

TOPIC FOR NCHRP PROJECT 20-5
Synthesis of Information Related to Highway Problems

TITLE: Best Practices in Traveler Information and Traffic Control for Managed Lanes Facilities

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TRB Committee on User Information Systems – AND20 (Chair)

SCOPE: Managed lanes facilities may present drivers with unfamiliar access, geometries, and operating rules. Conveying information concerning these features requires effective use of standard and novel traffic control devices. As managed lanes facilities continue to evolve, new operational strategies and geometric designs may require new traffic control devices. Current managed lanes facilities, including HOV lanes and toll facilities, use a variety of traffic control devices due, in part, to the lack of guidance and standardization in the MUTCD. Also, the course of development for many of these facilities has led planners to feel that theirs is a “one of a kind” facility where standard signs don’t apply. While, for the most part, existing signing has been developed with guidance and in the spirit of the MUTCD, there is little consistency currently in this area.

At a minimum, the contractor will investigate the best practices in traveler information systems and traffic control devices for managed lanes with respect to guide and toll information, regulatory and warning signs, pavement markings, and incident management. Relevant literature in the field will be reviewed and combined with surveys of selected transportation agencies, toll road operators, and state DOTs in order to report on the current state of the practice in providing information and the use of traffic control for all types of managed lanes facilities. A particular focus on best practices learned from facilities located outside of the U.S. is desired. The transition areas between general purpose and managed lanes must also be addressed.

Based on survey results, several in-depth case studies will be developed to profile innovative and successful practices, as well as lessons learned and gaps in information. Successful practices will be identified by virtue of good safety records, low violation rates, good operating speeds, and high customer satisfaction ratings. The contractor will identify areas where the identified best practices vary from specific recommendations and general guidance present in the MUTCD. Where possible, the contractor will articulate the general systematic approach to traveler information and traffic control implemented by the facilities selected for case studies. One product of the synthesis would be to identify guiding principles that agencies can use to provide traffic control devices in line with driver expectations in an integrated and system-wide way.

INFORMATION SOURCES (optional): Owner-operators of managed lanes (state DOTs and transit agencies), toll road authorities, and related professional guidance, standards, policies, and legislation affecting managed lane-related traveler information and traffic control.