



CITY OF CAMBRIDGE
Traffic, Parking and Transportation
57 Inman Street,
Cambridge, Massachusetts 02139

Susan E. Clippinger
Director

Administration	349-4700
Parking Violations	349-4705
Resident Parking	349-4701

November 18, 1998

TO: Robert Healy, City Manager

FROM: Susan E. Clippinger, Director 

SUBJECT: Council Order #22 dated 11/9/98 and Council Order #63 dated 11/4/98

RE: Report on the plan to improve safety at the Huron Ave. intersection with Chilton and Gurney Streets

Huron Avenue Accident and Pedestrian Safety Issues

The purpose of this memo is to update the city council and the community on what the City has done and will be doing to address concerns about pedestrian safety on Huron Avenue at the Gurney Street / Chilton Street intersection.

On Tuesday October 20, 1998 a pedestrian was struck by a vehicle and seriously injured as he crossed Huron Avenue at Gurney Street / Chilton Street. A westbound vehicle stopped for the pedestrian who was in the crosswalk. While the pedestrian continued across the street a second westbound vehicle passed illegally to the right of the stopped vehicle and failed to yield to the pedestrian. This incident has brought increased attention to the issue of pedestrian safety and requests from the community for improvements.

In this particular situation the pedestrian was legally crossing the street in a well marked crosswalk. It was the motorist's behavior that created the accident. Many of the comments being made by residents on this issue recognize that a key component of improving pedestrian safety at this location is improving motorist compliance with existing laws.

WORK PROGRAM

City staff has developed a work program to improve pedestrian safety at the Huron Avenue crosswalk.

- **Data Collection.** City staff identified locations to collect data about driver and pedestrian behavior. In addition to the data collected at Huron Avenue and Gurney Street / Chilton Street, city staff also collected information at other locations that helps to create the context for reviewing both the issues at the specific location as well as in a broader citywide context. This data gives us the information needed to

base designs on actual behavior. Data was collected on Tuesday November 10 and Thursday, November 12 is summarized below.

- **Community Meeting.** The City will hold a community meeting on Saturday, December 5, to discuss the data and develop an action plan to address the pedestrian safety concerns at the Huron Avenue crosswalk.
- **Implementation.** The timetable for implementation will depend on the final action plan.
- **Evaluation.** The City will monitor changes to evaluate their effectiveness.

CHANGES TO HURON AVENUE

In the past few years, a number of changes have been made to improve pedestrian safety on Huron Avenue. One of the long standing problems on Huron Avenue has been speeds. In 1976 the Department posted the street for 25 mph. The Police periodically do speed enforcement on the street.

In 1995, the street was repaved after water line replacement. Curb extensions were constructed at the Gurney Street / Chilton Street crosswalk to help pedestrians. Curb extensions reduce the width of road people have to cross; slow down turning vehicles; and improve visibility for drivers, cyclists and pedestrians. Also at that time bike lanes were added. In addition to improving conditions for cyclists, bike lanes make the roadway look narrower which reduces the speed of traffic, making the street safer for motorists, cyclists and pedestrian.

In 1991, yellow "yield to pedestrian" signs were installed. In 1993, these were changed to the current yellow and red "state law, yield to pedestrian" signs. At various times, a barrel advising drivers to stop for pedestrians has been located at the Gurney Street / Chilton Street crosswalk. The barrel sends a strong message to drivers about the importance of the crosswalk, but it has proven to be difficult to maintain, as the barrel has been hit by vehicles and stolen.

These changes have reduced speeds by approximately 5 mph and improved safety on Huron Avenue.

DATA

The data collected on November 10 and 12 is summarized below.

- About 100 people per hour cross Huron Avenue at the Gurney Street / Chilton Street intersection.
- Between 60 - 80 % of drivers yield to pedestrians at the Huron Avenue crosswalk at Gurney Street / Chilton Street. Drivers yield more to assertive pedestrians and during non rush hour.
- 90% of pedestrians wait less than 5 seconds to cross Huron Avenue at the Gurney Street / Chilton Street intersection.
- The percentage of pedestrians who cross the street with the walk signal at the intersection of
 - Huron Avenue and Lakeview Avenue (8 - 10 a.m.): 21%

- Garden Street and Appian Way (8 - 10 a.m.): 64%
- Oxford Street and Everett Street (8 - 10 a.m.): 2%
- Oxford Street and Sacramento Street (3 - 4 p.m.): 5 %

All of these signals have pedestrian push buttons.

- The 85th percentile speeds on Huron Avenue are between 31 and 33 mph.

OPTIONS TO BE DISCUSSED AT COMMUNITY MEETING

Our focus for improvements on Huron Avenue is twofold: how to improve pedestrian safety citywide, and how to increase safety at the intersection of Huron Avenue and Gurney Street / Chilton Street. The City has identified a number of initiatives that could play a role in improving pedestrian safety. All of these will be thoroughly discussed at the December 5 community meeting.

- **Spot Enforcement.** The Police Department does target enforcement at high accident locations. Huron Avenue is currently being targeted for enforcement.
- **Citywide Enforcement.** Enforcement is an important tool in educating drivers and reinforcing safe behavior.
- **Education.** The City currently has a number of education initiatives aimed at improving safety for pedestrians and cyclists. The City is always looking for ways to improve the effectiveness of the initiatives.
 - Approximately 20,000 city maps are distributed annually that contain pedestrian and bicycle safety information
 - For the last three years, a packet containing pedestrian and bicycle safety information has been mailed with all resident parking permits.
 - The City has developed and distributed safety oriented bumper stickers.
 - The City placed advertisements in Cambridge movie theaters with pedestrian and bicycle safety information.
 - The Police Department has done traffic safety education in the schools.
 - The Traffic Department has installed “yield to pedestrian” signs on the side of the road and on barrels in the center of the road.
 - The City annually participates and sponsors numerous outreach events at which pedestrian and bicycle safety information is distributed.
- **Improving the State Yield to Pedestrian Law.** Improving the state yield to pedestrian law would make it more understandable for motorists and easier to enforce.

The State’s current law states that, “when traffic control signals are not in place or not in operation the driver of a vehicle shall yield the right of way, slowing down or stopping if need be so to yield, to a pedestrian crossing the roadway within a crosswalk marked in accordance with standards established by the department of highways if the pedestrian is on that half of the traveled part of the way on which the vehicle is traveling or if the pedestrian approaches from the opposite half of the traveled part of the way to within five feet of that half of the traveled part of the way on which said vehicle is traveling.” Increasing the fines for violation of this order is also an opportunity.

- **Blue Bike Lanes.** The City has recently begun a test of painting bike lanes blue at intersections. Blue bike lanes at intersections have shown to significantly reduce car / bicycle crashes. Because they serve to remind motorists to look for cyclists, they are also beneficial to pedestrians crossing the street. The blue also reinforces the fact that motorists should stay in the travel lane and not drive in a bike lane.
- **Curb Extension.** There are currently curb extensions on Huron Avenue at the Gurney Street / Chilton Street crosswalk. Another curb extension could be constructed on Huron Avenue on the east side of Chilton Street. This would make it more difficult for a vehicle from proceeding to the right of a stopped vehicle.
- **Pedestrian Signal.** One of the options that has generated community interest is to install a signal at the Huron Avenue and Gurney Street / Chilton Street intersection. Prior to a decision to install a signal, the Department performs an engineering study called a warrant analysis. The data that has just been collected is the basis for the study. The warrant analysis process and the results will be discussed at the December 5 public meeting.

At the Huron Avenue and Gurney Street / Chilton Street intersection there is no cross traffic; both Chilton Street and Gurney Street are one-way away from Huron Avenue. Therefore, Huron Avenue traffic would have a green light until a pedestrian pushes the button.

The engineering study considers many issues including the benefits and disbenefits of installing a signal. A signal provides the most control of traffic; giving pedestrians a protected phase. Signals remove the responsibility from drivers to be alert for pedestrians. This is a real safety concern because our data show that depending on the location between 36% and 98% of pedestrians do not push the button. On Huron Avenue, 79% of pedestrians do not push the button at Lakeview and 92% at Reservoir Street. Motorists are not expecting these pedestrians to be crossing against the pedestrian light.

On low to medium volume roads, signals increase the delay to pedestrians. Currently 90% of pedestrians wait less than 5 seconds to cross Huron Avenue at the Gurney Street / Chilton Street crosswalk. With a signal the delay will be between 4 and 50 seconds, depending on how recently the button was last pushed.

CONCLUSION

All of the options listed above will be discussed in the meeting on December 5. The City looks forward to a creative and productive meeting with the community to develop an action plan for Huron Avenue.



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EXECUTIVE DEPARTMENT
ROBERT W. HEALY
City Manager

RICHARD C. ROSSI
Deputy City Manager

November 23, 1998

To The Honorable, The City Council:

Please find attached a response to Awaiting Report Item No. 37, regarding a report on the plan to improve safety at the Huron Avenue intersection with Chilton and Gurney Streets, received from the Traffic, Parking & Transportation Director Susan Clippinger.

Very truly yours,

Robert W. Healy
City Manager

RWH/mec
Attachment

Consent Agenda #10

17555

Relative to AR #37, regarding a
report on the plan to improve
safety at the Huron Avenue
intersection with Chilton and
Gurney Streets.

In City Council November 23, 1998

PLACED ON FILE