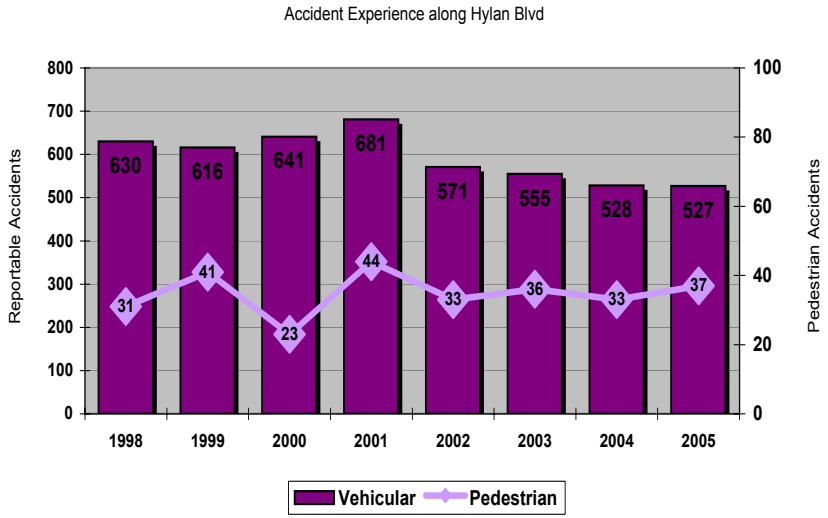
Staten Island

Hylan Boulevard

Description

Hylan Boulevard, Staten Island's longest commercial roadway, serves as one of borough's primary roadways. This 14-mile long corridor connects the island along the eastern shore, linking Rosebank and Tottenville. Throughout the corridor, there are many residential communities and active commercial districts that attract numerous vehicular trips. In addition, Hylan Boulevard serves as a principal commuter route to and from the Verrazano-Narrows Bridge and serves as an alternate route to the Outerbridge Crossing.

Due to the nature and function of this corridor, Hylan Boulevard is frequently congested on both weekdays and weekends, especially during peak travel hours. As such it has been a primary focus for both residents and public agencies. In 2000, a task force was created (comprised of members of DOT and NYPD) to formulate solutions to safety and operational problems along Hylan Boulevard. This task force built upon past accomplishments and programs that were implemented in 1999.



Safety is a primary concern along the entire length of Hylan Boulevard. Vehicular accidents generally increased from 1998 to 2001, but then decreased every year until 2005. Pedestrian accidents varied from 1998 to 2001 but remained fairly consistent from 2002 to 2005. Overall, there was approximately a 16% decline in vehicular accidents from 1998 to 2005.

Implemented Improvements

Improvements made to Hylan Boulevard include the installation of left-turn bays and an innovative two-way left turn lane.

Left turn bays were installed at the following intersections on Hylan Boulevard in summer 1999:

- Adams Avenue
- Arden Avenue
- Bedford Avenue
- Jefferson Avenue
- Liberty Avenue
- Page Avenue
- Seaview Avenue
- Stobe Avenue

The first two-way left turn lane in the City was installed along a 600–foot stretch of Hylan Boulevard between Lincoln and Midland Avenues in July 1999. The two-way left turn lane is located in the center of the boulevard; vehicles are permitted to make a left turn from this lane from either direction of travel on Hylan Boulevard. It provides for safe access to the many commercial establishments located in the area.

Large street name signs were first installed at seven major intersections along Hylan Boulevard in May 2000. The signs are supported from mast arms extending over the roadway. At the same

time, 12 large street name signs were installed in advance of six major signalized intersections between Steuben and Ebbitts Streets. These improvements primarily assist motorists with vision limitations and visitors unfamiliar with the area in identifying cross streets. In the spring of 2003, seven additional intersections received the oversized street name signs. These signs were installed at:

- Chesterton Avenue
- Buffalo Street
- Justin Avenue
- Bay Terrace
- Keegans Lane
- Cleveland Avenue
- Armstrong Avenue

More recently, additional oversized street name signs were installed at additional intersections along this corridor as part of the Oversized Street Name Sign program. As of February 2007, there are 296 such signs posted along Hylan Boulevard.

"Emergency Exit" and "Keep Driveway Clear" signs and "Keep Clear" pavement markings were installed on Hylan Boulevard at the 122nd precinct near Bryant Avenue in May 2000.

In May 2000, on a trial basis, signal timing at the intersection of Hylan Boulevard at New Dorp Lane was modified so that each direction of New Dorp Lane moved on separate signal phases. The trial program was discontinued and the traffic signal pattern reverted to the prior "normal sequence" pattern in conjunction with implementation of the following improvements:

- The left turn bay on Hylan Boulevard was extended by 100 feet in the westbound direction to accommodate five additional vehicles or 200 vehicles per hour.
- The raised center median (approximately 290 feet) from New Dorp Lane to Jacques Street was removed and replaced with a center divider comprised of flexible bollards.
- The roadway was resurfaced between New Dorp Lane and Jacques Street.
- Rush-hour parking restrictions were implemented between Guyon Avenue and Steuben Street.
- Five bus stops were relocated from near side to far side locations to improve traffic flow. In addition, three bus stops were lengthened to provide more space for buses to unload passengers and prevent spillback into the intersection.
- In coordination with NYC Transit, ensured that buses pull to the curb to pick up and discharge passengers.
- In coordination with the Police Department, increased enforcement of parking regulations along Hylan Boulevard (especially deliveries and bus stop violations during the AM and PM peak periods).
- In coordination with the Department of Sanitation and private sanitation companies, ensured that no pickups occur during the AM and PM peak periods.

These improvements resulted in PM peak travel time savings of approximately six minutes on southbound Hylan Boulevard between Jefferson Avenue and Beach Avenue. This represents a 57% reduction in travel time from 10.5 minutes to 4.5 minutes.

- All crosswalks on Hylan Boulevard were refurbished in April 2002.

Since May 2000, new traffic signals have been installed on Hylan Boulevard at the following locations:

- Hylan Boulevard and Arbutus Avenue (June 2000)
- Hylan Boulevard and Sharrotts Avenue (September 2000)
- Hylan Boulevard and Sprague Avenue (April 2001)
- Hylan Boulevard and Holdridge Street (March 2002)
- Hylan Boulevard and Holton Avenue (March 2003)
- Hylan Boulevard and Benton Avenue (May 2004)
- Hylan Boulevard and Bayview Avenue (April 2004)
- Hylan Boulevard and Cunningham Road (September 2005)

At the intersection of Hylan Boulevard and Old Town Road/Quintard Street, the Department implemented a safety project that included exclusive left turn signals for the Old Town Road and Quintard Street approaches, lane usage markings and signage, guard rails to separate a parking lot from the road bed of Quintard Street and a sidewalk cut back to facilitate turning movements. All work was completed in December 2004.

Hylan Boulevard
Left Turn Improvements

Example of intersection on Hylan Boulevard where no turning lane exists in either direction.

In May 2005, NYCDOT, in consultation with the NYPD and the Staten Island Borough President, initiated a consultant study to determine the feasibility of prohibiting left turns from Hylan Boulevard at intersections along the 6.2 mile segment between Steuben Street and Richmond Avenue.

This initiative was being pursued to improve the traffic flow along Hylan Boulevard, as well as improve the safety and operation of vehicles along the corridor. The corridor is constrained by its current alignment and the lack of dedicated turning bays at many locations. Accordingly, vehicles making left turns from Hylan Boulevard can have a detrimental effect on the through movement of vehicles travling along Hylan Boulevard.

In total, 110 intersections were reviewed, of which 27 intersections currently have left turn lanes and/or signals.

As part of the Staten Island Task Force study, consideration was given to prohibiting left turns at intersections where separate left turn lanes did not exist in both the eastbound and westbound directions for the AM and PM weekday peak periods, as well as for all time periods. In addition to recommended prohibitions, the study included a needs analysis for new directional signage as alternatives to left turns at prohibited intersections. The initial study results indicated that there were 50 intersections that prohibit left turns, leaving 33 intersections for consideration of left turn movements.

Treatments at these locations included the prohibition of left turns and the detour of traffic off of Hylan Boulevard, the installation of new signals, and the construction of new turning lanes at additional locations. Traffic often builds up on Hylan Boulevard due to cars queuing behind a vehicle attempting to make a left turn. By prohibiting left turns where space does not permit this movement and constructing turning bays at other intersections it is expected that traffic volumes and accidents will decrease on Hylan Boulevard.

The study was completed in July 2006. Upon completion of the report, NYCDOT reviewed the consultant findings and examined the feasibility of these recommendations and established an implementation schedule for these restrictions. DOT prohibited left turns at 24 intersections and constructed new left turn bays to facilitate left turn movements at an additional 10 intersections. Collectively, these improvements should have a substantial effect on improving congestion on one of Staten Island's most critical and heavily traveled corridors.

As of January 6, 2007, all signals, signs and markings were completed. Preliminary figures show that accidents are down, speeds are up, and the traffic flow is far better than before.

Improvements Implemented as of April 2007

New Left Turn Bays at Hylan Boulevard and:

- Dongan Hills Avenue — new W/B left
- Cleveland Avenue — new E/B & W/B left

Median Closures at Hylan Boulevard and:

- Bath Avenue
- Cooper Avenue
- Peter Avenue
- Seacrest Avenue
- Thornycroft Avenue
- Pacific Street
- Groton Street
- Hopkins Avenue
- Ainsworth Avenue
- Heinz Avenue
- Glover Street
- turning bay between Ainsworth Avenue & Redgrave Avenue

Left Turn Prohibitions at Hylan Boulevard and:

- Kensington Street — W/B left
- Parkinson Avenue — W/B & E/B left
- Reid Avenue — E/B left
- Benton Street — E/B & W/B left
- Raritan Avenue — E/B & W/B left
- Delaware Avenue — W/B left
- Alter Avenue — E/B & W/B left
- Garretson Avenue — W/B left
- Bryant Avenue — W/B left

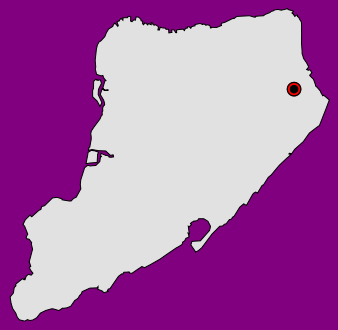
- Otis Avenue W/B left
- Locust Avenue E/B & W/B left (Except W/B trucks)
- Justin Avenue E/B & W/B left
- Hillside Terrace E/B & W/B left
- Wiman Avenue E/B & W/B left
- Naughton Avenue E/B & W/B left
- Hull Avenue E/B & W/B left
- Hamden Avenue E/B & W/B left
- Stobe Avenue E/B left
- Liberty Avenue W/B left
- Adams Avenue E/B left
- Bedford Avenue E/B left

Left Turn Phase Added to Signal at Hylan Boulevard and:

- Clove Road/Norway Avenue new W/B left turn phase
- Reid Avenue new W/B left turn phase
- Burgher Avenue new W/B left turn phase
- Cromwell Avenue new W/B left turn phase
- Seaview Avenue new E/B left turn phase
- Richmond Avenue new E/B left turn phase
- Keegans Lane new E/B left turn phase
- Cleveland Avenue new E/B & W/B left turn phase
- Bay Terrace new E/B left turn phase
- Buel Avenue new E/B & W/B left turn phase
- Seaver Avenue new E/B & W/B left turn phase
- Jefferson Avenue new E/B & W/B left turn phase

New Traffic Signal at Hylan Boulevard and:

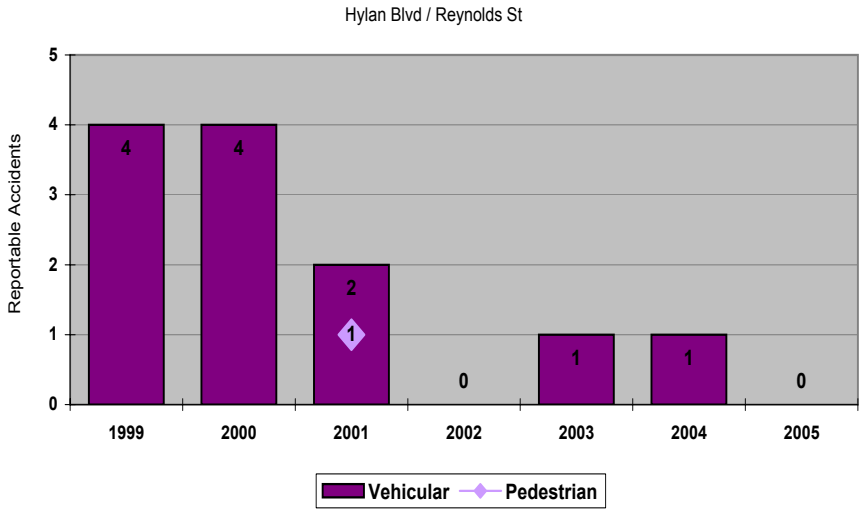
- Bryant Avenue
- Wiman Avenue



Hylan Boulevard/ Reynolds Street

Description

Building upon DOT's efforts to improve safety along the entire length of Hylan Boulevard, the Department implemented a set of safety improvements at Hylan Boulevard in the vicinity of Reynolds Street. This section of Hylan Boulevard was very wide (70 feet) with two moving lanes in each direction and a high incidence of speeding. While not a high accident intersection, this location experienced a rising accident trend from 1999 through 2000. **In 1999 there were four reportable accidents and four in 2000. There were no pedestrian accidents or fatalities during these two years. In 2001, there were three total accidents, of which one involved a pedestrian fatality. The Department implemented a series of traffic calming measures in December 2001. Since then, there have been no fatalities at this intersection. There were no reportable accidents at this intersection in 2002 and 2005 and only one accident in both 2003 and 2004. The improvements implemented at this intersection have made this location increasingly safer.**



Improvements Implemented in December 2001

In an effort to improve pedestrian safety and crossing time on Hylan Boulevard in the vicinity of Reynolds Street, the Department implemented a traffic calming measure to narrow the roadway to one moving lane in each direction between Tompkins Avenue and Colton Street. Roadway markings were installed to narrow the roadway and a raised center median was installed at the Hylan Boulevard/Reynolds Avenue intersection to supplement the painted median. At Tompkins Avenue, the Department installed new signs to help direct motorists through the intersection. Additionally, the crosswalk at the Hylan Boulevard/Reynolds Avenue intersection was relocated from the west to the east leg. All work was completed in December 2001.

Roadway markings and raised intersection at Hylan Boulevard and Reynolds Street

This improvement also resulted in decreased speeds on Hylan Boulevard, particularly in the westbound direction. There was a greater impact on eastbound speeds. Average speeds decreased by 8.6% eastbound (to 33.1 mph from 36.2 mph) and 3.6% westbound (to 35.3 mph from 36.6 mph). Eighty-fifth percentile speeds decreased 14% eastbound (to 37.0 mph from 43.0 mph) and 4.3% westbound (to 40.2 mph from 42.0 mph). Although speeds have decreased, they remain relatively high and the local precinct has been asked to increase enforcement on this section of Hylan Boulevard.

Father Capodanno Boulevard

Description

Father Capodanno Boulevard is a 2.8-mile roadway that operates along the southeast shore of Staten Island. This roadway is used as an alternate to Hylan Boulevard as it provides a direct access to the Verrazano-Narrows Bridge. The roadway geometry consists of sharp curvature in the vicinity of Sand Lane, but is generally straight and level. Motorists tend to speed during off-peak hours when traffic volumes are light and there is considerable excess available capacity. Four fatalities occurred on this roadway between 1993 and 2000, however no fatalities have occurred since 2001.

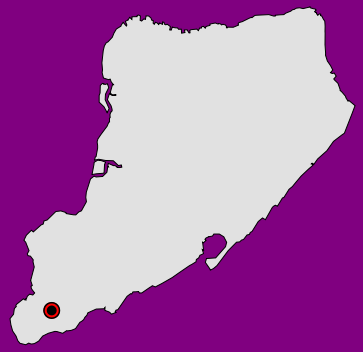
Improvements Implemented

- Trailer mounted speed boards were placed (facing both directions) approximately 1000 feet south of Slater Boulevard in January 2000. The unit facing northbound traffic was vandalized and removed in June 2000.
- A new signal was installed at the intersection of Father Capodanno Boulevard/Slater Boulevard in June 2000.
- Installed traffic signal poles with oversized 40 foot mast arms on each approach at the intersection of Father Capodanno Boulevard and Seaview Avenue. These improvements

New traffic signal pole with oversized mast arm at Father Capodanno Boulevard and Seaview Ave. In addition, an illuminated street name sign is affixed to the mast arm

Future Improvements

In order to maintain capacity during commuter rush hours and control speeding during off-peak hours when there is excess capacity, we are are working with our Consultant using the Engineering Service Agreement to implement lane control systems on Father Capodanno Boulevard (2.6 miles) from Greely Avenue to Lily Pond Avenue. It has been found that there is excess capacity at various times of the day resulting in violations of the speed limit. The lane control signal system will restrict the use of select lanes (in both directions) at various times of the day as designated by NYCDOT. By the end of the year, the Consultant will develop preliminary design concepts for the Boulevard, various options will be investigated and recommendations will be made.



Page Avenue/ P.S. 6

Description

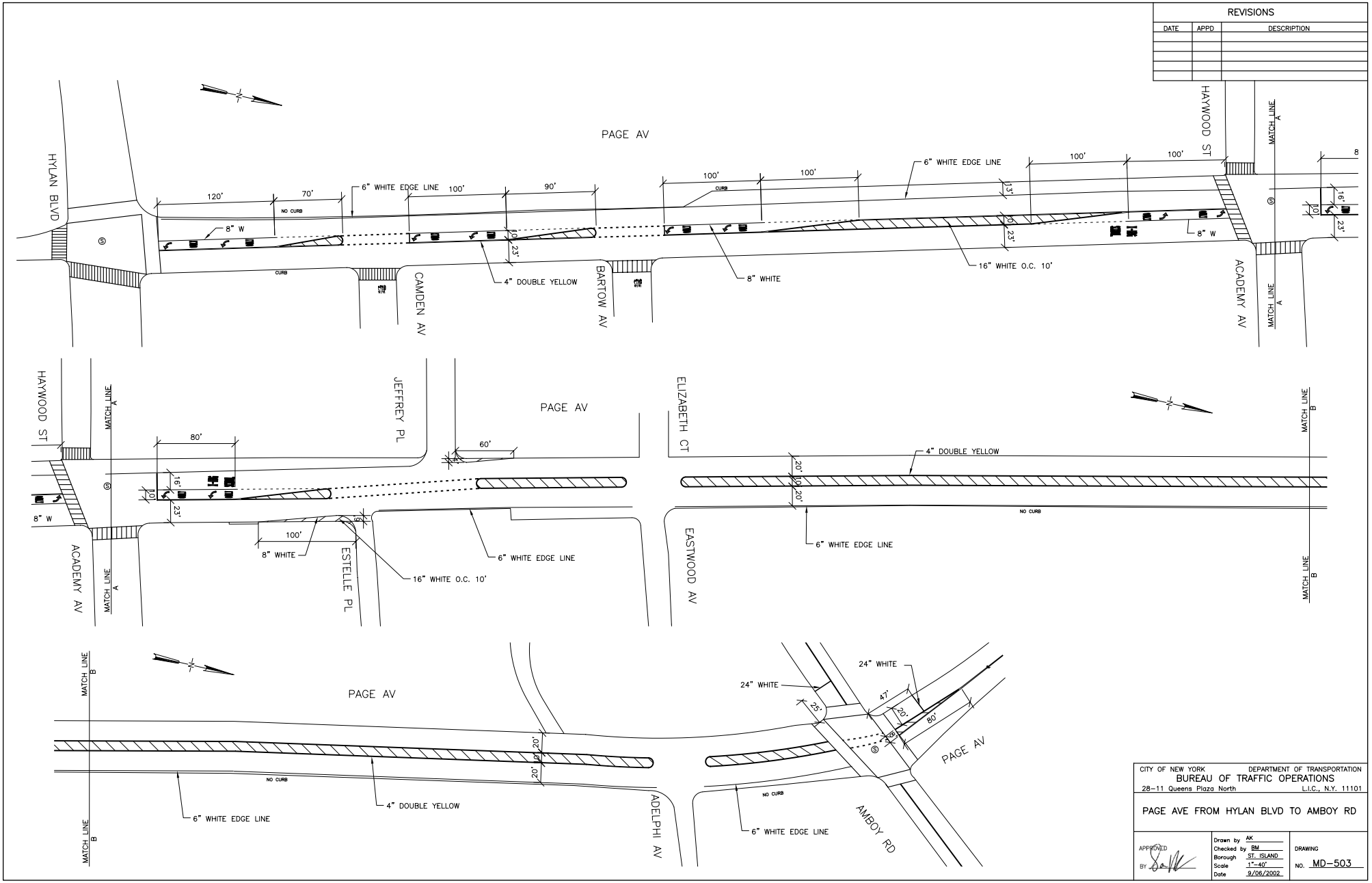
PS 6, which is located on Page Avenue between Hylan Boulevard and Amboy Road, had many safety concerns, particularly during arrival and dismissal times. Among those problems were the absence of sidewalks along Page Avenue, the absence of traffic controls at the Page Avenue/Academy Place intersection, and motorists' failure to obey parking/traffic regulations, particularly speeding, illegal U-turns, and double parking. Radar speed surveys conducted along Page Avenue showed that the 85th percentile speeds were 48 mph northbound and 47 mph southbound. Based upon these concerns, the Department took a proactive approach at this location.

Implemented Improvements

- Phase I of the sidewalk and curb installation for a distance of 400 feet on the west side of Page Avenue (opposite the school) was completed in the fall of 2000. Phase II, which included 200 feet on the east side of Page Avenue between Hylan Boulevard and Bartow Avenue and 100 feet along the bus stop on the north side of Hylan Boulevard at Page Avenue, was completed concurrently. As a result of the completion of Phases I and II, a continuous safe walkway for students now exists from the bus stop on Hylan Boulevard to PS 6.
- Pedestrian signals were installed at the Page Avenue/Amboy Road intersection in February 2001.
- Installed No U-Turn signs at the Academy Avenue/Page Avenue intersection in March 2001.

- Missing speed limit signs were replaced in the area in June 2001.
- A traffic signal was installed at the Page Avenue/Academy Avenue intersection in September 2001.
- New pedestrian and school crosswalks and school crossing markings word messages were installed on Page Avenue from Hylan Boulevard to Amboy Road. All work was completed in April 2002.
- School crossing signs (yellow-green fluorescent) and advance warning signs were installed at the Page Avenue/Bartow Street intersection in December 2000, at the Academy Avenue/Page Avenue intersection in October 2001, and at the Camden Avenue/Page Avenue and Hylan Boulevard/Page Avenue intersections in early August 2002.
- A painted median was installed to narrow the roadway on Page Avenue between Hylan Boulevard and Amboy Road in September 2002.
- Phase III, which includes installation of 2,000 feet of sidewalks and curbs on the west side of Page Avenue (between Academy Place and Amboy Road) was completed in early August 2002. Completion of Phase III provided a continuous walkway from Hylan Boulevard to Amboy Road.
- At the intersection of Page Avenue and Academy Avenue, the cycle length was increased from 60 to 90 seconds to allow an additional nine seconds (from 27 to 36 seconds) to cross Page Avenue. (May 2004)

The improvements are illustrated on the following page.


REVISIONS
DATE
APPD
DESCRIPTION
PAGE AV
HYLAN BLVD
HAYWOOD ST
ACADEMY AV
CAMDEN AV
BARTOW AV
JEFFREY PL
ELIZABETH CT
EASTWOOD AV
ESTELLE PL
ADELPHI AV
AMBOY RD
MATCH LINE A
MATCH LINE B
120'
70'
90'
100'
80'
60'
6" WHITE EDGE LINE
4" DOUBLE YELLOW
8" WHITE
16" WHITE O.C. 10'
8" W
NO CURB
CURB
24" WHITE
CITY OF NEW YORK
DEPARTMENT OF TRANSPORTATION
BUREAU OF TRAFFIC OPERATIONS
28-11 Queens Plaza North
L.I.C., N.Y. 11101
PAGE AVE FROM HYLAN BLVD TO AMBOY RD
APPROVED BY
Drawn by AK
Checked by BM
Borough ST. ISLAND
Scale 1"=40'
Date 9/06/2002
DRAWING NO. MD-503

Borough Wide Daylighting Initiative

Description

The process of "Daylighting" an intersection has both safety and operational benefits. "Daylighting" refers to the process of installing restrictive parking regulations at intersections to improve visibility and safety for motorists. These parking restrictions are designed to help motorists gain an unobstructed view of traffic approaching the intersection, as well as additional travel lanes or turning pockets at intersections. In the past, the Department of Transportation has worked closely with the Staten Island Borough Presidents and the local police precincts to identify intersections that would benefit from daylighting to enhance safety in the borough. As part of the Staten Island Task Force initiative, the Department of Transportation has recommitted itself to identifying additional locations throughout the borough which would benefit from these treatments. This commitment includes the identification of twelve intersections a month to implement this treatment. The cost of implementing these treatments is minimal compared to the safety benefits - daylighting requires only the posting of parking regulations to restrict parking outright along the approaching curb. During 2006, the Department met its goals of implementing these treatments at 12 locations per month. As of April 1, 2007 this treatment had been installed at 128 locations. Working with the Staten Island Borough President and the local police precincts, the Department will continue to identify intersections that would benefit from daylighting to enhance safety in the borough.

As a result of this initiative, daylighting has been installed at the locations on the following pages:

APRIL 2006		
ON STREET	**FROM**	**TO**
Queen St N	Graves Ave	Wewllbrook Ave
Queen St S	Bradley Ave	Wellbrook Ave
Holden Blvd N	Graves St	Wellbrook Ave
Marsh Ave	Ring Rd	Westport Ave
Nicholas St W	St Marks Pl	Carroll Pl
Buel Ave E	Husson St	Zoe St
Woodrw Rd N	Rossville Ave	Latham Pl
Westervelt Ave E	Hendricks Ave	Crescent Ave
Westervelt Ave E	St Marks Pl	Carroll Pl
Foster Rd E	Sinclair Ave	Stafford Ave
W Fingerboard Rd S	Windermer Rd	Allendale Rd
Castleton Ave S	Haven Esplande	Woodstock Ave

MAY 2006		
ON STREET	**FROM**	**TO**
Durant Ave N	Bartow Ave	Ainsworth Ave
Clinton Ave E	Henderson Ave	Prospect Ave
McClean Ave S	Linwood Ave	Piave St
Clove Rd W	Leslie Ave	Fayette Ave
Dalton Ave S	Vincent Ave	Belfast Ave
Dalton Ave S	Mobile Ave	Vincent Ave
Richmond Terr S	Mersereau Ave	Andros Ave
Leverett Ave S	Miles Ave	Leverett Ct
Richmond Rd S	Steele Ave	Burbank Ave
Bard Ave W	Forest Ave	Delafield Ave
Bedell Ave W	Amboy Rd	New Folden Pl
Ebbitts St	Hylan Blvd	Mill Rd

JUNE 2006		
ON STREET	**FROM**	**TO**
Arthur Kill Rd S	Storer Ave	Claypit Rd
Nelson Ave W	Hylan Blvd	Sweetwater Ave
Greeley Ave W	Nugent Ave	Grimsby Ave
Victory Blvd N	Auburn Ave	Crystal Ave
Palmer Ave S	Decker Ave	Lexington Ave
Hurlbert St S	McDermott Ave	Benton Ave
Laconia Ave N	Atlantic Ave	Raritan Ave
Quintard St W	Jerome Rd	Laconia Ave
Mason Ave N	Delaware Ave	Alter Ave
Henry Pl N	Delaware Ave	Alter Ave
Columbus Ave N	Stanwich St	Targee St
Columbus Ave S	Targee St	W Fingerboard Rd

JULY 2006		
ON STREET	**FROM**	**TO**
Prospect Avenue S	Franklin Avenue	Clyde Place
Dongan Hills Avenue E	Hylan Boulevard	Husson Street
Martling Avenue N	Clove Road	Brooks Pond Place
Greaves Avenue E	Dewey Avenue	Nahant Street
Prospect Place E	Amboy Road	Dead End
Slosson Avenue E	Rice Avenue	Martling Avenue
Morrison Avenue S	Broadway	North Burgher Ave
Wiman Avenue W	Hylan Boulevard	Tennyson Drive
Westcott Blvd W	Kemball Avenue	Chandler Avenue
Amboy Road N	Hale Street	Hecker Street
Greaves Avenue E	Greaves Lane	Dewey Avenue
Forest Avenue N	Oxford Place	Duer Lane

AUGUST 2006		
ON STREET	**FROM**	**TO**
St Pauls Ave E	Beach St	Stone St
St Pauls Ave E	Grant St	Clinton St
St. Pauls Ave E	Hannah St	Swan St
No Railroad Ave W	Cobblers La	W Fingerboard Rd
Hylan Blvd S	Mallory Ave	Lamport Blvd
Kensington Ave E	Hylan Blvd	Kramer St
Wilder Ave E	Clarke Ave	Rene Dr
Kensington Ave W	Hylan Blvd	Kramer St
North Burgher Ave W	Castleton Ave	Market St
North Burgher Ave W	Henderson Ave	Wayne St
North Burgher Ave E	Forest Ave	Myrtle Ave
North Burgher Ave W	Forest Ave	Myrtle Ave

SEPTEMBER 2006		
ON STREET	**FROM**	**TO**
Liberty Ave E	Hylan Blvd	Magnolia Ave
Slosson Ave W	Rice Ave	Potter Ave
Bement Ave W	Cary Ave	Bement Ave
Clinton Ave E	Fillmore St	Van Buren St
Pauw St S	York Ave	Jersey St
Genesse Ave N	Getz Ave	Eltingville Blvd
Richmond Terr S	Arlington Ave	South Ave
Arlington Pl N	Arlington Ave	Northfield Ave
St. Johns Ave S	Schubert St	Wagner St
Parkinson Ave W	McCormick Pl	Ledyard Pl
Continental Pl S	Union Ave	Maple Parkway
Diaz St N	Piave Ave	Linwood Ave

OCTOBER 2006		
ON STREET	**FROM**	**TO**
Vespa Ave S	Ruxton Ave	Almond St
York Ave W	Prospect Ave	Arnold St
Layton Ave S	Westervelt Ave	Bismark St
Hendricks Ave S	Westervelt Ave	Bismark St
Prospect Ave N	York Ave	Harvard Ave
Prospect Ave S	Clyde Pl	Harvard Ave
Franklin Ave W	Richmond Terr	Van Buren St
Forest Ave S	Llewellyn Pl	Mundy Ave
Wainwright Ave W	Genesee Ave	Augusta Ave
Wainwright Ave E	Figurea Ave	Augusta Ave
Pompey Ave E	Genesee Ave	Scranton Ave
Wainwright Ave E	Barlow Ave	Macon Ave

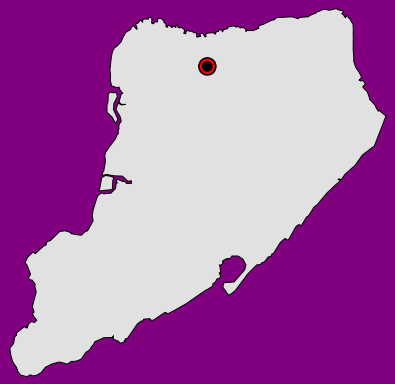
NOVEMBER 2006		
ON STREET	**FROM**	**TO**
Glen Ave W	Castleton Ave	Stanley Ave
Wainwright Ave W	Barlow Ave	Perkiomen Ave
Broadway E	Castleton Ave	Market St
Market St N	N Burgher Ave	Campell Ave
Henderson Ave N	No Burgher Ave	Campbell Ave
Windsor Ave S	Todt Hill Rd	Henning St
Forest Ave N	Brighton Ave	Ridgewood Pl
Forest Ave N	Ridgewood Pl	Randall Ave
Willowbrook Rd N	Buchanan Ave	Fillmore Ave
Hylan Blvd S	Olga Pl	Olga Pl *exit
Hylan Blvd N	Philip Ave	Bertram Ave
Windsor Rd S	Todt Hill Rd	Henning St

DECEMBER 2006		
ON STREET	**FROM**	**TO**
Tysens La E	Isora Pl	Ella Pl
Drumgoole Rd W N	Parkwood Ave	Lenevar Ave
Pompey Ave W	Memphis Ave	Lamoka Ave
Arden Ave E	Pompey Ave	Moffett St
Hyaln Blvd S	Oceanic Ave	Seacrest Ave
North Railroad Ave N	Otis Ave	Locust Ave
Rockland Ave N	McDivitt Ave	Shirra Ave
South Railroad Ave S	Hamden Ave	Hunter Ave
South Railroad Ave S	Burbank Ave	Locust Ave
South Railroad Ave S	Otis Ave	Bryant Ave
Broadway E	Delafield Ave	Seneca Ave
Delafield Ave S	Broadway	Elizabeth St

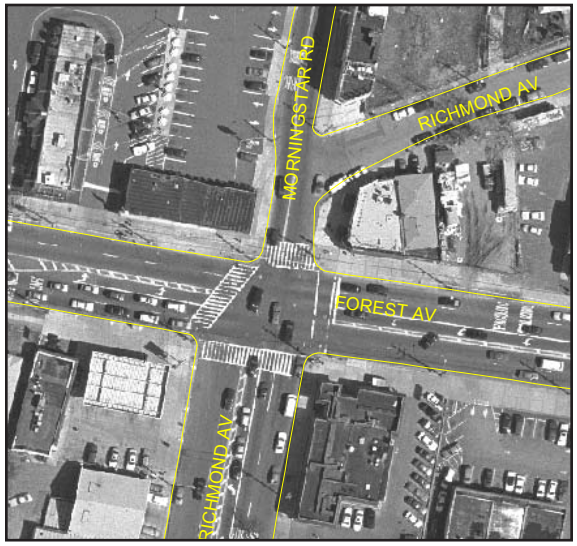
JANUARY 2007		
ON STREET	**FROM**	**TO**
Bement Ave W	Delafield Ave	Myrtle Ave
Ralph Ave N	Arden Ave	Jeanette Ave
Seaview Ave W	Quincy Ave	Oceanside Ave
Main Ave N	So Greenleaf Ave	Manor Rd

FEBRUARY 2007		
ON STREET	**FROM**	**TO**
Van Duzer St E	Sands St	William St
Major Ave S	Lily Pond Ave	Florida Ave
Van Duzer St E	Beach St	William St
Elizabeth St	Delafield Ave	Myrtle Ave
Haughwout Ave N	Jewett Ave	Derby Ct
Prospect Ave S	Lafayette Ave	Summer Pl
Victory Blvd N	Burke Ave	Parish Ave
Elizabeth St	Delafield Ave	Myrtle Ave
Bloomingdale Rd W	Lorraine Loop	HarrisLa
Drumgoole Rd W	Parkwood Ave	Lenevar Ave
Purdy Ave N	Sheraden Ave	Ardmore Ave

MARCH 2007		
ON STREET	**FROM**	**TO**
Decker Ave E	Cornell St	Catherine St
Pearl St	Calvin Pl	Trossach Rd
Kingsey Pl W	Northfield Ave	Dolson Pl
Ravenhurst Ave S	Jewett Ave	Elias Pl
Trossach Rd S	Pearl St	Murray Pl



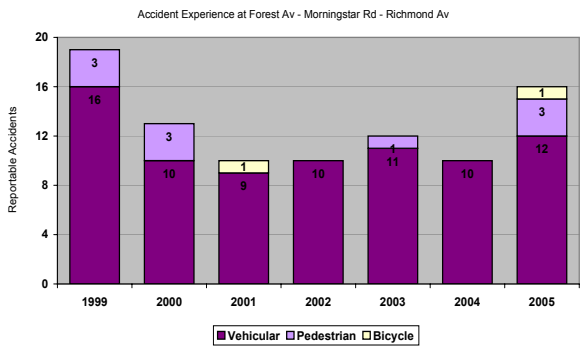
Forest Avenue/ Morningstar Road/ Richmond Avenue



Original configuration of intersection

Description

Richmond Avenue and Forest Avenue function as major arterials through Staten Island. Forest Avenue which runs east-west across the island, intersects Richmond Avenue and Morningstar Road. South of the intersection, Richmond Avenue is a wide two-way roadway. North of the intersection, Morningstar Road functions as a connector between Forest Avenue and the continuation of a narrower Richmond Avenue, In addition, the Morningstar Road approach to Forest Avenue is offset with Richmond Avenue and is much narrower. Overall, this intersection is the focus of high vehicular activity, as the surrounding land use is predominately commercial. A significant generator of this traffic is along the northwest corner of Forest Avenue and Morningstar Road. These conditions created numerous vehicular conflicts and illegal maneuvers by motorists.

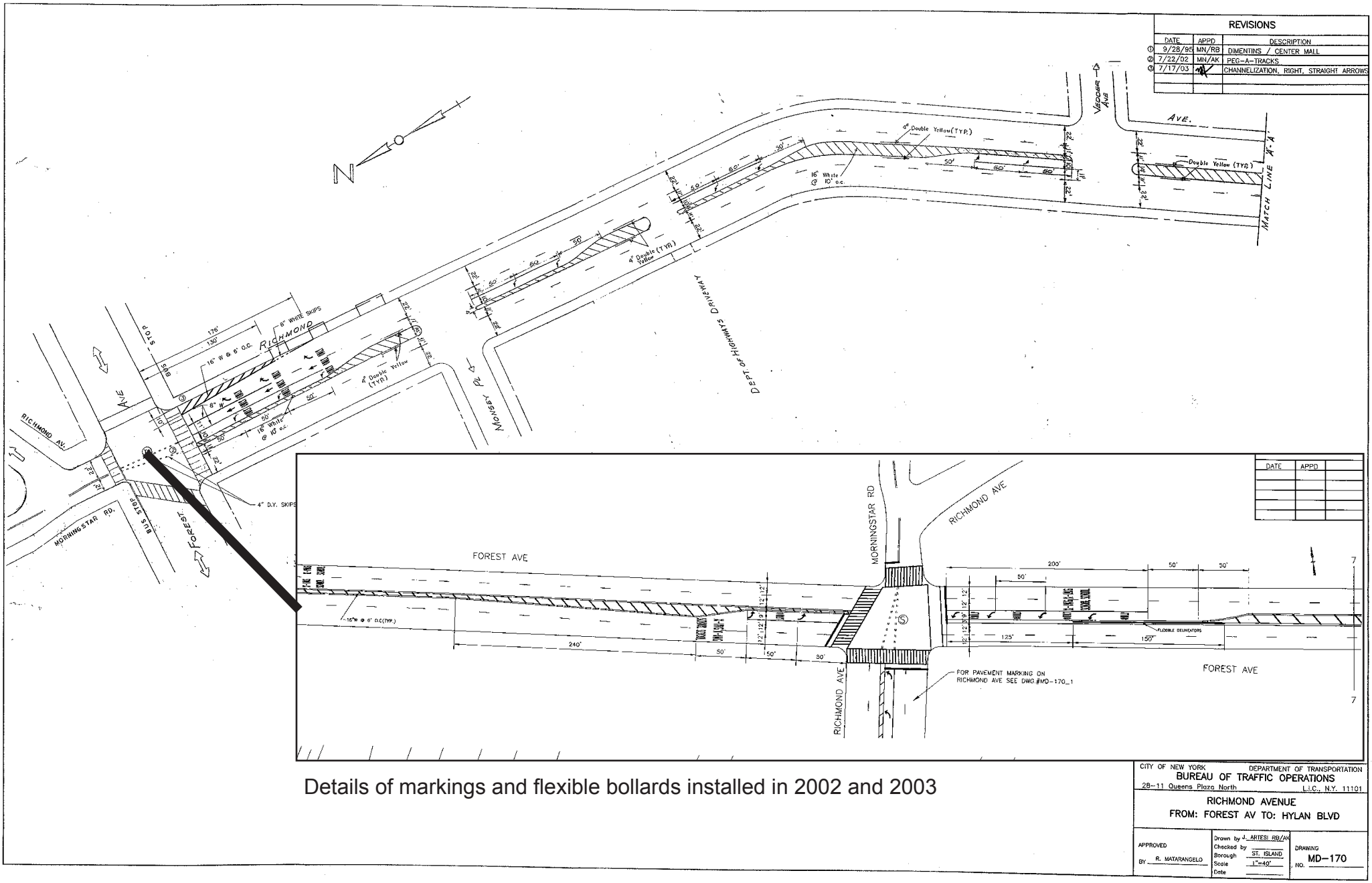


Based upon an increasing number of accidents and concerns about the illegal movements of vehicles at this intersection, the Department took a proactive approach to address these concerns. **The accident history at this location indicates a 31.6% decrease in reportable accidents between 1999 and 2000. Vehicular accidents dropped 37.5% to 10 from 16, but pedestrian accidents remained constant at three. Between 2001 and 2004, reportable accidents fluctuated between 10 and 12, with only one pedestrian and one bicyclist accident during this time. However, in 2005 reportable accidents spiked to 16, including three pedestrian and one bicyclist.**

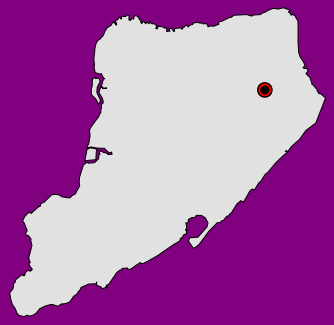
Implemented Improvements

- Flexible bollards were installed along the centerline of Forest Avenue in September 2002 to prevent vehicles from illegally crossing the painted center median while entering or exiting the ShopRite Plaza parking lot.
- Installed peg-a-tracs in September 2002 to identify the transition from the wider Richmond Avenue to the narrower Morningstar Road.
- Additional lane assignment markings and signage was installed on Forest Avenue, Morningstar Road and Richmond Avenue in August 2003.

The improvements are shown on the following page.



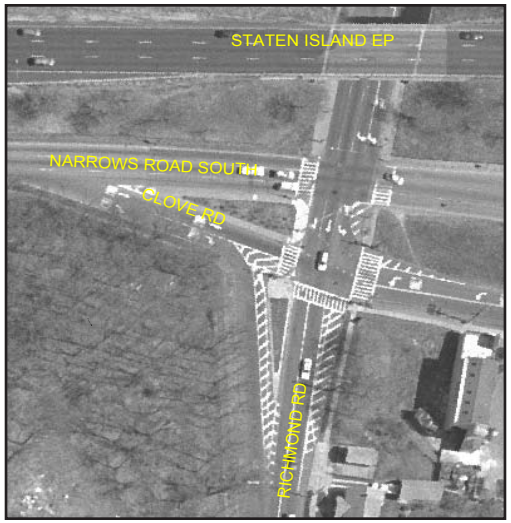
Details of markings and flexible bollards installed in 2002 and 2003



Narrows Road South/ Richmond Road

Description

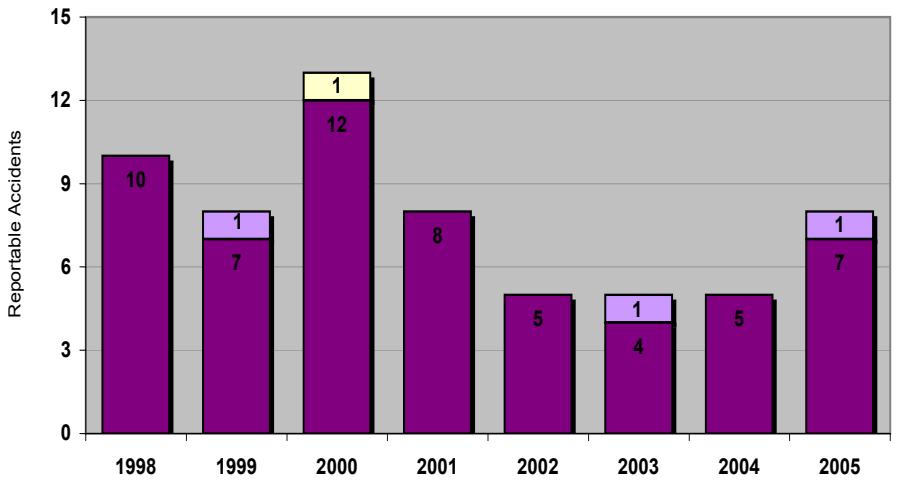
At this location, Narrows Road South functions as the eastbound service road for the Staten Island Expressway. Prior to the Richmond Road intersection, Narrows Road South forks providing access to both Clove Road as well as southbound Richmond Road. On the southern approach along Richmond Road, vehicles traveling southbound have the option to turn onto Narrows Road South or proceed a short distance further to turn onto Clove Road. In addition, Clove Road is two-way east of Richmond Avenue. Overall, the roadway configuration, geometries and lane assignments led to confusion for motorists regarding lane assignments on all three roadways intersecting at this location.



Aerial view of intersection

The accident experience at this intersection varied between 1998 and 2001. In 1998, there were a total of 10 reportable accidents. In November 1999, the Department installed advanced lane assignment signs and although accidents increased to 13 in 2000, accidents declined significantly by 39% to eight in 2001. Accidents continued to decline and remained at five from 2002 to 2004, with a slight increase to eight in 2005, including one pedestrian accident.

Accident Experience at Narrows Rd South and Richmond Rd



Implemented Improvements

- Additional directional/lane assignment signs were installed prior to the intersection to guide motorists in the appropriate direction in November 1999.
- Additional lane assignment signs were installed on the overpass at Richmond Road and Narrows Road North in November 2002.