





Project Background

(1) Project Background

Project Overview

Address numerous complaints and requests regarding the Van Duzer St Corridor:

- 1 St Pauls Ave
 From Victory Blvd to Van Duzer St
- Van Duzer St (southbound)
 From St Pauls Ave to Richmond Rd
- Richmond Rd
 From Van Duzer St to Narrows Rd N
- 4 Targee St
 From Narrows Rd N to Van Duzer St
- 5 Van Duzer St (northbound)
 From Targee St to Victory Blvd
- 6 Swan St
 From Bay St to St Paul's Ave



(1) Project Background



Project Timeline

Fall 2015

NYC DOT began investigating corridor after receiving numerous complaints about speeding

Spring 2016

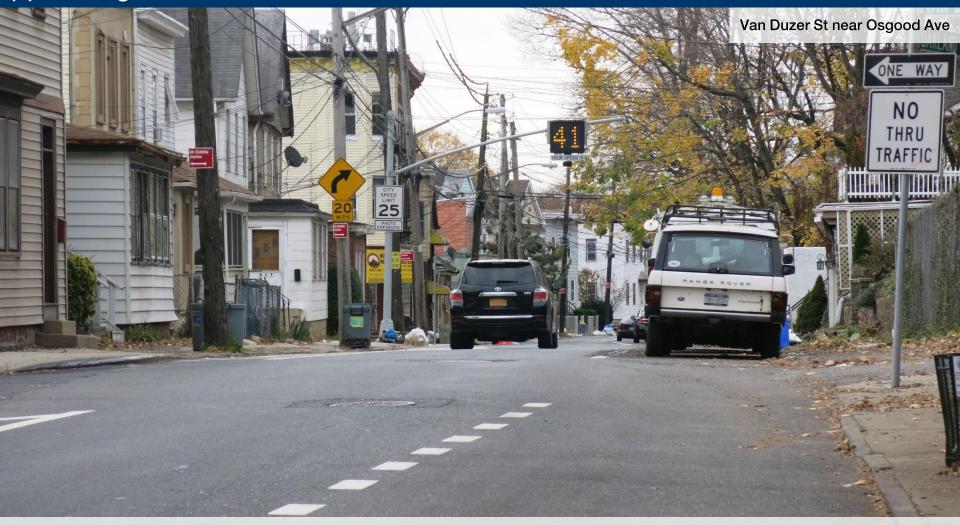
NYC DOT presented project proposal to Van Duzer St Civic Association and Staten Island Community Board 1

Summer 2016

Community members, NYC DOT, and NYPD met on-site to discuss problem locations and potential solutions

Fall 2016

NYC DOT presents updated project proposal to Van Duzer St Civic Association and met on-site with corridor residents



Speeding is Significant

Vehicle speeds along corridor were measured after numerous speed related complaints. Speeding was found to be significant throughout the corridor.

Pedestrian Access Issues

- Long crossing distances
- Long distances between pedestrian crossings
- Sidewalks end without pedestrian crossings



Opportunities to Increase On-street Parking

Parking is limited along the corridor due to a number of factors including:

- Excess channelization of road
- Excess travel lanes
- Complex intersection design



Bicycle Lane Potential

Bicycle lanes can help calm traffic and improve non-motorized access to community centers and the St. George Ferry Terminal



Tompkinsvillle



Bay St Bicycle Route



Van Duzer St at Beach St



Targee St at Vanderbilt Ave



Project Proposal

Improve transportation conditions for all users along the Van Duzer St Corridor by:

- Discouraging speeding
- Enhancing intersections
- Adding parking
- Adding crosswalks
- Adding bicycle routes









St Paul's Ave Victory Blvd to Van Duzer St

- 90% of vehicles speeding at Taxter PI (avg. speed is 31 mph)
- Wide road with unused, channelized space
- Corridor is truck/bus route; traditional speed bumps are infeasible

Proposed Changes St Pauls Ave Victory BI to Van Duzer St



Create Standard Width Travel Lane

Existing travel lane is too wide for street and is conducive to speeding



Add buffered bike lane

Existing channelization can be reused for bicycle lane

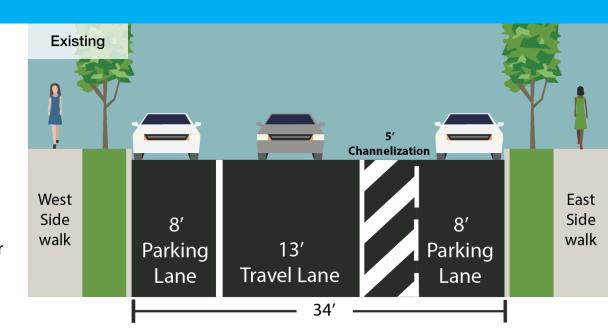
Buffer adds additional separation between bicycle and vehicle travel

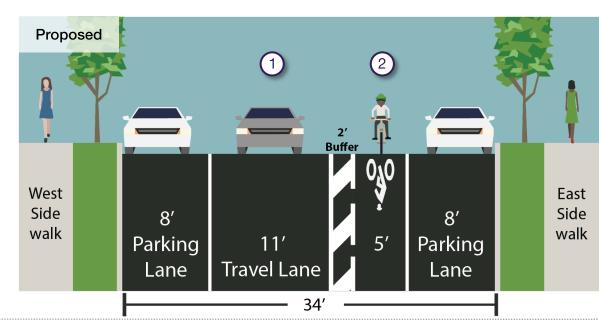
Left-side alignment avoids bus conflicts

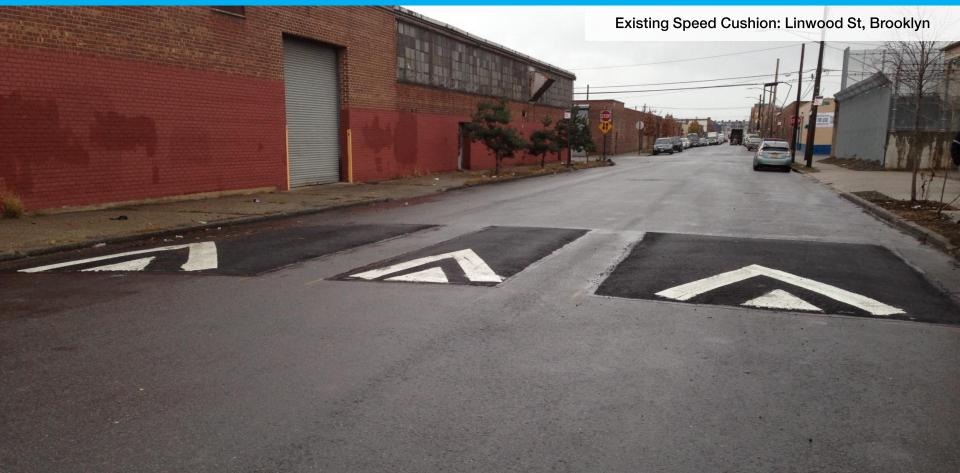


Speed Cushions

NYC DOT is evaluating corridor for speed cushions (type of speed bump)







- NYC DOT is piloting an alternative to speed bumps that accommodates buses, trucks, and emergency vehicles while slowing passenger cars
- Several locations on the Van Duzer St Corridor are being evaluated for speed cushion feasibility

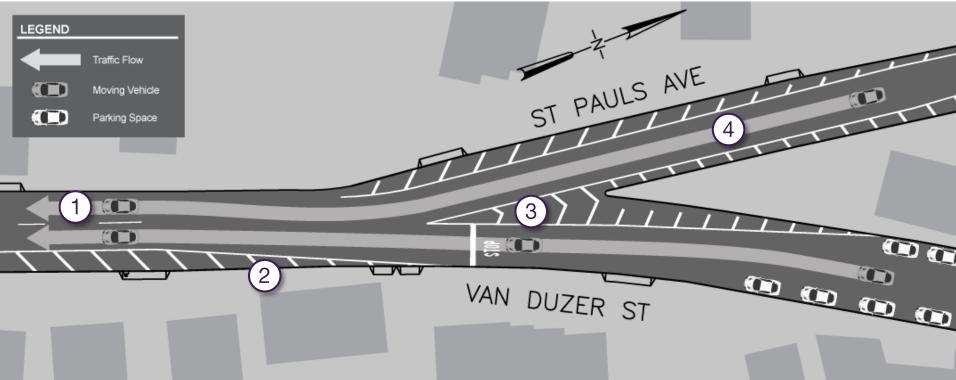




Van Duzer Street St Paul's Ave to Shelterview Dr

- 91% of vehicles speeding at Shelterview Dr (avg. speed is 32 mph)
- Poor visibility due to the angle of the intersection
- Limited on-street parking due to intersection design

Van Duzer St, St Paul's Ave to Shelterview Drive - Existing Conditions





Unnecessary daytime travel lane conducive to speeding and aggressive driving



Limited Parking

Merge at intersection reduces parking capacity on east curb, parking further reduced by driveways and fire hydrants



Skewed Intersection

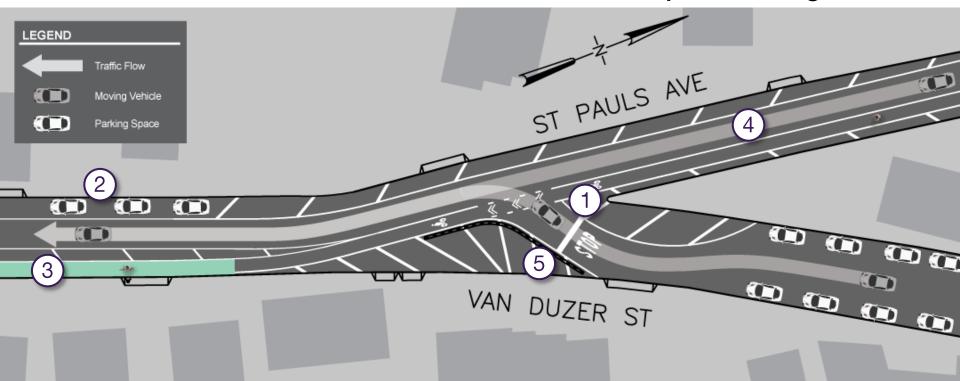
Angle of intersection limits visibility and complicates signage placement



Wide Travel Lane

13' wide travel lane is conducive to speeding

Van Duzer St, St Paul's Ave to Shelterview Drive – Proposed Design



Normalize Intersection Angle

Improves visibility and simplifies vehicular movements

4 Standard Travel Lane
Standard travel lane width
discourages speeding

Relocate Fulltime Parking to West Curb

Increases fulltime parking capacity by 45%, better visibility of street from driveways and for motorist parked curbside

Vertical Delineators
Improves compliance in response to community concerns

Add Bicycle Lane

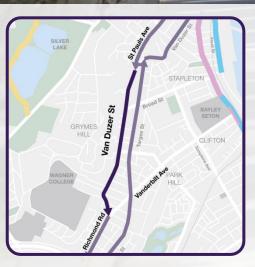
Buffered bicycle lane separates

bicycle and vehicle traffic, shifts vehicle traffic away from sidewalks

Speed Cushions

Corridor under evaluation for speed cushions





Van Duzer St St Paul's Ave to Richmond Rd

- 92% of vehicles speeding at Young St (avg. speed is 30 mph)
- Road varies between 1 and 2 travel lanes
- Excess channelization
- Corridor is truck/bus route; traditional speed bumps are infeasible

Proposed Changes Van Duzer St

St Paul's Ave to Richmond Rd



speeding

2 Buffered Bicycle Lane
Add bicycle lane and buffer where room permits

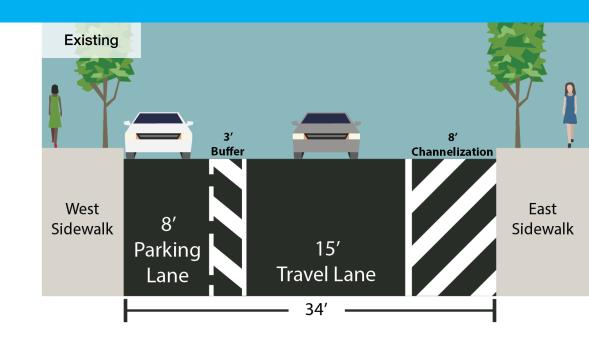
Add Parking

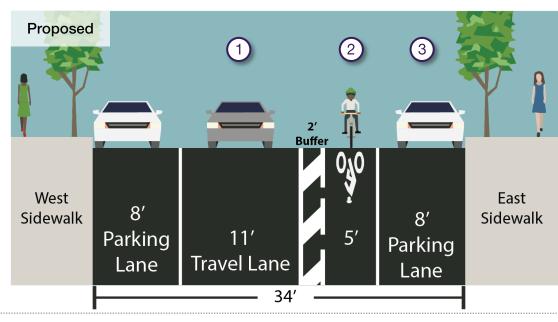
Remove channelization and excess travel lane to provide room for additional fulltime parking spaces

Maintain Needed Capacity
Maintain 2 travel lanes between
Cornell Pl and Richmond Rd

Speed Cushions

NYC DOT is evaluating corridor for speed cushions

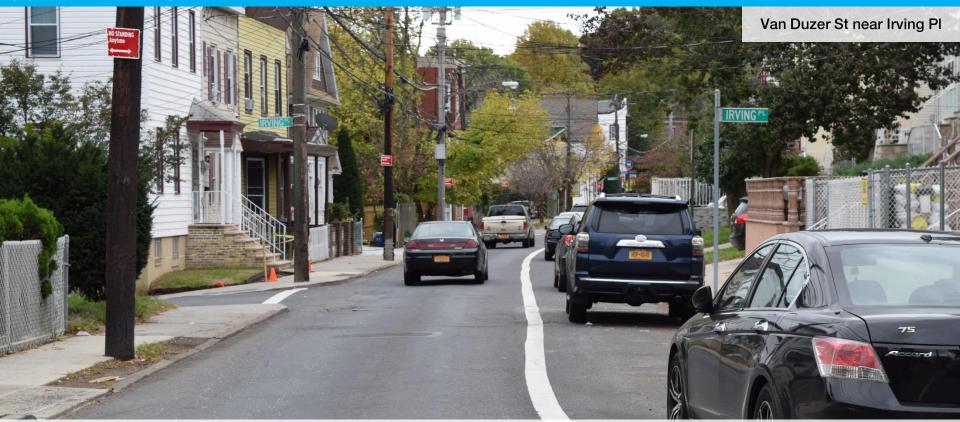






- Community Concern: Vehicles parking on sidewalk on Van Duzer St near Broad St
- NYC DOT plan: create 16 more fulltime parking spaces
 Discourage sidewalk parking by converting 14 overnight parking spaces to full-time parking spaces and adding 8 additional spaces (6 spaces lost to improve left-turn lane at Broad St)





- Community Concern: Van Duzer St is too narrow for a dedicated bicycle lane between Baring Pl and Roff St
- NYC DOT plan: add shared lane markings

Alert motorists to the presence of bicyclists and orient bicyclists on the same side of the street and outside the "door zone"

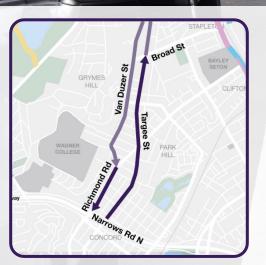




- Community Concern: Motorists drive on Van Duzer St curve (Hillside Ave to Richmond Rd) at high speeds
- NYC DOT plan: add buffered curbside bicycle lane with vertical delineators
 - Replace excess travel lane with buffered bike lane
 - Vertical delineators slow traffic through the curve







Richmond Rd

(Van Duzer St to Narrows Rd N)

& Targee St

(Narrows Rd N to Broad St)

- 77% of vehicles speeding on Targee St at Waverly PI (average vehicle speed is 35 mph)
- Traffic volumes higher near the expressway

Proposed Changes

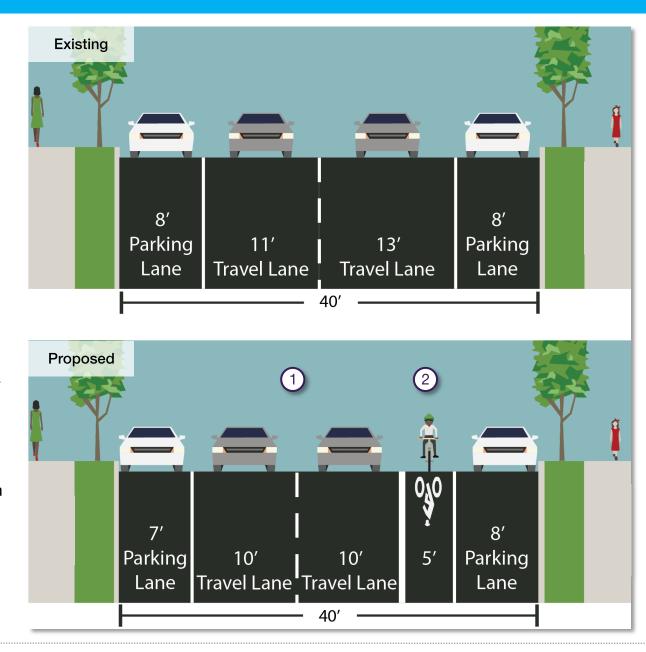
Richmond Rd
Van Duzer St to Narrows Rd N

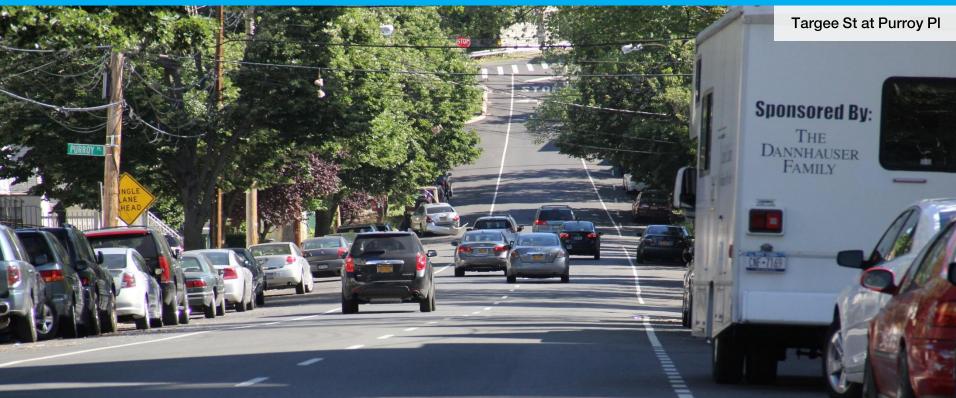
Targee St Narrows Rd N to Broad St



Narrow wide travel lane to discourage speeding and maintain capacity for higher traffic volumes

Add Bicycle Lane
Separate bicycle traffic from vehicular traffic







Targee St Broad St to Van Duzer St

- 89% of vehicles speeding at Frean St (avg. speed is 35 mph)
- Peak hour traffic volume on Targee St drops 44% between Narrows Rd N and Broad St
- Corridor is truck/bus route; traditional speed bumps are infeasible

Proposed Changes Targee St

Broad St to Van Duzer St



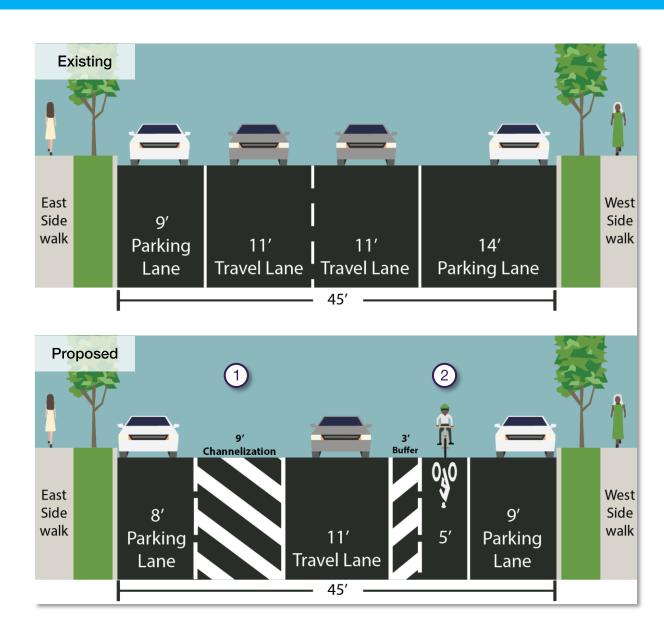
Remove Excess Travel Lane

Removing excess second travel lane calms traffic

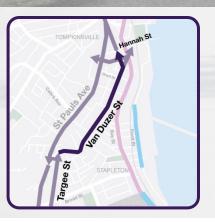


Add Bike Lane

Buffered bicycle lane adds additional comfort to cyclists on corridor







Van Duzer St Targee St to Hannah St

- Narrow roadway with parking on each side
- Average vehicle speed is ~27 m.p.h.
- Corridor is truck/bus route; traditional speed bumps are infeasible

Proposed Changes Van Duzer St

Targee St to Hannah St



Add Shared Lane Markings

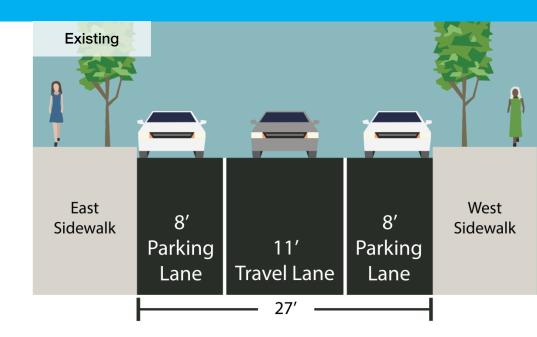
Roadway too narrow for addition of bicycle lanes

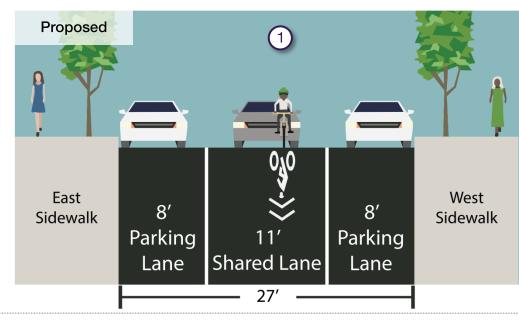
Alert motorists to cyclists presence
Orient bicyclists on the same side of the
street and outside the "door zone"



Speed Cushions

NYC DOT is evaluating corridor for speed cushions







- Community Concern: Motorists drive on Van Duzer St curve (Targee St to Wright St) at high speeds
- NYC DOT plan: add buffered curbside bicycle lane with vertical delineators
 - Replace excess travel lane with buffered bike lane
 - Vertical delineators slow traffic through the curve



Bicycle Network Connections

Connect new bicycle routes to existing bicycle route on Bay Street



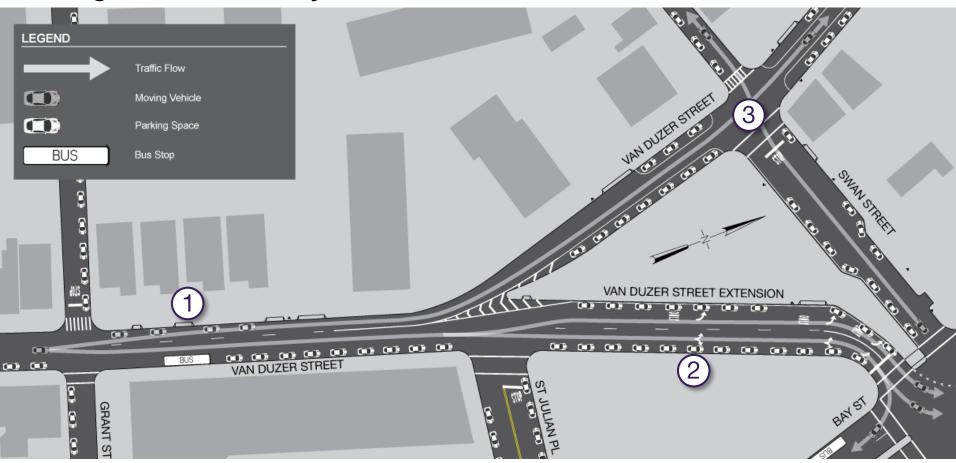




2 Swan St Bay St to St Paul's Ave



Existing Conditions – Bay St Connections



Parking Restricted

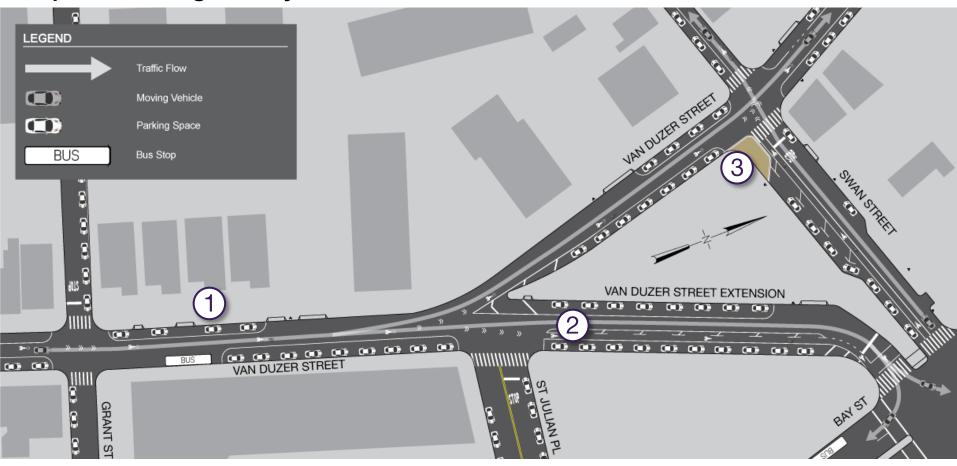
Parking regulation bans the use of 4 parking spaces (7am-7pm) and encourages speeding

Extra Travel Lane

Extra travel lane is unnecessary for existing traffic volume and discourages parking on the eastern curb **Poor Road Alignment**

Inconsistent width on Swan St results in poor lane alignment and long pedestrian crossing distance

Proposed Design – Bay St Connections



Upgrade Parking
Upgrades 4 overnight
parking spaces to full
time and calms traffic

Add Bike Lane

Buffered lane creates
bicycle connection to
Bay St and encourages
parking

Add Bike Route to Swan St
Painted curb extension and bicycle

lane reduces crossing distance and improves lane alignment



Add Enhanced Crosswalks

Provide pedestrians with places to cross the road safety



St Paul's Ave & Van Duzer St

Sidewalk ends without crosswalk by bus stop, closest crosswalk more than 700 feet away



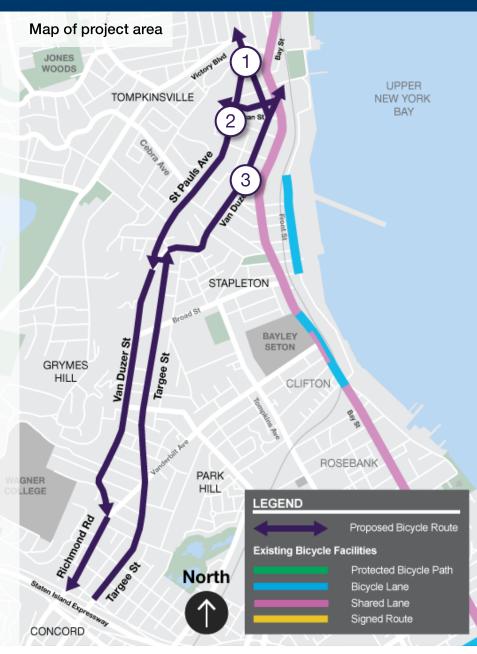
St Paul's Ave & Grant St

P.S. 65 is a significant pedestrian trip generator and the closest crosswalk is more than 1,400 feet away



Van Duzer St & William St

William St provides access to Bay St commercial corridor from the community and the distance between existing crossings is more that 1,400 feet





Enhanced Crosswalks



Add Crosswalk

High-visibility crosswalk improves pedestrian access



Increase visibility

Prohibit parking for 20 feet in front of crosswalks to increase visibility of crossing pedestrians



Enhanced Crosswalks



Shorten Crossing Distances

Painted curb extensions reduce pedestrian crossing distance



Provide Warning

Signs give advance warning to motorists of approaching crosswalk

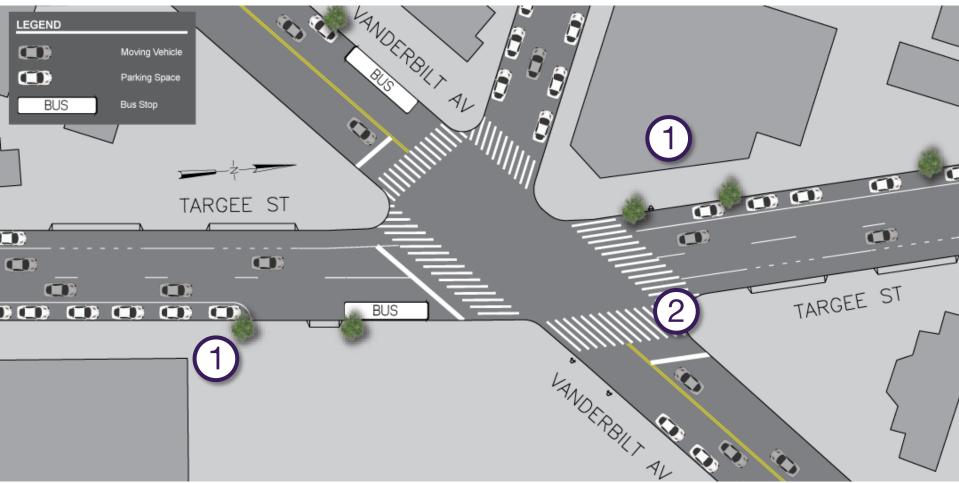




Reduce Crossing Distances Targee St and Vanderbilt Ave

- Commercial center of neighborhood
- Long crossing distances for pedestrians
- 8 people killed or severely injured (2010-2014)

Existing Conditions – Targee St and Vanderbilt Ave



(1)

Mixed-Use Area

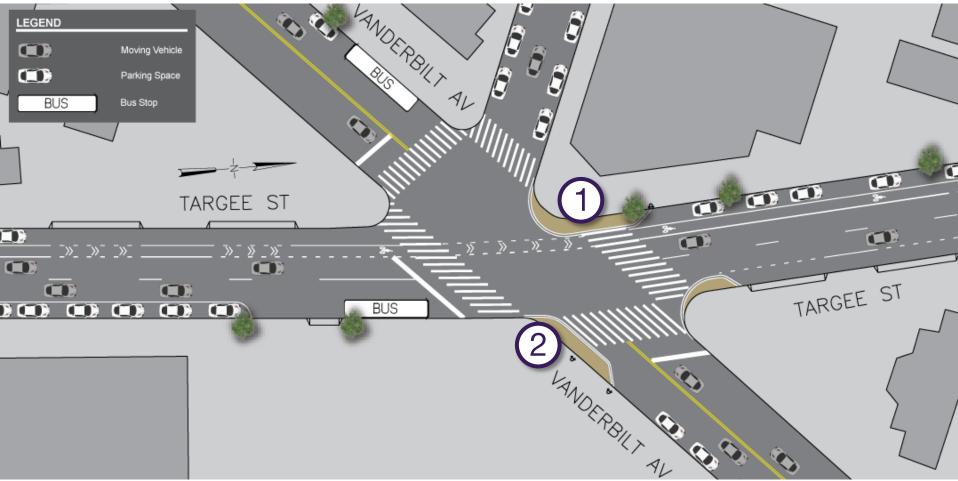
High pedestrian volume near stores and bus stops

2

Long Crossing Distances

Skewed intersection results in long crossings distances

Proposed Design - Targee St and Vanderbilt Ave



(1)

Shorten Pedestrian Crossings

Painted curb extensions shorten crossing distances

2

Calm Turning Traffic

Higher turning angles slow traffic as they navigate corners

Summary



(5) Community Input

Design Changes

NYC DOT made major changes to original proposal following community input:



St Paul's Ave Corridor

- Move bicycle lane to left side of street, to avoid bus conflicts
- Added buffer between bicycle lanes and travel lanes
- Speed cushions under evaluation



Van Duzer St (St Paul's Ave to Richmond Rd)

- Added vertical delineators at St Paul's Ave intersection and curve in road after Hillside Ave
- Move bicycle lane to left side of street, to avoid bus conflicts
- Added buffer between bicycle lanes and travel lanes
- Speed cushions under evaluation



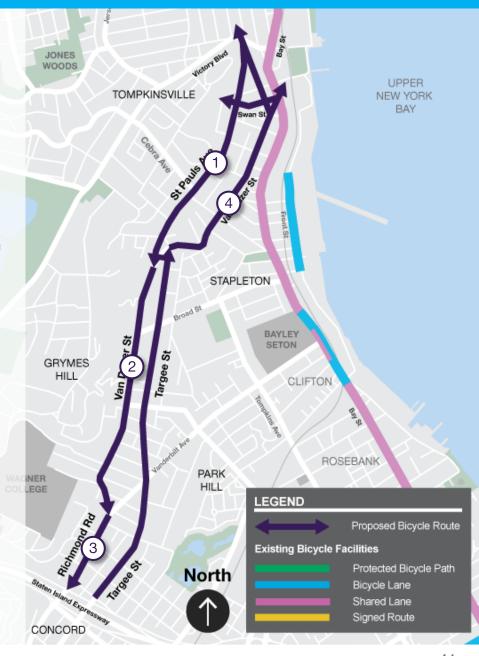
Richmond Rd

- Move bicycle lane to left side to avoid bus conflicts
- Added buffer between bicycle lanes and travel lanes



Van Duzer St (Targee St to Hannah St)

- Added vertical delineators added to design at Court St, where road curves
- Speed cushions under evaluation



(5) Parking

Net Increase In Parking

Proposal adds 11 new parking spaces and upgrades 32 overnight spaces to fulltime, and adds 7 new overnight parking spaces



Van Duzer St St Paul's Ave to Richmond Rd

- · Add 20 fulltime parking spaces
- Upgrading 28 overnight parking spaces to fulltime



Van Duzer St at Beach St

 Add 7 overnight parking spaces in left-turn lane, when traffic is low



Bay St Connection

- Upgrade 4 overnight parking spaces to fulltime on Van Duzer St at Grant St
- Remove 2 parking spaces on Van Duzer St Extension
- Remove 2 parking spaces on Swan St for bicycle lane

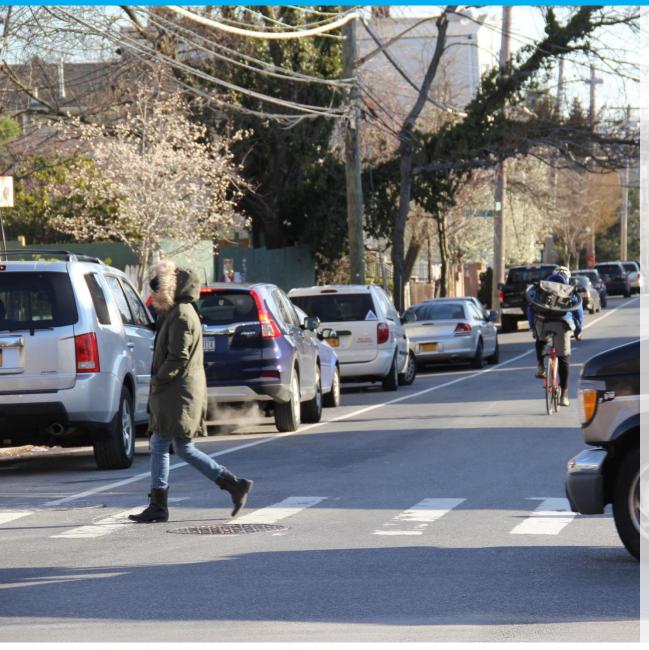


Pedestrian Improvements

- Remove 2 parking spaces for enhanced crosswalk at St Paul's Ave & Grant St
- Remove 1 parking space at Targee St & Vanderbilt Ave
- Remove 2 parking space at Van Duzer St & St Paul's Ave



(5) Summary



Project Summary

Project improves corridor by upgrading roadway for all users

- Reduce speeding along a residential corridor, while maintaining needed traffic capacity
- Add a bicycle route connecting to shops and entertainment, and existing route to St.
 George Ferry Terminal
- Improve lane alignment and visibility at key intersections
- Add more crosswalks for pedestrians
- Add or upgrade parking

THANK YOU!

Questions?













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