## THE STEADY BEACON



## Scott O. Kuznicki, P.E. Managing Editor

What does this mean? Perhaps you have found yourself asking this question upon approaching a sign, marking, or other traffic control feature. Occasionally, you might encounter a TCD that simply appears to be malfunctioning. Sometimes, it's a steady beacon, an indication that most traffic engineers might agree means absolutely nothing other than a failed flasher. To the general public, the steady beacon could mean anything.

Interpreting the meaning of functional and errant traffic control devices isn't just a job for the traffic engineer. Rather, the work of the traffic engineer can and must ensure that the meaning and applicability of traffic control devices remains clear to road users even when failures of function and interpretation occur, particularly for critical devices.

But what about failures of logic? Meeting the goals of visibility and comprehension requires attention to the uniformity of TCDs. Uniformity is achieved when there is an expectation of logical continuity through consistency and differentiability, such that specific devices have specific meanings. If correlation between messages and geometry is not achieved, road users will observe a variety of logic mismatches, ranging from the use of yellow flashing indications to the variety of signs and arrows used with option lanes to the use of numerals from unapproved fonts, all as meaningful as a steady beacon.

Often, these seeming oddities are based on research, some of it quite compelling! While research may show that demonstrated user preference favors one approach over another, more than occasionally by a slim statistical margin, the astute traffic engineer will seek to harmonize heuristics, logic models, and past and common practices in art of traffic engineering. This necessarily means that we are eager to anticipate the human factor, going beyond the all-important discipline of human factors in an effort to understand more than "What does this mean?" We must ask, also, "*Why* have we done this?"

What we see in the field is an indication of traffic engineering expertise and a reflection of the diligence of the people who play a role in selecting, designing, erecting, and maintaining traffic control devices. Improving the user experience drives our research of materials, fabrication, tools, visibility, durability, comprehension, and the all-important user response. We ask questions and seek these answers for the sake of the road user.

## SUBMISSIONS TO THE JOURNAL OF TRAFFIC CONTROL DEVICE RESEARCH

Submissions to the JTCDR are accepted at the web site of the National Committee on Uniform Traffic Control Devices, <u>http://ncutcd.org</u> on any web browser. Refer to the call for papers and submission guidelines for more information.

Future calls for submissions and papers will address pavement marking and delineation research, specifically regarding harmonization of desired characteristics for human drivers, advanced driver automation systems, and highly-automated vehicle systems.

While many journals typically accept research papers summarizing the results of experimentation or describing general methodologies, the Journal of Traffic Control Device Research is also home for a wide variety of technical and philosophical perspectives related to the disciplines of traffic engineering, transportation safety, and human factors engineering in transportation. The list below identifies some of the types of technical materials the editors are seeking for future issues.

- Research Compilation and Syntheses of Practice
- Practices Evaluations and Project Overviews
- Evaluations of Novel and Existing TCDs
- Human Factors Performance Evaluations
- Safety Outcome Evaluations
- Technology Applications and Integration with Automated Driving Systems
- Research Proposals for Innovative and Evolving TCDs
- Historical Perspectives on Traffic Engineering and the Development of TCDs
- Current Perspectives on Issues Related to TCDs and Human Factors Research

The chief goal of this journal is to capture and retain knowledge in an accessible format. The greatest knowledge we can obtain consists of reflections and insights from those who have spent decades learning about this work. These pioneering leaders developed the principles, methodologies, and systematic tools that traffic engineers use today to implement and evaluate the performance of traffic control devices.