

THE RECONSTRUCTION OF EASTERN PARKWAY

SCALE: 1" = 20'



- DESIGNED FOR THE CITY OF NEW YORK PARKS & RECREATION
- DESIGNED BY THE PROSPECT PARK ALLIANCE

SECTION 2: EASTERN PARKWAY FROM WASHINGTON AVENUE TO BUFFALO AVENUE

Introduction

The 1.96-mile Eastern Parkway [Map 7] is the spine for the non-motorized infrastructure planned for the study area. The parkway's malls, originally built as promenades and equestrian paths, are today landmarks and designated parkland. The south mall is the site of a Class I dual carriage greenway for pedestrians and bicyclists, while the north mall is dedicated to pedestrians only.

Eastern Parkway was conceived in 1866 by Frederick Law Olmsted and Calvert Vaux to be a landscaped road built expressly for pleasure riding and driving and scenic access to Prospect Park. The parkway, the world's first, was constructed from Grand Army Plaza to Ralph Avenue (then the Brooklyn boundary) between 1870 and 1874.

Recommendations for this section address three major issues: 1) Improving safety along the length of the malls by mitigating conflicts among motorists, cyclists and pedestrians and creating safer crossings at high volume intersections; 2) Working to heighten the awareness of the significant amenities along the corridor; and, 3) Reinforcing the continuity of the greenway along the parkway and as part of the Brooklyn-Queens Greenway.



Existing Conditions

Land use along Eastern Parkway is primarily residential. Two- and three-story brownstones and some larger apartment buildings line the long blocks of the parkway. Religious institutions are numerous. Commercial uses, such as banks and fast food restaurants, are more prevalent around subway stops at Franklin, Nostrand, Kingston, Schenectady and Utica avenues, and at the eastern end of the parkway.

The parkway is 200 feet wide from curb to curb, with a main roadway and two service roads separated by wide malls. The center roadway has three eastbound and two westbound ten-foot through lanes separated by an eight- to ten-foot striped median which becomes a left-turn lane at each intersection. Two 36-foot wide malls separate the parkway from parallel north (westbound) and south (eastbound) service roads, which are 30 feet wide, with a travel lane flanked by parking lanes on either side.

As stated previously, the southern mall, lined by trees, benches, and special light poles and fixtures, features a 14-foot wide Class 1 path with a dual carriageway, where pedestrians and wheeled users are separated by a granite rumble strip. The north mall is for pedestrians only.

Utica Avenue and Eastern Parkway

The malls are heavily used by neighborhood residents and cyclists passing through. In addition to the Class 1 facility on the malls, Bedford Avenue has Class 2 bicycle lanes offering direct north-south access to the greenway.

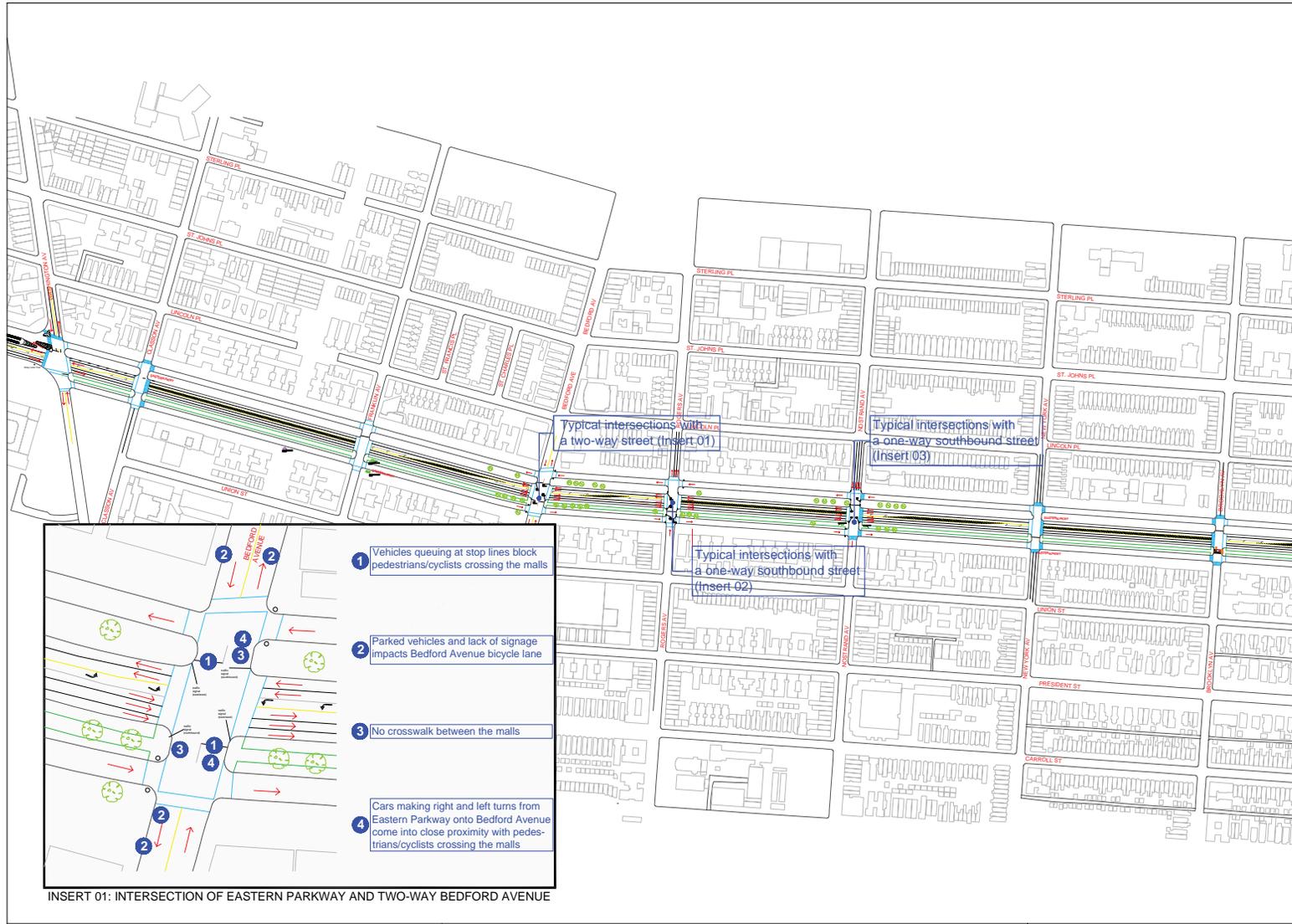
The parkway is signalized at each of the 14 intersections in this section. The service roads are controlled by a combination of signals and stop signs. At intersections with northbound cross streets (Classon, Rogers, New York, Kingston, and Troy avenues), the south service road is signalized, while the north service road is controlled by a stop sign. At intersections with southbound cross streets (Franklin, Nostrand, Brooklyn, Albany, and Schenectady avenues), the opposite is true: the north service road is signalized, while the south service road is stop-controlled. At intersections with two-way streets (Bedford, Utica, Rochester, and Buffalo avenues), both service roads are controlled by stop signs. The service roads have slightly less green signal time than the parkway.



Cyclists on an Eastern Parkway Mall

Vehicular traffic on Eastern Parkway is concentrated on the center roadway. The parkway carries peak hour traffic volumes between 2,000 and 2,500 vehicles in each direction; westbound traffic is heaviest in the morning, and eastbound traffic is heaviest in the evening. The service roads carry mostly local traffic. As with all parkways, commercial traffic is prohibited. Travel speeds are relatively high and vehicles make complicated turning movements at the intersecting cross streets due to the configuration of the parkway. Cars on both the parkway and the service roads turn onto intersecting north-south streets, which may cause queuing in the roadway between the malls. Through vehicles on the cross streets do not always advance completely through the intersection before the signal changes to red, adding to the queuing in the roadbed between the malls. Finally, vehicles on Eastern Parkway seeking access to the service roads (and vice versa) do so at the intersections; there are no slip ramps mid-block.

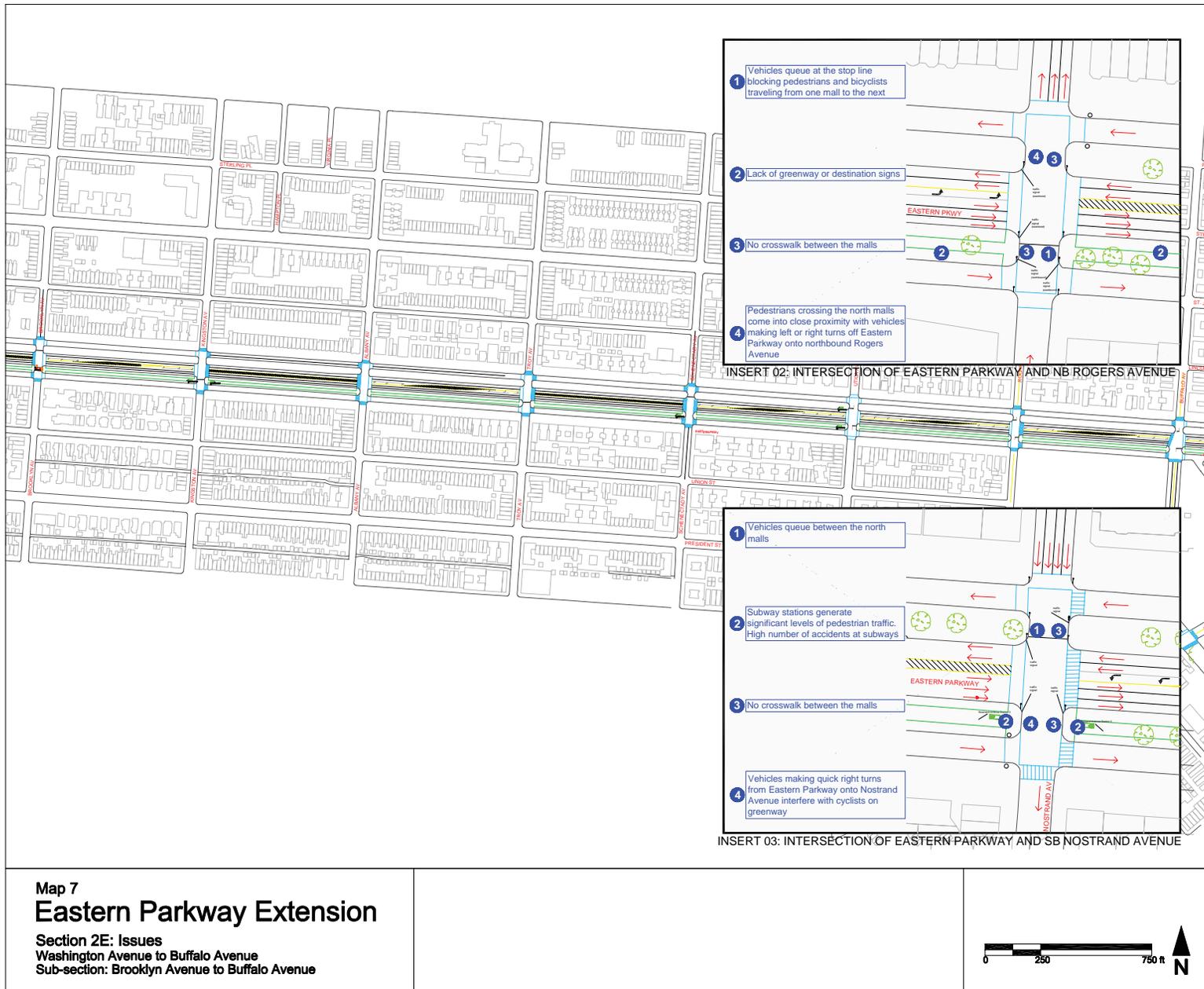
Traffic accidents were prevalent on Eastern Parkway, which averaged 760 total accidents, 400 reportable accidents, and almost 70 pedestrian accidents per year along its length [See Appendix 3: Accident Analysis]. Eastern Parkway intersections with two-way or one-way southbound streets had significantly higher numbers of crashes than one-way northbound streets. Intersections other than Utica Avenue¹ with more than 25 reportable accidents per year include Buffalo, Nostrand, Bedford, and Rochester avenues. Four of the five worst intersections for pedestrian accidents - Franklin, Nostrand, Buffalo, Kingston, and Bedford avenues - feature subway stations. Bicycle accidents were highest at Nostrand Avenue. There were 19 fatalities, most of which involved pedestrians, over the five years studied, including four fatalities at Franklin Avenue, four mid-block between Nostrand and New York avenues, and two each at Utica and Bedford avenues.



Map 7
Eastern Parkway Extension

Section 2W: Issues
 Washington Avenue to Buffalo Avenue
 Sub-section: Washington Avenue to Brooklyn Avenue





Findings

- Of the 14 intersections in this section of Eastern Parkway, only two have crosswalks striped between the south malls. As a result, pedestrians and cyclists on the greenway must cross from one mall to the next without benefit of a crosswalk, thereby disrupting the continuity of the greenway and exposing users to unnecessary vehicular conflict. Pedestrians on the north mall also must cross the intersection without a crosswalk or a pedestrian signal.
- Vehicles make quick left and right turns from Eastern Parkway to intersecting north- and southbound streets. These cars come into close proximity with east- and westbound pedestrians and cyclists attempting to cross the intersection from one mall to the next.
- Cars queue between the north or south malls, blocking the roadbed and forcing pedestrians and bicyclists crossing between malls to navigate around them, creating a hazardous situation.
- Accidents are high. Ten of the 14 intersections averaged at least 15 vehicular accidents per year. The seven locations with the highest number of reportable, pedestrian, and bicycle accidents were either two-way or one-way southbound streets.
- Eight of the study area's 19 fatalities occurred at two locations on Eastern Parkway: mid-block between Nostrand and New York avenues and at the intersection of Franklin Avenue.
- Vendors, common on the malls near subway stations, conflict with cyclists.
- There is considerable congestion at intersections with bus stops and/or subway stations.
- There is little or no signage to highlight the cultural and religious institutions, the greenway, or the parks and recreational areas along the Eastern Parkway corridor.



Bus blocking mall crosswalk

Recommendations

Intersection Improvements

The streets intersecting Eastern Parkway are similar in terms of surrounding land use, level of vehicular traffic, type of traffic control device, and signal timing. The application of standard recommendations at each intersection may vary slightly depending on whether the cross streets are one-way southbound streets (Nostrand, Franklin, Brooklyn, Albany, and Schenectady avenues); one-way northbound streets (Rogers, Classon, New York, Kingston, and Troy avenues); or two-way streets (Bedford [Map 8], Rochester and Buffalo avenues).²

Mark raised pedestrian-bicycle crosswalks between the malls

High-visibility crosswalks should be marked between the malls at each intersection along Eastern Parkway, as proposed at Washington Avenue and implemented at Utica Avenue. Crosswalks between the south malls should be consistent with the configuration of the existing malls. They should be at least as wide as at Utica Avenue, and designed with space and markings for both cyclists and pedestrians. It is further recommended that the stripes at each edge be constructed of a slightly raised surface, such as profiled markings or rumble strips, to provide a visual and physical warning to turning vehicles. The crosswalks should be positioned to permit vehicles to queue between the service and main roads: the crosswalks should be marked on the north side of the mall for northbound streets, and on the south side for southbound streets. Crosswalk implementation is subject to warrant analysis.



Intersection between malls without crosswalk

Existing signs on the malls that instruct “Turning Vehicles Yield to Pedestrians in the Crosswalk” should be replaced by a new sign [Figure 2] displaying the message to yield to pedestrians and cyclists and the new crosswalk design.

Mark stop lines

Advanced stop lines should be marked four feet from the crosswalk at every intersection along Eastern Parkway.

Install a leading pedestrian-bicycle signal phase

A leading pedestrian and bicycle interval should be incorporated into the signal phasing at each controlled intersection to permit greenway users to enter the crosswalk prior to vehicles, thus limiting unnecessary conflict. Pedestrian signals should be installed at the intersections along the north malls.