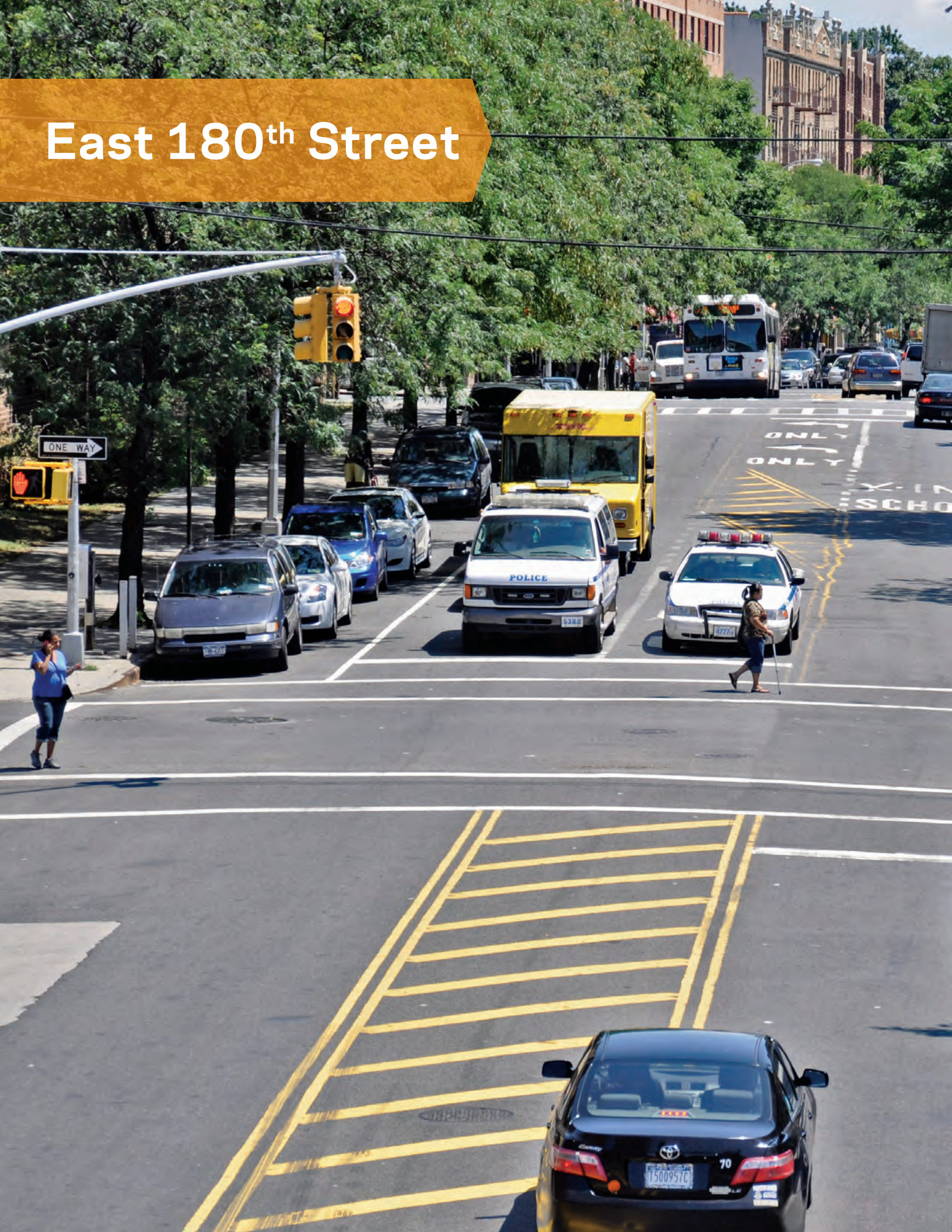


# East 180<sup>th</sup> Street





## Purpose

- Improve pedestrian and driver safety
- Reduce speeding
- Provide safer pedestrian crossings
- Improve traffic operations

## Outreach

- DOT presented plans to the Bronx Community Board 6 (CB6) Full Board in September 2010
- CB6 voted to support the project plans in September 2010

## Approach

- Narrowed travel lanes from 17 feet to 11 feet from Webster Avenue to Boston Road to calm traffic
- Installed a wide center, painted median
- Marked wide parking lanes and maintained all parking
- Installed high visibility markings at the crosswalk at East 180th Street and Boston Road
- Installed left-turn bays to improve safety for pedestrians and motorists and to decrease delay for motorists

## Results

- 67% reduction in pedestrian crashes involving injuries along East 180th Street from Webster Avenue to Boston Road
- Percentage of vehicles traveling over the speed limit decreased by 32% along westbound East 180th Street and by 29% along eastbound East 180th Street



East 180th Street is an east-west arterial located in the Tremont neighborhood of the Bronx. The majority of the corridor is comprised of low-level retail and densely-populated residential land uses. Just north of the project area are Saint Barnabas Hospital and the Bronx Zoo. The corridor is served by the Bx36 and Bx39 bus lines.



East 180th Street is an east-west roadway located in the Tremont neighborhood of the Bronx. The project corridor extends 1.2 miles from Webster Avenue to Boston Road. East 180th Street is approximately 50-feet wide and has one moving lane in each direction. The project corridor is lined with pedestrian retail, schools (PS3, PS57), and densely populated housing complexes.

DOT began studying East 180th Street in 2009. There were 19 severe injuries or fatalities to pedestrians in the study area between 2004 and 2008, making it the fifth highest accident location in the Bronx for crashes per mile. A bicyclist was killed at the intersection with Park Avenue in 2005 and a pedestrian was killed at the Third Avenue intersection in 2004.

The travel lanes on East 180th Street are 17-feet wide, well in excess of the standard 11-foot lanes. East 180th Street also has low traffic volumes. The combination of wide lanes and low volumes provides an opportunity for motorists to speed. DOT developed a plan to improve safety in the corridor. DOT presented the plan to the Full Board of CB6 in September 2010 and CB6 voted in support of the plan that same month. The project was implemented in October 2010.

In order to calm traffic, DOT narrowed each of the moving lanes from 17 feet to 11 feet. The excess space was converted to a 10-foot wide painted, center median with left-turn bays and wide parking lanes. A total of 21 left-turn bays were added along the corridor. The left-turn bays improve safety and reduce delay for through motorists who no longer have to wait for a left-turning vehicle to make the turn. The wide parking lane improves safety by providing a buffer for motorists

exiting their vehicles. Additionally, DOT upgraded the crosswalk at East 180th Street and Boston Road with high visibility markings.

Speeding decreased dramatically as a result of the East 180th Street project. Radar spot speed studies were performed on East 180th Street between Clinton Avenue and Prospect Avenue before and after the project was implemented. On average, in the westbound direction, the percentage of vehicles traveling over the speed limit of 30 mph decreased from 40% to 8%. In the eastbound direction, the percentage of vehicles traveling over the speed limit decreased from 30% to 1%. Average speeds between Clinton Avenue and Prospect Avenue decreased in the westbound direction from 28.9 mph to 25.6 mph, an 11% decrease and in the eastbound direction speeds were reduced by 18% from 27.4 mph to 22.6 mph.

The total number of crashes involving pedestrian injuries along East 180th Street from Webster Avenue to Boston Road decreased by 67% from an average of 14.3 per year during the three years prior to implementation to an annual rate of 4.8 since the project was completed. This decline represents a statistically significant reduction in crashes (for crash analysis methodology, see page 68). In addition, the annualized crash rate involving injuries to pedestrians after implementation was lower than the number of crashes in any of the 10 prior years.

The safety improvements along East 180th Street benefit both pedestrians and drivers by calming traffic, reducing the incidence of speeding, and better organizing the traffic while maintaining capacity.



Traffic calming measures applied on East 180th Street included the narrowing of the travel lanes from 17 feet to 11 feet and the addition of painted center medians and parking lanes.



Left-turn lanes were added at 21 locations along the East 180th Street corridor to improve safety and traffic operations.

Adding a median and left-turn bays and narrowing travel lanes led to a 67% reduction in crashes involving pedestrians and reduced speeding.

#### Crashes with Injuries along East 180th Street Webster Avenue to Boston Road

	Before* (three previous years)			After
<b>Total Crashes with Injuries</b>	40	29	45	32.8
<b>Number of Crashes with Injuries to:</b>				
<b>Motor Vehicle Occupants</b>	20	17	30	26.4
<b>Pedestrians</b>	18	12	13	4.8
<b>Bicyclists</b>	2	0	2	1.6

\*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.

#### East 180th Street Average Traffic Speeds (in m.p.h.) Clinton Avenue to Prospect Avenue

	Before	After	% Change
<b>Westbound</b>	28.9	25.6	-11%
<b>Eastbound</b>	27.4	22.6	-18%

Data collected between 10 a.m.-3 p.m. on a weekday. Before data collected in December 2009. After data collected in January 2011.

#### Percentage of Vehicles Over the Speed Limit on East 180th Street Clinton Avenue to Prospect Avenue

	Before	After	Change
<b>Westbound</b>	40%	8%	-32%
<b>Eastbound</b>	30%	1%	-29%

Data collected between 12-12:30 p.m. on a weekday. Before data collected in April 2009. After data collected in September 2009.