

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

Refer to : HOTO-1

Mr. Oleg Naljotov
1975 84th Street, Apartment #B4
Brooklyn, NY 11214

Dear Mr. Naljotov:

Thank you for your November 13, 2001, letter regarding your invention of a different sequence for traffic lights. We apologize for the delay in replying. Due to the mail quarantines that have occurred here in Washington, DC, delivery of your letter to this office encountered a major delay.

As you described in your letter, your proposal is to make the green signal flash for 3 to 6 seconds before it changes to the yellow clearance, for the purpose of giving drivers an additional period of time to decide whether or not to stop when the yellow appears.

There has been considerable experience with similar ideas intended to provide an earlier indication of the change from green to yellow, typically with varieties of a "countdown," using either numerals or sequences of lights being extinguished or illuminated. Each time that such countdown-type displays have been tried, it was found that these displays encouraged some drivers to unreasonably speed up to "beat the light" and the increased aggressive driving behavior caused more crashes to occur than was the case without the countdown. It has been conclusively shown that countdown displays reduce, rather than improve, highway safety. Therefore, we have not and will not consider including any such countdown-type displays for vehicular traffic control signals in the Manual on Uniform Traffic Control Devices (MUTCD), the national standard for all traffic control devices on roads open to public travel. Your idea of flashing the green for 3 to 6 seconds in advance of the change to yellow is, in effect, a countdown display, and we do not plan to revise the MUTCD to include such a sequence.

State and local authorities responsible for traffic control on the nation's roads do have a variety of tools available to them to improve safety at signalized intersections. Most important are the proper timing of the yellow interval and the use of an additional "all-red" interval following the yellow and before conflicting traffic gets the green. Based on scientific studies, the traffic engineering profession has developed formulas and guidelines that are used to set yellow and all-red clearance intervals on an intersection-by-intersection basis depending on the prevailing approach speeds, grades (uphill or downhill), intersection width, and other factors. In cases where unusual crash rates occur despite proper yellow and all-red timings, traffic engineers often use special advance warning signs, including electronic signs such as "Signal Ahead Red When

Flashing," that provide approaching drivers with additional advance notice of the conditions ahead. Also, red light camera enforcement programs have been shown to be effective in reducing violations of the red and in reducing crashes.

We regret that we are unable to endorse your idea, but we certainly appreciate your interest in improving traffic safety. For recordkeeping purposes, we have numbered and titled your request as follows: "4-246(I)–Flashing Green Countdown Display." Please refer to this number in any further correspondence. If there are any questions, please contact Mr. Scott Wainwright at 202-366-0857.

Sincerely yours,

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