



U.S. Department
of Transportation
**Federal Highway
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

October 17, 2005

Refer to: HOTO-1

Mr. Thomas Hicks
Director
Office of Traffic and Safety
Maryland State Highway Administration
7491 Connelley Drive
Hanover, MD 21076

Dear Mr. Hicks:

Thank you for your August 31 letter requesting permission to experiment with a part-time traffic control signal at the entrance to Maryland Route 45 from Hereford High School in Baltimore County, Maryland. It is our understanding that this location does not meet any of the existing warranting conditions for signalization as contained in the Manual on Uniform Traffic Control Devices (MUTCD). Your experimentation is intended to evaluate whether a signal operated in stop and go mode only when conditions exceed some volume or delay threshold would improve traffic safety despite not meeting MUTCD warrants.

At present, the State highway is controlled by traffic signal indications (circular red, circular yellow, and flashing circular yellow) while the high school driveway is controlled by a STOP sign. A police officer controls traffic at the intersection during peak times by manually operating the traffic signal indications to display red signals on the State highway while flagging traffic out of the high school. During times when a police officer is not present, the signals flash yellow for the State highway and the STOP sign controls traffic on the high school driveway. We understand that, under your proposed experimentation, the STOP sign will be removed and normal traffic signal faces will be installed facing the high school driveway. During most of the day, the signal will be operated in the flashing mode (as an Intersection Control Beacon) but, based on certain threshold volume and/or delay conditions as detected by video detection and software algorithms, operation in a stop and go mode will be triggered.

We have reviewed your request and the accompanying evaluation plan and have found them to be satisfactory, with the following exceptions:

- The data collection plan does not include before and after crash data. Although conflicts and other data will be valuable, a very important measure of success of the proposed operation is reduction in crashes. We would like you to add before and after crash data to your data collection and evaluation and extend the experimentation period to 3 years to allow for availability of adequate "after" crash data.



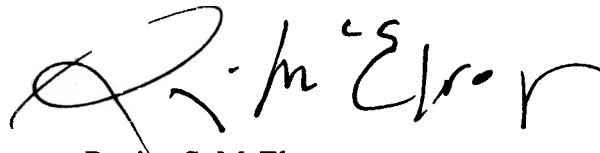
- Determination of safe and effective thresholds for switching between flashing and stop and go operation will be important. Changes in operation so frequent that they violate road user expectations should be avoided. Please be sure to document the methods used to determine the thresholds and their performance.

With these changes in your plan, we hereby approve the request for experimentation, for a period of 3 years following the installation of the part-time signal. This approval is subject to the following additional conditions:

- The site of the experiment must be restored to a condition that complies with the provisions of the MUTCD within 3 months following the end of the time period of the experiment. If, as a result of the experimentation, a request is made that the MUTCD be changed to include the device or application being experimented with, the device or application will be permitted to remain in place until an official rulemaking action has occurred.
- The experimentation must be terminated at any time that you determine significant safety concerns are directly or indirectly attributable to the experimentation. The Office of Transportation Operations also has the right to terminate approval of the experimentation at any time if there is an indication of safety concerns.
- Semiannual progress reports must be provided to the Office of Transportation Operations for the duration of the experimentation, as well as a copy of the final results of the experimentation within 3 months following completion of the experimentation.

For reference purposes, we have assigned the request the following official experimentation number and title: "4-296(E) – Part-Time Signal." Please refer to this number in future correspondence. We appreciate your interest and effort in improving traffic safety and operations, and we look forward to receiving your reports and evaluation results from the experimentation. If we can be of further assistance in this project, please contact Mr. Scott Wainwright by email at scott.wainwright@fhwa.dot.gov or by telephone at 202-366-0857.

Sincerely yours,



Regina S. McElroy
Director, Office of Transportation
Operations

cc: Mr. Roger Wentz, ATSSA