



Legislation Text

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TO: Board of Mayor and Aldermen

FROM: Eric Stuckey, City Administrator
Paul Holzen, Director of Engineering
Jonathan Marston, Assistant director of Engineering
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SUBJECT:

Consideration of Ordinance 2017-03 "An Ordinance to Establish All-Way Stop Control at the Intersection of Churchill Place and Newcastle Drive". (1/26/17 CIC 3-0; 1-recused; 02/14/17 1ST BOMA Reading 6-0)
SECOND AND FINAL READING

Purpose

The purpose of this memorandum is to provide information to the Franklin Board of Mayor and Aldermen (BOMA) concerning Ordinance 2017-03 "An Ordinance to Establish All-Way Stop Control at the Intersection of Churchill Place and Newcastle Drive".

Background

The City of Franklin's Engineering Department received a request from several homeowners along Churchill Place for all-way stop control at the intersection of Churchill Place and New Castle Drive. The existing two-way stop control provides for stop signs on Newcastle Drive only.

The Engineering Department followed the neighborhood traffic calming program and held a meeting on October 4, 2016 at City Hall. A petition zone of influence surrounding this intersection was identified by the engineering department. All the property owners (113 residents) within this zone of influence were invited to this neighborhood meeting. At this meeting, the City of Franklin's neighborhood traffic calming procedure was explained to the meeting participants. A map of the petition zone, list of addresses within the petition zone, and a petition form with a request statement "Install traffic calming devices on Churchill Place at or near the intersection of Newcastle Diver" was given to Mr. John Green, who was coordinating this effort with the neighborhood residents.

The existing speed limit on Churchill Place, between Jordan Road and London Lane, is 25 miles per hour (MPH). Also, the existing speed limit on Newcastle Drive, between Cambridge Place and Essex Court, is 25 MPH. Field investigations revealed that there is no speed limit sign posted upon entering Churchill Place from Jordan Road. Traffic data at the intersection of Newcastle Drive and Churchill Place was collected

from August 16 - 18, 2016. This traffic data indicates that the general volume split of traffic on the two streets is 82% on Churchill Place and 18% on Newcastle Drive. There were no accidents at the intersection of Newcastle Drive and Churchill Place in the 12-month period from August 2015 to August 2016. Speed data along Churchill Place was collected on June 4, 2014 and June 6, 2014 between Essex Court and Newcastle Drive. To qualify for the traffic calming program, the 85th percentile speed should be 7 MPH faster than the posted speed limit. The 85th percentile speed on Churchill was 30.22 MPH, which is less than the required 32MPH threshold (See Exhibit B). The all-way stop sign warrant investigation showed that this intersection does not meet the minimum traffic volume warrant.

The use of stop signs at low-volume intersections for traffic calming purposes is controversial. The Federal Highway Administration (FHWA) research indicates the following:

- 1) Chapter 2B.04 of the Manual on Uniform Traffic Control Devices (MUTCD) states the following:
“YIELD or STOP signs should not be used for speed control”.
- 2) The use of stop signs for traffic calming purposes shows little or no midblock speed reduction. Stop sign speed reduction is typically limited to the immediate vicinity of the intersection and in some cases, the midblock speed actually increases as residents try to make up for lost time at unwarranted stop sign.
- 3) Stop sign compliance is poor at unwarranted multi-way stop signs. Some drivers will believe that the unwarranted stop sign has no traffic control purpose because there are usually no vehicles on the minor street. The installation of unwarranted stop signs has the potential to result in a great deal of frustration and disrespect for traffic control devices.

On November 1, 2016, the Engineering Department received a petition (Exhibit A) signed by 62 property owners, requesting a “stop sign at this intersection”. It should be noted that the original petition form that was given to Mr. Green was not used, and the 62 signatures were obtained on a separate petition form, requesting all-way stop control at this intersection.

Options for Improvement

The available options are as follows:

Option 1 - Install all-way stop control at the intersection of Churchill Place and Newcastle Drive and install a 25 mph speed limit sign on Churchill Place.

Option 2 - Install a 25 MPH speed limit sign on Churchill Place.

Option 3 - No action. Considers that the current traffic patterns along Churchill Place are acceptable (noting that the speed data is below the threshold for traffic calming consideration).

Financial Impact

The estimated financial impacts are as follows:

Option 1 - \$600. Installation cost, labor to be performed in-house by the Street Department

Option 2 - \$200. Installation cost, labor to be performed in-house by the Streets Department.

Option 3 - No cost.

Recommendation

The Engineering Department recommends against all-way stop control at this intersection. Stop control warrants were not met, and the speed data does not justify the installation of traffic calming devices.