

Burke Ave

Traffic Calming

Community Board 12 Transportation Committee, Bronx

Feb
2014



Project Area

- Project area: Burke Ave from Bronx Park E to E Gun Hill Rd
- Corridor runs through 2 Community Boards CB 11 & CB 12
- 6 lanes (4 travel, 2 parking)
- 60' wide roadway



Bronx Park E at Burke Ave, looking east

Need: Why Burke Ave?

- Community request to improve safety along route
- High amount of severe injuries
- High speeds
 - Max recorded speed of 50 mph
 - Speeders (85th Percentile) avg 37 mph

Burke Ave - E Gun Hill Rd to Bronx Park E, BX Injury Summary, 2007-2011 (5 Years)

	Total Injuries	Severe Injuries	Fatalities
Pedestrian	44	2	0
Bicyclist	9	0	0
Motor Vehicle Occupant	262	7	0
Total	315	9	0



Boston Rd at Burke Ave, looking west



E Gun Hill at Burke Ave, looking west

Project Details

- Install flush center median with turn bays
- Parking lane stripe
- Remove one through travel lane in each direction
- Refurbish crosswalks and markings at necessary locations



Existing Conditions

Boston Rd at Burke Ave, Bronx, looking west

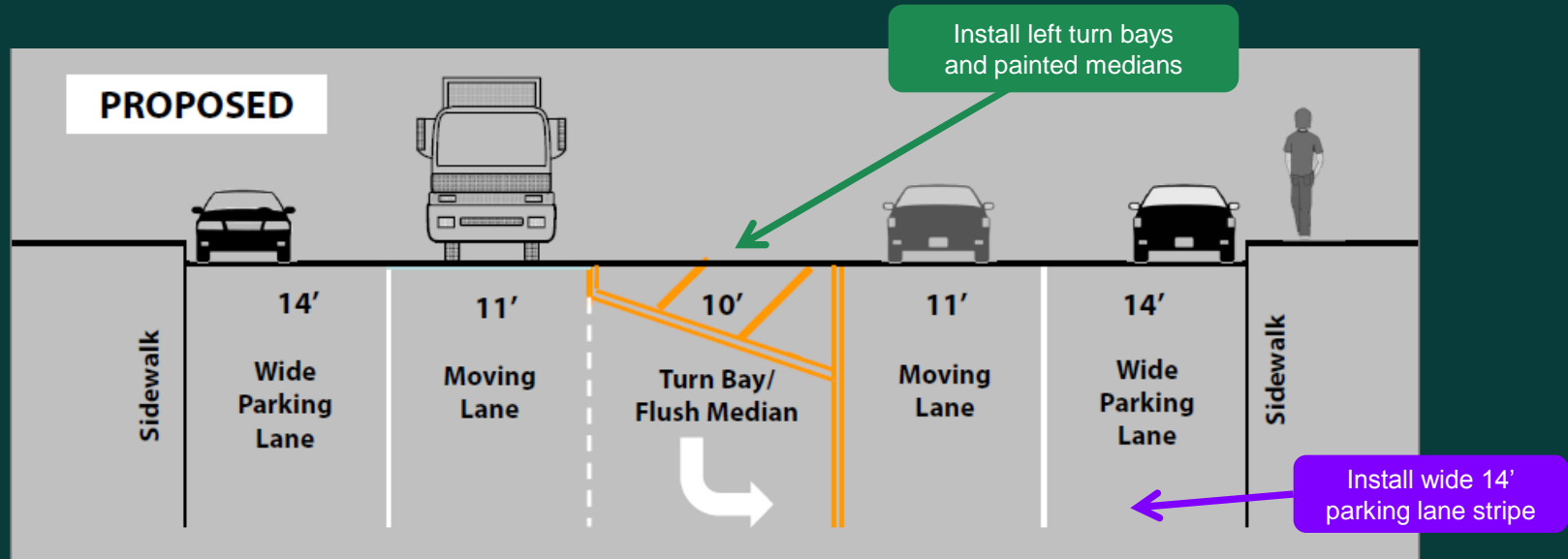
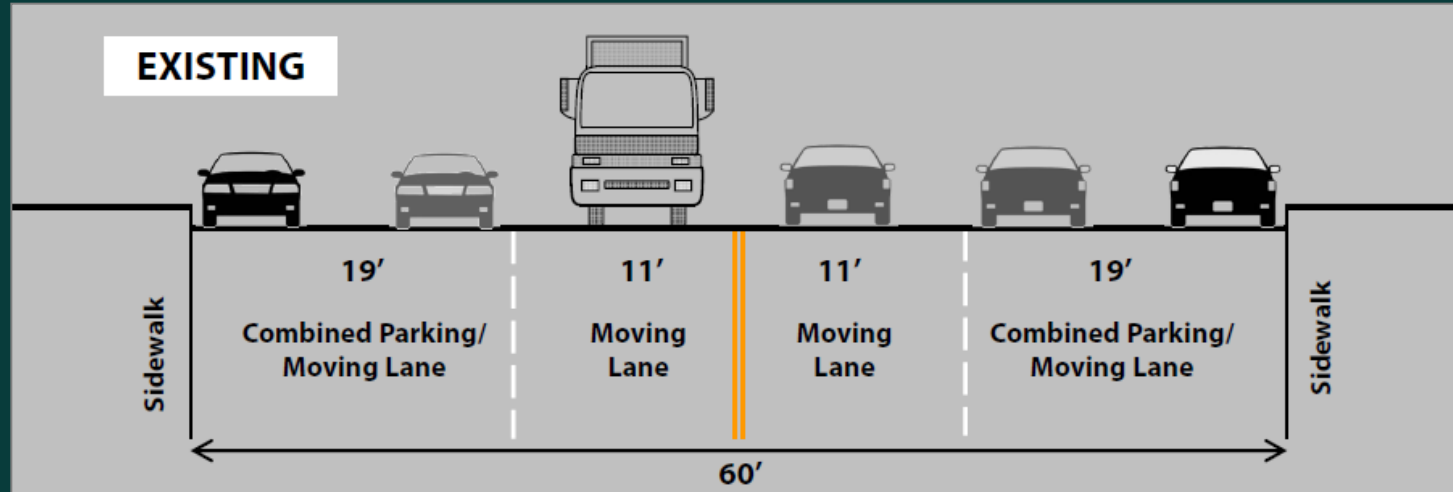


Example of Proposed Treatment

Linden Blvd & Nostrand Ave, Brooklyn, looking east

Project Proposal

Project Limits: Burke Ave from Bronx Park East to E Gun Hill Rd



Evaluation of Lane Removal

Congested Lane

- 700 vehicles per hour or above

Existing (2 lanes)

- Maximum 163 vehicles per lane

Proposal (1 lane + left turn bays)

- Maximum 327 vehicles per lane

Maximum Recorded Peak Volume (AM & PM)

Modeled Intersection Typical of Route

Burke Ave at Boston Rd (AM Peak 8-9)

- Existing: **18.6** secs delay
- Proposal: **20** secs delay

Very minor increase in delay

700 Vehs per Hour

163
Existing Max
Lane Volume

327
Proposal Max
Lane Volume

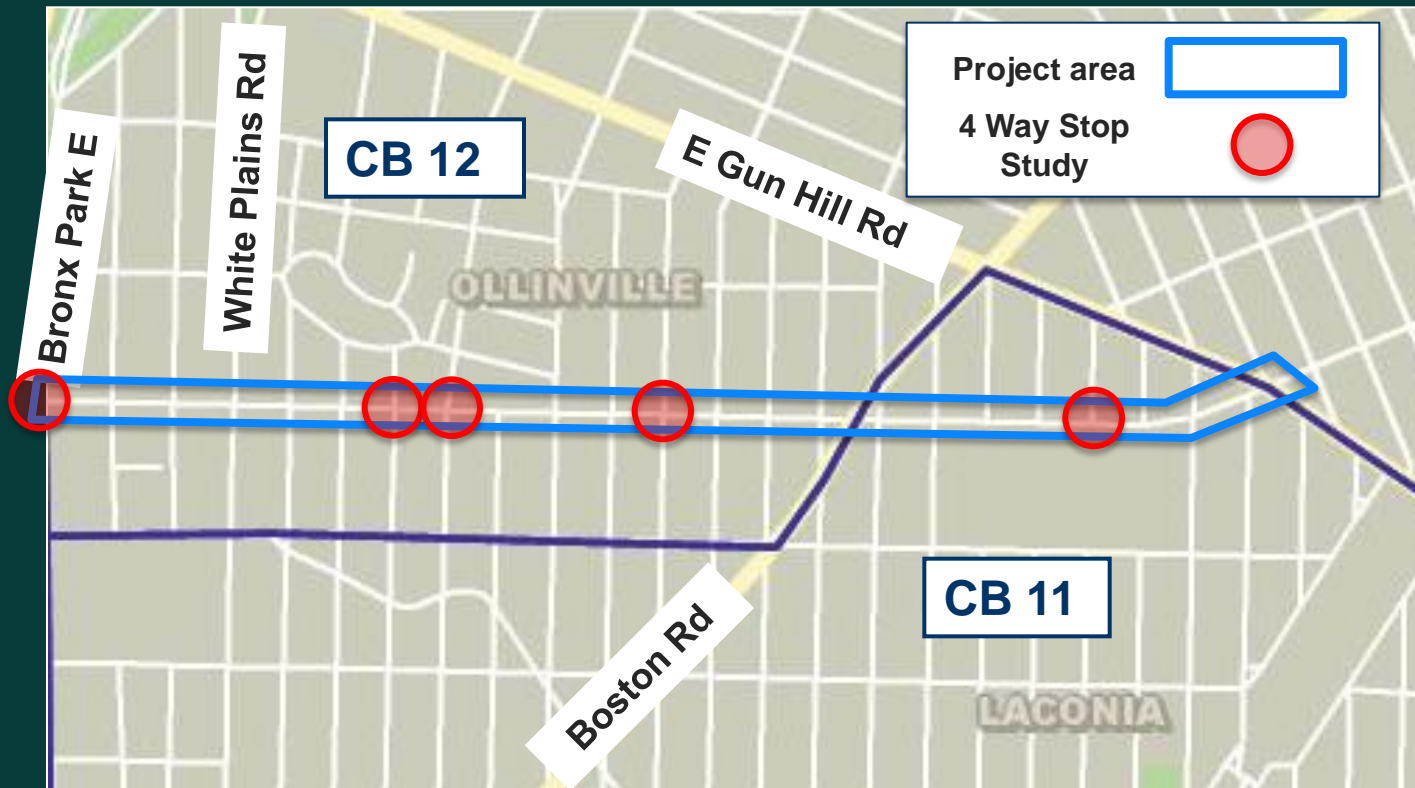
Safety Issue-Uncontrolled Intersections

Safety Issue

- 33% of crashes involving pedestrians occurred at uncontrolled intersections

Proposed Solution

- 4 way stops requested for Bronx Park E, Wallace Ave, Colden Ave, Barnes Ave and Pearsall Ave
- Study involves analyzing volumes, crashes, and injuries; the intersection must meet certain thresholds for a 4 way stop to be considered



Safety Issue - Laconia Ave at Burke Ave

High amount of Right Angle Crashes

- Stop controlled only for Laconia Ave not for Burke Ave
- Vehicles traveling NB on Laconia Ave have difficulty judging gaps in traffic due to the closeness of the Boston Rd intersection and are hitting vehicles traveling EB and WB

68% of Crashes Right Angle
Total 38 Injuries
5 year period



Burke Ave

Boston Rd

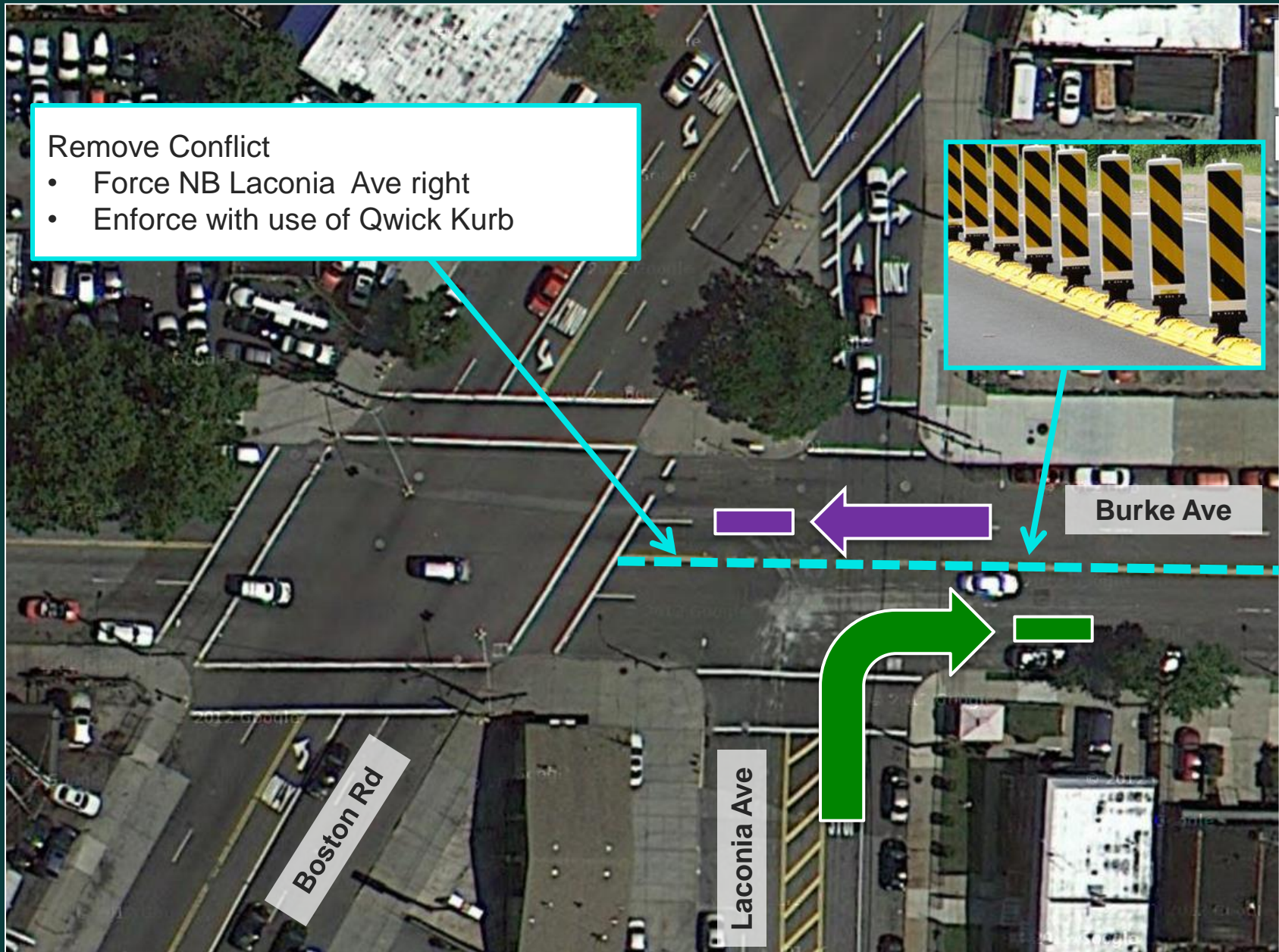
Laconia Ave

~150 peak
hourly volume

Proposed Solution - Laconia Ave at Burke Ave

Remove Conflict

- Force NB Laconia Ave right
- Enforce with use of Qwick Kurb



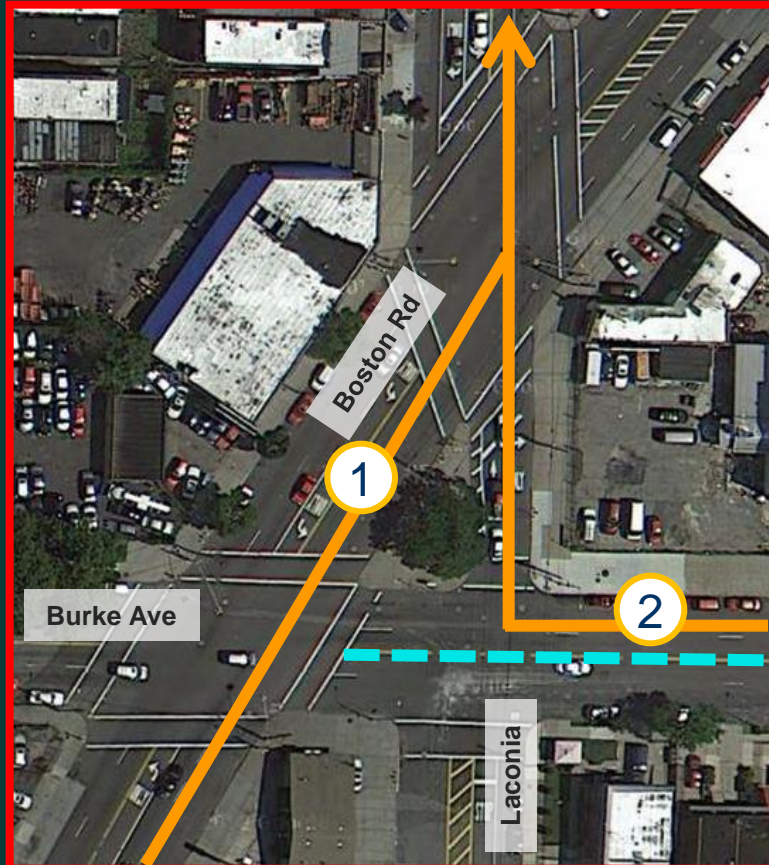
Proposed Solution - Laconia Ave at Burke Ave

Alternative Routes Comparison

Existing Route 2 Signals 1 Stop

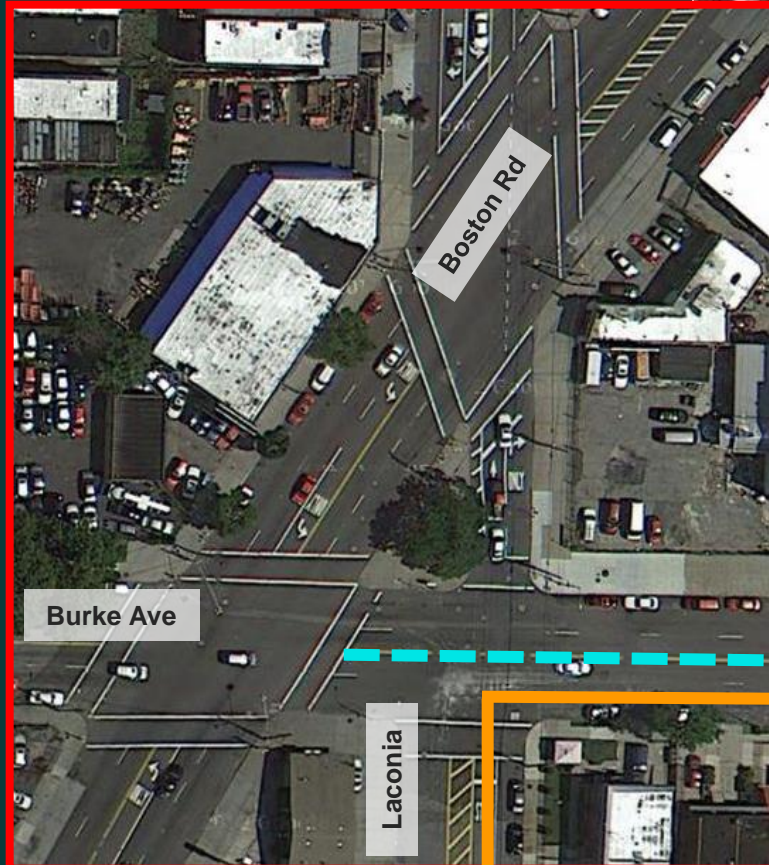
① 3 Signals 1 Stop

② 2 Signals 1 Stop



Proposed Solution - Laconia Ave at Burke Ave

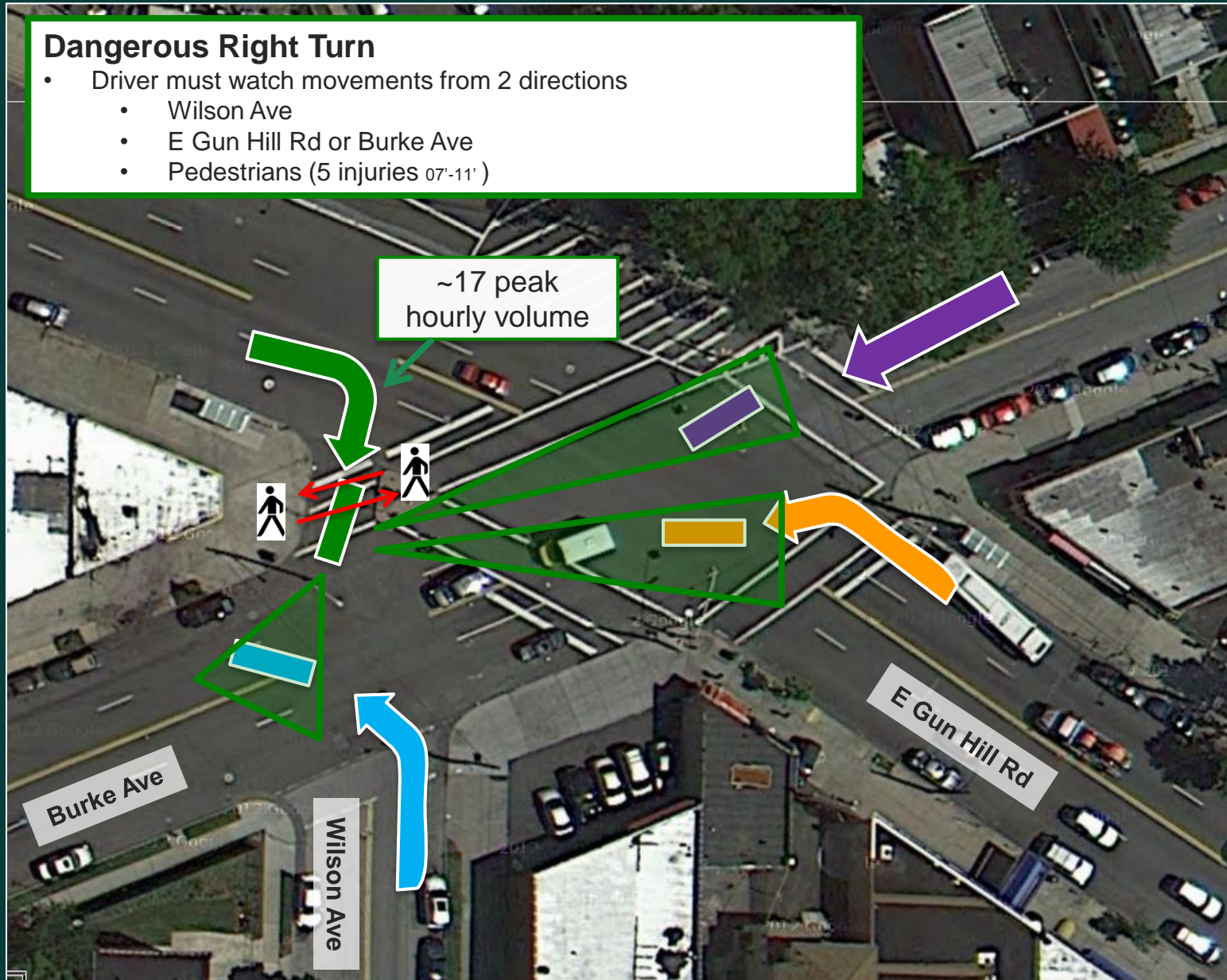
Alternative Route Comparison
Existing Route 2 Signals 1 Stop
③ 1 Signals 4 Stop



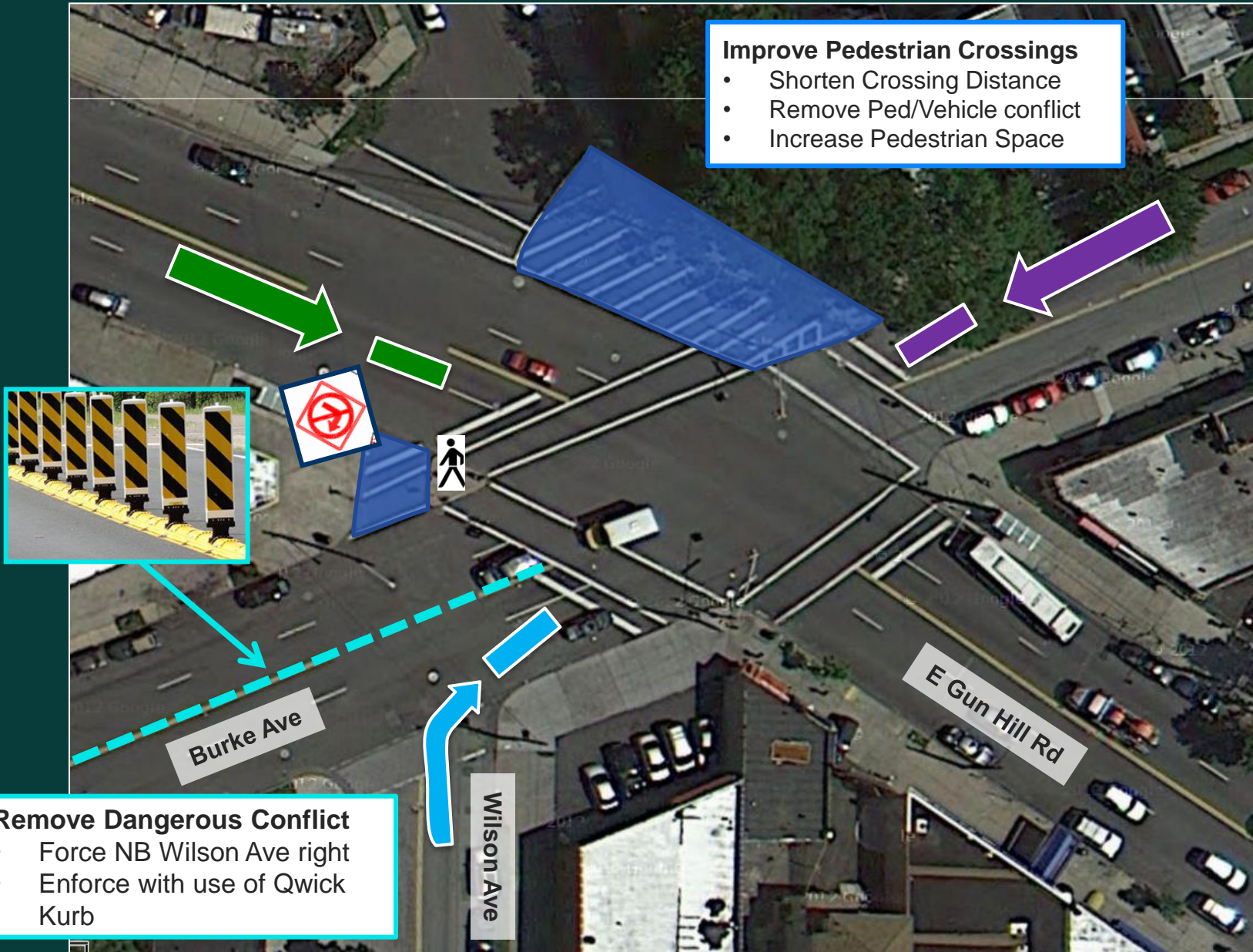
Safety Issue - E Gun Hill Rd at Burke Ave

Dangerous Right Turn

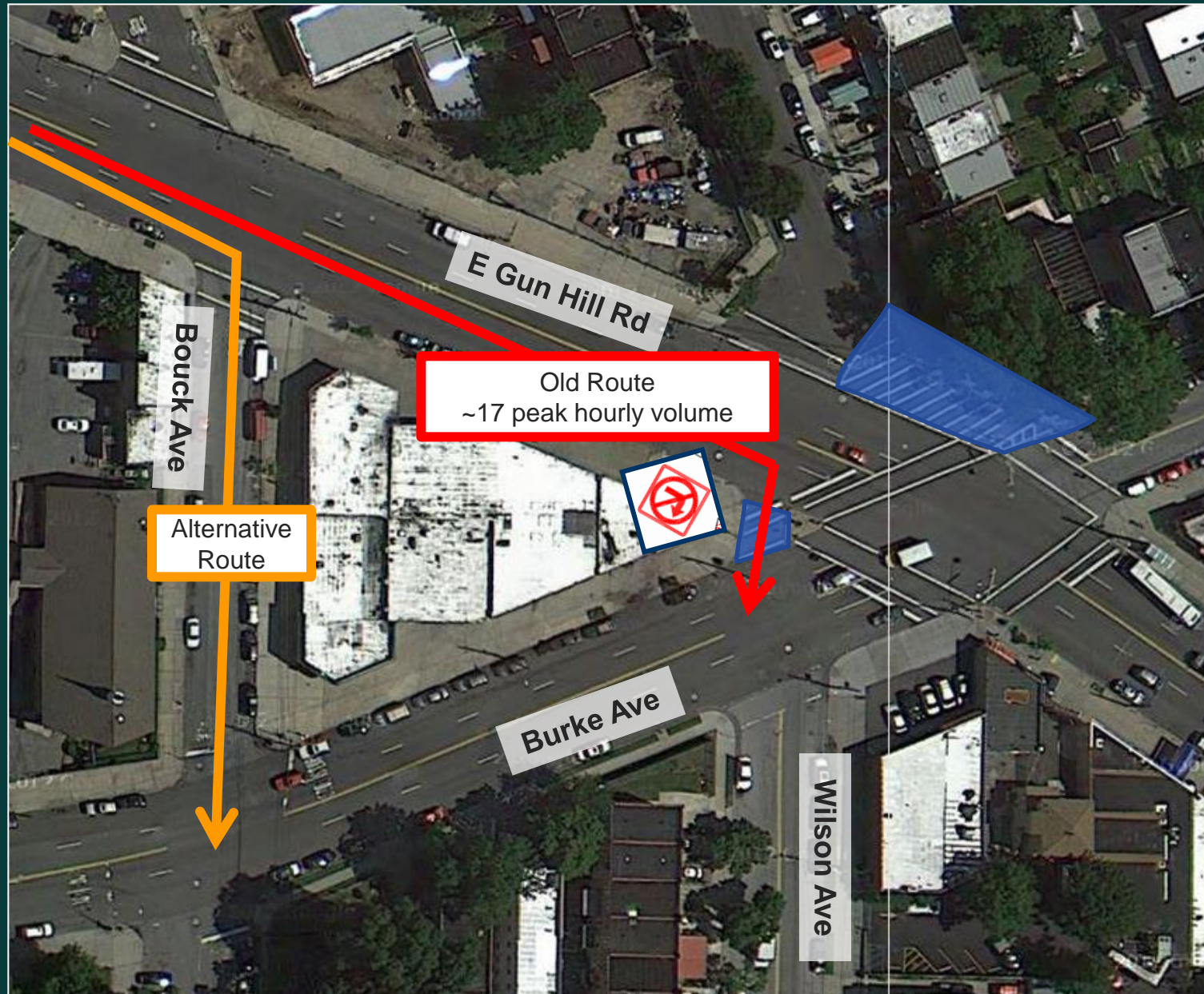
- Driver must watch movements from 2 directions
 - Wilson Ave
 - E Gun Hill Rd or Burke Ave
- Pedestrians (5 injuries 07'-11')



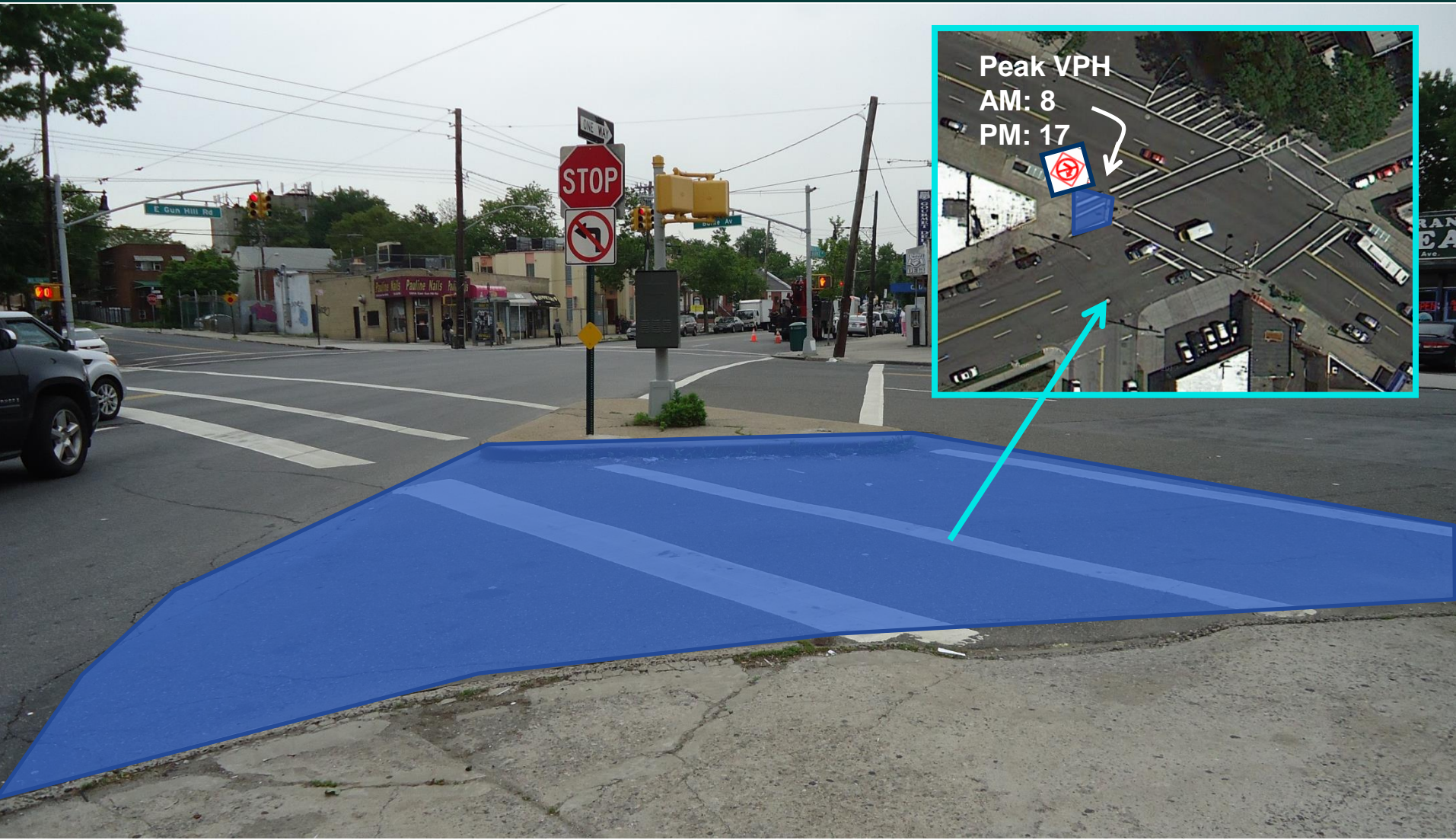
Proposed Solution - E Gun Hill Rd at Burke Ave



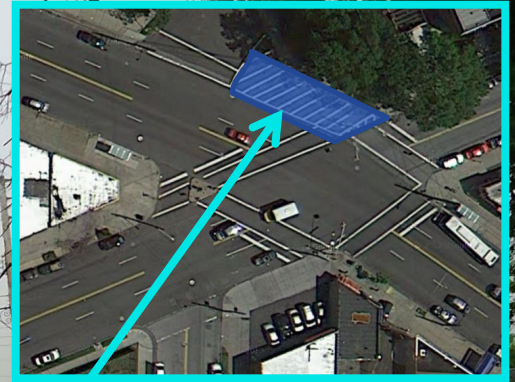
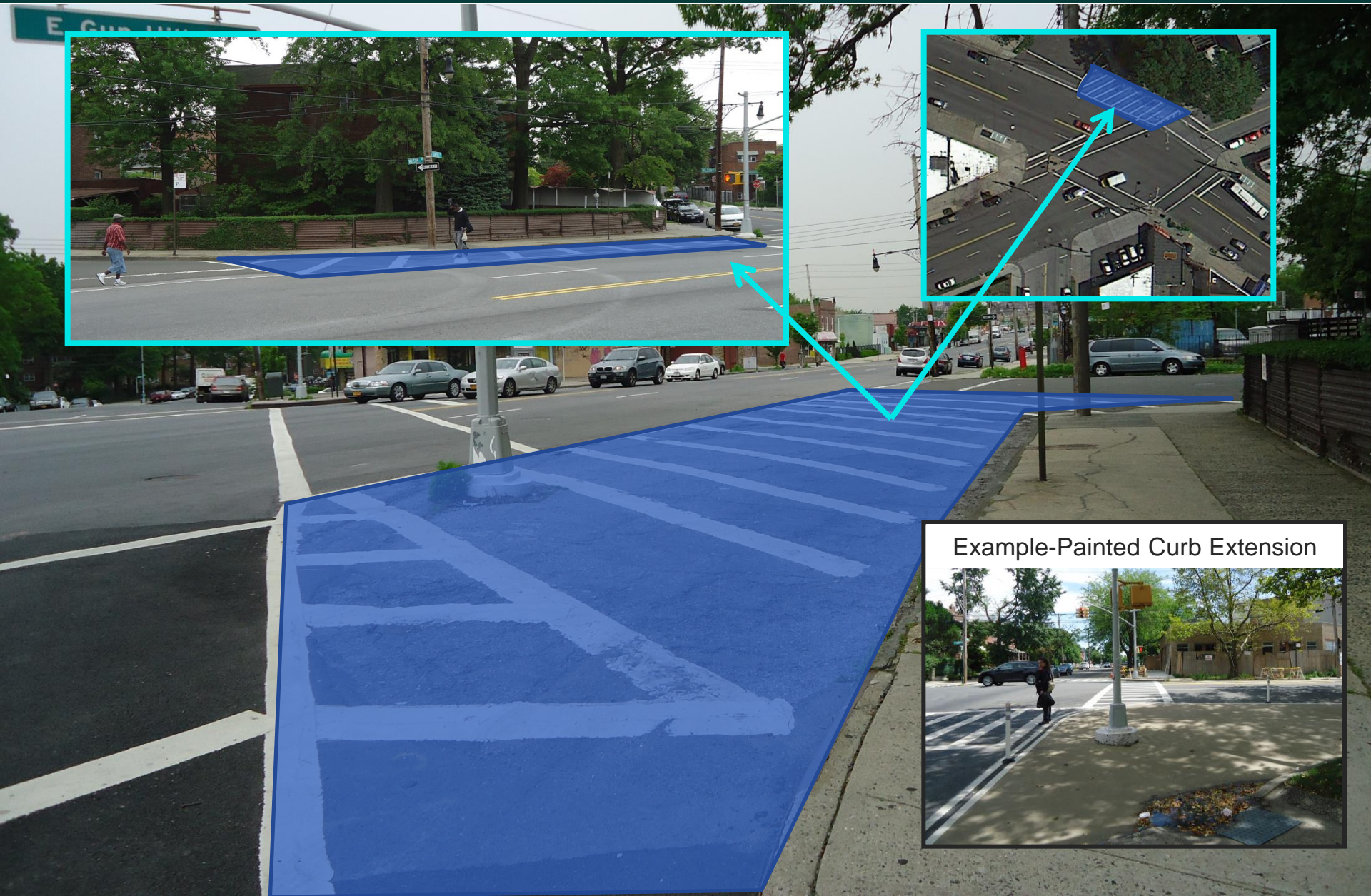
Proposed Solution – E Gun Hill Rd at Burke Ave



Increase Ped Space with Concrete – E Gun Hill Rd at Burke Ave



Painted Curb Extension-E Gun Hill Rd at Burke Ave



Example-Painted Curb Extension



Proposal Benefits

Painted Median and Parking Stripe

- Less weaving and better organized traffic
- Safer pedestrian crossings
- Removes excess capacity and reduces ability to speed

Left Turn Bays

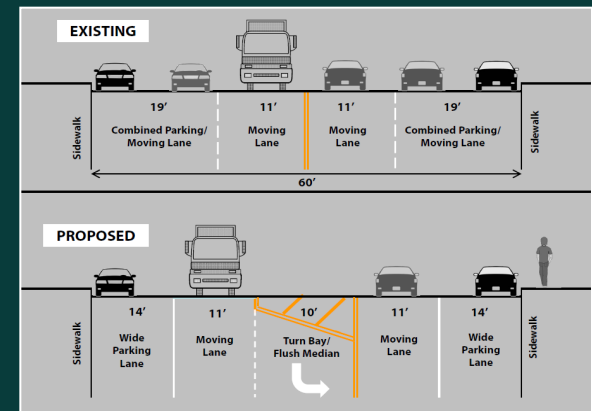
- Simpler, safer left turns

Laconia Ave at Burke Ave

- Removal of dangerous conflict causing right angle crashes

E Gun Hill Rd at Burke Ave

- Simplify intersection to reduce dangerous conflicts
- Safer pedestrian crossings



Boston Rd/Laconia Ave at Burke Ave, looking north



E Gun Hill Rd at Burke Ave, looking southeast

Questions?

**Thank
You**