U.S. Department of Transportation Federal Highway Administration 400 Seventh St., S.W. Washington, D.C. 20590

Refer to: HOTO-1

Mr. Toby Rickman State Traffic Engineer Washington State Department of Transportation P.O. Box 47300 Olympia, WA 98504-7300

Dear Mr. Rickman:

We have reviewed your September 27 letter regarding your request for approval to experiment with in-roadway flashing warning lights and offer the following comments. As stated in Section 1A-6 of the Manual on Uniform Traffic Control Devices (MUTCD), please address the following in the evaluation plan:

- a. Provide a detailed description of the proposed change, including the number and location of lights that will be used in future experiments. We believe that a minimum of five (5) lights should be used as follows: Edge of travel way; center of lane; centerline; center of lane; edge of travel way.
- b. Add a statement that Federal Highway Administration (FHWA) will be notified of exact locations as sites are selected for experimentation.
- c. The experimentation plan should be expanded to include the following:
 - Length of Experimentation: The statement in your proposal about the length of the experimentation was not clear. Please clarify starting and ending dates. Your proposal should also include the length of the before, after, and acclimation time periods. The duration of the experimentation should be at least 1 year. The location site(s) should be restored to its original state within 3 months of the end of the experimentation unless a request for change to the MUTCD is submitted to the FHWA, Office of Transportation Operations.
 - How the field observation data will be collected, e.g., by observers, using video, etc.
 - When the field data will be collected, e.g., day, night, peak, off-peak, week, weekend, etc.

- What subjective data will be collected, who and how many subjects, and how these data will be collected, e.g., by interview, questionnaire, etc.
- The amount of field and subjective data that will be collected.
- The statistical tests that will be used to evaluate the data.
- We also request that you include some safety assessment such as near misses, traffic conflicts, accidents, etc. Please specify.
- Agreement to Restore Location Site: The experimentation
 plan should include an agreement to restore the experiment
 site to a state complying with the provisions of the MUTCD
 should at any time it be determined that significant safety
 hazards are directly or indirectly attributed to the
 experimentation.
- Reporting Requirements: Agreement to submit semi-annual progress reports and a final report to the FHWA, Office of Transportation Operations.
- Each jurisdiction experimenting with in-roadway flashing warning lights should install raised pavement markers at one crossing for comparison purposes.

In addition to the requirements found in Section1A.6 of the MUTCD, we offer the following comment:

• Include a statement acknowledging that the State, as an agency, has jurisdiction over the roadways involved in the experimental sites versus a local jurisdiction. If the State does not have jurisdiction, the local jurisdictions would need to apply for experimentation individually.

Your request to experiment with the in-roadway flashing warning lights for crosswalks will be approved, contingent on receipt and review of a more detailed evaluation plan including the items requested above.

For future reference purposes, we have assigned the following official experimentation number and title to your request: IV-165(Ex) -"In-Roadway Flashing Warning Lights." Please refer to this number in future correspondence.

If we can be of further assistance, please contact Ms. Louisa M. Ward on 202-366-4372.

Sincerely yours,

Donald P. Steinke Director, Office of Transportation Operations

FHWA:HOTO-1:LWard:ds:64372:10-22-99

cc: HOTO-1 HOST-1(2) HOTO-1(LWard/EHuckaby/KPoindexter) HOTO-1(GSchoene/CKittle) Mr. Robert Garrett, NCUTCD Mr. Sam Tignor, HRDS-03 Ms. Carol Tan Esse, HRDS-05 All Resource Centers HDA-WA(2) Chron 3408 Reader 3408