

**CITY COUNCIL
COMMUNICATION:**

ITEM _____

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

00-432

SYNOPSIS -

AGENDA:

Communication from the City Manager regarding traffic controls on Cummins Parkway between University Avenue and Merle Hay Road.

SEPTEMBER 25, 2000

FISCAL IMPACT -

SUBJECT:

Minor costs for signing that has been installed and for the proposed signal modifications, to be paid from Traffic and Transportation Division operating budget.

TRAFFIC
CONTROLS-
CUMMINS
PARKWAY
BETWEEN
UNIVERSITY
AVENUE AND
MERLE HAY ROAD

RECOMMENDATION -

Receive and file.

TYPE:

BACKGROUND -

RESOLUTION
ORDINANCE
RECEIVE/FILE

On August 6, 2000, a fatal accident occurred on Cummins Parkway in which a drunk driver lost control of her vehicle and killed a five-year-old girl who was riding a big-wheel in her driveway. Following this tragic accident, residents have met several times with Council Member Tom Vlassis and have requested a number of traffic controls for Cummins Parkway to slow speeds, reduce cut-through traffic, and increase safety.

SUBMITTED BY:

FLOYD BENTZ, P.E.
CITY ENGINEER

On August 28, 2000, by Roll Call No. 00-3600, Council approved an ordinance change to install an all-way stop at the intersection of Cummins Parkway with 60th Street and Clark Street, and referred additional traffic control measures to the Traffic Safety Committee for review and recommendation.

Cummins Parkway is a divided, boulevard-type roadway connecting University Avenue and Merle Hay Road, and is designated as a through street, with side streets stopping for Cummins. At University

Avenue and at Merle Hay Road, Cummins Parkway stops while University and Merle Hay are the through streets.

Traffic counters were placed on Cummins Parkway near Carpenter Avenue on August 28-29, 2000, to measure the volume and speed of traffic. The posted speed limit for this area is 25 mph. For southbound traffic, the average volume was 1,185 vehicles per day (vpd), with an average speed of 28 mph and an 85 percentile speed (speed at which 85 percent of the vehicles are traveling at or below) of 33 mph. Northbound traffic was similar, with 1,245 vpd and an average speed of 26 mph and an 85 percentile speed of 31 mph. The traffic counts showed that southbound traffic had a pronounced peak of 164 vehicles per hour between 7:00 a.m. and 8:00 a.m., while northbound traffic peaked at about 120 vehicles per hour between 3:00 p.m. and 6:00 p.m. While field observations showed some traffic used Cummins Parkway as a shortcut between University Avenue and Merle Hay Road, especially during the peak periods, overall, the traffic volume is neither excessive nor unusual for a boulevard type roadway or a residential collector street. In addition, the speed data showed that a large majority of drivers are not traveling at an excessive speed, although the speed may be somewhat above the posted limit of 25 mph.

The reported accident history on Cummins Parkway prior to the fatal accident was also reviewed and found not to be excessive. During the four-year period 1996 through 1999, Cummins Parkway between University and Merle Hay had a total of three accidents, including two personal injury accidents.

At the intersection with Merle Hay Road, there were a total of three property damage accidents, or an average of 0.75 accidents per year. At the intersection with University Avenue, which has four lanes and a higher volume of traffic, there were a total of 14 accidents, including five injury accidents, or an average of 3.5 accidents per year. The accident rate for these two locations is 0.20 and 0.58 Accidents per Million Entering Vehicles (Acc/MEV), respectively. An intersection is generally not considered a "high-accident" location unless this rate exceeds 2.0 Acc/MEV.

Following is a listing of the traffic controls requested by the residents, along with a discussion of each item:

1. Install stop signs on Cummins Parkway at 60th Street to create an all-way stop. On August 28, 2000, the City Council approved an ordinance change to create a five-way stop at the intersection of 60th Street, Cummins Parkway, and Clark Street. On August 29, 2000, a

City sign crew installed the stop signs on Cummins Parkway to create this all-way stop, including Stop Ahead signs for northbound and southbound traffic.

2. Install reflectorized Chevron warning signs along the west side of Cummins at the curve. On August 29, 2000, a City sign crew installed four Chevron warning signs around the curve in the 1400 block for southbound traffic. Each sign included a 25-mph advisory speed plate mounted under the Chevron sign.

3. Install a stop sign for southbound Cummins Parkway at Forest Avenue. This intersection is a "T" intersection, with Forest Avenue connecting on the west side of Cummins Parkway. Visibility is adequate with no accident pattern indicating a need for an additional stop sign for southbound traffic. Such a stop sign would create an unusual stop arrangement, with traffic on the west and north legs required to stop, but not the south leg. Stop signs are intended to assign the right-of-way at intersections where the traffic conditions warrant stop control. These conditions do not exist at this intersection. If a southbound stop sign is installed to act as a speed breaker, it is unlikely to be effective. Past studies have shown that stop signs installed to control speed have a higher rate of violations, increase the potential for rear-end collisions, and speeds a short distance beyond the stop sign are as high or higher, since many motorists quickly speed up to make up for the lost time at the stop sign. One possibility to aid in speed reduction along Cummins Parkway would be the installation of one or more "traffic calming" devices. These could include some type of traffic circle, pavement narrowing, or other physical feature that by design would assist in slowing, or "calming" traffic flows. Staff suggests that this be considered at the neighborhood meeting that is identified in Item Nos. 9 and 10 below.

4. Move the stop sign on Carpenter Avenue farther around the large radius at the intersection with Cummins Parkway to improve its visibility. The location of the existing stop sign appears to provide adequate sight distance for westbound drivers approaching this intersection on Carpenter Avenue. Because of the large intersection radius, if this sign were moved farther east it would be a considerable distance to the intersection itself. Staff will install a larger 30-inch size stop sign to provide better visibility to approaching motorists.

5. Add a left-turn arrow for eastbound traffic at the traffic signal on University Avenue at Merle Hay Road. A turn arrow at this signal would make it easier to turn from University Avenue to Merle Hay Road, and might reduce the amount of traffic that uses Cummins

Parkway to avoid this left turn. Staff will investigate this signal modification to determine if it can be done by City crews or needs to be included in the traffic signal project being designed for University Avenue. In addition, staff will investigate the feasibility and cost for adding a southbound right-turn lane on Merle Hay Road at this signal to reduce delays and enhance this movement instead of using Cummins Parkway as a shortcut.

6. Install several more speed limit signs along both sides of Cummins Parkway. Additional 25-mph speed limit signs have been installed along this section of Cummins Parkway. Signs are installed at each end of this section, with two additional signs near the curve. The 25-mph advisory speed plates have also been installed under the Chevron warning signs.

7. Install a stop sign for southbound traffic on the west side of Cummins Parkway at approximately 1428 Cummins, and a second stop sign on the east side of Cummins Parkway just south of the turnaround. If installed, these stop signs would be at mid-block locations, at a curve, and very close to the recently installed stop signs on Cummins Parkway at 60th Street/Clark Street. Such a location would be unexpected by motorists, which could lead to increased accident potential, especially for rear-end collisions. Stopping on the curve could be more difficult, especially in wet or snowy/icy conditions.

8. Provide a concentrated radar control program to slow traffic. Since the fatal accident, the Police Traffic Unit has provided radar speed enforcement on Cummins Parkway, and will continue to provide periodic enforcement. In addition, the City has recently ordered two radar speed trailers, which can automatically monitor and display the speeds of traffic using a street. This street is an excellent candidate for periodic deployment of these speed trailers when they are delivered to the Police Department.

9. Consider changing Cummins Parkway to one-way streets, with control striping and buffer zones. Cummins Parkway is generally considered to be a divided roadway, with one-way traffic flow on each side of the median area, similar to Polk Boulevard, Kingman Boulevard, or Urbandale Avenue. However, a few motorists use either side of the median on Cummins Parkway as a two-way roadway, which is unexpected by most other motorists traveling in the opposite direction. Signing of this section of Cummins Parkway as a divided roadway with one-way traffic on each side of the median would enhance the safety for motorists, and would also allow striping of an edge line for a single lane of traffic with a buffer area for

parking. One-way traffic flow would also allow the possibility of installing traffic calming, such as a special traffic circle, which could be considered at the intersections of Forest Avenue and Carpenter Avenue. It is proposed to have a neighborhood meeting with the affected residents to consider this change.

10. Consider barricading Cummins Parkway at Clark Street, creating a cul-de-sac on Cummins to eliminate cut-through traffic. The closure of any City street must be reviewed with considerable care and neighborhood input. Impacts to be considered include traffic diversion to adjacent streets, emergency vehicle access, school bus rerouting, and snow and trash removal. It is proposed to have a neighborhood meeting with the affected residents to consider this change. If there is a strong interest among the affected residents to pursue this option, then a formal public hearing by the Plan and Zoning Commission will be required. The Plan and Zoning Commission would then make a recommendation to the City Council, who would make the final decision on whether Cummins Parkway would be barricaded off at any location. The City will not take any action to close Cummins Parkway before this process is completed.

Staff recommends that traffic flow and speed be monitored following the recent installation of stop signs at 60th Street/Clark Street and the Chevron warning signs for southbound traffic at the curve, and does not recommend the installation of additional stop signs. Staff also recommends modifying the signal at University Avenue and Merle Hay Road to add a left-turn signal for eastbound traffic. Staff further recommends a neighborhood meeting with the residents to consider the change of Cummins Parkway to one-way traffic on each side of the median and the potential for traffic circles or other traffic calming measures, and to consider the effects of closing Cummins Parkway at some location to create a cul-de-sac.

At their September 19, 2000 meeting, the Traffic Safety Committee approved staff's recommendations.