Luten Avenue

Purpose

- Reduce excessive vehicle speeds
- Provide safer pedestrian crossings

Outreach

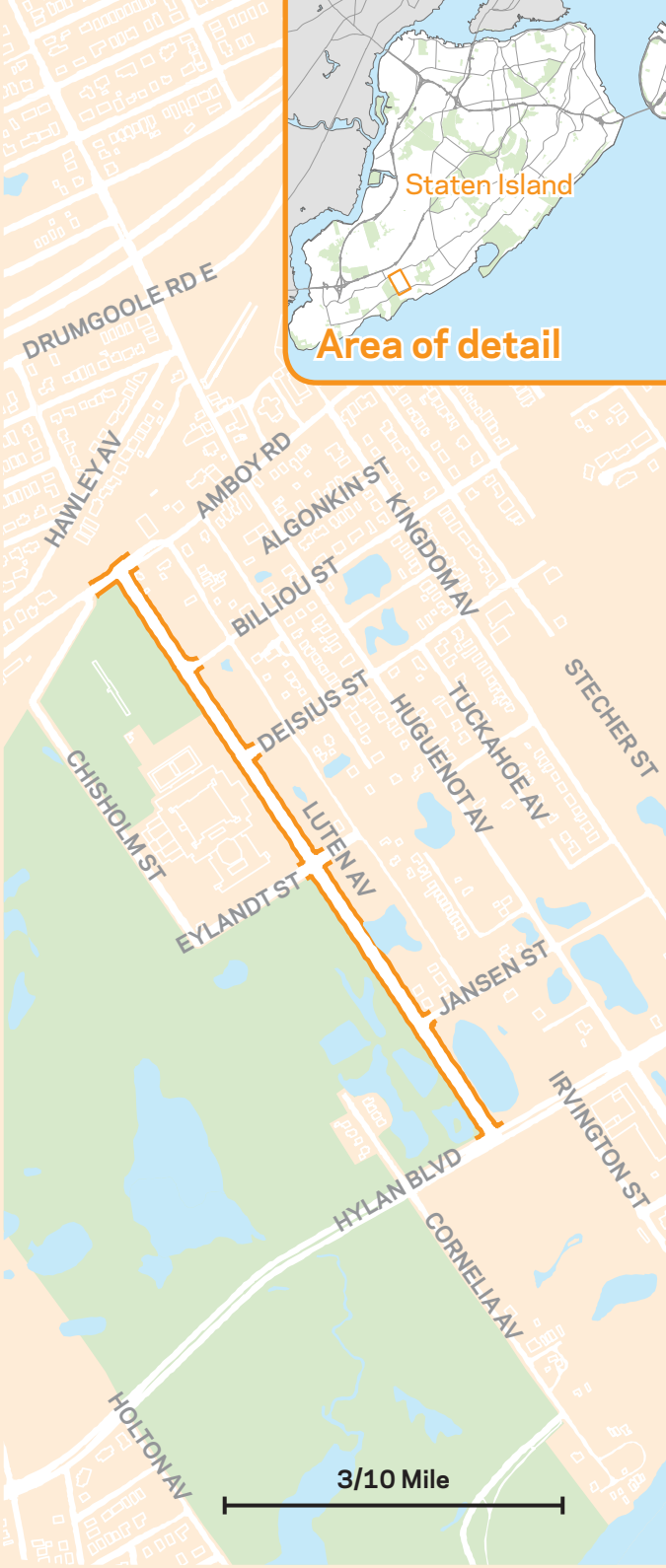
- Improvements requested by Staten Island Community Board 3 (CB3) and Tottenville High School
- DOT met with CB3 and local officials in November 2009 to gather community concerns regarding the project area
- DOT presented plans to CB3 and local officials in March 2010 and received support for the plan

Approach

- Installed a painted center median with parking lane stripes to narrow the roadway and calm traffic
- Installed pedestrian refuge islands and crosswalks to improve pedestrian safety
- Installed left-turn lanes to improve pedestrian and vehicular safety and to decrease delay for vehicles
- Installed new signal at the intersection of Deisius Street and Luten Avenue to improve traffic operations and pedestrian safety

Results

- Percentage of vehicles traveling over the speed limit decreased by 34% along southbound Luten Avenue and by 21% along northbound Luten Avenue
- Number of crashes involving injuries to motor vehicle occupants and pedestrians lower than the average for the three prior years
- Shorter pedestrian crossing distances



Luten Avenue is a wide roadway, with one lane in each direction and parking along each side. It parallels Tottenville High School and Wolfes Pond Park and has heavy pedestrian activity, particularly during school peak hours. The S55 and S56 operate on Luten Avenue and the S56 terminus is one block south at Eylandt Street.

Luten Avenue

Luten Avenue is a five-block, 50-feet wide street with one moving lane in each direction, connecting Amboy Road and Hylan Boulevard. The east side of the roadway has dense vegetation and access to residential land uses. The west side of Luten Avenue fronts Tottenville High School.

DOT began investigating Luten Avenue at the request of the Staten Island Borough Commissioner, CB3 and Tottenville High School in the wake of the November 6, 2009 fatality of a Tottenville High School student crossing Luten Avenue just north of Deisius Street. DOT met with the Staten Island Borough President, the New York City Police Department (NYPD), CB3, local officials, Tottenville High School Principal and Parent Teacher Association officials in late November 2009 to solicit community input. DOT took feedback from the community to develop the proposal and presented the updated project plan in March 2010. The Borough President, local Councilmembers and elected officials, local NYPD and Tottenville High School officials all supported the proposed safety improvements. CB3 passed a resolution in support of the project in March 2010.

Based on observations and data collected by DOT, the roadway had excess traffic capacity, a high incidence of speeding, long crossing distances for pedestrians and inadequate number of crossings for pedestrians. DOT also observed a high instance of high-school students crossing Luten Avenue mid-block, not at intersections where drivers anticipate seeing pedestrians.

In order to calm traffic and improve safety, DOT narrowed Luten Avenue by painting a 10-foot center median and nine-foot parking lane stripes on both sides of Luten Avenue. DOT installed four new crosswalks to improve pedestrian safety along the corridor. DOT also installed three pedestrian refuge islands in the south crosswalk of Billiou Street, the south crosswalk of Deisius Street, and the north crosswalk of Eylandt Street to improve pedestrian safety by shortening the crossing distances for pedestrians. A left-turn lane was added at six locations to improve pedestrian and vehicular safety and to decrease delay for vehicles. DOT installed a new signal at the intersection of Deisius Street and Luten Avenue to improve traffic operations and improve pedestrian safety by giving pedestrians safer opportunities to cross.

Most segments along the corridor experienced a decrease in speed due to the traffic calming improvements. The percentage of drivers traveling above the speed limit on northbound Luten Avenue on the segment between Deisius Street and Billiou Street decreased from 42% to 21% and from 63% to 29% in the southbound direction. Average speeds between Deisius Street and Billiou Street decreased in the northbound direction from 29.9 mph to 26.5 mph, an 11% decrease and in the southbound direction speeds were reduced by 16% from 32.8 mph to 27.5 mph.

Analysis of NYPD crash data shows crash rates for motor vehicle occupants and pedestrians after implementation were lower than the average for the three prior years.

A painted center median with left-turn bays and pedestrian safety islands were installed along Luten Avenue from Amboy Road to Hylan Boulevard to calm traffic and enhance safety for all road users.

A pedestrian safety island was installed in the north crosswalk of Luten Avenue at Eylandt Street to improve safety specifically for the Tottenville High School students and all pedestrians at this intersection.

Adding crosswalks and a median and narrowing travel lanes reduced speeding, eased crossing the street and reduced crashes.

The safety improvements along Luten Avenue have benefited both pedestrians and drivers by providing traffic calming treatments, simplifying turning movements, installing pedestrian safety islands, and installing appropriate traffic controls within this corridor, while not impacting traffic flow.

Crashes with Injuries along Luten Avenue Amboy Road to Hylan Boulevard

	Before* (three previous years)			After
Total Crashes with Injuries	6	2	2	2.3
Number of Crashes with Injuries to:				
Motor Vehicle Occupants	5	1	0	1.7
Pedestrians	1	1	2	0.6
Bicyclists	0	0	0	0

*Before columns show the crash history for each of the three years immediately prior to project implementation. After column shows number of crashes since implementation (through January 2012) at annual rate. See page 68 for further information on crash data source and analysis methodology. The sum of the three specific categories may not equal "Total Crashes with Injuries" because some crashes involved injuries in multiple categories.

Luten Avenue Average Traffic Speeds (in m.p.h.) Deisius Street to Billiou Street

	Before	After	% Change
Northbound	29.9	26.5	-11%
Southbound	32.8	27.5	-16%

Data collected between 11 a.m.-12 p.m. on a weekday. Before data collected in December 2009. After data collected in September 2010.

Percentage of Vehicles Over the Speed Limit on Luten Avenue Deisius Street to Billiou Street

	Before	After	Change
Northbound	42%	21%	-21%
Southbound	63%	29%	-34%

Data collected between 11 a.m.-12 p.m. on a weekday. Before data collected in December 2009. After data collected in September 2010.