Federal Highway Administration 400 Seventh Street, SW Washington, DC 20590

Refer to: HOTO-1

Mr. Mike Curtit Technical Support Engineer Missouri Department of Transportation 105 West Capitol Avenue Jefferson City, MO 65102

Dear Mr. Curtit:

Thank you for your October 3 letter regarding your request to experiment with pedestrian countdown signals at two intersections in Columbia, Missouri. We have reviewed the material that was submitted and find it to be suitable in support of your request to experiment. Therefore, your request to experiment for one year under the provisions of the Manual on Uniform Traffic Control Devices with pedestrian countdown signals is hereby approved.

To be consistent with other experimentations on pedestrian countdown displays being conducted around the country (including elsewhere in Missouri), it is requested that your experimentation at the two intersections in Columbia include the following:

- 1. Please use the mode of operation that only displays the countdown during the flashing DON'T WALK interval.
- 2. We are enclosing a sample form to use for data collection. Please use the following guidelines. We are asking for these data items to be collected in all experiments so the results can be easily compared across the country.
 - Data should be collected before and after installation of the countdown signal.
 - A large number of pedestrian observations should be made (100+).
 - Data should be collected during the same time period and on the same day of the week.
 - Observations of pedestrian and driver behavior should be collected along with survey data.
 - Pedestrian data that should be collected as a minimum:

- 1. Compliance with the pedestrian signal. When pedestrian arrive at the corner, do they cross with the WALK, the flashing DONT WALK, or the solid DON'T WALK?
- 2. When pedestrians finish crossing, is it during the WALK, the flashing DON'T WALK, or the solid DON'T WALK?
- 3. Is the pedestrian male or female?
- 4. What is the pedestrian's age group? (0-17, 18-64, or 65+)
- 5. How was the crossing accomplished? (For Example: ran across, walked across, aborted the crossing, there was a conflict with a vehicle, or combination of the above)
- 6. Note whether the observance was of a pedestrian walking alone or in a group.
- Driver data (parallel to the pedestrian crossing) that should be collected as a minimum:
 - 1. What was the signal display during arrival at the intersection (GREEN ARROW, CIRCULAR GREEN, YELLOW, YELLOW ARROW, RED, RED ARROW)?
 - 2. What was the vehicle's maneuver (straight through, right turn, left turn)?
 - 3. What was the signal display as the vehicle proceeds through the intersection (GREEN ARROW, CIRCULAR GREEN, YELLOW, YELLOW ARROW, RED RED ARROW)?
 - 4. Was there a conflict with a pedestrian?

In your pedestrian surveys, please make sure the questions are asked in a manner that will indicate whether the pedestrian understands what the signal indications mean. Please include the following question, "Do you interpret the combination of the flashing DON'T WALK and the numbers to mean it is legal to enter the crosswalk on a flashing DON'T WALK as long as you can reach either the median or the other side prior to the countdown device reaching zero?" We also suggest you phrase questions so the pedestrian has to explain or select the meaning of the indications (multiple choice answers). For example: What does the WALK indication mean? What does the flashing DON'T WALK mean? What does the solid DON'T WALK mean? What do the numbers indicate to you? Do you cross any differently with the countdown signal than with traditional pedestrian signals?

We would appreciate receiving your schedule for implementation and submission of evaluation reports based on this approval of experimentation. At your convenience, please fax a copy of your updated schedule to Mr. Scott Wainwright at 202-366-3225.

For future reference purposes, we have assigned the following official experimentation number and title to your request: 4-236(Ex)--"Pedestrian Countdown Signals—Missouri DOT#2." Please refer to this number in future correspondence. Thank you for your interest in improving pedestrian safety.

Sincerely yours,

Shelley J. Row, P.E. Director, Office of Transportation Operations