

TECHNICAL SUMMARY

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MnPASS express lanes currently in use have been well-received by the public.

Public Acceptance of New Highway Capacity Strategies: FAST Miles and FEE Lanes

What Was the Need?

Increasing congestion and limited state budgets are forcing transportation departments across the country to look into better ways to use existing highway infrastructure. In 2005, Minnesota converted the high-occupancy vehicle, or HOV, lane on I-394 to a high-occupancy toll, or HOT, lane. That conversion changed what was a restricted lane limited to use by buses, motorcycles and vehicles with two or more passengers—to an optional toll lane for single occupant vehicles known as MnPASS.

Mn/DOT is currently evaluating additional strategies to more efficiently use the highway infrastructure. Several different concepts exist, including FAST Miles, which involves creating an optional toll lane combined with a predetermined amount of credits given to motorists each month, and FEE—flexible and efficient express—lanes, which combine active traffic management with a creditResearchers conducted six focus groups with Minnesota highway users to determine public understanding of a variety of FAST and FEE lane concepts. Participants were generally open to more efficient use of existing infrastructure but expressed concerns about logistics, fairness and safety.

based system, converting general purpose lanes to toll lanes during peak driving times.

For any new value pricing plan to be successful, it is necessary to know how well the public understands the concept and what level of acceptance exists for a plan of this sort.

What Was Our Goal?

The goal of the project was to determine public understanding of the need for increased capacity on the highway system and to gauge public acceptance and understanding of the FAST Miles and FEE lanes concepts.

What Did We Do?

Investigators reviewed relevant literature, looking into the experience of the Federal Highway Administration, California and New York in implementing similar plans. Then they organized and conducted six focus groups containing eight to 10 participants each. Different categories of highway users were targeted, including peak and nonpeak period drivers, transit riders (bus or light rail), MnPASS users and business managers whose employees needed to drive the Twin Cities Metropolitan Area freeways to do their work.

Investigators explained each of the following options for reducing congestion and asked participants for their reactions:

- HOV lanes: This lane is for carpoolers and buses.
- HOT lanes: Vehicles with two or more persons and motorcyclists can use this lane for free, while single occupancy vehicle drivers are charged a fee to use the lane (the MnPASS system).
- FEE lanes (Configuration A): During peak hours, the left general-purpose lane is converted into a toll lane (free for buses) and the right shoulder is converted into a general purpose lane.
- FEE lanes with credits (Configuration B): An additional general-purpose lane would be

"This study helped identify the concerns of Minnesota highway users regarding the conversion of free general purpose lanes to toll lanes, which has never been done before. This will be valuable as we refine our policies to better utilize existing infrastructure."

---Ken Buckeye, Program Manager, Mn/DOT Office of Policy Analysis, Research & Innovation

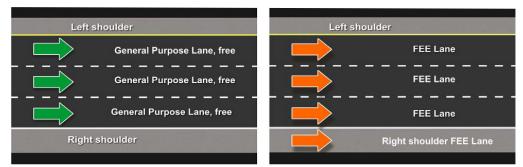
"Once citizens saw how a HOT lane works, they supported it. The same might be said for some of the concepts in this study: Although support may be low at first, over time and through public education, support for value pricing initiatives can grow."

—Adeel Lari,

Director, Innovative Financing in the State and Local Policy Program, University of Minnesota Hubert H. Humphrey Institute of Public Affairs

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Configuration C (right) would convert all lanes to FEE lanes during peak periods. Many focus group participants thought this was inevitable but had concerns regarding fairness and equity.

converted to a toll lane, making two FEE lanes, and credits would be provided to all motorists in the metropolitan area for use in the FEE lanes.

• FEE highway with credits (Configuration C): All general-purpose lanes as well as the shoulder travel lane would be converted to FEE lanes during peak periods, and more credits would be offered than under Configuration B.

What Did We Learn?

Responses to each configuration were consistent across focus groups. Users were most familiar with the HOV and HOT systems currently in use and generally held a positive view of both. Responses to each of the three FEE lane configurations were mixed. With FEE Configurations A and B, participants liked the increased choice, the ability to pay to get somewhere on time, the increased capacity provided by using the shoulder during peak times, and the minimal out-of-pocket expenses as a result of the credit system in Configuration B. Key concerns included the potential safety ramifications of having the shoulder used as a travel lane, fairness to carpoolers and the perceived complex nature of the credit system.

Configuration C, which would convert all general purpose lanes to FEE lanes, also elicited a mixed response. Participants thought it was easier to understand than A or B, found it more egalitarian and often expressed the belief that such a configuration is inevitable. Key concerns included the lack of choice, unfairness, logistics and difficulty administering the credit system. Participants worried that people could get priced out of using the highways, but were equally concerned that a credit system would be complicated and costly to implement.

What's Next?

Researchers recommend pursuing HOT lanes and one FEE lane on all major highways, with education and outreach needed to communicate details of the credit system and the need for new configurations to reduce congestion.

A current project under way on I-35W allows people to travel on the shoulder during peak times, much like Configuration A. That project will help determine if the concerns expressed regarding safety, fairness and logistics actually materialize.

This Technical Summary pertains to Report 2010-27, "Study of Public Acceptance of Tolling with New Capacity and Credits: Concepts of FAST Miles and FEE Lanes," published July 2010. The full report can be accessed at http://www.lrrb.org/PDF/201027.pdf.