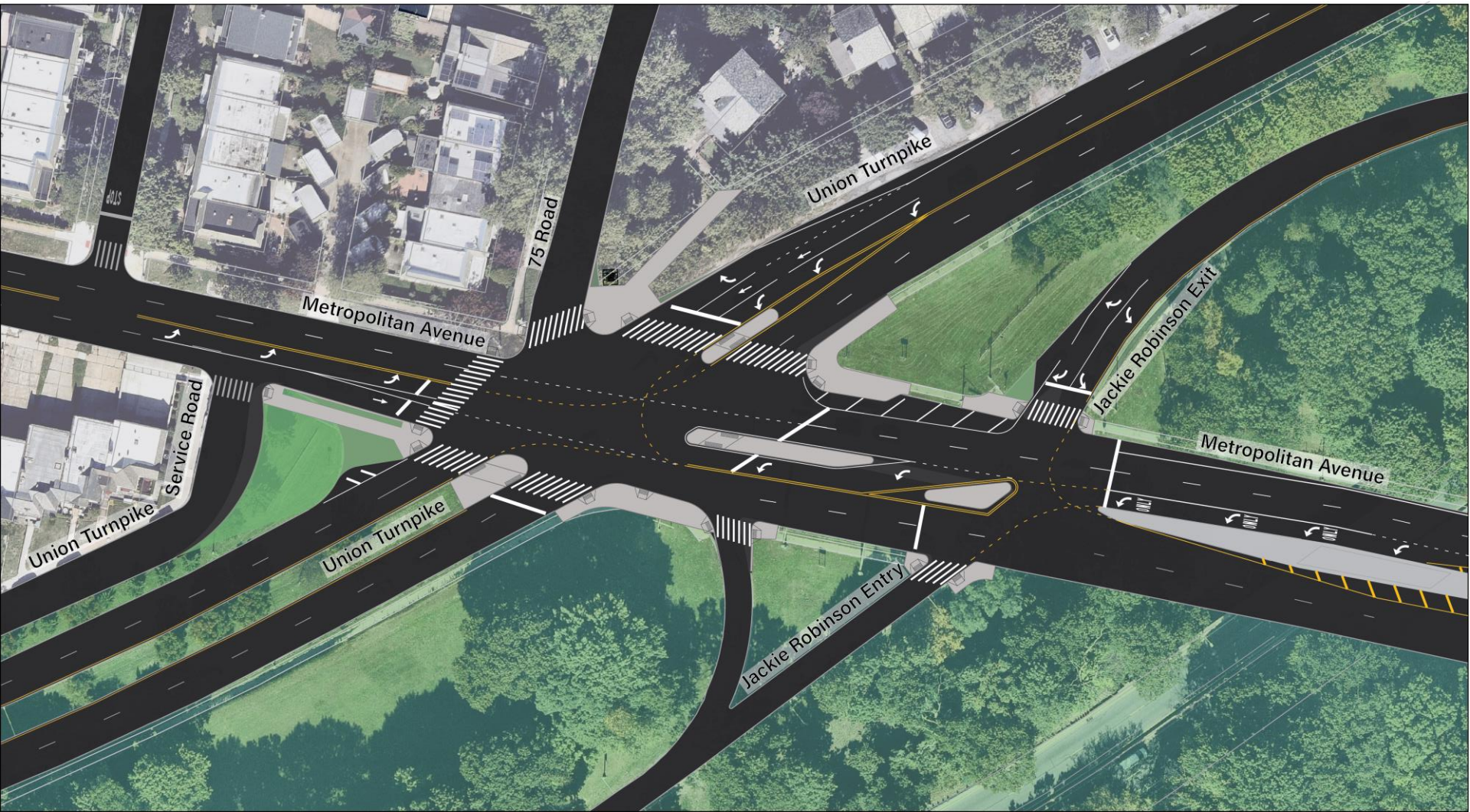


Martello Bollards

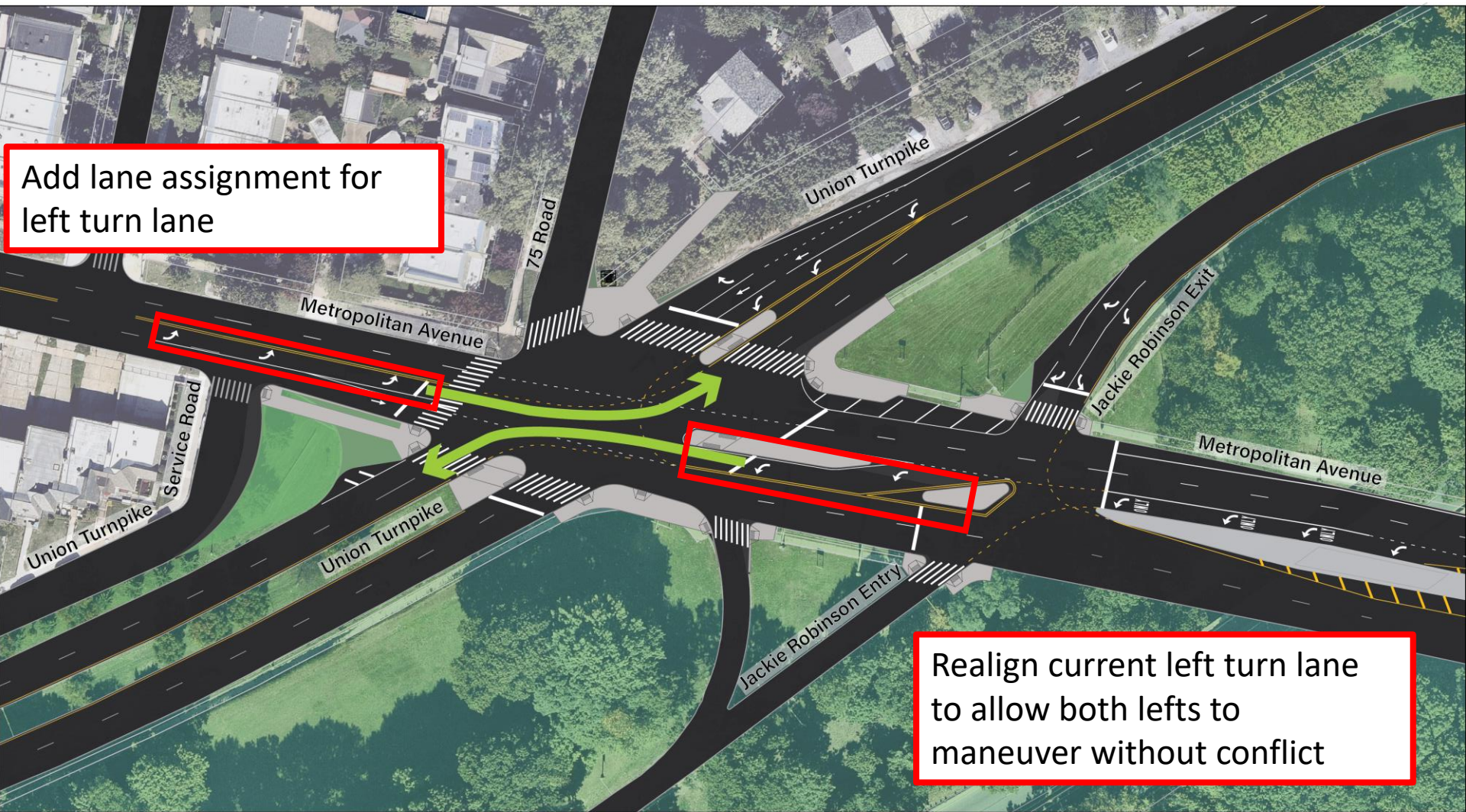


Slip Closure

Proposal

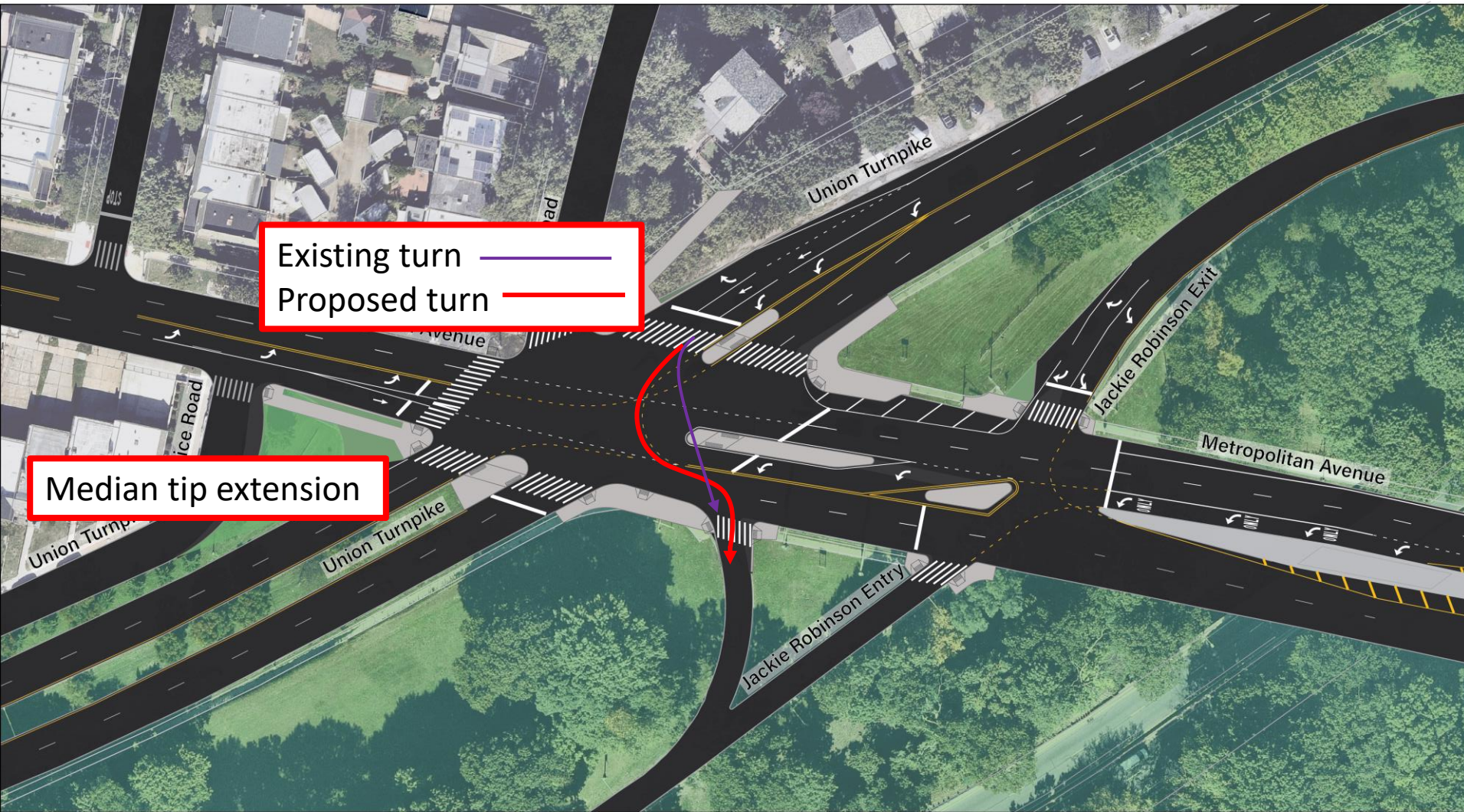


Proposal – left turn lane adjustments



Reduces conflict between left turn lanes

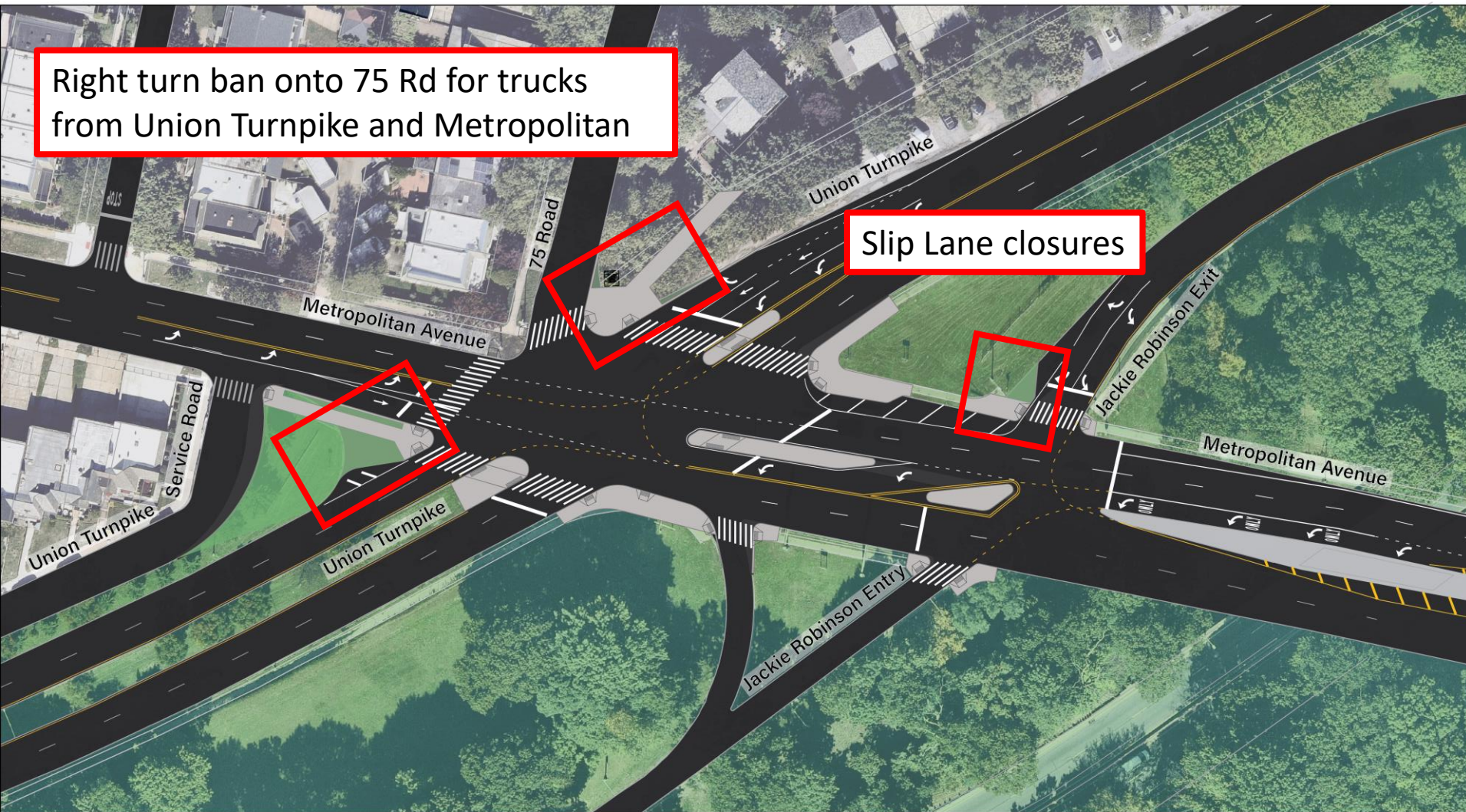
Proposal – pedestrian refuge islands



Calmed vehicular turns
New S-turn onto ramp

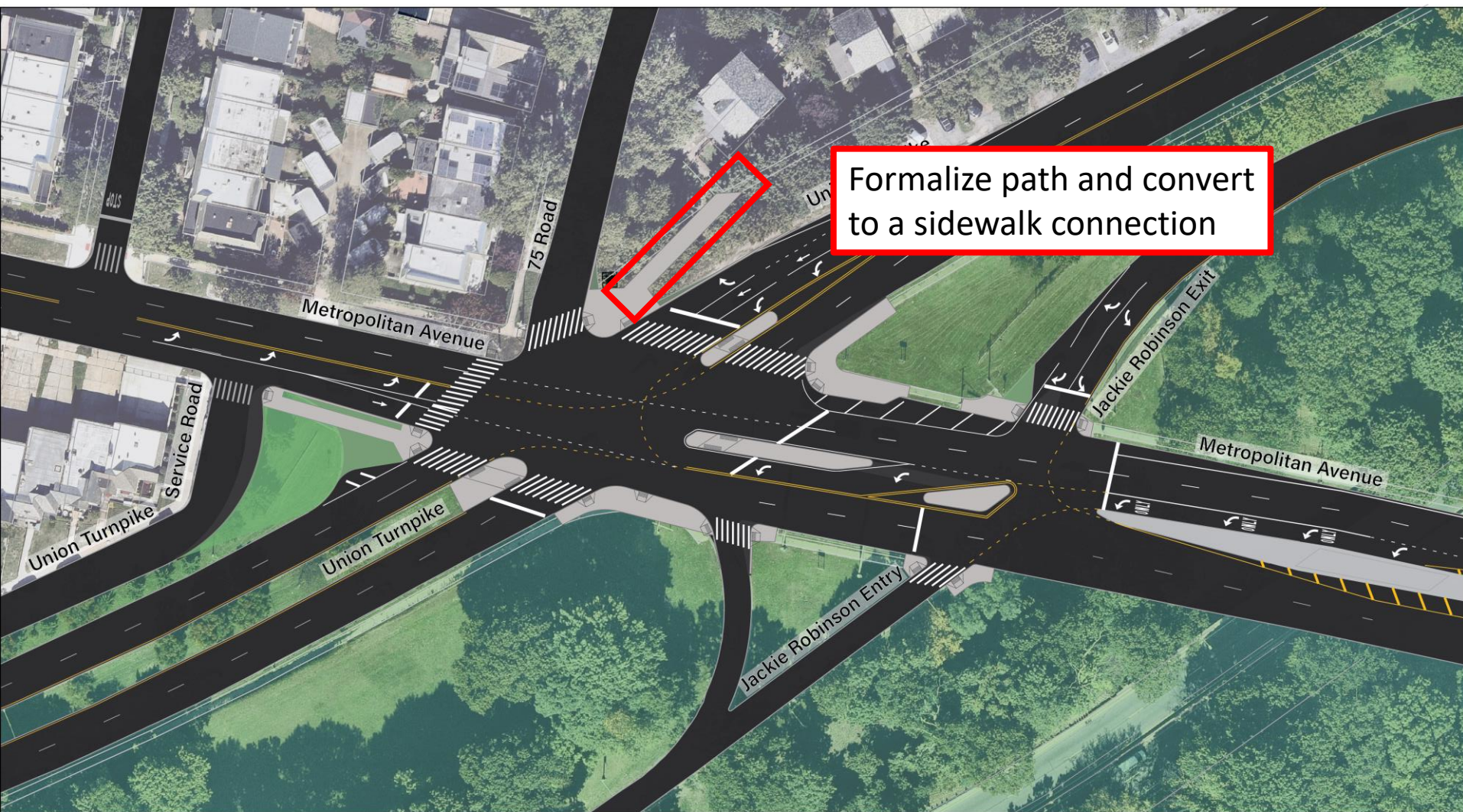
Protected refuge area in crosswalk

Proposal – slip lane closures



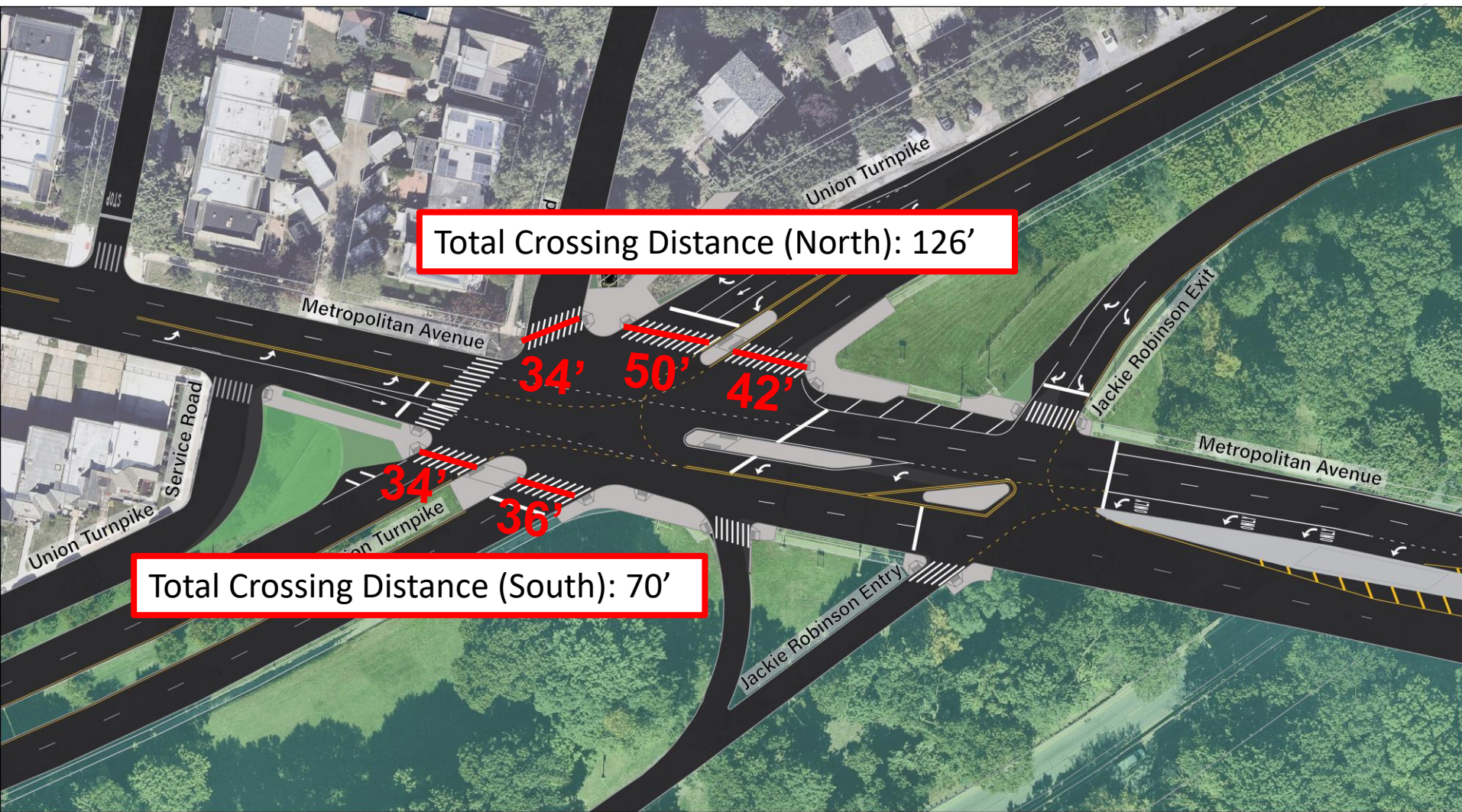
- Unnecessary roadbed reallocated to pedestrian uses
- Clarifies vehicular movement

Proposal – new sidewalk connection

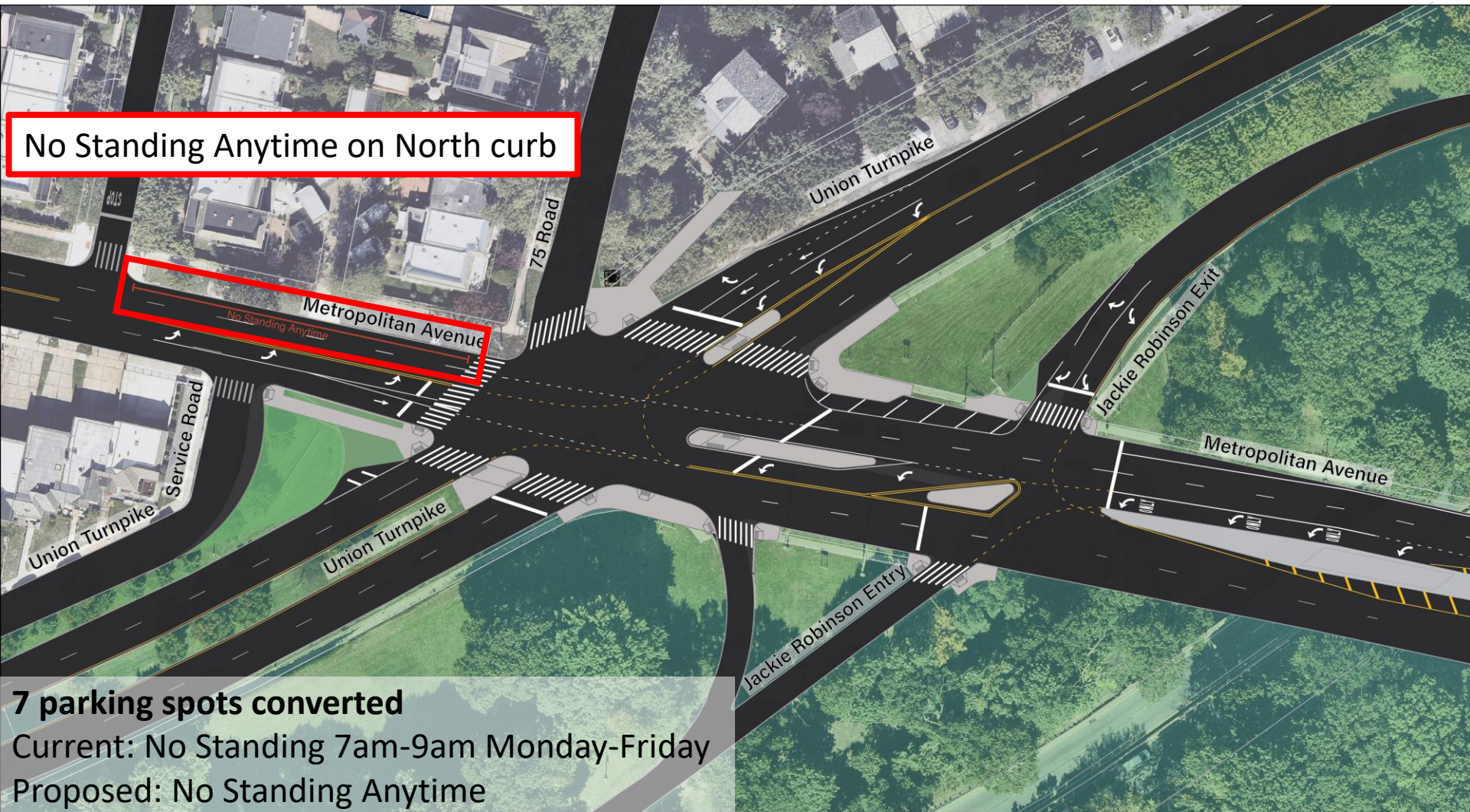


Improves pedestrian network

Proposal – shortened crosswalk

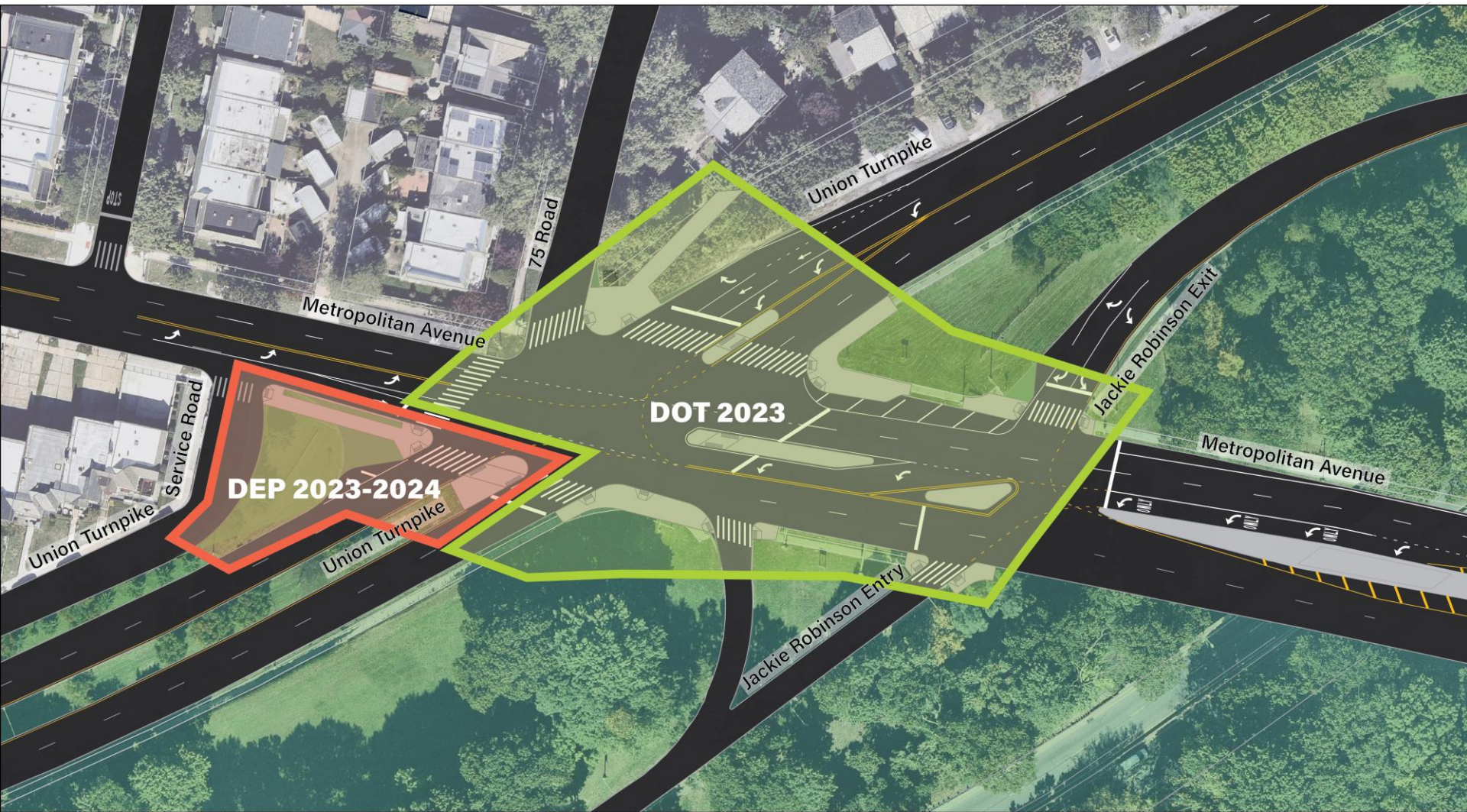


Proposal – parking regulations



Removes merge from intersection

DEP and DOT Work



Benefits

Improves pedestrian network

Provides safer, shorter
pedestrian crossings

Calms vehicle turns

Improves traffic flow

Reduces conflict between
vehicles and pedestrians



Thank You!

Questions?



NYCDOT



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