



Board Report

File #: 2018-0036, **File Type:** Informational Report

Agenda Number: 5.

AD HOC CONGESTION HIGHWAY AND ROADS COMMITTEE APRIL 11, 2018

SUBJECT: METRO EXPRESSLANES DYNAMIC MESSAGE SIGNS

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE report on Metro ExpressLanes Dynamic Message Signs.

ISSUE

At the October 2017 Ad Hoc Congestion, Highway and Roads Committee, Director Hahn expressed concern that some of the terminology/abbreviations on the ExpressLanes Dynamic Message Signs (DMS) was confusing and did not clearly communicate its intent to customers. This report addresses those concerns by sharing the results of market research and recent consultation with Caltrans.

BACKGROUND

Per Title 23 of the Code of Federal Regulations, Part 655.603, all signage used on highways across the US, including the Metro ExpressLanes, must conform to the standards presented in the Manual on Uniform Traffic Control Devices (MUTCD). The MUTCD is a set of federally applied rules and guidelines governing signage treatments on public roads adopted by each State. This includes, among other things, standards and guidelines with respect to usage of color, number of words, and allowable terminology/abbreviations. For example, the adopted version of the MUTCD in California requires that the term "HOV" be used rather than "Carpool" on all state-owned facilities, including the Metro ExpressLanes.

In order to assure visibility of signage, message options for ExpressLanes' DMSs are constrained by the size of the sign themselves, as characters must be at least a certain size, placing a limit on the number of characters that can fit on a given sign. The DMSs used on the ExpressLanes can generally support messages that are no more than three lines long, and no more than 20 characters per line.

For consistency of user experience across California, precise definitions and usage are also established for the FasTrak brand by the California Toll Operators Committee (CTOC) which includes

both the term “FasTrak” and the related but distinct term “FasTrak Flex.”

- **FasTrak** refers to the standard electronic tolling collection system used throughout California, which all toll operators with electronic payment systems are required to accept (this includes the Metro ExpressLanes).
- **Flex**, refers more precisely to a particular type of FasTrak transponder that includes a switch for declaring vehicle occupancy. The “Flex” suffix is essential for distinguishing these switchable transponders from other non-switchable types of FasTrak transponders. Flex is a common name for the switchable transponder that is used nationwide and in California by other tolling agencies. By using the term Flex, the ExpressLanes signage indicates that those with a non-Flex FasTrak transponder are assumed to be solo drivers and will have to pay the toll regardless of the number of occupants in their vehicle.

DISCUSSION

In an effort to obtain feedback from ExpressLanes customers, staff held five focus groups on November 15 and 16, 2017. The focus groups were comprised of both frequent and in-frequent users of the 10 and 110 ExpressLanes and concentrated on the issue of signage and messaging.

Findings

Relevant focus group findings are as follows:

- Participants experienced great difficulty in comprehending signs that included the word ‘HOV’. HOV was thought to be related to low-emission vehicles or high operations vehicles. Some participants understood that it had something to do with the number of people in the car.
- One of the least understood elements of the digital signs was the use of the word ‘FLEX’. Flex was speculated to refer to the flexibility of time and fees or the need to have a transponder.
- Participants were acquainted with the ExpressLanes signs presented to them with varying degrees of comprehension. For each sign discussed, participants quickly gathered their understanding of the message and sought to paraphrase it for simplicity.

Attachment A provides a side by side comparison of the current and proposed changes to the DMSs based on the recommendations of the focus groups and in consultation with Caltrans. Since some of the terms identified by the focus groups as unclear cannot be changed due to MUTCD requirements, physical limitations of the signs, and/or adopted CTOC guidelines, staff will develop a marketing and education campaign to more clearly communicate the intent of the DMS messages. Targeted education and outreach activities will include the development of:

- A Pocket Guide with promotional items will be mailed to all customers highlighting key Metro ExpressLanes messages.
- An Educational video which will be promoted through customer email notification, social

media, and metroexpresslanes.net.

- Social media marketing with digital signage that targets new and existing customers.
- Press release to highlight the new Metro ExpressLanes messages.

Metro staff will conduct focus groups to determine the effectiveness of the new messages and education/marketing campaign six to nine months after implementation in the summer.

FINANCIAL IMPACT

Funding for the outreach and marketing efforts is included in the FY 18 budget of Cost Center 2220.

NEXT STEPS

Staff will work with the marketing and communications department to start the educational and marketing outreach strategies. Staff will take the necessary steps to notify customers of the change and implement the new message signs.

ATTACHMENTS

Attachment A - Metro ExpressLanes Message Signs

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METRO EXPRESSLANES

New Digital Messaging Recommendations

EXISTING

RECOMMENDED



The ExpressLanes are open to any driver, even if the driver does not have a transponder. Violations will not be processed and tolls will not be charged. Drivers may not cross the solid double white lines unless directed to do so by the CHP.



No one may enter or use the lane. Any driver who enters the lanes after the lanes are closed will be charged the maximum toll for the full corridor even if the driver did not travel the full length of the corridor.



The minimum non-peak or peak toll rate per mile will be charged.

Non-peak hour rate is \$0.10 per mile.
Peak hour rate is \$0.35 per mile.

Flex – Switchable FasTrak transponder that has a switch that can be moved to indicate the number of occupants in the vehicle.



Any driver entering the lanes must have two or more occupants in the vehicle, and must also have a FasTrak Flex transponder set to the proper occupancy setting. Any driver entering the lanes without meeting these requirements will be subject to the maximum toll rate for the corridor, regardless of actual length traveled in the ExpressLanes. Drivers that were already in the ExpressLanes before encountering this sign may stay in the lane.



Any driver entering the lanes must have three or more occupants in the vehicle, and must also have a FasTrak Flex transponder set to the proper occupancy setting. Any driver entering the lanes without meeting these requirements will be subject to the maximum toll rate for the corridor, regardless of actual length traveled in the ExpressLanes. Drivers that were already in the ExpressLanes before encountering this sign may stay in the lane.

METRO EXPRESSLANES

Item # -

March 14, 2018 Ad Hoc Congestion, Highway & Roads Committee

Metro ExpressLanes Dynamic Message Signs



Metro ExpressLanes Dynamic Message Signs

At the October 2017 Ad Hoc Congestion, Highway and Roads Committee, Director Janice Hahn expressed concern that some of the terminology used on the ExpressLanes' Dynamic Message Signs (DMS) was confusing and did not clearly communicate its intent to system users. Specifically, among the areas of concern raised were the meaning of the word "Flex" and the usage of the acronym "HOV".



Focus Groups

Five focus groups were held on November 15th & 16th.

- The focus groups were comprised of both frequent and infrequent users of the 10 and 110 ExpressLanes and concentrated on the issue of signage and messaging.



Metro

Key Findings

Key Findings from the Focus Group Interviews:

- Use of the word 'HOV'
 - Participants experienced great difficulty in comprehending signs that included the word 'HOV'.
- Unfamiliarity with the Flex transponder
 - One of the least understood elements of the digital signs was the use of the word 'FLEX'.
- Importance of simplified language
 - For each sign discussed, participants quickly gathered their understanding of the message and sought to paraphrase it for simplicity.



Overarching Issues

Overarching issues govern the selection of terminology for highway DMSs:

- Per federal regulations, all signage used on highways across the US must conform to the standards presented in the Manual on Uniform Traffic Control Devices (MUTCD).
- Message options for ExpressLanes' DMSs are constrained by the size of the sign themselves, character sizes, and the number of characters that can fit on a given sign.
- For consistency of user experience across California, precise definitions and usage are established for the FasTrak brand by the California Toll Operators Committee (CTOC).



Existing & Recommended Signs

EXISTING

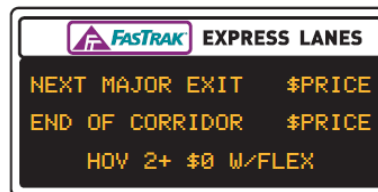
RECOMMENDED



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No one may enter or use the lane. Any driver who enters the lanes after the lanes are closed will be charged the maximum toll for the full corridor even if the driver did not travel the full length of the corridor.



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Non-peak hour rate is \$0.10 per mile.

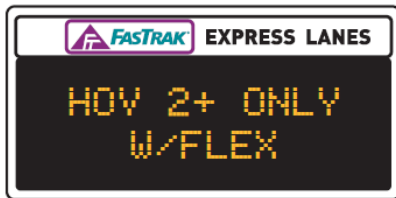
Peak hour rate is \$0.35 per mile.

Flex – Switchable FasTrak transponder that has a switch that can be moved to indicate the number of occupants in the vehicle.

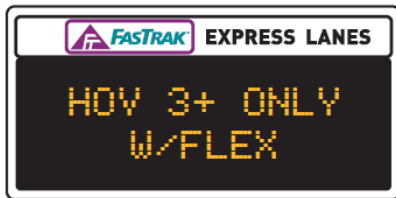
Existing & Recommended Signs

EXISTING

RECOMMENDED



Any driver entering the lanes must have two or more occupants in the vehicle, and must also have a FasTrak Flex transponder set to the proper occupancy setting. Any driver entering the lanes without meeting these requirements will be subject to the maximum toll rate for the corridor, regardless of actual length traveled in the ExpressLanes. Drivers that were already in the ExpressLanes before encountering this sign may stay in the lane.



Any driver entering the lanes must have three or more occupants in the vehicle, and must also have a FasTrak Flex transponder set to the proper occupancy setting. Any driver entering the lanes without meeting these requirements will be subject to the maximum toll rate for the corridor, regardless of actual length traveled in the ExpressLanes. Drivers that were already in the ExpressLanes before encountering this sign may stay in the lane.

Targeted Education & Outreach Schedule

IMAGE OF BROCHURE

<ul style="list-style-type: none">• Press release	March 2018
<ul style="list-style-type: none">• Pocket Guide with promotional items	April/May 2018
<ul style="list-style-type: none">• Educational video	April/May 2018
<ul style="list-style-type: none">• Social media marketing	April/May 2018
<ul style="list-style-type: none">• Focus groups to determine the effectiveness of the new messages & education/marketing campaign	Early 2019

