



BROAD ST AND VANDERBILT AVE STREET IMPROVEMENTS

Presentation to Staten Island Community Board 1

April 9, 2019



PROJECT OVERVIEW

1. Staten Island Cycling Trends
2. Previous Work
3. Proposed Improvements
4. Project Summary



Vanderbilt Ave facing east at Thompkins Ave

Staten Island Cycling Trends (2014-present)

Increased Ridership and Expanding Network

Biking to Work
48% Increase

Staten Island is the borough with the highest rate of change for people biking to work
Source: 3-Year Rolling Average of US ACS – Journey to Work

Bike Network Size
42% Increase

27 additional lane miles added from 2014 – 2017, for a total of 91 miles

Dockless Bike Share Pilot
+54,000 Trips

From 7/26/2018 to 1/30/2018
*based on unverified operator data



New Springville Greenway



Clove Rd



Van Duzer St



Dockless Bike Share

Previous Work: New Springville Greenway Connections (Summer 2016)



Connecting Bicycle Routes Increased Cycling

After adding a bicycle connection between the New Springville Greenway and the Staten Island Greenbelt, ridership more than doubled

Nome Ave at Richmond Ave
206% increase

Travis Ave at Nehring Ave
128% increase

Rockland Ave at Forest Hill Rd
195% increase

Source: 14-hour weekend bicycle counts in June 2016 and 2018

Rockland Ave facing west towards Kelly Blvd

Safety Significantly Increased After Travel Lanes Were Narrowed and Bicycle Lanes Added

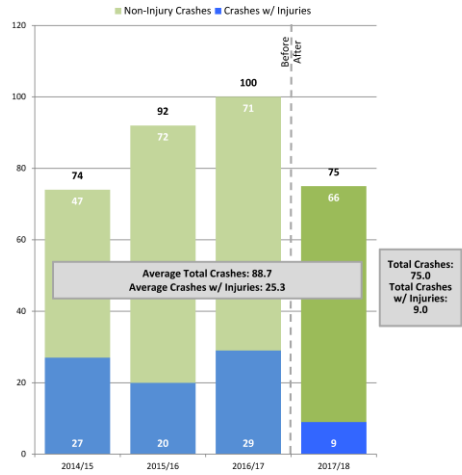
Crashes with injuries
Down 64%

Motor Vehicle
Occupant Injuries
Down 77%

Pedestrian Injuries
Down 17%

Cyclist Injuries
Down 100%

	One year				Before (Avg)	After (Avg)
	2014/15	2015/16	2016/17	2017/18	25.3	9.0
Crashes w/ Injuries	27	20	29	9	25.3	9.0
Non-Injury Crashes	47	72	71	66	63.3	66.0
Total	74	92	100	75	88.6	75.0



Each before year period is the 12-month period beginning August 1 and ending July 31. The 1-yr after period is November 1, 2017 to October 31, 2018. The implementation period of August 1, 2017 to October 31, 2017 is excluded.



Proposed Improvements

New Bicycle Routes

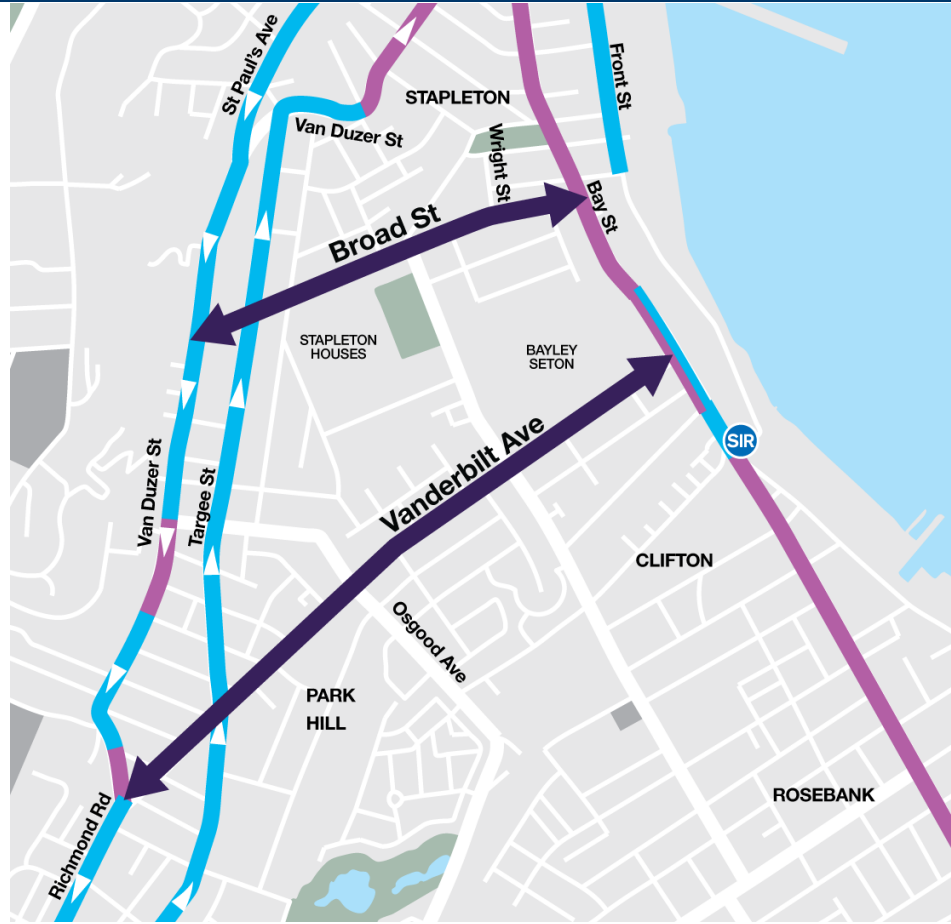
Add bicycle routes to Broad St and Vanderbilt Ave between existing routes on Van Duzer St, Targee St, and Bay St

To Enhance The Existing Bicycle Network

Build on positive trends for cycling on Staten Island by connecting existing routes to population and commercial centers

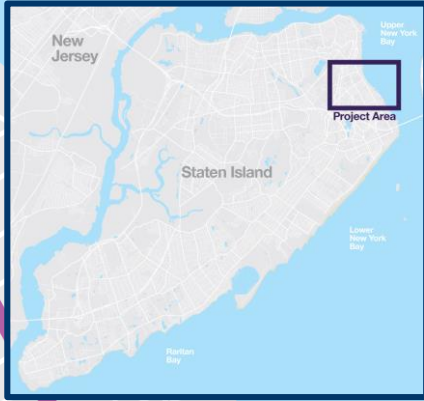
And Increase Street Safety

Implement proven traffic calming measures on a Vision Zero Priority Corridor



LEGEND

- Proposed Bicycle Route (purple double-headed arrow)
- Existing Bicycle Facilities
 - Protected Bicycle Path (green line)
 - Bicycle Lane (blue line)
 - Shared Lane (pink line)
 - Signed Route (orange line)



Proposed Improvements: New Bicycle Facilities

Add Bicycle Lanes



- Dedicates space for cyclists on the street
- Increases predictability of cyclist's behaviour for motorists and pedestrians
- Separates slower bicycle traffic from motor vehicle traffic

Add Shared Lane Markings



- Guides cyclists along routes
- Alerts motorists to the presence of cyclists
- Helps align cyclists properly in the street

LEGEND

- Proposed Bicycle Lanes (Blue dashed line with arrows)
- Proposed Shared Lanes (Purple dashed line with arrows)
- Existing Bicycle Facilities
 - Protected Bicycle Path (Green solid line)
 - Bicycle Lane (Blue solid line)
 - Shared Lane (Purple solid line)
 - Signed Route (Brown solid line)



Existing Conditions: Broad St



Wide parking lanes

Retail between Targee St and Quinn St
and at Bay St

Stapleton Houses between Gordon St
and Cedar St

Vision Zero Priority Area

High concentration of pedestrian injuries

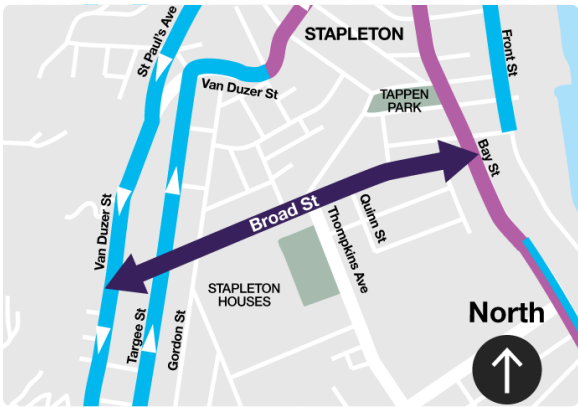
106 cyclist

during a typical midweek day

Source: 14-hour count at Canal St on 10/10/2018

Vanderbilt Ave facing east towards Thompkins Ave

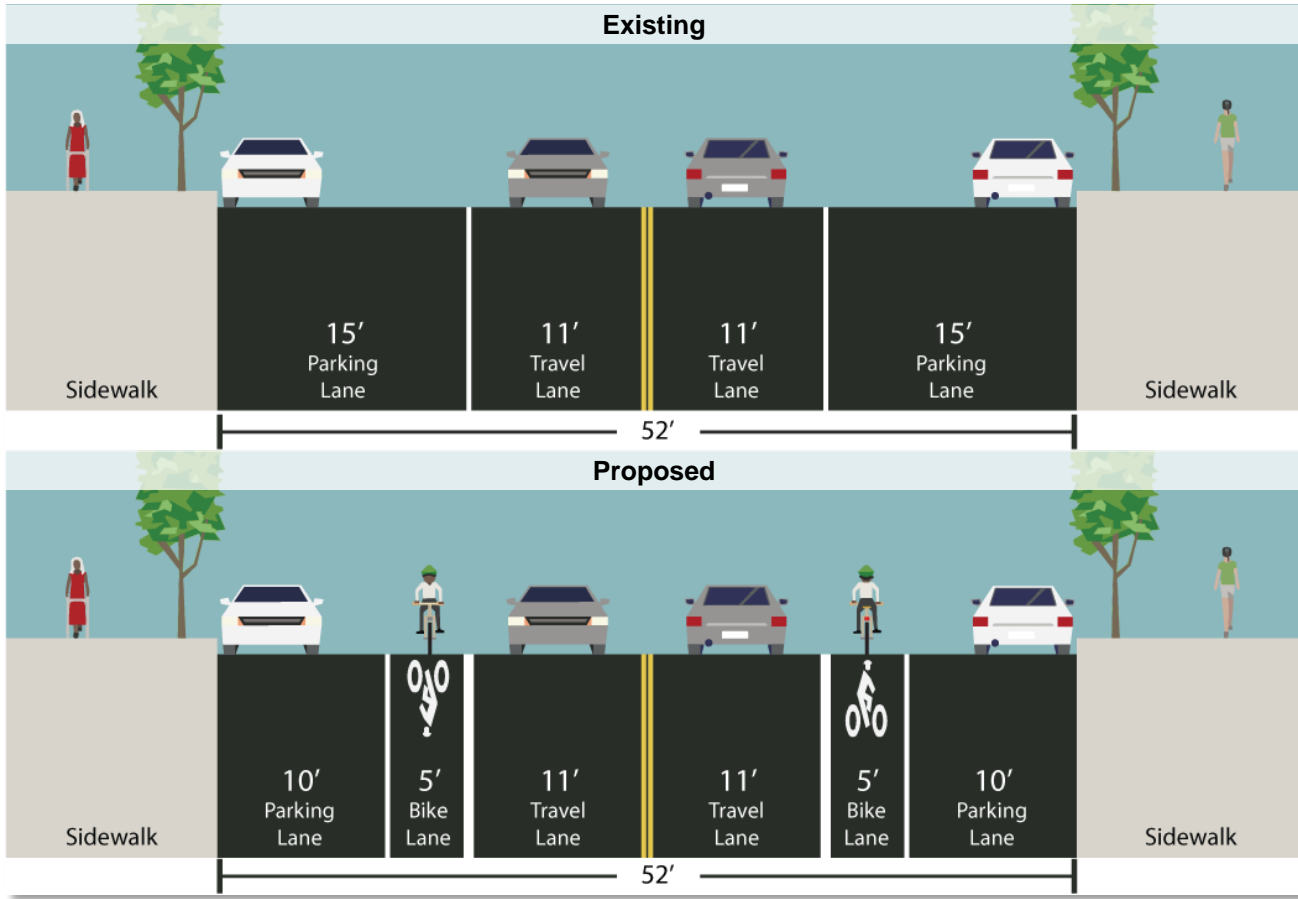
Proposed Improvements: Broad St



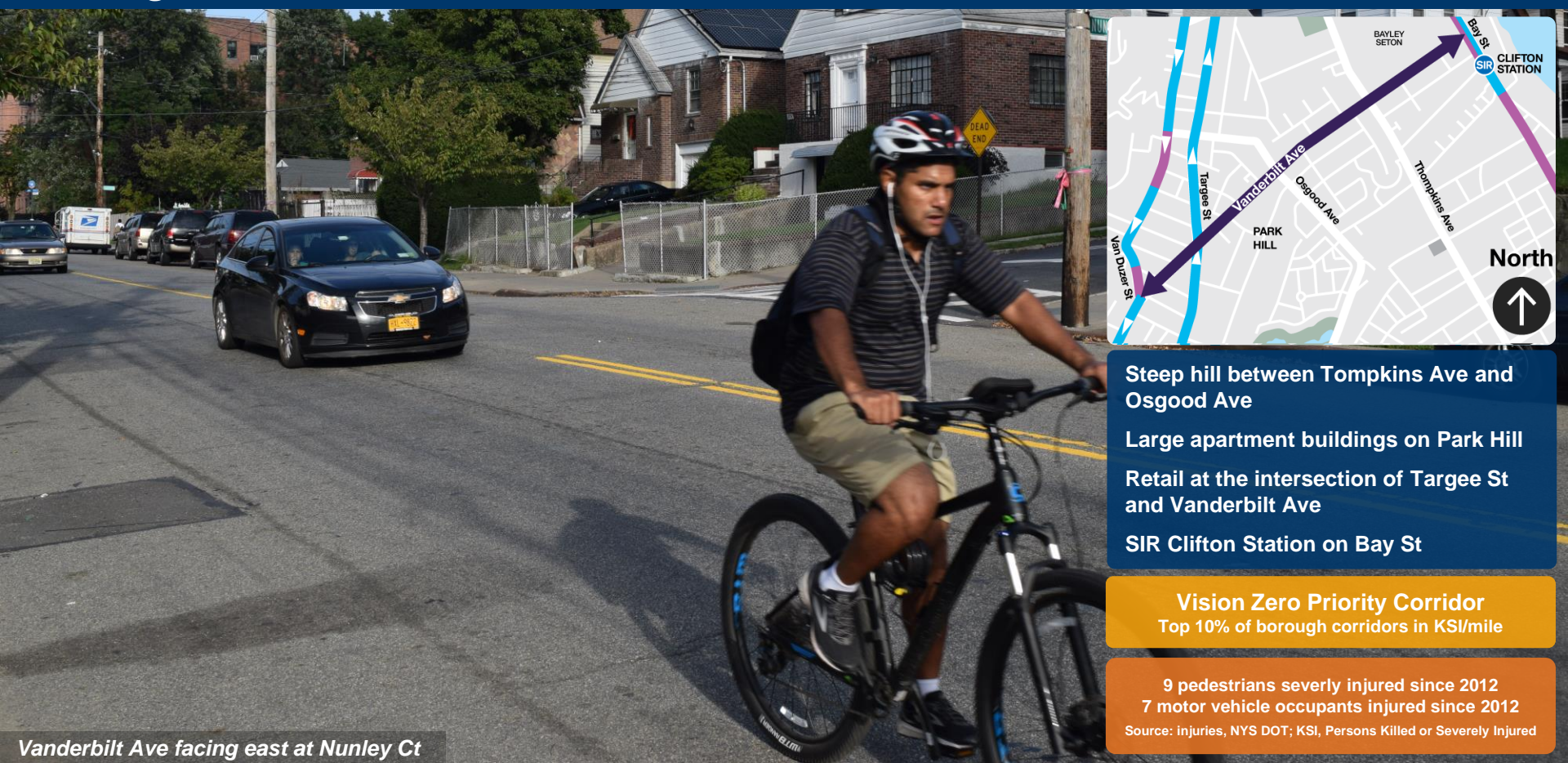
Repurpose Existing Parking Lane Width for Cyclist

Narrow wide parking lanes and dedicate remaining space to bicycle lanes

Add shared lane markings where road is too narrow for bike lanes (1 block)



Existing Conditions: Vanderbilt Ave



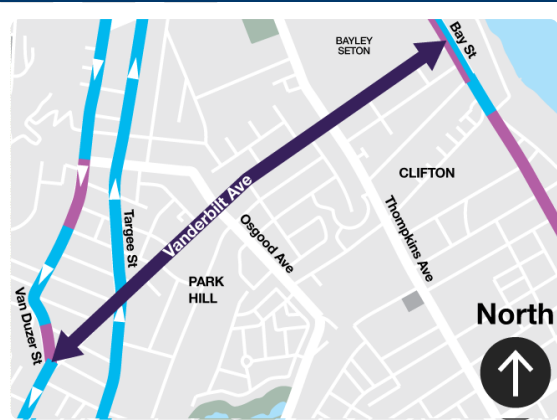
- Step hill between Tompkins Ave and Osgood Ave
- Large apartment buildings on Park Hill
- Retail at the intersection of Targee St and Vanderbilt Ave
- SIR Clifton Station on Bay St

Vision Zero Priority Corridor
Top 10% of borough corridors in KSI/mile

9 pedestrians severely injured since 2012
7 motor vehicle occupants injured since 2012
Source: injuries, NYS DOT; KSI, Persons Killed or Severely Injured

Vanderbilt Ave facing east at Nunley Ct

Proposed Improvements: Vanderbilt Ave



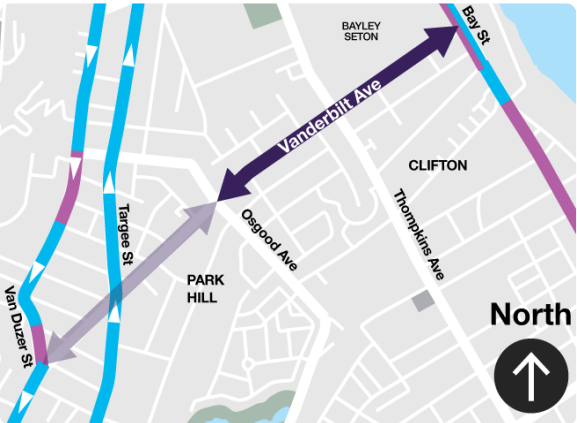
Discourage Speeding with Speed Cushions

Add speed cushions along Vanderbilt Ave to slow vehicles down, without negatively affecting bus, truck, and emergency vehicle traffic



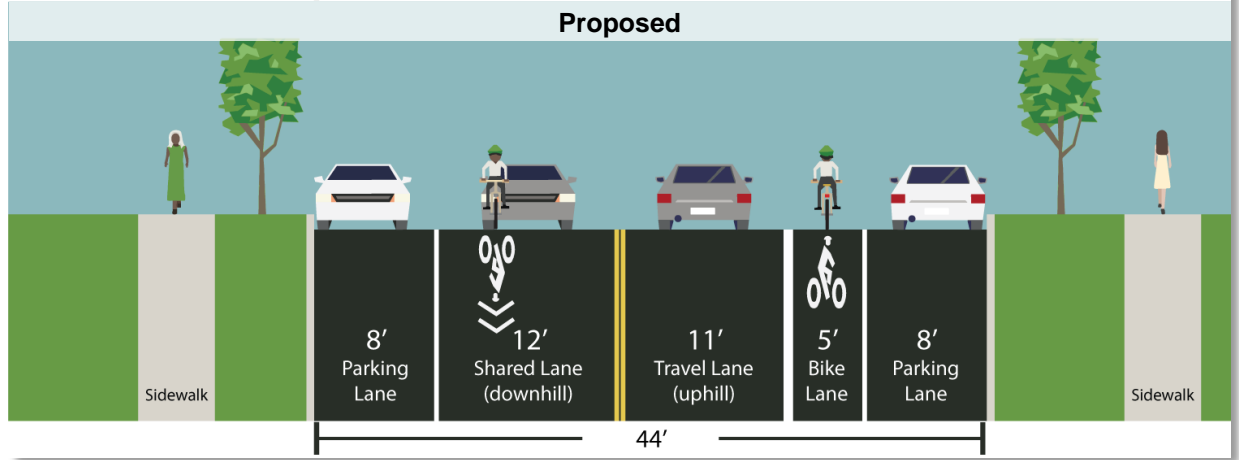
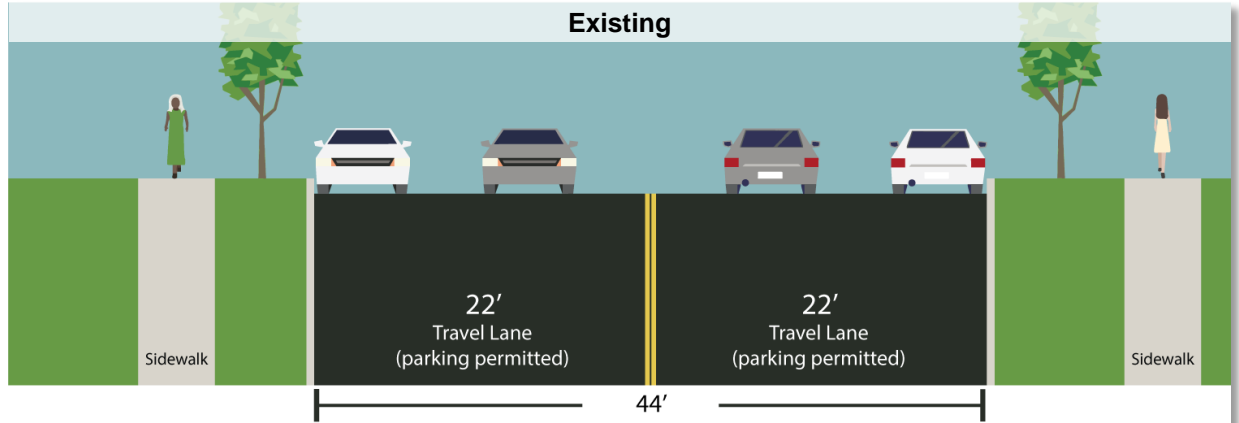
Existing Speed Cushions on Van Duzer St

Proposed Improvements: Vanderbilt Ave, Bay St to Osgood Ave

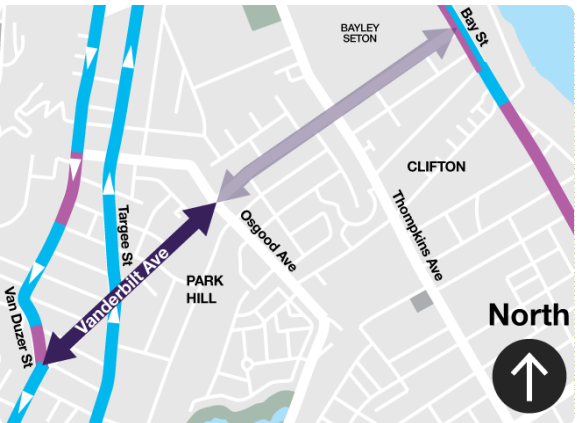


Separate Cyclists From Faster Motor Vehicle Traffic During Uphill Segments

Narrow uphill travel lane to standard width and add dedicated bicycle lane
 Add sharrows to downhill stretch and narrow travel lanes to standard shared lane widths

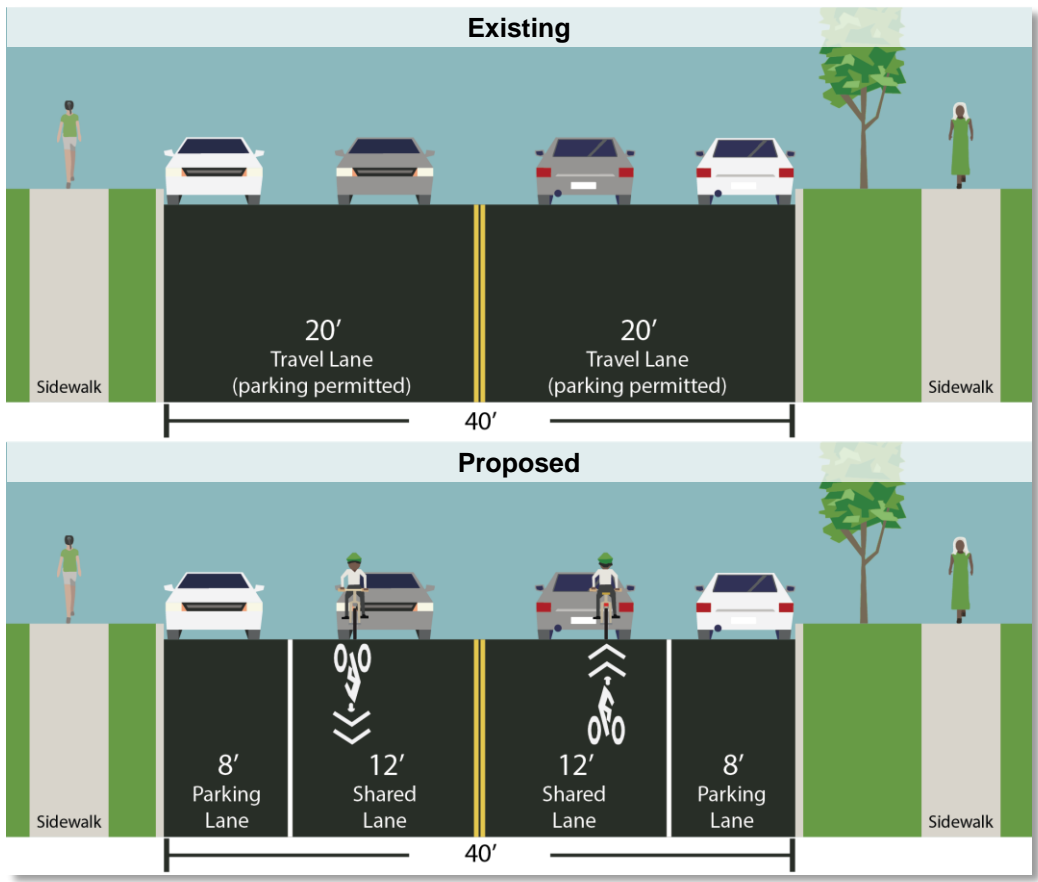


Proposed Improvements: Vanderbilt Ave, Osgood Ave to Van Duzer St



Add Shared Lanes To Guide Cyclists to Existing Routes

Where roadway is too narrow for dedicated bike lanes, shared lane markings are used to guide cyclists to existing bicycle routes on Van Duzer St and Targee St



Project Summary

Encourage Cycling

Connect existing bicycle routes and communities to increase safety and help with wayfinding

Discourage Speeding

Narrow travel lanes standard width and add speed cushions to Vanderbilt Ave

No Loss To Traffic or Parking Capacity

Narrow travel and parking lanes to increase safety without impacting existing capacity



Broad St at Cedar St

THANK YOU!

Questions?



NYCDOT



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