

Location: Flatbush Avenue and Glenwood Road



**Intersection of Flatbush Avenue and Glenwood Road**

Description of Existing Conditions

Flatbush Avenue is about 60 ft wide near Glenwood Road and has two travel lanes and a parking lane in each direction of traffic. The sidewalks along this major arterial are 17 –18 ft wide.

Glenwood Road is segmented and does not align as it intersects Flatbush Avenue. It is a two-way street with one travel lane in each direction of traffic and has a width of 40 ft. The sidewalks on Glenwood Road are 17 -18 ft wide.

Vehicle volumes are observed to be heavy at times in this part of Flatbush Avenue. Glenwood Road has moderate vehicle volumes which can be heavy at times especially during the evening peak hours. In general pedestrian volumes are moderate.

Two signs near the “Stop bar” at the intersection (one at each stop bar location) inform pedestrians not to cross at that particular location: “No Ped Crossing Use Crosswalks”.

Pedestrian Accident Data 2004 -200613 Pedestrian Accidents

Table: C-25 – Summary of Pedestrian Accidents

<u>Accident Location</u>	<u>Year</u>	<u>Time</u>	<u>Pedestrian Action</u>	<u>P e d e s t r i a n Location</u>	<u>Vehicle Action</u>
Glenwood Rd	9/22/2004	daylight	crossing against signal	at intersection	going straight ahead
Glenwood Rd	10/30/2004	night, wet surface	walking along the road against traffic	at intersection	going straight ahead
Glenwood Rd	10/23/2004	night	crossing with signal	at intersection	making a left turn
Glenwood Rd	12/6/2004	night, rain	crossing with signal	at intersection	making a left turn
Glenwood Rd	2/18/2005	night	not reported	at intersection	going straight ahead
Glenwood Rd	5/7/2005	daylight	other actions in road	at intersection	parked getting out
Glenwood Rd (2 peds injured)	4/15/2006	dusk	crossing with signal	at intersection	first vehicle going straight ahead and other vehicle making a right turn
Glenwood Rd	9/24/2005	daylight	crossing against signal	at intersection	making a left turn
Glenwood Rd	11/8/2006	daylight, rain	crossing against signal	at intersection	making a right turn
Glenwood Rd	12/25/2006	night, rain	crossing with signal	at intersection	making a left turn
Glenwood Rd	12/4/2006	not reported	not reported	at intersection	making a U-turn
Glenwood Rd	9/19/2006	daylight	not in roadway	at intersection	making a right turn

Problems and Opportunities

- Pedestrian Crossing at “Stop Bar” and Midblock locations  
Since Glenwood Road does not align when it intersects Flatbush Avenue, it creates two intersections. In between these intersections two stop bars have been placed on Flatbush Avenue to control vehicles as they approach the intersections. Several pedestrians were observed crossing Flatbush Avenue at the stop bars or midblock when the light turned green for Glenwood traffic. This is an unsafe situation for pedestrians since westbound and eastbound drivers making a turn onto Flatbush Avenue do not expect pedestrians to be crossing midblock or at the stop bars and do not slow down as they make the turn. There are signs to inform pedestrians not to cross at that particular location: “No Ped Crossing Use Crosswalks”. But these signs are smaller than the other regulatory signs posted and are not always noticed by pedestrians arriving at the intersection because of their size and location.

Furthermore this area of Flatbush Avenue is a common transfer point between the B41, B6 and B11. The bus stops are located on Flatbush Avenue and on Glenwood Road near the intersections (see following diagram map of existing conditions). Many pedestrians transferring from one bus to another often cross midblock without using the crosswalks.

The midblock pedestrian crossing volumes collected for this location are: 28 pedestrians for the AM peak period (7:00 – 9:00 AM), 35 pedestrians for the MD peak period (12:00 – 2:00 PM), 35 pedestrians for the PM peak period (4:00 – 6:00 PM), and 73 pedestrians for the Weekend peak period (1:00 – 3:00 PM).

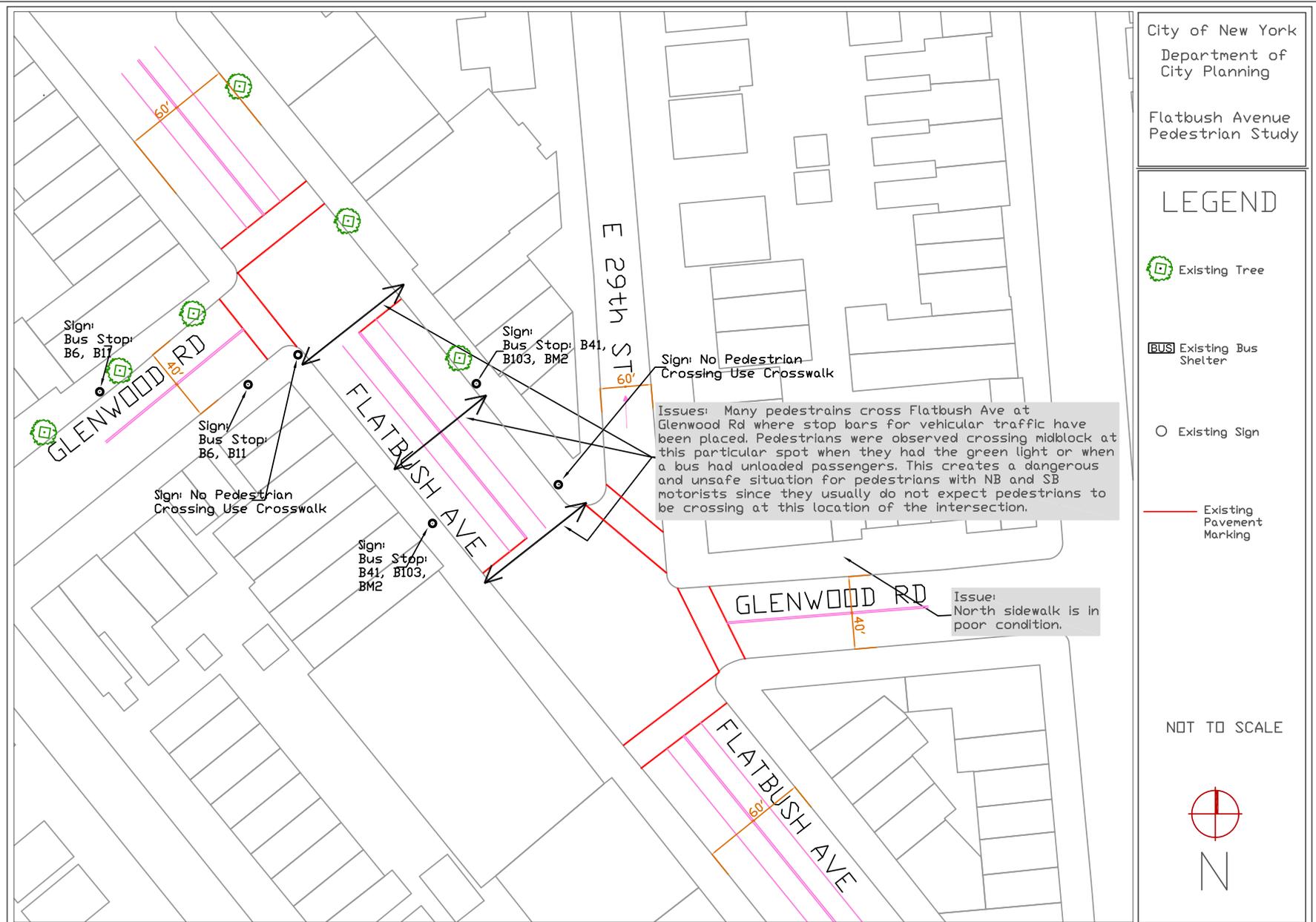


Pedestrians unsafely cross Flatbush Avenue near Glenwood Road at a stop bar while traffic from Glenwood Road have the green light and turn onto Flatbush Avenue.

- **Traffic congestion and delays**  
Traffic congestion and delays occur at times on Flatbush Avenue at Glenwood Road and are often caused by double parking in the southbound lanes of trucks and vans loading /unloading merchandise. Several jaywalkers were observed during these delays crossing Flatbush Avenue at midblock locations north and south of Glenwood Road.
- **Pavement Conditions**  
The pavement in this section of the study area is in poor condition with uneven segments. The north sidewalk of Glenwood Rd (segment south of E 29<sup>th</sup> Street) is cracked and uneven particularly near Flatbush Avenue.

### Recommendations

- **Improve Pedestrian Crossing**  
The existing signs “No Ped Crossing Use Crosswalks” are not very useful based on their placement and orientation. As a recommendation, make each sign a double-sided sign that can be seen from both directions as you approach the midblock location. Have an additional sign put up adjacent to or above the “No Ped Crossing Use Crosswalks” sign. This sign should be an image of a pedestrian with a red interdiction symbol over it (MUTCD manual “R9-3a” sign; see Appendix D-2: Standards for Signs Recommended). It reinforces the first sign and displays graphically that it is prohibited for pedestrians to cross the roadway at an undesirable location where crossing is not designated.
- **Bus Stop Relocation**  
An additional recommendation is to move the B41 northbound bus stop north of the existing crosswalk with the cooperation of the Metropolitan Transit Authority (MTA). Placing the bus stop at this new location will make it more convenient for bus passengers transferring to/from the B41 bus. The bus stop would be closer to the east - west crosswalk as bus riders cross Flatbush Avenue to transfer from one bus line to the other. Appropriate placement of the bus stop at this intersection is key to pedestrian safety (See following map of recommendations).
- **Signage**  
As a proposal to minimize double parking on the west side of Flatbush Avenue, loading and unloading zones should be provided for trucks and vans making deliveries to businesses in the area. In return it can discourage pedestrian jaywalking at this location when vehicular traffic delays and gaps are minimized. The loading zone can be provided by removing the “No Parking” signs and metered parking located south of the bus stop and replace them with “No Standing Anytime, except for Deliveries” signs (See following map of recommendations).  
  
An increase in enforcement presence can help cut back on illegal double parking in the area.
- **Improve Pavement Conditions**  
Repair the pavement at this intersection including the north sidewalk of the segment of Glenwood Road south of E 29<sup>th</sup> Street in order to enhance the street environment for pedestrians walking in this area.

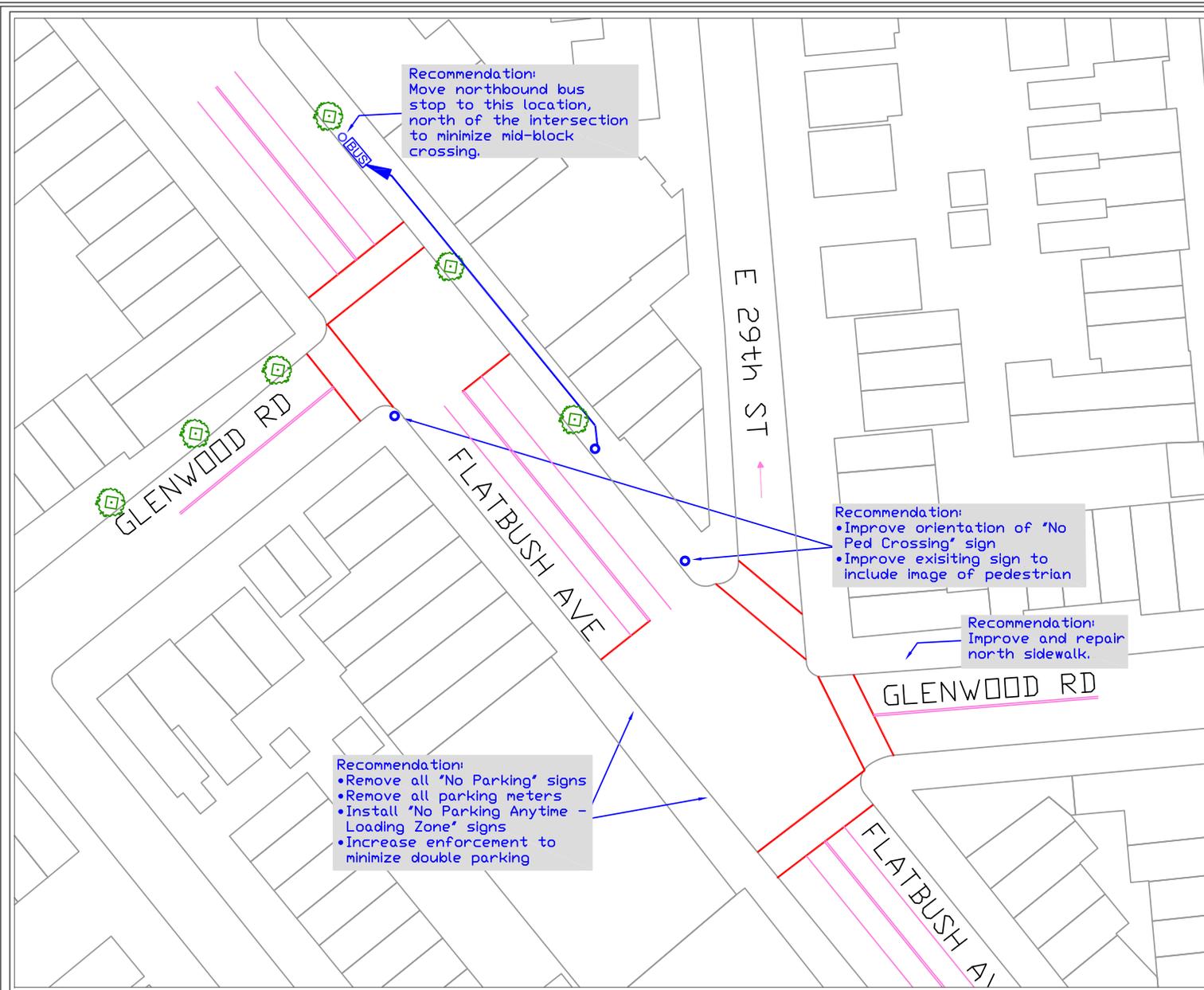


Flatbush Avenue and Glenwood Road  
Existing Conditions - Figure: C-13a

LEGEND

-  Existing Tree
-  Recommended Tree (shown in blue)
-  Existing Bus Shelter
-  Recommended Bus Shelter (shown in blue)
-  Existing Sign
-  Recommended Sign (shown in blue)
-  Existing Pavement Marking
-  Recommended Marking (shown in blue)

NOT TO SCALE



Flatbush Avenue and Glenwood Road  
 Recommendations - Figure: C-13b

