

Mr. Roger Wentz, ATSSA



U.S. Department  
of Transportation

**Federal Highway  
Administration**

November 15, 2005.

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

Refer to: HOTO-1

Mr. Trent M. Kittleman  
Executive Secretary  
Maryland Transportation Authority  
300 Authority Drive  
Baltimore, MD 21222

Dear Mr. Kittleman:

Thank you for your October 11 request for approval to experiment with purple pavement marking "dots" (and accompanying explanatory signs) to guide E-Z Pass transponder holders into the dedicated transponder lanes at certain tollbooth plazas in Maryland. The Maryland State Highway Administration forwarded your request and supporting information to us along with their endorsement.

Your evaluation plan will measure the effects of the dots versus the existing conditions, rather than in comparison to other potential standard pavement markings such as dotted white lane line extensions and/or word message pavement marking legends. We understand that, due to the particular geometrics of the approaches to the toll plazas, adding such standard markings was found to be infeasible and that is the reason for the request to experiment with the purple dots. Your request described the dots as the first phase, with potential additional phases involving different, non-standard lane control signal colors and displays. We approve your experimentation with the purple "dots" and the accompanying explanatory signs, for a period not to exceed 2 years. For future reference purposes, we have assigned the following official experimentation number and title to your request: "3-181(Ex)—Purple Dot Markings for EZ Pass Lanes at Tollbooth (MD)." Please refer to this number in future correspondence.

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 Manual on Uniform Traffic Control Devices (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.

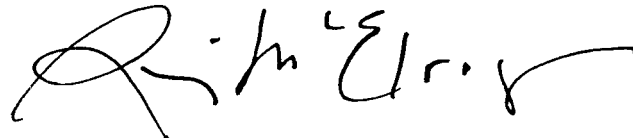


- Semiannual progress reports must be provided to the Office of Transportation Operations for the duration of the experimentation, as well as a copy of the final results of the experimentation within 3 months following completion of the experimentation.

We understand from Ms. Roxane Y. Mukai of your staff that the Maryland Transportation Authority is not ready at this time to proceed with the lane control signal portion of your proposed experimentation. Additionally, we are not ready to approve that portion at this time. We have concerns about the color purple as a signal display, in terms of conspicuity and visibility distance, ability of road users to distinguish it from other signal colors under day and night conditions, and impacts on road users with color vision deficiencies. We recommend that you investigate these issues and obtain more information from available previous research and/or from a laboratory study, before you submit a separate request for experimentation with purple signal devices at tollbooths.

Thank you for your interest in improving traffic safety through the use of innovative traffic control devices. We look forward to receiving your semiannual progress reports and final report. If we can be of further assistance on this matter, please contact Mr. Scott Wainwright at 202-366-0857 or via email at [scott.wainwright@fhwa.dot.gov](mailto:scott.wainwright@fhwa.dot.gov).

Sincerely yours,



Regina S. McElroy  
Director, Office of Transportation  
Operations

cc: Mr. Roger Wentz, ATSSA