

KEISHA LANCE BOTTOMS Mayor

55 TRINETY AVE., SW. ATLANTA, GEORGIA 30303-0324 SUITE 4700, CITY HALL - SOUTH (404) 330-6240 FAX (404) 658-7552 email: publicworks@atlanta.gov

DEPARTMENT OF PUBLIC WORKS JAMES A. JACKSON, JR., Interim Commissioner

MEMORANDUM

DATE:

November 16, 2018

TO:

Councilmember Dustin Hills

City Council District 9

FROM:

Cotena P. Alexander

Program Management Officer Office of Transportation

RE:

All-Way Stop Analysis on Defoor Avenue at Claremont Street, NW

The Department of Public Works/Office of Transportation has completed a comprehensive traffic study in response to your request to investigate the feasibility of converting the intersection of Defoor Avenue at Claremont Street NW to All-Way Stop control.

The analysis reveals that the intersection does not meet warrants for all-way stop control based on volumes on Defoor Avenue NW and Claremont Street NW. Also, the crash history not meeting the required minimums.

A detailed summary of the traffic study results for this location is provided below.

All-Way Stop and Traffic Signal studies consist of: 1) a traffic volume count and a traffic speed study; and 2) a two-year accident history profile.

The City of Atlanta and other jurisdictions within the State of Georgia, who are responsible for the installation of traffic control devices within the State, must adhere to the guidelines, standards and warrants as set forth in the Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD). MUTCD is approved by the Federal Highway Administrator as the National Standard in accordance with

Title 23 U.S. Code, Sections 109(d), 114(a), 217, 315, and 402(a), 23 CFR 655, and 49 CFR 1.48(b)(8), 1.48(b) (33), and 1.48(c)(2) for any street, highway, or bicycle trail open to public travel.

The Manual on Uniform Traffic Control Devices MUCTD, Section 2B-07 states that:

The following criteria should be considered in the engineering study for a multi-way stop sign installation:

- A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.
- B. A crash problem, as indicated by 5 or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right- and left-turn collisions as well as right-angle collisions.

C. Minimum volumes:

- 1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day, and
- 2. 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 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but
- If the 85th-percentile approach speed of the major-street traffic exceeds 65 km/h or exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the above values.
- D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.

The results of a twenty-four-hour traffic volume counts were as follows:

Defoor Avenue Eastbound = 3401
 Defoor Avenue Westbound = 2816
 Claremont Street Southbound = 140

The 85th percentile approach speed was 36.56 miles per hour eastbound, and 34.7 miles per hour westbound on Defoor Avenue NW.

In addition to the volume warrant, the MUTCD states that a Multi-Way Stop may be warranted where there exists "An accident problem, as indicated by 5 or more reported accidents of a type susceptible of correction by a multi-way stop installation in a 12-month period." Police records show that there were no correctible accidents in the last 24 months.

If you need additional information or clarification, please contact me.

CPA/bb

cc: Nursef Kedir NPU-D Correspondence File



KEISHA LANCE BOTTOMS
Mayor

55 TRINITY AVE., SW, ATLANTA, GEORGIA 30303-0324 SUTTE 4700, CITY HALL - SOUTH (404) 330-6240 FAX (404) 658-7552 email: publicworks@atlanta.gov DEPARTMENT OF PUBLIC WORKS
JAMES A. JACKSON, JR.,
Interim Commissioner

MEMORANDUM

DATE:

November 16, 2018

TO:

Councilmember Dustin Hills

City Council District 9

FROM:

Cotena Alexander 🎷

Program Management Officer Office of Transportation

RE:

All-Way Stop Analysis on Defoor Avenue at Harper Street, NW

The Department of Public Works Office of Transportation has completed a comprehensive traffic study in response to your request to investigate the feasibility of converting the intersection of Defoor Avenue at Harper Street NW to All-Way Stop control.

The analysis reveals that the intersection does not meet warrants for all-way stop control based on volumes on Defoor Avenue NW and Harper Street NW. Also, the crash history not meeting the required minimums.

A detailed summary of the traffic study results for this location is provided below.

All-Way Stop and Traffic Signal studies consist of: 1) a traffic volume count and a traffic speed study; and 2) a two-year accident history profile.

The City of Atlanta and other jurisdictions within the State of Georgia, who are responsible for the installation of traffic control devices within the State, must adhere to the guidelines, standards and warrants as set forth in the Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD). MUTCD is approved by the Federal Highway Administrator as the National Standard in accordance with

Title 23 U.S. Code, Sections 109(d), 114(a), 217, 315, and 402(a), 23 CFR 655, and 49 CFR 1.48(b)(8), 1.48(b) (33), and 1.48(c)(2) for any street, highway, or bicycle trail open to public travel.

The Manual on Uniform Traffic Control Devices (MUCTD, Section 2B-07 states that: The following criteria should be considered in the engineering study for a multi-way STOP sign installation:

- A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.
- B. A crash problem, as indicated by 5 or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right- and left-turn collisions as well as right-angle collisions.

C. Minimum volumes:

- 1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day, and
- 2. 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 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour, but
- 3. If the 85th-percentile approach speed of the major-street traffic exceeds 65 km/h or exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the above values.
- D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.

The results of a twenty-four-hour traffic volume counts were as follows:

Defoor Avenue Northbound
 Defoor Avenue Southbound
 Harper Street Westbound
 401
 649

The 85th percentile approach speed was 36.00 miles per hour nortbound, and 36.56 miles per hour southbound on Defoor Avenue NW.

In addition to the volume warrant, the MUTCD states that a Multi-Way Stop may be warranted where there exists "An accident problem, as indicated by 5 or more reported accidents of a type susceptible of correction by a multi-way stop installation in a 12-month period." Police records show that there were no correctible accidents in the last 24 months.

If you need additional information or clarification, please contact me.

CPA/bb

cc: Nursef Kedir NPU-D Correspondence File



KEISHA LANCE BOTTOMS Mayor

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DEPARTMENT OF PUBLIC WORKS JAMES A. JACKSON, JR., Interim Commissioner

MEMORANDUM

DATE:

November 16, 2018

TO:

Councilmember Dustin Hills

City Council District 9

FROM:

Cotena Alexander

Program Management Officer Office of Transportation

RE:

All-Way Stop Analysis on Harper Street at Woodland Hills Ave, NW

We have received your memorandum requesting that the Office of Transportation investigate the feasibility of installing a multi-way stop control at the intersection of Harper Street at Woodland Hills Ave, NW. In response to your request, the Office of Transportation performed a comprehensive multi-way stop control study for the subject intersection(s); and has concluded the intersection has met the conditions for a multi-way stop control.

The multi-way stop control study consists of: 1) a traffic volume count; 2) a traffic speed study; and 3) a twoyear accident history profile. Because of the growing concerns regarding multi-way stop within residential areas, we have revised the Federal Highway Administration's traffic guidelines for multi-way stop control warrants specifically for local streets. The revised warrants are applicable to local streets, and are based on a point system, where a minimum of five points is needed to meet warrants. The intersection of Harper Street at Woodland Hills Ave NW received five (5) points.

We will install public notice signs to alert drivers that the intersection will be converted into an all way stop the week of December 10, 2018 and then install necessary signs and markings to effectuate the change the week of December 17, 2018.

For your reference, we have attached a more detailed analysis of the residential warrants.

If you need additional information or clarification, please contact me.

CPA/bb

cc: Nursef Kedir NPU-D

Correspondence File

All-Way Stop Analysis on Harper Street at Woodland Hills Ave NW

Three factors are taken into consideration:

- 1. The sight distance based on a speed limit of 25 miles per hour;
- 2. The number of correctible accidents occurring within a 12-month period; and
- 3. The total intersection volume split (the minor street must be at least 40 percent of the total intersection volume for a 'plus'-type intersection, and at least 25 percent of the total intersection volume for a 'tee'-type intersection).

Results (Revised Residential Warrants)

A twenty-four-hour traffic volume count, speed study and accident investigation were conducted in October of 2017. The results of this analysis revealed the following:

• Sight distance based on a speed limit of 25 m.p.h.	1 point
• Correctible accidents in a 12-month period (No reported accidents in the last 24 months)	0 point
• Traffic volume (Total intersection volume if split requirements are satisfied)	4 points
Total Points Assigned	5 points

KEISHA LANCE BOTTOMS MAYOR 55 TRINITY AVENUE, S.W. SUITE 4700, CITY HALL SOUTH ATLANTA, GEORGIA 30303-3531 TEL. (404) 330-6240 FAX. (404) 658-7552 DEPARTMENT OF PUBLIC WORKS James A. Jackson, Jr Interim Commissioner

MEMORANDUM

Date:

November 7, 2018

To:

Councilmember Dustin Hillis

City Council District 9

From:

Cotena Alexander, Program Management Officer

Office of Transportation

Re:

Request for Speed Tables on Springer St, NW between Defoor Ave and Harper St

We regret to inform you that the above referenced street did not meet the technical requirement for speed table installation. The City requirement is that the 85th percentile speed must be at least 10 mph above the posted speed limit; the speed limit for this street is 25 mph and the study shows 85th percentile speed of 26 mph. Also, the weekday traffic volume on the street segment must be between 400 and 3,000 vehicles within a 24-hour period to be considered for speed a table. The volume for this study is 286. No further action is needed at this time.

Please find the attached Speed Table Request Criteria which indicates the specific technical requirement(s) and standard(s) for which this street segment did not meet.

Should you have any questions or would like to discuss this determination further, please call Adolphus Ofor, Senior Traffic Engineer, at (404) 330-6501, or via email to: aofor@atlantaga.gov.

Attachment

cc: Adolphus Ofor, Department of Public Works

File

CITY OF ATLANTA SPEED TABLE PROGRAM

REQUESTED STREET SEGMENT: Springer Street, NW between Defoor Avenue and Harper Street

SPEED TABLE INSTALLATION STANDARD(S) NOT MET AS INDICATED BY "X":

The street segment must be classified as a "local street", according to the City of Atlanta Street Classification Map.

The street segment must be less than 40 feet wide, from the edge of the pavement on one side of the street to the edge of the pavement on the opposite side of the street.

The grade (slope) of the street segment must be less than 8% for safety reasons.

X The weekday traffic volume on the street segment must be between 400 and 3,000 vehicles within a 24-hour period. (*Traffic volume was 286*)

Less than 5% of the total vehicles on the street segment may have a long wheel base (such as trucks or buses).

X At least 15% of the total traffic volumes on the street segment must exceed the posted speed limit by 10 miles per hour, or more. (85th percentile speed was 26 mph; speed limit is 25 mph)

Traffic Calming Study Summary

Street Segment (s): Springer Street, NW between Defoor Avenue and Harper Street

Date of Traffic Count/Speed Study: 9/27/2018 to 9/28/2018

Traffic study results	Study Results	Requirement	Met Requirement?		
			Yes	No	N/A ⁽¹⁾
Street Classification	local	Local	х		
Width of Street, feet	n/a	Max. 40'			x
Grade		Max. 8%			x
Volume, vehicles per day	286	400 to 3000		X	
% of Truck Traffic		Max. 5% ⁽²⁾			
Posted Speed Limit (3), mph		25			
85th Percentile Speed (maximum of direction 1 or direction 2)	26 mph	At least 10 miles-per-hour over the Posted Speed Limit		X	
Direction 1, mph	23				
Direction 2, mph	26				

Recommendation and comment	
This street segment (s) failed the minimum speed and vehicular volun action is required	ne requirements for speed table consideration. No further
Recommendation By	Adolphus Ofor

Notes:

- 1. N/A "Not Applicable" means that this analysis was not conducted since the street segment failed other minimum requirements
- 2. A street segment (s) will not be rejected from speed hump consideration based on percentage of trucks unless a truck generating business is located on street.
- 3. If there are no posted speed limit signs on entire length of the street and on file, the default speed limit is 25 miles-per-hour for streets that classified as "local".

mph - miles per hour

85th percentile speed is the speed at or below which 85 percent of vehicles travel



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MEMORANDUM

Date:

November 7, 2018

To:

Councilmember Dustin Hillis

City Council District 9

From:

Cotena Alexander, Program Management Office

Office of Transportation

Re:

Request for Speed Tables on Marvin St, NW between Defoor Ave and Harper St

We regret to inform you that the above referenced street did not meet the technical requirement for speed table installation. The City requirement is that the 85th percentile speed must be at least 10 mph above the posted speed limit; the speed limit for this street is 25 mph and the study shows 85th percentile speed of 25 mph. Also, the weekday traffic volume on the street segment must be between 400 and 3,000 vehicles within a 24-hour period to be considered for a speed table. The volume for this study is 228. No further action is needed at this time.

Please find the attached Speed Table Request Criteria which indicates the specific technical requirement(s) and standard(s) for which this street segment did not meet.

Should you have any questions or would like to discuss this determination further, please call Adolphus Ofor, Senior Traffic Engineer, at (404) 330-6501, or via email to: aofor@atlantaga.gov.

Attachment

cc: Adolphus Ofor, Department of Public Works

File

CITY OF ATLANTA SPEED TABLE PROGRAM

REQUESTED STREET SEGMENT: Marvin Street, NW between Defoor Avenue and Harper Street

SPEED TABLE INSTALLATION STANDARD(S) NOT MET AS INDICATED BY "X":

The street segment must be classified as a "local street", according to the City of Atlanta Street Classification Map.

The street segment must be less than 40 feet wide, from the edge of the pavement on one side of the street to the edge of the pavement on the opposite side of the street.

The grade (slope) of the street segment must be less than 8% for safety reasons.

X The weekday traffic volume on the street segment must be between 400 and 3,000 vehicles within a 24-hour period. (*Traffic volume was 228*)

Less than 5% of the total vehicles on the street segment may have a long wheel base (such as trucks or buses).

X At least 15% of the total traffic volumes on the street segment must exceed the posted speed limit by 10 miles per hour, or more. (85th percentile speed was 25 mph; speed limit is 25 mph)

Traffic Calming Study Summary

Street Segment (s): Marvin Street, NW between Defoor Avenue and Harper Street

Date of Traffic Count/Speed Study: 9/27/2018 to 9/1/2018

8

			Met Requirement?		
Traffic study results	Study Results	Requirement		No	N/A ⁽¹⁾
Street Classification	local	Local	x	:	
Width of Street, feet	n/a	Max. 40'			x
Grade		Max. 8%			x
Volume, vehicles per day	228	400 to 3000		X	
% of Truck Traffic		Max. 5% ⁽²⁾			
Posted Speed Limit (3), mph	1 1111	25			
85th Percentile Speed (maximum of direction 1 or direction 2)	25 mph	At least 10 miles-per-hour over the Posted Speed Limit			
Direction 1, mph	24				
Direction 2, mph	25				

Recommendation and comment		
This street segment (s) failed the minimum speed and vehicular volume requirements for speed table consideration. No further action is required		
Recommendation By	Adolphus Ofor	

Notes

- 1. N/A "Not Applicable" means that this analysis was not conducted since the street segment failed other minimum requirements
- 2. A street segment (s) will not be rejected from speed hump consideration based on percentage of trucks unless a truck generating business is located on street.
- 3. If there are no posted speed limit signs on entire length of the street and on file, the default speed limit is 25 miles-per-hour for streets that classified as "local".

mph - miles per hour

85th percentile speed is the speed at or below which 85 percent of vehicles travel