# Fulton Street Corridor Enhancement

## Flatbush Avenue to Nostrand Avenue





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Fulton Street is a major east-west commercial street in Brooklyn serving the communities of Fort Greene and Bedford-Stuyvesant. It cuts across the street grid resulting in the formation of irregular intersections. This creates problems for pedestrians, buses, trucks and general traffic. Building on the recommendations of the *Downtown Brooklyn Traffic Calming Program*, which resulted in the installation of such traffic calming measures as a "gateway" treatment on Fulton Street at South Oxford Street, and the recommendations generated at recent DOT Retreats, additional improvements were developed for a 1.7-mile segment of Fulton Street between Flatbush and Nostrand Avenues.

## **Gateways**

The configuration of many intersections on Fulton Street generally does not require vehicles to reduce speed when turning. The "oblique" angles at these intersections allow vehicles turning from or to Fulton Street to proceed at speeds incompatible with the high pedestrian activity and the residential and commercial land use of the corridor. In response, the intersections have been re-configured to normal "right angle" corners. In addition, crosswalks have been shortened to further reduce conflicts between pedestrians and turning vehicles. Markings, flexible bollards and other conventional traffic control devices were used to normalize the intersections. (More permanent treatments will be incorporated in reconstruction plans for Fulton Street.) These gateway treatments were installed on Fulton Street at the following intersections:

- Gates Avenue
- Hanson Place
- Putnam Avenue

#### Gates Avenue

The gateway treatment at Gates Avenue consisted of markings to create chanellized sections of the roadway, and flexible bollards to normalize the intersection and shorten the crossing distance (Figures 1 and 2).



Figure 1. **Before**. Looking east on Fulton Street at Gates Avenue.



Figure 2. **After.** Looking east on Fulton Street Gates Avenue.

#### Hanson Place

The gateway treatment at Hanson Place included the closure of an existing "free right" turning movement from eastbound Hanson Place to eastbound Fulton Street (Figures 3 and 4). Three parking spaces were eliminated on the southside of Hanson Place.



Figure 3. **Before**. Eastbound Hanson Place approaching Fulton Street.

Figure 4. **After**. Eastbound Hanson Place approaching Fulton Street.

The Downtown Brooklyn Traffic Calming Program had recommended angle parking on Hanson Street between Fulton Street and South Portland Avenue. The proposed gateway treatment provided for the installation of twelve angle parking spaces on the north side of Hanson Place. This resulted in the reduction in the number of travel lanes on eastbound Hanson Place from two to one lane by making the left lane for left turns only onto northbound South Portland Avenue. The approach at Fulton Street has been marked for two lanes - left turn/through only and right turn only.

#### Putnam Avenue

The gateway treatment converted Putnam Avenue from two-way to one-way westbound between Fulton Street and Grand Avenue (Figure 5). This conversion required minor rerouting of the eastbound B26 bus to reach Putnam Avenue via Classon Avenue. The rerouting has been accommodated by "daylighting" the east curb of Classon Avenue north of Fulton Street and installing a Stop line (Wide Turn Zone) on westbound Putnam Avenue in advance of Classon Avenue.



Figure 5. Gateway treatment and street-direction conversion for Putnam Avenue at Fulton Street.

## Other Gateways

Modest gateway treatments, consisting primarily of neckdowns utilizing markings and flexible bollards, , were installed at the following intersections:

- Carlton Avenue
- Downing Street
- Irving Place
- Spencer Place

## **Bus Lanes**

At Flatbush Avenue, Fulton Street connects directly to the Fulton Mall, an intensely used transit facility. To the east of Flatbush Avenue, up to five bus routes (B25, B26, B38, B44 and B52) operate on Fulton Street, with 42 scheduled buses per hour during the peak period. In order to improve the reliability of bus operations, bus lanes have been installed westbound on Fulton Street from South Oxford Street to Hudson Avenue and eastbound from Flatbush Avenue to Ft. Greene Place (Figure 6). The lanes operate weekdays 7-10 AM along the north curb (westbound) and 4-7 PM on the south curb (eastbound).

Mast arm poles to support overhead bus lane signs were installed on two blocksides on westbound Flatbush Avenue (between Ft. Greene Place and St. Felix Place, and between Ashland Place and Rockwell Place) and on two blocksides on eastbound Fulton Street (between Flatbush Avenue and Rockwell Place, and between Ashland Place and St. Felix Place).



Figure 6. New Bus Lane on Fulton Street.

### **Pedestrian Safety**

The crosswalks at intersections along Fulton Street have been upgraded to current DOT standards for locations with high-pedestrian activity. The upgrades neluded the installation of high-visibility crosswalks. In addition, at the intersection of Fulton Street at Lafayette Avenue/Ft. Greene Place, the low-volume left turn from eastbound Lafayette Avenue to westbound Fulton Street has been prohibited. This permits the signalization of the west crosswalk at Ft. Greene Place.

## **Traffic Mobility**

In order to improve general traffic operations and safety, several improvements were made in the corridor. These include the installation of large street name signs and oversized one-way arrows on one-way streets approaching Fulton Street. Large street name signs have been installed on Fulton Street at:

- Ashland Place
- Bedford Avenue
- Carlton Avenue
- Classon Avenue
- Flatbush Avenue

- Franklin Avenue
- Nostrand Avenue
- Vanderbilt Avenue
- Washington Avenue

Oversized one-way arrows have been installed at the following intersections:

- Adelphi Street
- Carlton Avenue
- Classon Street
- Downing Street
- Franklin Avenue
- Grand Avenue
- Hanson Place

- Rockwell Place
- Spencer Place
- South Elliot Place
- St. Felix Street
- St. James Place
- Waverly Avenue

Wide turn zones (WTZs) have been established to permit trucks and other large vehicles to turn from and onto Fulton Street safely and without delay. New signs and markings were created to designate WTZs (Figure 7). Locations on Fulton Street include:

- Classon Avenue
- Franklin Avenue
- Nostrand Avenue
- Washington Avenue.



Figure 7. Wide Turn Zone Warning Signs for Pedestrians.

Installation of the corridor enhancements on Fulton Street were completed in October 2004.

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