



## Department of Transportation

---

POLLY TROTTENBERG, Commissioner

June 12, 2015

The Honorable David G. Greenfield  
Council Member, 46<sup>th</sup> District  
4424 16<sup>th</sup> Avenue  
Brooklyn, New York 11234

Dear Council Member Greenfield:

This is in reply to your May 12<sup>th</sup> e-mail requesting a summary of our traffic studies for the intersection of 51<sup>st</sup> Street and Old New Utrecht Road.

Attached is the Summary Report for this intersection.

Thank you for your interest in this matter.

Very truly yours,

Keith Bray  
Brooklyn Borough Commissioner

KB:ahb:jb  
CK14-1563  
DOT-232750-X2V8

bc: K. Bray, A. Borock, E. Athanailos, J. Baez, V. Preston, Queens Borough Engineering Office

## **Intersection Control Study Summary Report**

This is in reply to your request for a summary of the traffic study and/or report performed by the Department of Transportation (DOT) that resulted in a denial of Multi-Way Stop controls at the intersection of 51<sup>st</sup> Street and Old New Utrecht Road in Brooklyn, New York.

This is a four-legged intersection. 51<sup>st</sup> Street is a one-way westbound street, while Old New Utrecht Road is a one-way southbound street. The intersection is controlled by a Stop sign for southbound Old New Utrecht Road and these vehicles must either make a right turn or go through.

In order to determine if Multi-Way Stop controls are justified at this location, DOT conducted an engineering study of traffic conditions, pedestrian characteristics and physical characteristics of the location. The study included an analysis of factors related to the existing operation and safety at the location (and the potential to improve these conditions), and the applicable factors contained in the federal Manual on Uniform Traffic Control Devices (MUTCD).

A full description of the federal Multi-Way Stop applications are available online at <http://mutcd.fhwa.dot.gov/>.

### **Field Observation Data (Manual Counts)**

Manual vehicle and pedestrian counts were conducted on February 24<sup>th</sup> from 6:00 to 7:00 pm and on February 25<sup>th</sup> from 7:30 to 8:30 am and from 2:30 to 3:30 pm (manual counts are typically conducted during morning and evening peak hours and during school dismissal times if required).

### ***VEHICULAR VOLUMES***

At 51<sup>st</sup> Street and Old New Utrecht Road A.M. peak hour volumes were 73 vph on the major [51<sup>st</sup> Street] and 34 vph on the minor [Old New Utrecht Road], dismissal hour volumes were 113 vph on the major and 70 vph on the minor, and P.M. peak hour volumes were 84 vph on the major and 53 vph on the minor.

### ***PEDESTRIAN VOLUMES***

Pedestrian volumes [crossing 51<sup>st</sup> Street] were low - 99 pedestrians during the A.M. peak, 64 pedestrians during dismissal and 100 pedestrians during the P.M. peak.

### ***SPEED***

The 85<sup>th</sup> percentile speed (the speed at which 85% of vehicles travel at or below) on westbound 51<sup>st</sup> Street was 27 miles per hour (mph) which is not excessive.

## ***CRASH EXPERIENCE***

We were unable to document any preventable accidents within any 12 month period [between March 2012 and March 2015].

2012 – One total crash.

2013 – None.

2014 – Two total crashes.

2015 – Three total crashes as of March 5<sup>th</sup>.

## **Multi-Way Stop Applications**

Multi-Way Stop controls can be considered when there are five or more preventable crashes within a 12 month period. Such crashes include right angle collisions as well as left turn and right turn collisions.

- At the intersection of 51<sup>st</sup> Street and Old New Utrecht Road, the highest number of crashes have occurred in 2015 (three total crashes).

Multi-Way Stop controls can be considered when the vehicle volume on the major street approach averages at least 300 vehicles per hour for any eight hours of an average day and the combined vehicular, pedestrian and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same eight hours.

- At 51<sup>st</sup> Street and Old New Utrecht Road A.M. peak hour volumes were 73 vph on the major [51<sup>st</sup> Street] and 133 combined units per hour (uph) on the minor [Old New Utrecht Road],
- School dismissal hour volumes were 113 vph on the major [51<sup>st</sup> Street] and 134 combined units per hour (uph) on the minor [Old New Utrecht Road],
- In the P.M. peak there were 84 vph on the major and 153 combined units per hour (uph) on the minor.

## **Conclusion**

In accordance with this engineering study, we have determined that this location does not meet any of the aforementioned guidelines for a Multi-Way Stop control. You may resubmit your request for additional intersection controls in 18 months, at which time we will re-study the intersection.