

Park Circle



Purpose

- Calm traffic and reduce driver confusion
- Provide safer pedestrian, bicyclist and equestrian crossings
- Expand pedestrian and bicycle network
- Enhance the streetscape

Outreach

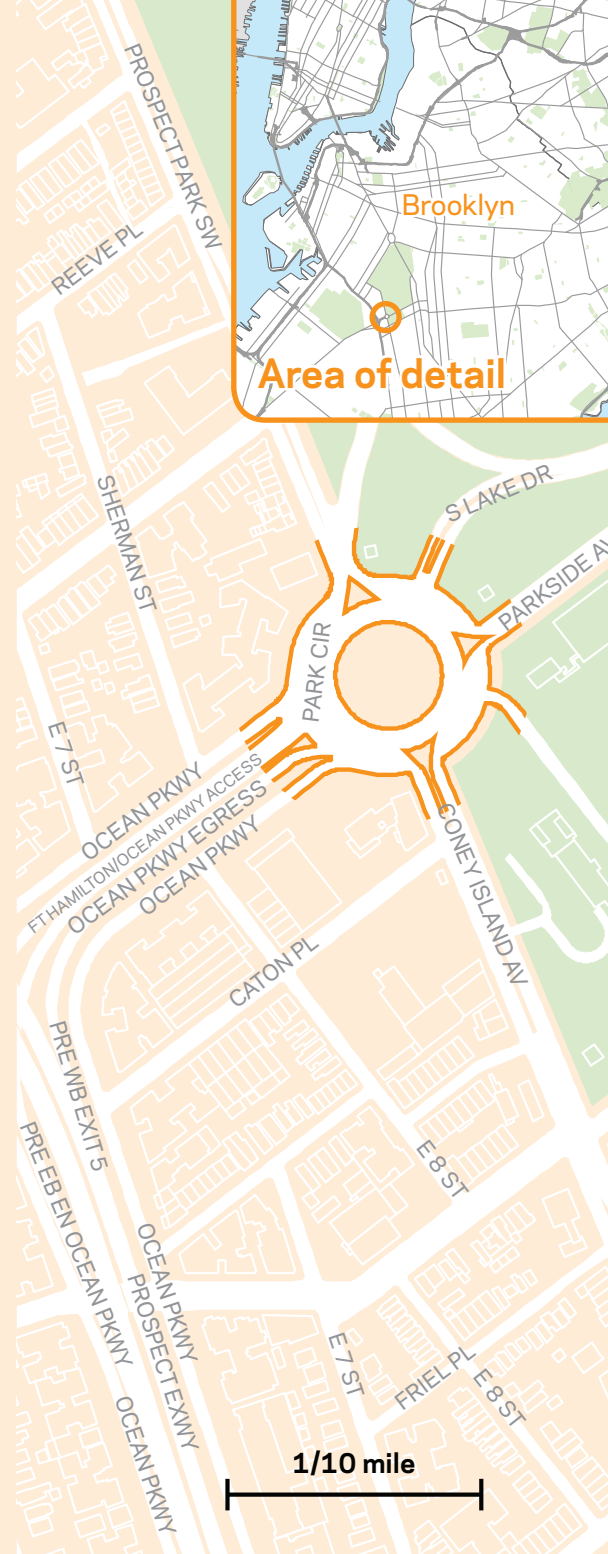
- Brought to DOT's attention by Stable Brooklyn, a neighborhood community group
- DOT held a design workshop in February 2009 for the Transportation Committees of Brooklyn's Community Boards 7, 12 and 14 (CB7, CB12 and CB14)
- DOT presented plans addressing community goals and concerns to CB7, CB12 and CB14 in June 2009 and received support from all the boards for the project; CB7 passed a resolution unanimously in favor of the improvements
- DOT conducted a project walk-through for the public after implementation to refine the project improvements

Approach

- Installed new signage and pavement markings for motorists
- Reconfigured intersections to calm traffic
- Installed new crosswalks and added pedestrian refuge islands
- Installed two new signals and relocated two signals to provide shorter pedestrian crossings across Prospect Park Southwest and the Ocean Parkway and Fort Hamilton/Ocean Parkway access ramps
- Installed a protected bridle path
- Installed a new bicycle path around the circle and along Fort Hamilton Parkway and completed a bicycle connection to the existing Ocean Parkway Greenway

Results

- Reduced driver confusion and calmed traffic through signage, signal and geometry changes
- Travel times decreased for all directions during the morning and evening peaks except trips entering the circle from the northbound approach at Coney Island Avenue
- Outer ring of circle made fully accessible to pedestrians with safe and short crosswalks
- Improved bicycle connectivity
- Added significant landscaping around the circle to visually knit the neighborhoods together and improved neighborhood appearance by transforming the 'expressway' look of the Ocean Parkway and Fort Hamilton/Ocean Parkway access ramps to a 'city street' look



Park Circle is located at the southernmost entrance to Prospect Park in Brooklyn. The traffic circle provides access to the park, major arterials, and Ocean Parkway and Fort Hamilton Parkway. It is a unique location with a myriad of users ranging from motorists to pedestrians and cyclists, and equestrians. Besides the park, most of the land uses around Park Circle are residential.

Park Circle is a high-volume, five-legged traffic circle located in the Windsor Terrace and Kensington neighborhoods of Brooklyn. Park Circle is an historic landmark. This grand entrance to Prospect Park was designed by the famous architect Stanford White and is flanked by the Horse Tamers, bronze sculptures designed by Brooklyn artist Frederic MacMonnies in 1889. Park Circle is also noted as the terminus of the oldest greenway in the United States, the Ocean Parkway Greenway which was designed by Olmsted and Vaux and opened in 1895.

Stable Brooklyn, a neighborhood community group also representing the needs of Kensington Stables, the only remaining horse stable serving Prospect Park, brought safety and access concerns at Park Circle to DOT's attention. In February 2009, DOT held a design workshop for the public and CB7, CB12 and CB14. After a short presentation of DOT's operational tools, participants gathered around tables with existing plans and markers. Each table assigned a representative to report at the end of the meeting their most urgent problems and hopes for Park Circle. DOT used the input from the workshop to help develop the project improvements. DOT held another public workshop in June 2009 to present a summary of the issues along with recommended improvements. This workshop gave the community the opportunity to comment on and refine the recommendations. The project received support from all three community boards and CB7 passed a resolution unanimously in favor of the improvements. In addition to the workshops and presentations, DOT conducted a project walk-through for the public in November 2009 to refine the project improvements.

In order to address the community's concerns regarding the lack of safe connectivity around the circle and to the park, DOT constructed a protected bridle path and bike path around Park Circle. DOT added bike paths on Fort Hamilton Parkway and along Ocean Parkway to provide

a connection to the Ocean Parkway Greenway. DOT also installed new crosswalks: one across the access ramp to Ocean Parkway; one across the Fort Hamilton/Ocean Parkway access ramp; and one from the inner part of the circle to a pedestrian refuge island at Parkside Avenue.

Other changes made at the Ocean Parkway and Fort Hamilton/Ocean Parkway access ramps included the transformation of unused roadbed through landscaping and markings, the installation of two new signals just prior to the circle exit, the addition of landscaped pedestrian refuge islands, and the relocation of large highway overhead gantry signs to a nearby bridge. These changes made the intersections safer by shortening the crosswalks for pedestrians, decreased driver confusion by delineating the road space, and enhanced the streetscape.

Driver confusion and speeding were two vehicular issues identified by the community and DOT throughout the Park Circle study area. DOT added new signage and pavement markings to help reduce driver confusion. Signal timings were adjusted around the circle to improve flow and wide entry and exit curves were redesigned to calm traffic.

The park exit at Prospect Park Southwest was closed and relocated to South Lake Drive. The existing signals at Prospect Park Southwest were relocated closer to the circle and a new signal was added at South Lake Drive for vehicles exiting the park. The intersection reconfiguration at Prospect Park Southwest made it possible to shorten the crossing distance for pedestrians.

Travel time runs were completed for each movement around the circle before and after project implementation. The average travel times are based on the direction that the drivers enter the circle and were calculated for the morning peak (7:30-8:30 a.m.) and the evening peak (4:30-5:30 p.m.). All average travel times decreased or had little change for both time periods except for



The park exit for vehicles was relocated from this location at Prospect Park Southwest to South Lake Drive.



A protected bridle path was constructed around Park Circle to provide a safe route for equestrians accessing Prospect Park.

Pedestrian safety and connectivity improved at Park Circle with the installation of pedestrian refuge islands, signal-protected crosswalks and related changes.

drivers entering the circle in the northbound direction from Coney Island Avenue. Travel times improved the most in the evening peak for westbound drivers; drivers entering the circle from Parkside Avenue saved 37 seconds. Drivers entering the circle from the southbound direction at Prospect Park Southwest experienced a decrease in travel time of 31 seconds in the morning peak and 20 seconds in the evening peak.

DOT examined crash data from the NYPD for the period before and after project implementation. The intersections around Park Circle have not seen significant changes in the overall number of crashes, nor in the number of crashes involving injuries to pedestrians. The number of crashes involving

injuries to pedestrians after implementation is lower than the average for the three prior years. This location does not see a high volume of pedestrians so the sample size for pedestrian injuries is small. It is hoped that the changes will encourage more residents to enjoy walking between neighborhoods and through Park Circle in the future.

The overall safety and access for pedestrians, cyclists, drivers and equestrians was improved. This project provides the only horse path on New York City streets and enhances the street aesthetics for all users of this multi-modal area.



A bicycle lane was added on Fort Hamilton Parkway to expand the bicycle network and provide connections to existing bicycle lanes to the west of Prospect Park.

Park Circle Average Peak Hour Travel Times

Direction of Travel	Time Period	Before	After	Change	% Change
Northbound	AM	00:47	01:09	00:22	46%
	PM	00:55	01:25	00:30	53%
Southbound	AM	01:53	01:22	-00:31	-28%
	PM	01:49	01:29	-00:20	-18%
Westbound	AM	01:18	01:19	00:01	2%
	PM	01:48	01:11	-00:37	-34%
Eastbound	AM	01:54	01:38	-00:16	-14%
	PM	02:01	02:01	00:00	0%

Before data collected in May 2008. After data collected in June 2010. All data collected weekdays between 7:30-8:30 a.m. and 4:30-5:30 p.m. Time shown in minutes, seconds.

Crashes with Injuries at Park Circle

	Before* (three previous years)			After
Total Crashes with Injuries	7	7	3	6.5
Number of Crashes with Injuries to:				
Motor Vehicle Occupants	4	5	1	4.4
Pedestrians	0	0	2	0
Bicyclists	3	2	0	2.2

*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 October 2010) at annual rate. See page 72 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.