Project Background
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### 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
Project Timeline

Fall 2015
NYC DOT began investigating corridor after receiving numerous complaints about speeding

June 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 meet on-site to discuss problem locations and potential solutions
Existing Conditions
(2) Existing Conditions

Van Duzer St near Osgood Ave

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

Van Duzer Street Corridor
(2) Existing Conditions

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
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
At St Paul’s Ave

• 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
Existing Conditions – St Paul’s Ave and Van Duzer St

**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

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

Proposed Design – St Paul’s Ave at Van Duzer St

LEGEND

- Traffic Flow
- Moving Vehicle
- Parking Space

1. Normalize Intersection Angle
   Improves visibility and simplifies vehicular movements

2. Add Parking
   Improved alignment provides room for additional parking

3. Add Bicycle Lane
   Buffered bicycle lane separates bicycle and vehicle traffic

4. Standard Travel Lane
   Standard travel lane width discourages speeding

5. Vertical Delineators
   Improves visibility and compliance in response to community concerns

Van Duzer Street Corridor
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 PI and Richmond Rd

★ Speed Cushions
NYC DOT is evaluating corridor for speed cushions

Van Duzer Street Corridor
(3) Corridor Improvements

- **Community Concern:** Vehicles parking on sidewalk on Van Duzer St near Broad St

- **NYC DOT plan:** add more daytime parking spaces
  Discourage sidewalk parking by converting 16 overnight parking spaces to full-time parking spaces
(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
**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
(3) Corridor Improvements

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
(3) Corridor Improvements

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
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
(3) Corridor Improvements

- 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

**LEGEND**
- Traffic Flow
- Moving Vehicle
- Parking Space
- Bus Stop
- BUS

**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
Pedestrian Improvements
Add Enhanced Crosswalks

Provide pedestrians with places to cross the road safely

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 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
(4) Pedestrian Improvements

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
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

1. **Shorten Pedestrian Crossings**
   Painted curb extensions shorten crossing distances

2. **Calm Turning Traffic**
   Higher turning angles slow traffic as they navigate corners
Summary
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, 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
(5) Parking

Net Increase In Fulltime Parking
Proposal adds 13 new parking spaces and upgrades 20 overnight spaces to fulltime, and removes 7 existing overnight parking spaces

1. Van Duzer St
   St Paul’s Ave to Chestnut Pl
   • Add 22 parking spaces
   • Upgrade 16 overnight parking spaces to fulltime
   • Remove 14 overnight-only spaces

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 4 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

Van Duzer Street Corridor
(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

Van Duzer Street Corridor
THANK YOU!

Questions?