

Meeting Agendas/Info

CITY COUNCIL
COMMUNICATION:

ITEM _____

01-177

OFFICE OF THE CITY MANAGER CITY OF DES MOINES, IOWA

AGENDA:

APRIL 16, 2001

SUBJECT:

TRAFFIC
REGULATION
CHANGES

TYPE:

RESOLUTION
ORDINANCE
RECEIVE/FILE

SUBMITTED BY:

FLOYD BENTZ, P.E.
CITY ENGINEER

SYNOPSIS -

The following traffic regulation changes have been reviewed by staff and are recommended for approval:

1. Reversal of Two-Way Stop--East 15th Street and Richmond Avenue.
2. Placement of Two-Way Stops in the Chesterfield Neighborhood.
3. Speed Limit Reduction--Park Avenue Between Fleur Drive and Valley Drive.
4. Removal of Taxicab Stand and Installation of New Parking Metered Spaces--East Side of 8th Street North of Walnut Street.

FISCAL IMPACT -

Minor costs for signing and parking meter changes to be paid from the Traffic and Transportation operating budget.

RECOMMENDATION -

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

BACKGROUND -

1. On February 12, 2001, the Des Moines City Council received a neighborhood petition asking that the intersection of East 15th Street and Richmond Avenue be changed to four-way stop control. Concern was expressed that drivers are speeding along Richmond Avenue through the neighborhood and that some cars do not stop at all on East 15th Street. By Roll Call No. 01-432, this petition was referred to the Traffic Safety Committee for review and

recommendation.

Staff conducted a traffic study for this location, including a review of the accident history, as well as field observations of the site. The intersection is currently controlled as a two-way stop, with Richmond Avenue having the right-of-way. The intersection is located one block north and east of the intersection of East 14th Street and Hull Avenue.

The accident history indicates that there were three reported crashes at this location in the past six years, which is similar to the average rate at two-way stops in residential locations citywide. This accident rate would not justify installation of a four-way stop at this intersection.

Richmond Avenue is a two-block street east of East 14th Street, ending at Villa Vista Drive. Neither street would be considered a "minor residential collector" type street, where staff has recommended installation of four-way stops in the past few years. These generally have occurred on approximately one-quarter mile spacings.

Since Richmond Avenue is located one block north of Hull Avenue, where there is a traffic signal at East 14th Street, there is probably some cut-through traffic using Richmond Avenue to bypass the traffic signal. Both City staff and the Iowa Department of Transportation (IDOT) are reviewing the East 14th/Hull intersection to determine if a major safety project to reconstruct the intersection is justified, similar to what was constructed at East 14th and Guthrie. Such an improvement should reduce "bypass" traffic using residential streets. However, any major project is several years in the future.

Past studies have indicated that installing four-way stops has not been effective when placed primarily for the purpose of reducing speeds. These studies have indicated that a large percentage of drivers do not stop for these signs, and speed data has shown that speeds within one-half block of the stop signs are at or higher than the speeds before the stop signs were installed. This is probably because motorists are trying to make up for lost time. The conditions at this intersection do not warrant a four-way stop. However, because of the neighbors' concern for speeding, the new "Check Your Speed - 25 mph" signs will be installed in this area of Richmond Avenue.

The Traffic Safety Committee reviewed this item at their March 13,

2001 meeting, and concurred that a four-way stop was not warranted. Although this request was not approved by the Committee, there was discussion that it may be more appropriate to reverse the existing stop signs at the intersection, and that staff should obtain additional input from the petitioners prior to proceeding.

Staff discussed this issue with the original petitioner, Mr. Dan Jawor, who then polled the surrounding neighborhood. Mr. Jawor indicated that there is considerable support for reversing the existing two-way stop. Based on this neighborhood support, staff recommended that the existing two-way stop signs at this location be reversed so that traffic on Richmond Avenue would then be required to stop at East 15th Street. At their April 10, 2001 meeting, the Traffic Safety Committee concurred with the staff recommendation to reverse the stop signs and install "Check Your Speed -25 mph" signs on Richmond.

The following revisions to the Municipal Code are necessary to reverse the stop signs, and designate East 15th Street as the through street at this intersection.

SEC. 114-2034. EAST FIFTEENTH STREET.

East Fifteenth Street, at Richmond Avenue, stop.

SEC. 114-2320. RICHMOND AVENUE.

~~Richmond Avenue, at East Fifteenth Street, stop.~~

2. Staff received a citizen request to review an area of the Chesterfield Neighborhood for the possibility of installing stop signs at several uncontrolled intersections.

Staff reviewed the area bounded by Market Street on the north, Scott Avenue on the south, SE 27th Street on the west, and SE 30th Street on the east. There are several intersections that are currently uncontrolled. Staff recommends that stop signs be installed at the remaining uncontrolled intersections, which are the following:

- On Elm Street at SE 27th Street
- On SE 27th Court at Elm Street
- On SE 27th Court at Raccoon Street
- On SE 27th Street at Market Street
- On SE 27th Court at Market Street
- On Elm Street at SE 28th Street

· On SE 29th Street at Raccoon Street

At their April 10, 2001 meeting, the Traffic Safety Committee concurred with staff's recommendation.

The following revisions to the Municipal Code are necessary to designate through streets by placing the two-way stops.

SEC. 114-2073. SOUTHEAST TWENTY-SEVENTH STREET.

Southeast Twenty-seventh Street, at from the north line of Elm Street to the south line of Raccoon Street, stop.

SEC. 114-2198. ELM STREET.

Elm Street, at Southeast Twenty-seventh Court, stop.

SEC. 114-2318. RACCOON STREET.

Raccoon Street, at southeast Twenty-seventh Court, stop.

SEC. 114-2279. EAST MARKET STREET.

East Market Street, from the east line of Southeast Eighteenth Street to the west line of Southeast ~~Twenty-fourth Court~~ Twenty-eighth Street, stop.

SEC. 114-2076. SOUTHEAST TWENTY-EIGHTH STREET.

~~Southeast Twenty-eighth Street, at Raccoon Street~~, stop.

Southeast Twenty-eighth, from the south line of Market Street to the south line of Raccoon Street, stop.

SEC. 114-2318. RACCOON STREET.

Raccoon Street, at Southeast Twenty-ninth Street, stop.

3. At their February 12, 2001 meeting, City Council received a neighborhood petition requesting that the speed limit on Park Avenue be reduced from 35 mph to 30 mph between Fleur Drive and Valley Drive and that no trucks be allowed in this area of Park Avenue except for emergency purposes. Concern was expressed regarding excessive speeding and accident problems for this area of Park Avenue. By Roll Call No. 01-431, Council referred this item to the Traffic Safety Committee for review and recommendation.

Staff has reviewed this section of Park Avenue, which is 1.6 miles in length. The current speed limit is 35 miles per hour. The traffic volumes are approximately 12,000 vehicles per day. Park Avenue is not designated as a truck route and, therefore, trucks are not allowed except to make local deliveries to and from the nearest truck routes, which are Valley Drive or Fleur Drive.

From radar data that was collected in early March 2001, the average speed of traffic on Park Avenue is between 36-38 miles per hour, with the "85th percentile" speed of 39-41 miles per hour. The five-year accident history based on the period from 1994-1998 indicates a total of 152 reported crashes during that time, or an average of 30 per year. This is equivalent to 433 accidents per 100 million vehicle miles of travel (Acc/100MVM). The statewide average rate for city streets is approximately 525 Acc/100MVM, so the rate is approximately 15 percent below the statewide average.

Historically, traffic engineers have tried to establish speed limits based on the "85th percentile" speed, which was thought to be the upper range of what the responsible driver would travel. In more recent analysis, this method may establish speeds higher than what would be considered a "safe and responsible" speed limit. Also, drivers are not typically ticketed unless they are driving 5-10 miles per hour over the speed limit. These factors can result in speeds higher than desired.

Based on the review of this section of Park Avenue, which is primarily a residential two-lane street and includes Brody Middle School, staff recommends that the speed limit be lowered from 35 miles per hour to 30 miles per hour on Park Avenue between Fleur Drive and Valley Drive. At their April 10, 2001 meeting, the Traffic Safety Committee concurred with staff's recommendation.

The following revisions to the Municipal Code are necessary to place the reduced speed limit into effect.

SEC. 114-1343. PARK AVENUE.

Park Avenue, from Southwest Fourteenth Street to ~~Southwest Sixty-third Street~~ Fleur Drive, 35 miles per hour.

Park Avenue, from Fleur Drive to Valley Drive, 30 miles per hour.

Park Avenue, from Valley Drive to Southwest Sixty-third Street, 35 miles per hour.

4. At the request of several area businesses, including Shaeffer's Bridal Shop, the Traffic and Transportation Division has investigated the possibility of creating more on-street parking in the area of 8th and Walnut Streets. Trans-Iowa's General Manager, Lee Christensen, was contacted and has responded that Trans-Iowa has no objection to the removal of this taxicab stand, since it is no longer in use. The proposed ordinances below will remove the taxicab stand area. In this area the City will be able to install five new parking metered spaces for in-and-out customer parking in this area.

SEC. 114-2677. EIGHTH STREET--WALNUT STREET TO LOCUST STREET.

~~Eighth Street, on the east side, from Walnut Street to a point 110 feet north thereof, taxicab stand, 9:00 a.m. to 4:00 p.m.~~

SEC. 114-3891. EIGHTH STREET--MULBERRY STREET TO WALNUT STREET.

Eighth Street, on the east side, from Walnut Street to a point 110 feet north thereof, two-hour meters, 9:00 a.m. to 4:00 p.m.
