

**CITY COUNCIL
COMMUNICATION:**

03-622

AGENDA:

DECEMBER 22, 2003

SUBJECT:

TRAFFIC REPORT AND
TRAFFIC REGULATION
CHANGES—AURORA
AVENUE BETWEEN
BEAVER AVENUE AND
MERLE HAY
ROAD

TYPE:

RESOLUTION
ORDINANCE
RECEIVE/FILE

SUBMITTED BY:

JEB BREWER, P.E.
CITY ENGINEER

ITEM _____

**OFFICE OF THE CITY MANAGER
CITY OF DES MOINES, IOWA**

SYNOPSIS —

The Traffic and Transportation Division has prepared a report and recommendations of traffic conditions on Aurora Avenue between Beaver Avenue and Merle Hay Road. These recommendations include: 1) ordinance revisions to install a four-way stop at the intersection of 50th and Aurora; 2) reduce the speed limit on Aurora from 35 mph to 30 mph from Beaver Avenue to the west city limits (west of Merle Hay Road); 3) install a marked school crosswalk and mid-block pedestrian traffic signal across Aurora Avenue in front of Hoover High School; and 4) various additional items for implementation at different times, some involving additional study and coordination with the Des Moines School District, Meredith Neighborhood Association, and/or Polk County. The report and recommendations have been reviewed and approved by the Traffic Safety Committee, and are presented to Council for approval.

FISCAL IMPACT —

Minor costs for signing for the four-way stop and reduced speed limit, and for painting the school crosswalk, to be paid from the Traffic and Transportation operating budget. Estimated costs of not more than \$10,000 for the “25 MPH when flashing” school speed limit signs on Aurora Avenue and not more than \$25,000 for the school pedestrian signal to be paid from the adopted Capital Improvements Program budget, “City-wide Signals, Channelization and School Crossing Protection Program.” Potential future projects for installation of traffic signals at Beaver and Aurora Avenues, or left-turn lanes at Beaver and Madison Avenues, are estimated to cost in excess of \$125,000 each, and if recommended by Council for installation would require additional funding in future years’ CIP budget.

RECOMMENDATION —

Receive, file and refer to Legal Department for proper legislation.

BACKGROUND —

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At the November 17, 2003 City Council meeting, a petition was received from residents in the vicinity of Hoover High School and the Meredith Neighborhood Association regarding speeding and safety concerns on Aurora Avenue between Beaver Avenue and Merle Hay Road. City Council, by Roll Call No. 03-2622, directed that several items be implemented and that others be referred to the City Manager and staff for recommendation. Council also indicated that a written report was to be presented at their December 22, 2003 meeting. The specific items directed for implementation are as follows:

1. Install a four-way stop at 50th and Aurora.
2. Reduce the speed limit on Aurora Avenue to at least 30 mph.
3. Place a crosswalk across Aurora Avenue at Hoover High School.

Other items that were recommended to be reviewed included:

- A. Installation of "25 mph when flashing" school warning signs.
- B. Enforcement of the "bus loading zone" along Aurora at Hoover High School.
- C. Possibility of installing left-turning lanes and or turning signals at the Madison / Beaver Avenue intersection.
- D. Install traffic signals at Beaver and Aurora.
- E. Reinstall the four-way stop sign at 50th and Meredith.
- F. Restripe Aurora Avenue to a three-lane facility between Beaver and Merle Hay.
- G. Possible all-way stop signs at 47th/Aurora and 54th/Aurora.

Traffic and Transportation Division staff has prepared the necessary ordinance revisions to: (1) place a four-way stop at 50th and Aurora, and (2) revise the speed limit on Aurora to 30 mph from Beaver Avenue to the west city limits (west of Merle Hay Road). Staff also recommends that a mid-block traffic signal be installed across Aurora Avenue at Hoover High School in the spring of 2004, and that the crosswalk identified in item (3) above should be installed at this time in conjunction with the signal installation.

In regard to Items A through G, staff has reviewed a number of these in the past. Several of them will also require additional study and neighborhood input prior to implementation. In addition, on November 24, 2003, a meeting was held with Des Moines School representatives to discuss the traffic conditions surrounding the Hoover High/Meredith Middle School complex. Most of the above items were discussed. The School representatives indicated that they plan to make several site improvements, including additional bus insets and possible modifications to the parking lots in order to better accommodate the traffic flows during school arrival and dismissal times. They have indicated that these items will be implemented during the summer of 2004, so they will be in place

by the start of the 2004 school year.

The items outlined above are discussed in more detail below:

A. Installation of “25 MPH when flashing” school warning signs

In the late 1980s, the City implemented a program to install “25 mph when flashing” signs at elementary and middle schools throughout Des Moines, where the existing speed limit adjacent to the school property was greater than 25 mph. Approximately 100 school flashers were installed as part of this program. High Schools were not included at that time, due to the thought that the program had the most impact on the younger-age students.

Recently, staff has received requests for these school flashers to be installed at several of the high schools. One such sign assembly has been installed on E. 14th Street at East High School. Since there are only four or five total schools that would be involved, staff recommends that school flashers be reviewed for implementation at the remaining High Schools as appropriate. This review will include Hoover High, Lincoln High, Roosevelt High, and North High Schools. It is anticipated that the flashers would be installed during the summer of 2004.

B. Enforcement of the “Bus Loading Zone” Along Aurora at Hoover High School

This item was forwarded to the Des Moines Police Department for appropriate enforcement.

C. Possibility of Installing Left-Turning Lanes and or Turning Signals at the Madison/ Beaver Avenue Intersection

Council requested that staff review the possibility of constructing turning lanes on Madison Avenue at Beaver Avenue so that left-turning vehicles do not interfere with through traffic flow. Also, that left-turn signals be considered on Beaver Avenue at this location. Staff will review this possibility, including a cost estimate to perform the necessary work. This report should be completed within the next two months.

D. Install Traffic Signals at Beaver and Aurora

This item has been reviewed in the past, and determined that signals were not warranted. Staff will update the previous study to determine if the current traffic conditions and crash history would warrant installation of signal. This update should be completed within two months.

E. Reinstall the Four-Way Stop Sign at 50th and Meredith

This past fall, a temporary four-way stop was installed at this intersection during closure of the Beaver Drive Bridge over I-35/80. Meredith Drive was a primary detour route during this bridge closure, and carried significantly higher traffic volumes than normal. The intersection reverted to a two-way stop condition with the re-opening of the bridge in late October.

Staff will review the existing conditions, including updated traffic counts, in order to determine if the intersection warrants the installation of a four-way stop. Since one-half of this intersection is under the jurisdiction of Polk County, staff will coordinate the study with the Polk County Engineer's Office. It is expected that this study will take approximately two months to complete.

F. Restripe Aurora Avenue to a Three-Lane Facility between Beaver and Merle Hay

This concept was implemented successfully on Beaver Avenue several years ago. The traffic volumes on Aurora Avenue are approximately 8,000 to 10,000 vehicles per day, which make it a good candidate for this type of improvement. Staff has done considerable previous work on this possibility, and recommends that it be moved forward to implementation. The process will consist of a neighborhood meeting to go over the proposed improvement, as well as identify where parking changes would be necessary. It is anticipated that this three-lane concept, if approved, could be implemented in the spring of 2004.

G. Possible All-Way Stop Signs at 47th/Aurora and 54th/Aurora

Staff has reviewed the conditions at these two intersections. They do not meet the requirements that warrant installation of all-way stop signs, and staff recommends that they not be installed at this time. Both 47th and 54th are considered local residential streets, and carry minor traffic volumes. Requests for four-way stop signs similar to this are generally received due to speeding concerns, which should be alleviated with the other proposed traffic changes that will be implemented along Aurora Avenue. These include restriping the roadway to a three-lane facility, reducing the speed limit to 30 mph, installing a four-way stop at 50th and Aurora (the intersection of two "collector" type roadways), and the additional police enforcement.

At their December 9, 2003 meeting, the Traffic Safety Committee concurred with staff's recommendations listed above. The following changes to the Municipal Code are necessary to place the four-way stop at 50th and Aurora and the reduced speed limit on Aurora into effect.

