NCUTCD Proposal for Changes to the Manual on Uniform Traffic Control Devices

TECHNICAL COMMITTEE: Guide/Motorist Information (GMI) Signs Committee
ITEM NUMBER: XX-GMI-01
TOPIC: National Toll Interoperability Symbol
ORIGIN OF REQUEST: MAP-21
AFFECTED SECTIONS OF MUTCD: Section 2F

DEVELOPMENT HISTORY:
- Approved by Toll & Managed Lanes Task Force: 01/06/2016
- Approved by Technical Committee: 01/07/2016
- GMI Approval Following Sponsors: 06/09/2016
- Approved by NCUTCD Council: 06/10/16

SUMMARY:
This proposal adopts a standard roadway symbol for national toll interoperability.

DISCUSSION
The Moving Ahead for Progress in the 21st Century Act (MAP-21) requires all Federal-aid highway toll facilities to implement technologies or business practices that provide for the interoperability (IOP) of electronic toll collection in the United States by October 1, 2016.

According to the International Bridge, Tunnel and Turnpike Association (IBTTA) web site, “The ultimate vision for North American interoperability is for customers to be able to pay for travel and related services on toll facilities across the continent with a single account and a choice of payment methods.”

About three years ago, IBTTA embraced this mandate and created an interoperability (IOP) committee of toll operators charged with achieving national toll interoperability later this year.

The IBTTA IOP committee is composed of representatives of IBTTA member toll agencies and firms that provide services to the toll industry. The IBTTA IOP committee is structured into a Steering Committee and four sub-committees: Roadside Operations (cost analysis, protocol testing), Back Office Operations (technology and finance issues), Governance (ongoing oversight, IOP compliance, membership), and Communications & Marketing (public outreach and road symbol development). The Communications & Marketing (C&M) sub-committee is comprised of toll operators from the northeast, Florida, Texas, Colorado, Washington, California and a NCUTCD representative to ensure general compliance with MUTCD roadway symbol design principles.
The Florida Turnpike Enterprise has contributed graphical and financial resources in developing candidate roadway symbols. The C&M sub-committee paired down these pictorial representations to five candidate symbols and five “international” symbols (as requested by FHWA’s Traffic Control Device Pooled Fund Study). The FHWA will assist IBTTA in selecting a preferred roadway symbol as part of the Pooled Fund Study.

While MAP-21 requires toll operators to be interoperable later this year, the complexities associated with achieving national toll interoperability are such that toll interoperability is currently in place on a regional basis and will continue to be rolled-out on a regional basis prior to achieving full national toll interoperability.

The new toll interoperability symbol is the nucleus of a national campaign to promote national toll interoperability. The purpose of this symbol is to convey the message to motorists “Your Registered Toll Payment Device Works Here.” Towards this end, IBTTA has played a key role in developing and selecting candidate symbols that conform with general MUTCD design principles and FHWA-approved research methods to identify a symbol and standard word message that is comprehensible to motorists. In addition, IBTTA toll operators have agreed to the following principals in the deployment of the new IOP symbol:

- symbol shall be included in the MUTCD
- symbol shall not replace a toll authority’s existing pictograph
- symbol shall supplement toll authority’s existing pictograph
- symbol shall be released as part of a national communication program on Interoperability.

RECOMMENDED MUTCD CHANGES

The following present the proposed changes to the current MUTCD within the context of the current MUTCD language. Proposed additions to the MUTCD are shown in blue underline and proposed deletions from the MUTCD are shown in red strikethrough. Changes previously approved by NCU TCD Council (but not yet adopted by FHWA) are shown in green double underline for additions and green double strikethrough for deletions. In some cases, background comments may be provided with the MUTCD text. These comments are indicated by [highlighted light blue in brackets].

Section 2F.19 National Toll Interoperability Symbol

Support:
01 The display of the National Toll Interoperability (NIOP) symbol [see Figure 2X-XX] communicates to motorists that the tolls system is compliant with the NIOP toll collection protocol and related services across the nation may be paid with a single pre-registered account.

Standard:
02 The NIOP symbol shall have the design shown in Figure 2X-XX. If a ETC is interoperable, the Toll Interoperability symbol shall be displayed along with the ETC pictograph. The Toll Interoperability symbol shall be displayed to the right of the ETC toll pictograph(s), or within the ETC pictograph, near the lower right-hand corner [see Figure 2X-XX].
Guidance

If used, the NIOP symbol should be displayed in a visible location such as:

A. In close proximity to an ETC pictograph (e.g., upper right corner, lower right corner, immediate right or beneath).
B. Within an Express Lane header panel.
C. On an advance sign for the ETC facility.

Figure 2F-XX provides examples of how the NIOP symbol should be displayed.
NOTE: Figure 2F-XX has not been approved by council. The interoperability symbol is still undergoing human factors evaluation. The inclusion of the figure at this time was to provide a visual support to the evaluation of the language. Once the human factors evaluation of the symbol is completed the figure will be sent to sponsors and then brought back before council for approval. The yellow circle shown is displayed as a placeholder for the symbol location.

June 9, 2016 – GMI Vote:
FOR: Unanimous    AGAINST: ABSTAIN;

June 10, 2016 – Council Vote
FOR: Unanimous    AGAINST: ABSTAIN;