

**Memorandum
Public Works Department**



To: City Manager
Subject: Stop Signs
Date: June 8, 2020
Number: 2020-094

SOURCE OF REQUEST:

Jenni Swanson
Fourth Ward Alderman
Rock Island, IL 61201

NATURE OF REQUEST:

The Traffic Engineering Committee received a request to install 4-way Stop signs on 25th Avenue at its intersection with 29th Street.

MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES WARRANTS:

The excerpts from the Manual of Uniform Traffic Control Devices (MUTCD) are attached.

CONTACTS WITH RESIDENTS:

None

TRAFFIC STUDY INFORMATION:

There is currently Stop control at this intersection with Stop signs on 29th Street.

The Engineering Division conducted a traffic study of this intersection and it did not meet any of the warrants or conditions for the installation of additional stop signs.

COST:

The cost to the city is minimal.

RECOMMENDATION:

The Traffic Engineering Committee recommends that the City Council deny the request.

Submitted by: Michael T. Bartels, Public Works Director
Traffic Engineering Committee

Approved by: Randall D. Tweet, City Manager

TO: Traffic Engineering Committee **TEC Number:** 20-05
SUBJECT: Request for Installing Additional STOP Signs **Date:** 06/07/2020
25th Avenue at 29th Street

The Engineering Division evaluated a request about installing 4-way STOP signs on 25th Avenue at its intersection with 29th Street. There is currently STOP control at this intersection with STOP signs on 29th Street. Traffic at the above intersection was studied on May 21, 2020.

The request was evaluated in accordance with the latest edition of the Manual of Uniform Traffic Control and Devices (MUTCD). The MUTCD was developed by the Federal Highway Administration and the State Departments of Transportation to ensure that traffic control (signage and striping) is uniform and consistent across the country, states and municipalities. In addition, the MUTCD states that STOP control should not be utilized for speed control and that traffic control is to provide gaps in the flow of traffic to allow roadway users adequate time to cross or access the intersecting roadway. The MUTCD states that STOP signs can be warranted at an intersection if one of the following warrants is met:

Intersection of a less important road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law: The traffic study indicated the following volumes:

- 25th Avenue carried 956 AADT;
- 29th Street carried 158 AADT.

This intersection was observed to meet the application of the normal right-of-way rule with reasonable compliance with the law. *Therefore this warrant was not met.*

Street entering a through highway or street (arterial): 25th Avenue and 29th Street are classified as local streets. *Therefore this warrant was not met.*

Unsignalized intersection in a signalized area: In accordance with MUTCD criteria, there are no signalized intersections in this area. *Therefore this warrant was not met.*

Minimum vehicular volumes: To satisfy the traffic warrant, the vehicular volume entering the intersection from the major street approaches (total of both approaches) should average at least 300 vehicles/hour for any 8 hours of an average day. The study indicated that 25th Avenue averaged less than 112 vehicles per hour for the busiest 8 hours of an average day. *Therefore this warrant was not met.*

Restricted view or crash records indicate a need for control by the STOP sign: There are no obstructions that would restrict a motorist's vision at this intersection. To satisfy the accident experience warrant, at least 5 or more reported crashes in a 12-month period that is susceptible to correction by a STOP sign installation. In the past 3 years, there has been one (1) reported crash at this intersection. *Therefore this warrant was not met.*

Summary: *The traffic study performed on the dates referenced above indicated that this intersection did not meet any of the above warrants or conditions for the installation of additional STOP signs.*

SUBMITTED BY: Michael J, Kane, P.E., Assistant City Engineer

APPROVED:

STOP

Regulatory Signs

2B-5 Warrants for Stop Sign

Because the STOP sign causes a substantial inconvenience to motorists, it should be used only where warranted. A STOP sign may be warranted at an intersection where one or more of the following conditions exist:

1. Intersection of a less important road with a main road where application of the normal right-of-way rule is unduly hazardous.
2. Street entering a through highway or street.
3. Unsignalized intersection in a signalized area.
4. Other intersections where a combination of high speed, restricted view, and serious accident record indicates a need for control by the STOP sign.

Prior to the application of these warrants, consideration should be given to less restrictive measures, such as the YIELD sign (2B-7) where a full stop is not necessary at all times. Periodic reviews of existing installations may be desirable to determine whether, because of changed conditions the use of less restrictive control or no control could accommodate traffic demands safely and more effectively.

STOP signs should never be used on the through roadways of expressways. Properly designed expressway interchanges provide for the continuous flow of traffic, making STOP signs unnecessary even on the entering roadways. Where at-grade intersections are temporarily justified for local traffic in sparsely populated areas, STOP signs should be used on the entering roadways to protect the through traffic. STOP signs may also be required at the end of diverging roadways at the intersection with other highways not designed as expressways. In most of these cases, the speeds will not warrant any great increase in the sign sizes.

STOP signs shall not be erected at intersections where traffic control signals are operating. The conflicting commands of two types of control devices are confusing. If traffic is required to stop when the operation of the stop-and-go signals is not warranted, the signals should be put on flashing operation with the red flashing light facing the traffic that must stop.

Where two main highways intersect, the STOP sign or signs should normally be posted on the minor street to stop the lesser flow of traffic. Traffic engineering studies, however, may justify a decision to install a STOP sign or signs on the major street, as at a three-way intersection where safety considerations may justify stopping the greater flow of traffic to permit a left-turning movement.

STOP signs may be used at selected railroad-highway grade crossings only after their need has been determined by a detailed traffic engineering study. Use of the STOP

sign at railroad-highway grade crossings is described in section 8B-9.

Portable or part-time STOP signs shall not be used except for emergency purposes. Also, STOP signs should not be used for speed control.





Michelle Martin <martin.michelle@rigov.org>

Re: stop sign

1 message

Michelle Martin <martin.michelle@rigov.org>
To: Randall Tweet <tweet.randall@rigov.org>
Cc: Mike Bartels <bartels.michael@rigov.org>

Mon, Mar 2, 2020 at 10:21 AM

The Traffic Engineering Committee met this morning and discussed the request to install stop signs at 29 ST 25 AV.

Engineering will conduct a traffic study when the weather permits. Night time temperatures need to be higher in order for the traffic counters to stick. Engineering is hoping to be able to do the study in the next month or so.

Michelle Martin
Public Works Department
City of Rock Island
309-732-2223



On Tue, Feb 25, 2020 at 12:52 PM Randall Tweet <tweet.randall@rigov.org> wrote:

For the next TEC meeting. Thanks.

----- Forwarded message -----

From: **Jenni Swanson** <swanson.jenni@rigov.org>
Date: Tue, Feb 25, 2020, 12:25
Subject: stop sign
To: Randall Tweet <tweet.randall@rigov.org>

Randy,

As I mentioned last night, I would like to put in a request for a stop sign at 29th street and 25th ave.

There are no stop signs or speed limit signs on the stretch of road from 30th St-27th St. Cars use that route frequently and the speeding is getting out of hand.

My neighbor was almost hit and I was almost hit while walking as there are no sidewalks and cars travel too fast,

My goal is to slow traffic down to avoid a tragedy.

Please advise my next steps.

Thank you,
Jenni Swanson