Springfield, IL 62704 217/787-3515

3 August 2001

Director: Office of Transportation Operations U.S. Department of Transportation Federal Highway Administration 400 7* Street S.W. Washington, DC 20590

Dear Director:

Based on a ietw received from Kirk Brown, Secretary of the, Illinois Department of Transportation, I am forwarding to you the following Suggestion. The suggestion was originally sent to the Illinois State Employees Suggestion Award Board which, on review, was sent to Secretary Brown's Office for

consideration. The reply from Secretary Brown indicated that the suggested change would have to be made at the national level rather than the state level since the suggestion applies to the national Transportation code contained in the national Manual of Uniform Traffic Control Devices under Title 23 of the Code of Federal Regulations.

Therefore, the attached information sheets detail the suggestion about: "Improving the detection of center curbs and median strips".

I realize that should this suggestion (or even part of it) be adopted, some driver education might be needed (as indicated by Secretary Brown); however, I would suspect it would be relatively simple since red has always meant danger, orange/yellow—caution, and green—go; the only new addition I suggest is"blue" which would signify "all clear." Should drive education be an issue, I think that certain "existing" laws/requirements (such as left turns on red from a one-way street to another one-way street, or which lanes need to stop for school buses and which don't, and yielding at certain corners, etc.) pose greater educational needs than the above suggestion.

Be that as it may, I offer this suggestion for your consideration. I've seen many cars run over curbs or out of proper travel lanes because they were not clearly "signed" or marked and I think some sort of sign or marking would help prevent such damage and accidents.

Thank you very much for your considerations.

Vernon Kleen

enclosures

Two-part Suggestion for Improving the Detection of Center Curbs and Median Strips Drawings to accompany the suggestions

cc: file

Vemon Kleen (S.S. # 213-40-6313) 1825 Clearview Drive Springfield, IL 62704 217/787-3515

Suggestion No. I

Subject or Suggestion: Improving the Detection of Center Curbs and Median Strips

1. Current Practice or Procedural Problem:

At night, even more so during (and/or immediately after) rains, drivers (especially older drivers) find it difficult to discern the presence and location of some elevated center curbs and median strips that occur at various locations, but especially at intersections; the problem increases during (or immediately after) rains and by the number and location of glaring (and sometimes flashing) lights from street lights, local businesses, and vehicles (especially on wet pavement). As a result, many cars are damaged and the occupants of the cars are sometimes injured because the drivers are unable to detect the presence of some curbs soon enough.

2. Your Suggestion for Solution or Improvement

Part A: On corners with and/or without elevated center curbs or median strips, I suggest a methodology be developed to clearly mark the presence (perhaps even the height) of the curbs so drivers can readily detect their location and drive correctly and safely around them. One potential solution to this problem would be a standard, color-coded, necking system that could be universally recognized anywhere. My proposal would consist of 5 colors in the following sequence from left to right: red, orange, yellow, green and blue. (Red, orange/yellow and green are already "known and accepted" colors; the addition of blue to such sites would be one step beyond green and, if approved as a standard, indicate "all clear'.)

Such colors could be a national (international) standard and could be used to mark and help identify all center curbs (or even places where there aren't curbs) where traffic should be informed. The marking method could be used so that the driver could tell where AND how high the curb was by the "shape and/or orientation" of the colored markers and be assured that **everything** to the "right" of the blue marker would be safe passage (at least as far as the curb was concerned).

The choice of materials for the colored markers could vary from intersection to intersection. In some cases, perhaps luminescent paint that shows up at night (if such exists) could be used; in other cases, perhaps luminescent tape (which does exist) could be used; and finally, in more serious locations, permanently-attached, color-reflective strips or buttons (similar to the orange and white ones already in use on some curbs and as centerline markers on highways) could be used. Whatever the material it should be long-lasting so as to maintain its effectiveness for this purpose.

Dependent on the curb, the markers could range from being full-height vertical strips on the curb, to small (but seeable) "buttons" along the curb or in the roadway. (See accompanying drawing -- PART A, 4 examples.)

3 August 2001 Page I Vernon Kleen (S.S. # 213-40-6313) 1825 Clearview Drive Springfield, EL 62704 217/787-3515 3 August 2001 Page 2

PART B: In another scenario, drivers leaving parking lots, businesses and driveways and turning onto 4- (or more-) lane public roads sometimes encounter a median strip separating the two traffic directions. The median strip "should" prevent drivers from making a left turn into "oncoming" traffic; however, drivers unfamiliar with such locations aren't always aware of the split traffic situation and at night especially, may not recognize (for a variety of reasons) the median strip as a barrier to the split-direction traffic.

One potential solution (Example 1) would be to mark such median strips with a reflective "warning" color (perhaps a bright variation of red) or something that would signify "no left turn!' that could be placed on the curb (median strip) directly in front of the drivers as they exit from such driveways.

Another potential solution (example 2) would be to modify the color-coded standard identified in Part A (above) in such a way that the color code would identify the median barrier and direct the driver in the correct direction (with the blue marker perhaps being an arrow pointing in the correct direction).

The material used for these workers should 'ideally' be permanent, require low maintenance and placed in such a way that they wouldn't be seriously damaged (or scraped off) by right-bound traffic accidently rubbing against the curb or median strip.

3. Benefits and/or Savings if your Suggestion is implemented:

The primary benefits and/or savings (probably \$millions and \$millions every year) would be to the American motorists (reducing injuries to themselves and damage to their vehicles). The implementation of this suggestion would reduce the number of automobile accidents and probably reduce the frequency (and expense \$\$\$\$) of replacing damaged curbs. This suggestion would be an investment in human and traffic safety.





