

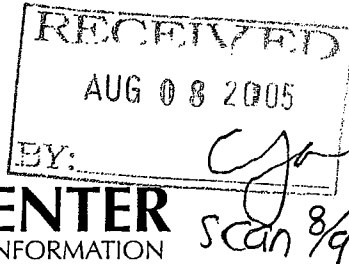


THE UNIVERSITY OF NORTH CAROLINA

HIGHWAY SAFETY RESEARCH CENTER

SAFETY • MOBILITY • INFORMATION

ATTACHMENT 2



August 8, 2005

Mayor Kevin Foy
Town of Chapel Hill
Chapel Hill, NC 27599

Dear Mr. Foy:

I am writing to express the concerns of the UNC Highway Safety Research Center (HSRC) regarding the use of the flags and signs for pedestrians at two intersections in Chapel Hill. Our pedestrian safety experts are quite familiar with the use of the experimental flags by a few cities in the U.S. and have observed their use at other locations in the U.S. Often there is a need for motorists to be more aware of pedestrians crossing streets. Not all motorists yield to pedestrians, particularly when making turns at intersections. Furthermore, some motorists choose to run red lights, which can create the risk of a collision with a pedestrian who is crossing the street on a WALK signal. The use of flags has been tried on an experimental basis in several U.S. cities in an attempt to increase motorist awareness of pedestrians and improve motorist behaviors. However, they have been used at lower-speed, two-lane roads at either intersections or mid-block locations, but typically at locations that were also un-signalized.

We have a serious concern about the use of flags at the two locations in Chapel Hill; i.e., the intersection of Martin Luther King, Jr. Blvd. at Hillsborough Road and the intersection of N.C. 54 at Hamilton Road. Both of these intersections are high-volume, high-speed roadways. Our primary concern is that since both intersections are also signalized, having the flags (with signs stating "Look left & right when crossing- For added visibility, carry orange flag across with you") may give pedestrians the false impression that they can pick up a flag and step into the roadway during the green phase (DONT WALK interval) and expect motorists to stop for them. We have observed one pedestrian at the MLK, Jr. site doing just that. Fortunately, this particular pedestrian did not step out in front of the oncoming vehicles, since they were clearly traveling too fast to stop. At high-speed signalized intersections, motorists are relying on the traffic signal and may not see a pedestrian in the street until it is too late to stop. Furthermore, if one vehicle does manage to stop for a pedestrian in such a situation, a motorist in an adjacent lane may not see the pedestrian until it is too late, since that motorist's view may be blocked by the stopped vehicle. Following vehicles may not realize that the vehicle in front of them is making an unexpected stop, thus creating the risk of a rear end crash.

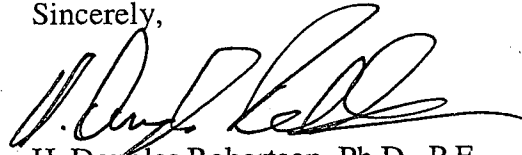
We strongly recommend that the flags and signs at the two selected sites be removed as soon as possible. If such flag installations are desired for testing in Chapel Hill, we

recommend that they be used on low-speed, low-volume, two-lane roadways that are unsignalized. Although we understand that the intent of installing these devices is to improve pedestrian safety, it is our judgment that the unintended outcome might be to cause a pedestrian to be struck by a high-speed motor vehicle. Furthermore, we recommend that if used, that the accompanying sign also warn pedestrians NOT to cross unless they have the WALK signal and to make sure that the approaching vehicles have stopped before stepping into the street.

These flags with signs are purely experimental at this time and are not supported by national safety standards for pedestrian crossings in the Manual on Uniform Traffic Control Devices (MUTCD). The use of any experimental devices such as these must have the prior approval of the Federal Highway Administration. Otherwise, any related pedestrian collision and resulting injury could have serious liability implications for the town of Chapel Hill.

Finally, I will mention that as background on our role in such matters, the Pedestrian and Bicycle Information Center here at HSRC was created through a grant from Congress and serves as an information clearinghouse for the U.S. DOT on matters related to bicycling and walking. We have also been involved in evaluating many traditional and innovative pedestrian safety treatments for the Federal Highway Administration and have found that some treatments can have negative safety consequences to pedestrians, even though the intent is to improve pedestrian safety. Please visit our web site (www.walkinginfo.org) for more information. Please feel to call me at 962-8703 if we can be of further assistance.

Sincerely,



H. Douglas Robertson, Ph.D., P.E.
Director

cc: Cal Horton, Town Manager
Tony Waldrop, Vice Chancellor for Research and Economic Development
David Harkey, P.E., Deputy Director, HSRC
Charlie Zegeer, P.E., Director, Pedestrian and Bicycle Information Center



TOWN OF CHAPEL HILL

August 12, 2005

H. Douglas Robertson, Ph.D., P.E.
Highway Safety Research Center
730 Martin Luther King Jr. Blvd.
Chapel Hill, NC 27599-3430

Ref: Orange Flag Crosswalks

Dear Dr. Robertson:

Thank you for your letter dated August 8, 2005 (attached) regarding the Town's pilot orange flag crosswalk projects. We value comments and advice from you and the HSRC staff.

In your letter, you note that crosswalk flags are still in the experimental stage with regard to national standards in the MUTCD; and that if pilot projects are implemented, they should involve pedestrian crossings at low-volume/low-speed intersections and/or unsignalized mid-block pedestrian crossings.

I have attached some agenda materials that were provided to the Town Council in advance of its decision to implement orange flag crosswalk pilot projects at the NC86/Hillsborough intersection and at the NC54/Hamilton intersection. Based on our research, Town staff did not recommend piloting the red flag crosswalks because:

- *We do not know how we would measure the effectiveness of the pilot projects
- *Our research suggested that less than 15% of pedestrians use the flags where they have been provided in other communities around the county.
- *The Town would incur costs to establish and maintain the pilot projects.

Based on your letter, it appears that we should have included information on the potential safety problems that could result from placing crosswalk flags at certain types of intersections.

Please note mailing address has changed to:
405 Martin Luther King Jr. Blvd., Chapel Hill, NC 27514-5705

The Council did not concur with our recommendation against implementing the projects, and selected the NC86/Hillsborough and NC54/Hamilton intersections for pilot projects based on suggestions received from the Town Transportation Board and the Town Bicycle and Pedestrian Advisory Board.

We will reconsider the current red flag crosswalk pilot projects based on the HSRC comments, and will report our recommendations to the Council at its September 12, 2005 regular business meeting.

Again, thank you for providing us with your perspective and advice on this matter. I will ask our Traffic Engineer, Kumar Neppalli, to contact you to discuss recommended alternatives.

Regards,

A handwritten signature in black ink, appearing to read "George Small". The signature is fluid and cursive, with a large initial "G" and "S".

George Small, PE, RLS
Engineering Director

Attachment: HSRC letter dated August 8, 2005
Council Agenda Item #8 dated January 10, 2004
Excerpt from minutes of January 10, 2005 Council meeting

Cc: W. Calvin Horton, Town Manager
Kumar Neppalli, Traffic Engineer
David Bonk, Transportation Planner