VAN DUZER STREET CORRIDOR
TRANSPORTATION IMPROVEMENTS

Staten Island Community Board 1
January 19th, 2017
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

2. **Van Duzer St (southbound)**
   - From St Pauls Ave to Richmond Rd

3. **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
Existing Conditions
Speeding is Significant

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

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.

1. Tompkinsville
2. Bay St Bicycle Route
3. Van Duzer St at Beach St
4. 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
Corridor Improvements
St Paul’s Ave
Victory Blvd to Van Duzer St

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

Proposed Changes
St Pauls Ave
Victory Bl to Van Duzer St

1. Create Standard Width Travel Lane
   Existing travel lane is too wide for street and is conducive to speeding

2. 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)
(3) Corridor Improvements

- 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
(3) Corridor Improvements

Van Duzer St, St Paul’s Ave to Shelteview Drive - Existing Conditions

LEGEND

| Traffic Flow | Moving Vehicle | Parking Space |

1. Extra Travel Lane
   Unnecessary daytime travel lane conducive to speeding and aggressive driving

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

3. Skewed Intersection
   Angle of intersection limits visibility and complicates signage placement

4. Wide Travel Lane
   13’ wide travel lane is conducive to speeding
(3) Corridor Improvements

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

**Legend**
- Traffic Flow
- Moving Vehicle
- Parking Space

1. **Normalize Intersection Angle**
   Improves visibility and simplifies vehicular movements

2. **Relocate Fulltime Parking to West Curb**
   Increases fulltime parking capacity by 45%, better visibility of street from driveways and for motorist parked curbside

3. **Add Bicycle Lane**
   Buffered bicycle lane separates bicycle and vehicle traffic, shifts vehicle traffic away from sidewalks

4. **Standard Travel Lane**
   Standard travel lane width discourages speeding

5. **Vertical Delineators**
   Improves compliance in response to community concerns

**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
(3) Corridor Improvements

Proposed Changes
Van Duzer St
St Paul’s Ave to Richmond Rd

1. Create Standard Width Travel Lane
   Narrow travel lane to discourage speeding

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

3. 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
(3) Corridor Improvements

- **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)
(3) Corridor Improvements

- **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”
(3) Corridor Improvements

- 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

Example: Honeywell St Bridge, Queens
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 Pl (average vehicle speed is 35 mph)
- Traffic volumes higher near the expressway
(3) Corridor Improvements

Proposed Changes

Richmond Rd
Van Duzer St to Narrows Rd N

Targee St
Narrows Rd N to Broad St

1. Create Standard Travel Lanes
   Narrow wide travel lane to discourage speeding and maintain capacity for higher traffic volumes

2. 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

1. Remove Excess Travel Lane
   Removing excess second travel lane calms traffic

2. Add Bike Lane
   Buffered bicycle lane adds additional comfort to cyclists on corridor

(3) Corridor Improvements
(3) Corridor Improvements

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

1. 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”

2. 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

Example: Honeywell St Bridge, Queens
Bicycle Network Connections

Connect new bicycle routes to existing bicycle route on Bay Street

1. Van Duzer St Ext
   St Julian Pl to Bay St

2. Swan St
   Bay St to St Paul’s Ave
(3) Corridor Improvements

Existing Conditions – Bay St Connections

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

2. Extra Travel Lane
   Extra travel lane is unnecessary for existing traffic volume and discourages parking on the eastern curb.

3. Poor Road Alignment
   Inconsistent width on Swan St results in poor lane alignment and long pedestrian crossing distance.
(3) Corridor Improvements

Proposed Design – Bay St Connections

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

2. Add Bike Lane
   Buffered lane creates bicycle connection to Bay St and encourages parking

3. Add Bike Route to Swan St
   Painted curb extension and bicycle lane reduces crossing distance and improves lane alignment

Van Duzer Street Corridor
Pedestrian Improvements
Add Enhanced Crosswalks

Provide pedestrians with places to cross the road safely

1. St Paul’s Ave & Van Duzer St
   Sidewalk ends without crosswalk by bus stop, closest crosswalk more than 700 feet away

2. 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

3. 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 than 1,400 feet
Enhanced Crosswalks

1. Add Crosswalk
   High-visibility crosswalk improves pedestrian access

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

Van Duzer Street Corridor

Enhanced Crosswalk: Queens Blvd (Service Road), Queens
Enhanced Crosswalks

1. Shorten Crossing Distances
   Painted curb extensions reduce pedestrian crossing distance

2. Provide Warning
   Signs give advance warning to motorists of approaching crosswalk

Van Duzer Street Corridor
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)
(4) Pedestrian Improvements

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
(4) Pedestrian Improvements

Proposed Design – Targee St and Vanderbilt Ave

**Legend**
- Moving Vehicle
- Parking Space
- Bus Stop
- Bus

1. Shorten Pedestrian Crossings
   Painted curb extensions shorten crossing distances

2. Calm Turning Traffic
   Higher turning angles slow traffic as they navigate corners
Design Changes
NYC DOT made major changes to original proposal following community input:

1. **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

2. **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

3. **Richmond Rd**
   - Move bicycle lane to left side to avoid bus conflicts
   - Added buffer between bicycle lanes and travel lanes

4. **Van Duzer St (Targee St to Hannah St)**
   - Added vertical delineators added to design at Court St, where road curves
   - Speed cushions under evaluation
Net Increase In Parking

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

1. **Van Duzer St**
   - St Paul’s Ave to Richmond Rd
   - Add 20 fulltime parking spaces
   - Upgrading 28 overnight parking spaces to fulltime

2. **Van Duzer St at Beach St**
   - Add 7 overnight parking spaces in left-turn lane, when traffic is low

3. **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

4. **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
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?