

## Staff Report

### **SPEED STUDY RESULTS: HYDE AVENUE (BLOOMINGTON HEIGHTS)**

December 11, 2018

#### **BACKGROUND:**

The City has received concerns from area residents regarding the speed of traffic along the Hyde Avenue Bloomington Road to just north of Harrison Road in the Bloomington Heights Subdivision. In response to these concerns, City Council directed staff to collect and analyze speed data, which was done following the start of the Fall school semester. The summary of that data, including recommendations, are shown below.

Staff conducted field observations and collected speed data in three different segments along Hyde Avenue. The segments are 1) north of Harrison Road in Bloomington Heights Subdivision, 2) Harrison Road to Stone Brooke Road, and 3) Stone Brooke Road to Bloomington Road. These segments were divided this way due to the vertical and horizontal changes of Hyde.

It should be noted that engineering practice analyzes roadway speed using three significant summary statistics; 1) the **85th Percentile Speed**, which is the speed at which 85% of the drivers are traveling at or slower, 2) the **Pace**, which is the 10-MPH range that contains the highest number of drivers, and 3) **Excessive Speed**, which is the number of drivers traveling at 10 MPH, or more, over the posted speed limit.

Traffic calming policies of the City involves two steps; 1) comparing the consistency (+/- 5 MPH) of the 85th Percentile Speed and the Pace (upper limit) with the posted speed limit, and 2) comparing the number of drivers that are in the Excessive Speed range to 3% and 5% thresholds.

If the 85<sup>th</sup> Percentile and the Pace are found to be more than 5 mph different than the posted speed, a change in the speed limit should be considered.

In addition, if the analysis highlights below 3% excessive speeding, staff works with the Police to conduct periodic enforcement or provide additional guidance signs as needed to slow traffic. Between 3% and 5%, staff may recommend non-physical traffic calming measures (paint, dynamic signs, or warning devices, etc.). Above 5%, staff may recommend physical traffic calming measures that force drivers to slow down (speed humps, curb narrowing, horizontal alignment changes, etc.).

#### **FINDINGS:**

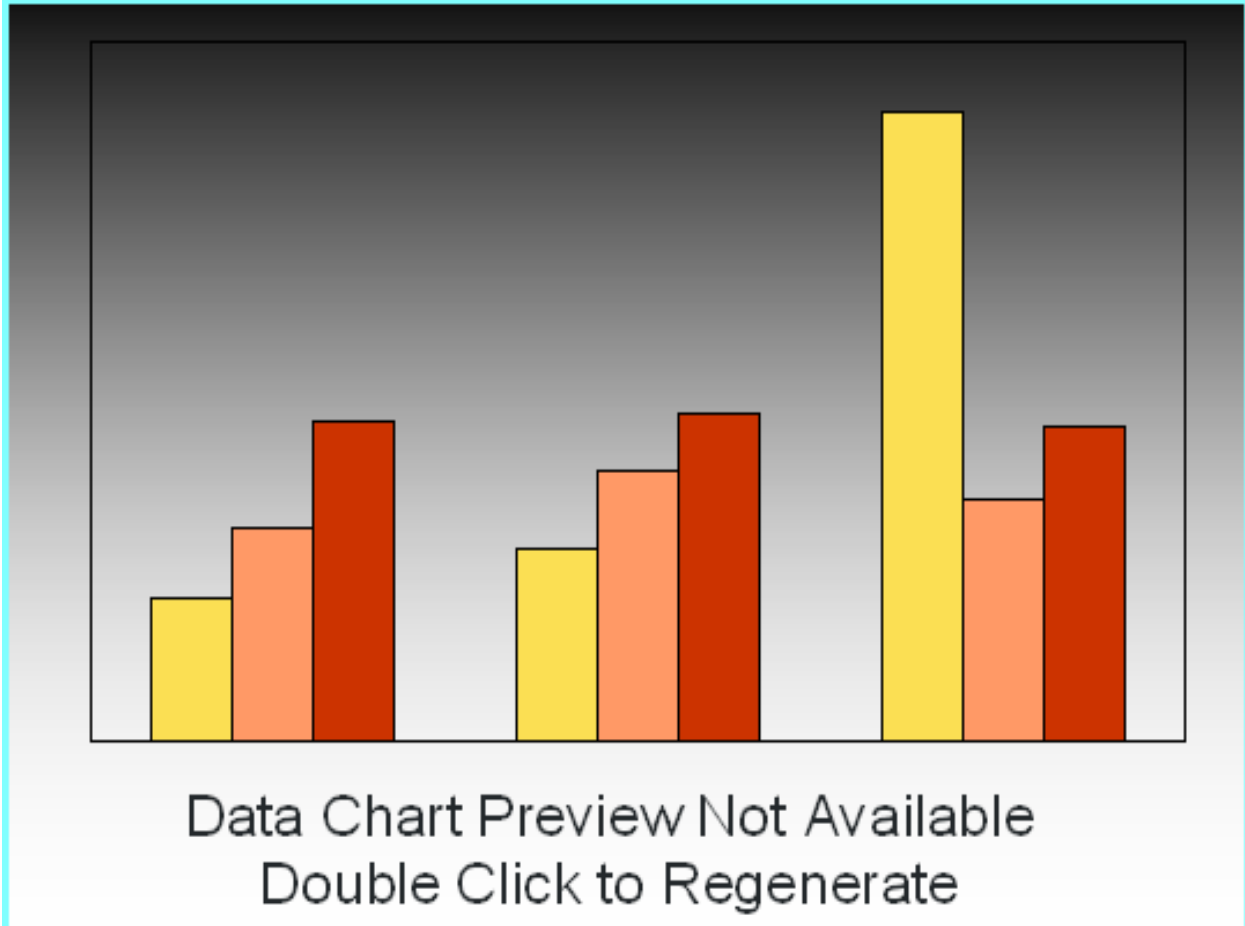
The data shows very low excessive speeding (less than 1%) in Segments 1 and 2 at the northern end of Hyde Avenue, along with an 85th Percentile Speed and Pace that is

consistent with the posted speed. **Therefore, staff is not recommending any action at this time for Hyde Avenue north of Stone Brooke Road.**

In Segment 3, Stone Brooke Road, south to Bloomington Road, the data shows a slightly increased amount in the excessive speeding range at 1.6%, and the 85th Percentile Speed and Pace is near the upper level of 5 MPH over the posted speed limit. **Therefore, staff will work with the Ames PD to increase enforcement in the area. Also, staff will monitor this segment of Hyde for any significant changes in speed that may warrant future traffic calming measures to be implemented.**

## Attachment 1:

Segment 1: Hyde Avenue, north of Harrison Road



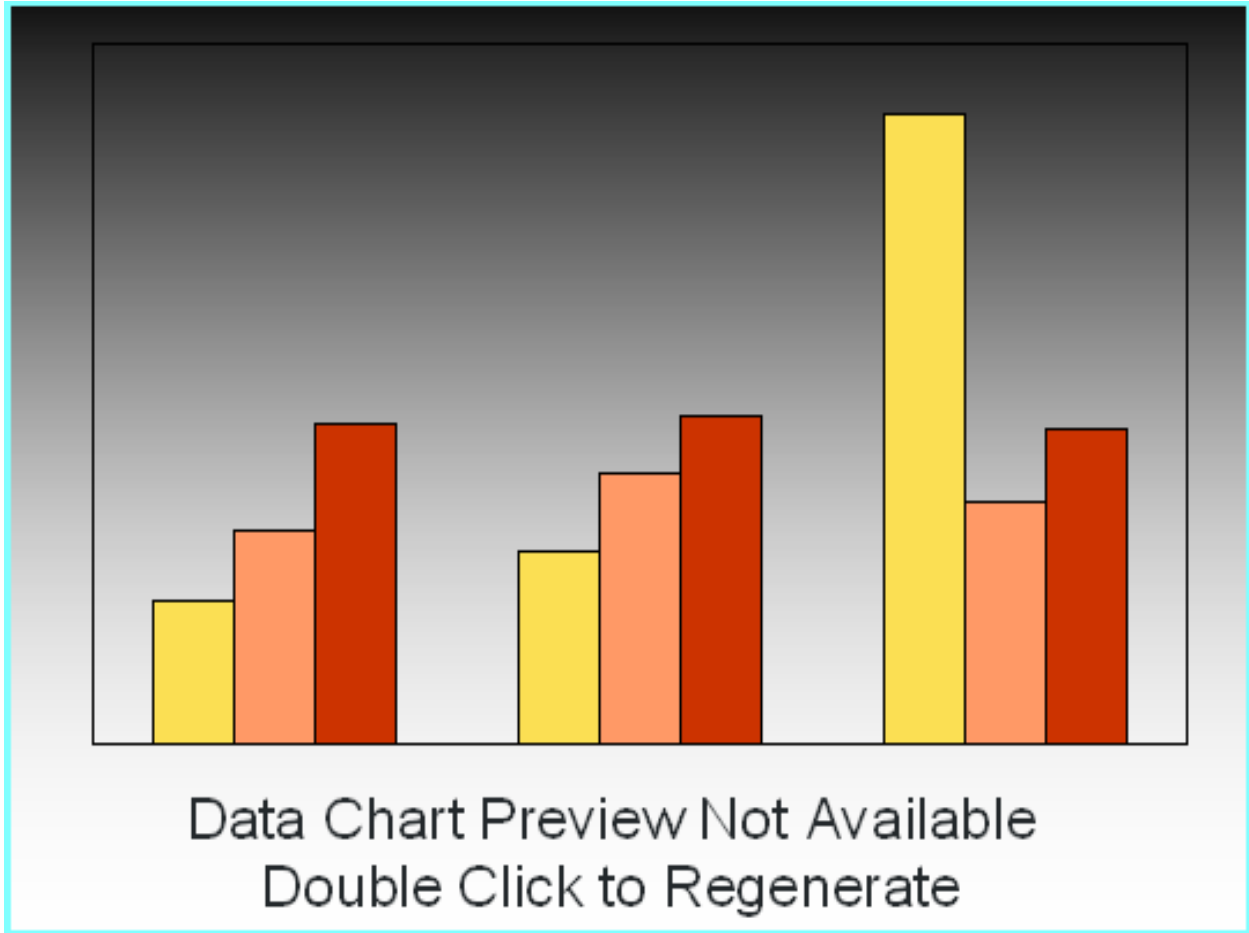
Posted Speed = 35 MPH, transitions to 25 MPH in this segment

85<sup>th</sup> Percentile Speed ~ 34 MPH

10-MPH Pace = 26 to 35 MPH, 68.6% of drivers

Excessive Speed [>45 MPH] = 0.3%

Segment 2: Harrison Road to Stone Brooke Road



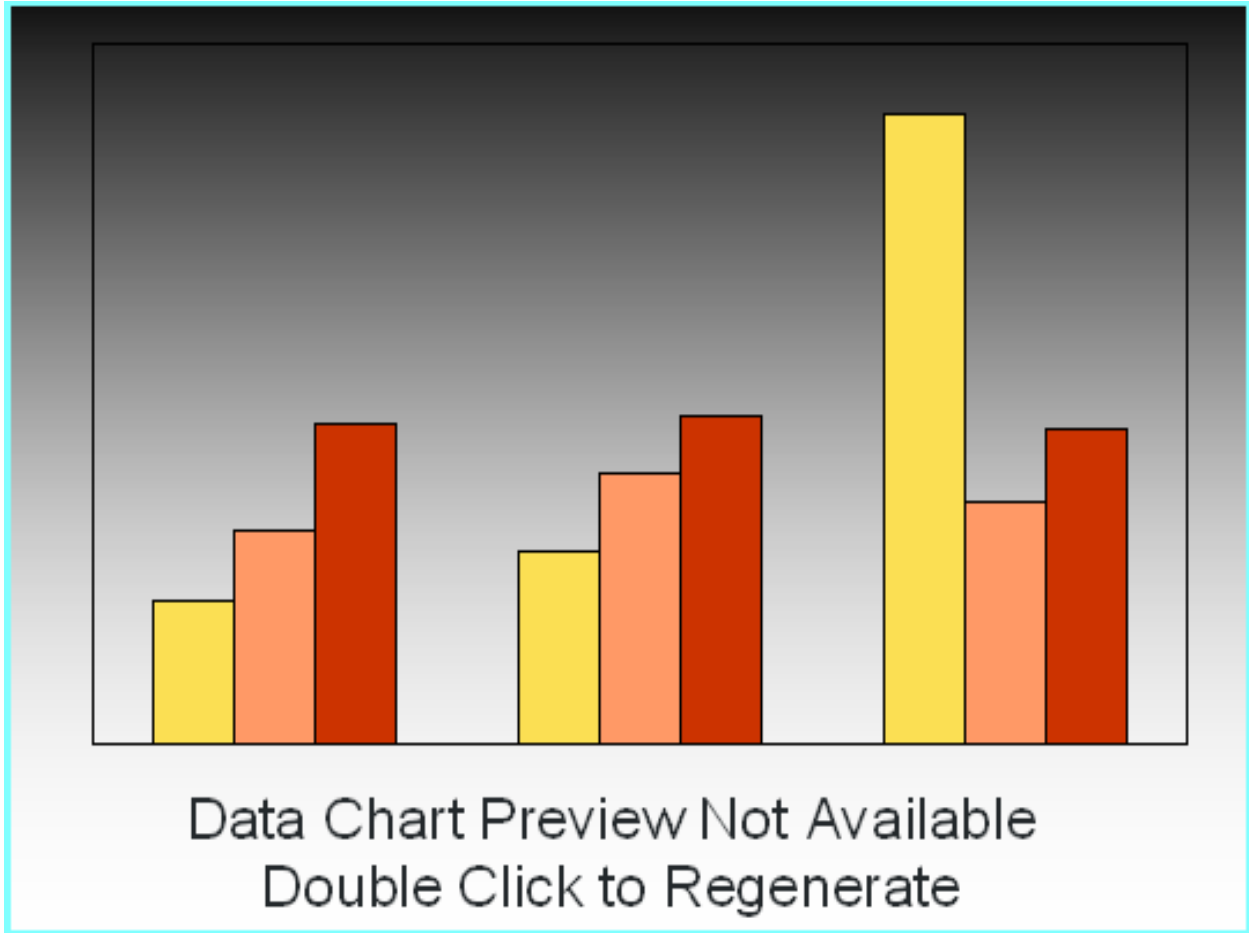
Posted Speed = 25 MPH

85<sup>th</sup> Percentile Speed ~ 28 MPH

10-MPH Pace = 21 to 30 MPH, 84.6% of drivers

Excessive Speed [ $>35$  MPH] = 0.3%

### Segment 3: Stone Brooke Road to Bloomington Road



Posted Speed = 25 MPH

85<sup>th</sup> Percentile Speed ~ 30 MPH

10-MPH Pace = 22 to 31 MPH, 82.9% of drivers

Excessive Speed [ $>35$  MPH] = 1.6%