

User Perceptions of FEE Lane Concepts in Minnesota



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- Low-cost highway capacity expansion
- Express lane pricing concepts
- Results of analysis of costs, benefits and revenues

Overview

*Creating a Network of Express Lanes in
Metropolitan Areas*

ITE Journal, September 2009: Patrick DeCorla-
Souza & John Halkias

*Congestion Pricing With Lane Reconfigurations to
Add Highway Capacity*

Public Roads. Federal Highway Administration.
March/April 2009:
DeCorla-Souza, Patrick (2009).

Analytical Details

- Travelers in I-35W and I-394 corridors during peak times (2 groups)
- Off-peak travelers
- Transit riders
- MnPASS HOT lane users
- Business representatives (suppliers, tradesman, shippers)

Focus Group Market Segments

- Off-peak all lanes are free
- Dynamically priced
- No lane take-away
 - Right side dynamic shoulder lane available during peak
 - Lane control technology
- Peak-period all users pay
 - No occupancy preference except for buses
- Credits may be offered

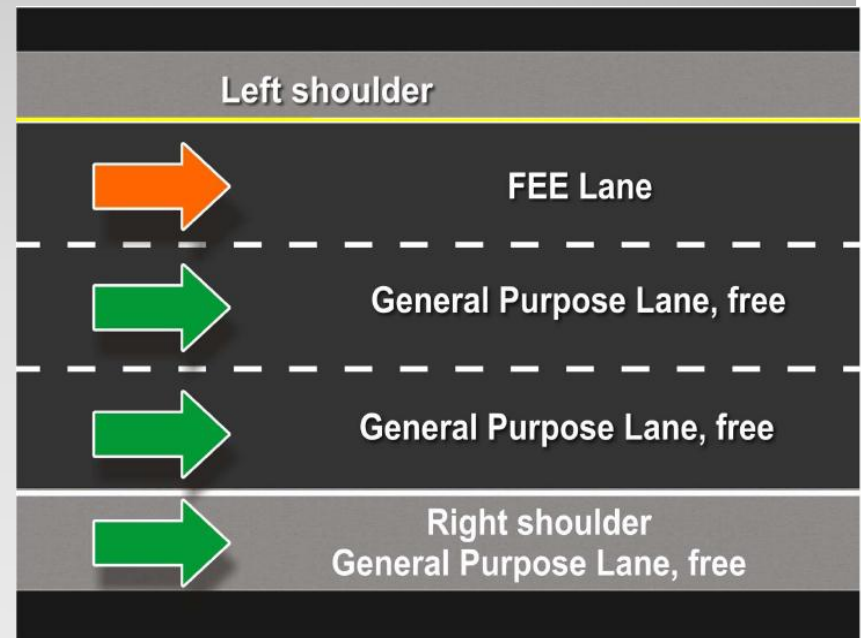
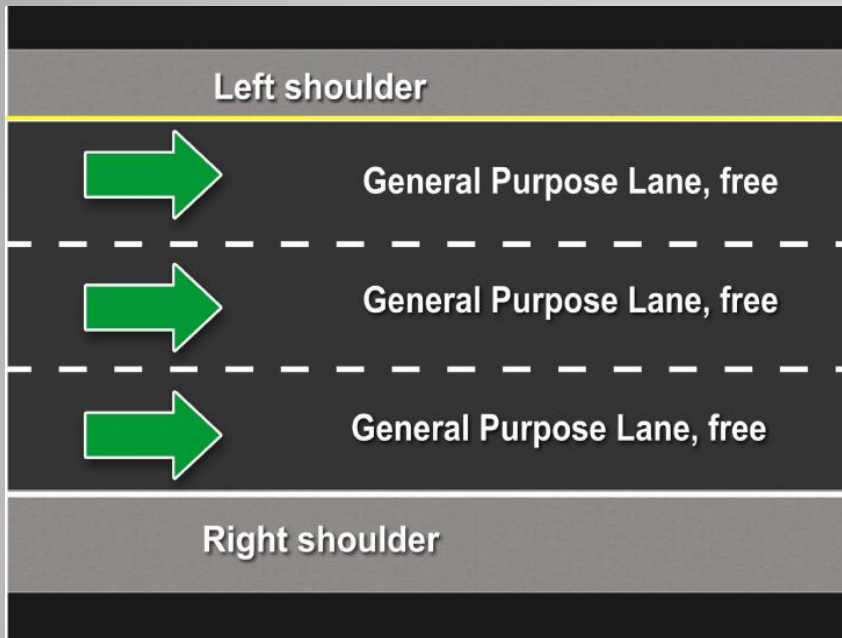
How FEE Lanes Work



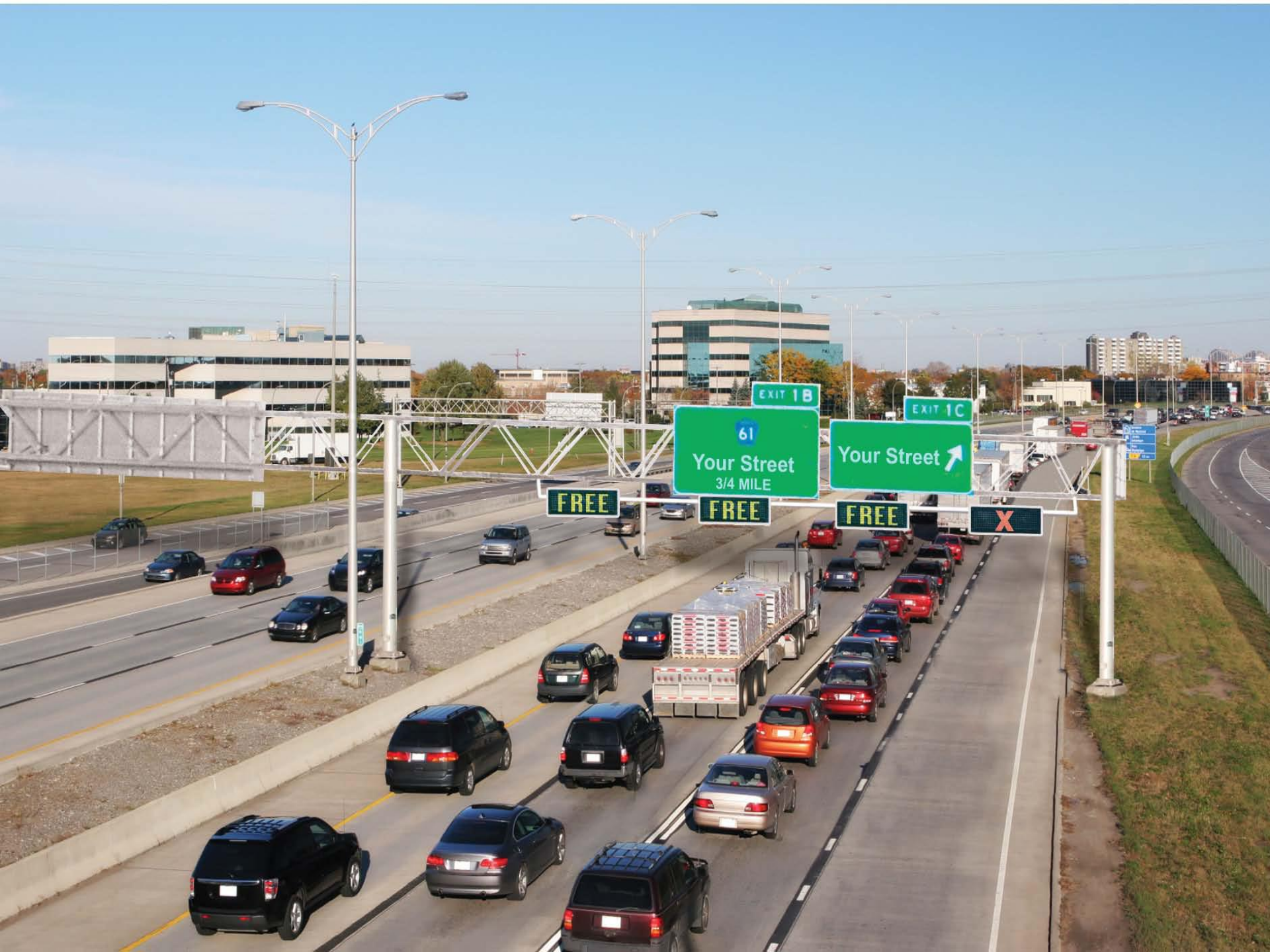
Mn PASS HOT Lanes: HOT Operations

- **Off-Peak Period**

- **Peak Period**



Configuration A



61
Your Street
3/4 MILE

Your Street ↗

FREE

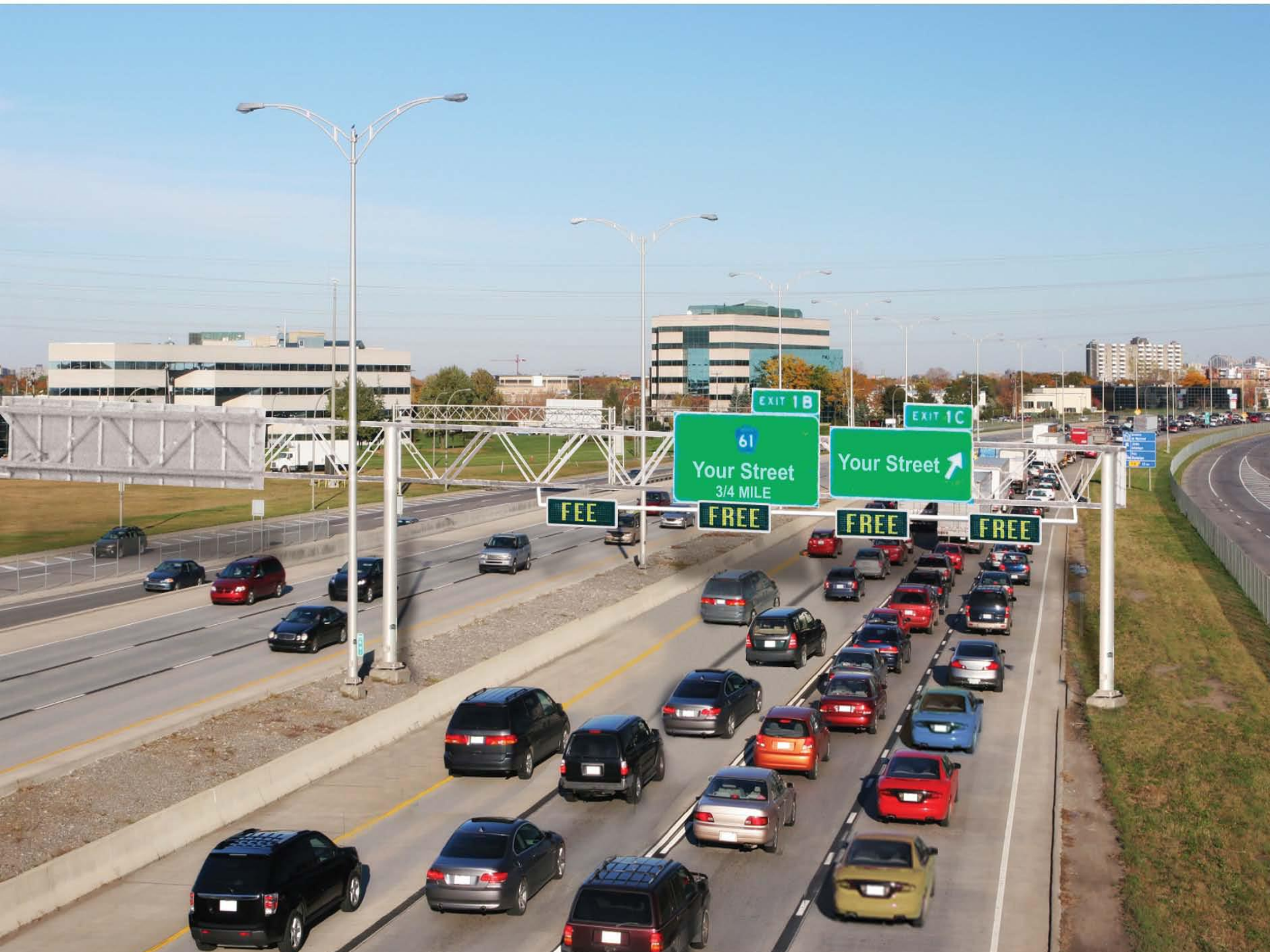
FREE

FREE

X

EXIT 1B

EXIT 1C



61
Your Street
3/4 MILE

Your Street ↗

EXIT 1B

EXIT 1C

FREE

FREE

FREE

FREE

- Choice
- Increased throughput
- Using shoulder as a lane
- Concept works in Washington, D.C.

**FEE Lane Configuration A:
Likes**

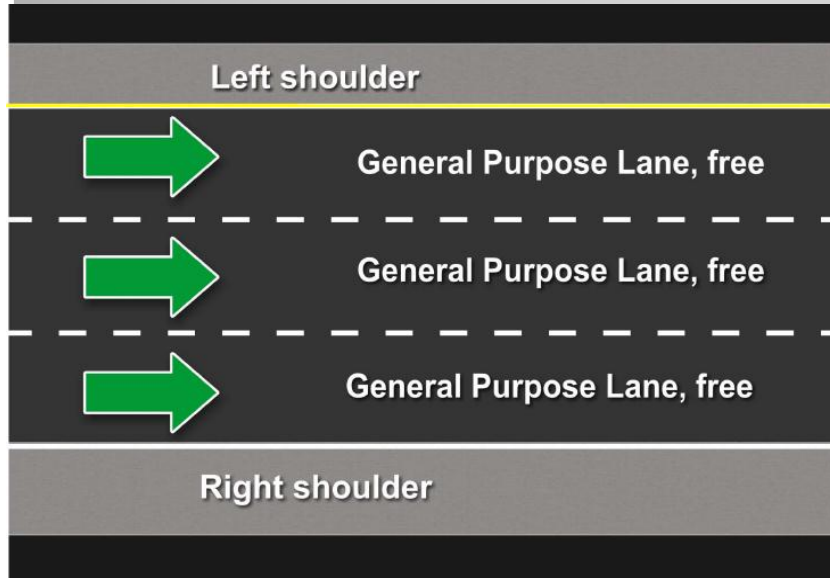
- Safety
- Unfair to carpoolers
- Lack of understandable system
- Managing accidents and breakdowns
- Enforcement challenges
- Merging and exiting
- Driver confusion in off-peak
- Snow removal and storage
- Need to weave across several lanes to access FEE Lanes
- FEE Lanes may be under used
- Traffic would move faster if all lanes were free

FEE Lane Configuration A: Concerns

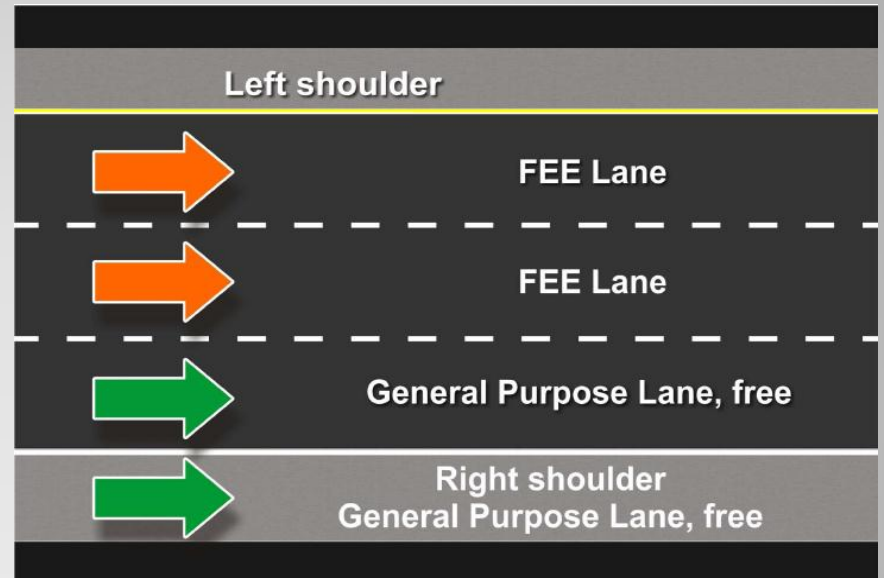
- Enforcement, use metal arms
- Implement on all highways at same time
- There should be a “Fast” guarantee in FEE Lane
- Using left shoulder for extra lane may work better
- Should be used for longer distance travel

FEE Lane Configuration A: Suggestions

- **Off Peak**



- **Peak Period**



Configuration B



EXIT 1B
61
Your Street
3/4 MILE

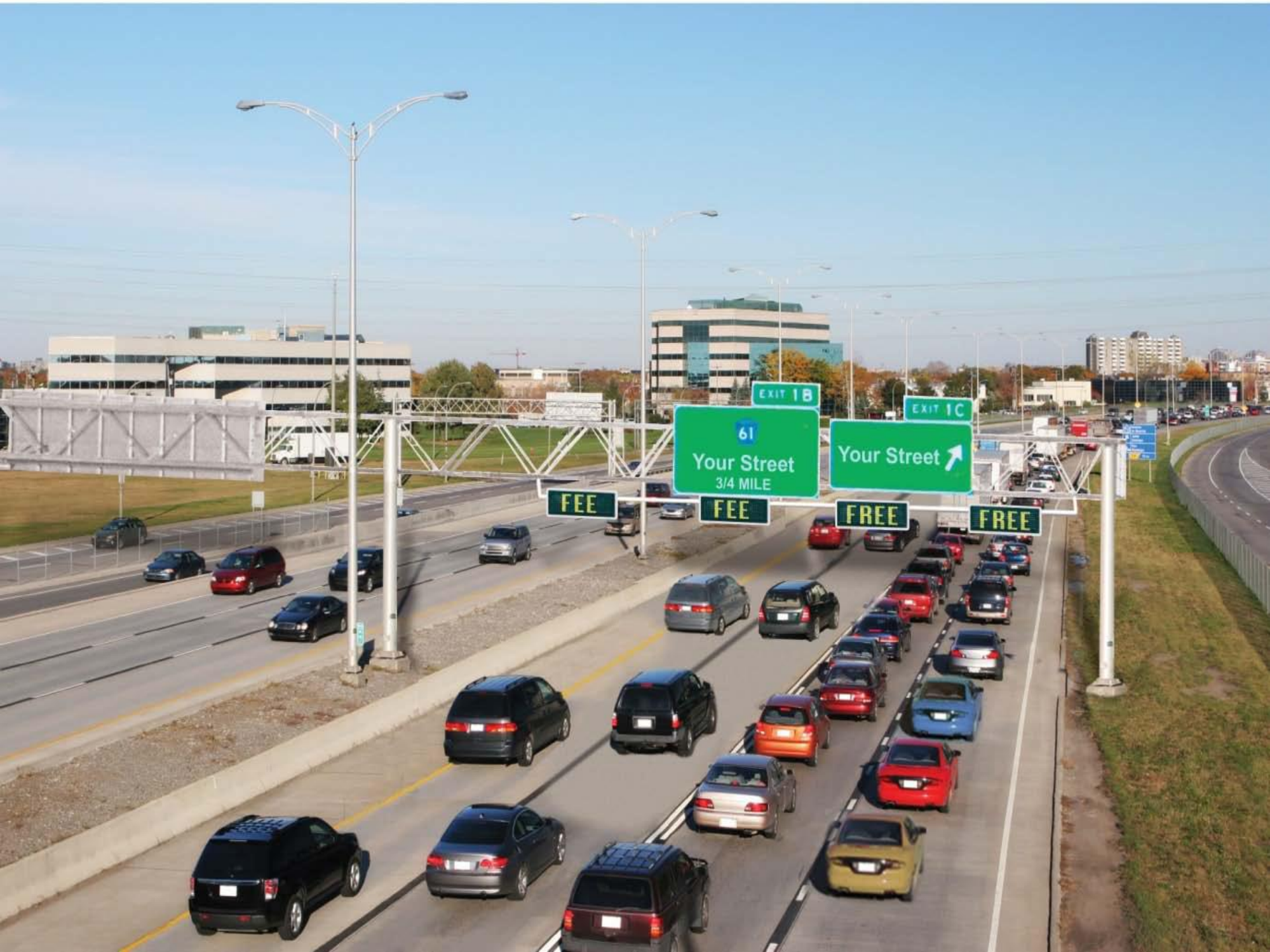
EXIT 1C
Your Street

FREE

FREE

FREE

X



61
Your Street
3/4 MILE

Your Street ↗

EXIT 1B

EXIT 1C

FEE

FEE

FREE

FREE



61
Your Street
3/4 MILE

Your Street ↗

FREE

FREE

FREE

X

EXIT 1B

EXIT 1C

- Choice
- Enhancement of HOT concept
- Credits allow for less out-of-pocket expenses
- FEE Lane would be available to service vehicles.

FEE Lane Configuration B: Likes

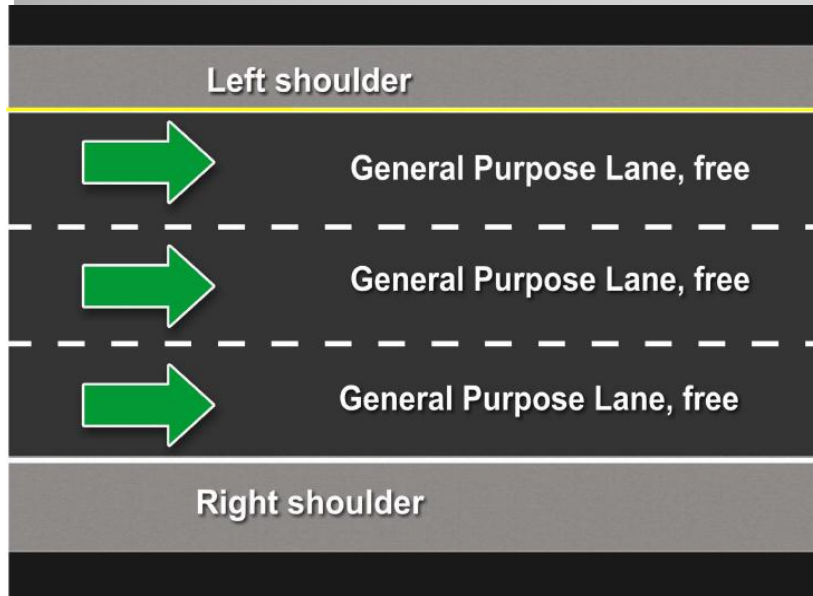
- Equity – for carpoolers, for low-income drivers; taxes already paid for highways
- Complexity of credit system and fair distribution
- People would not use the FEE Lanes
- Not enough time savings to justify paying
- FEE Lanes will cause congestion in free lanes
- Transit will get overcrowded because people will use credits to ride bus
- Government will raise taxes to give away credits
- Drivers in free lanes may not let FEE Lane drivers merge into and out of FEE Lanes

FEE Lane Configuration B: Concerns

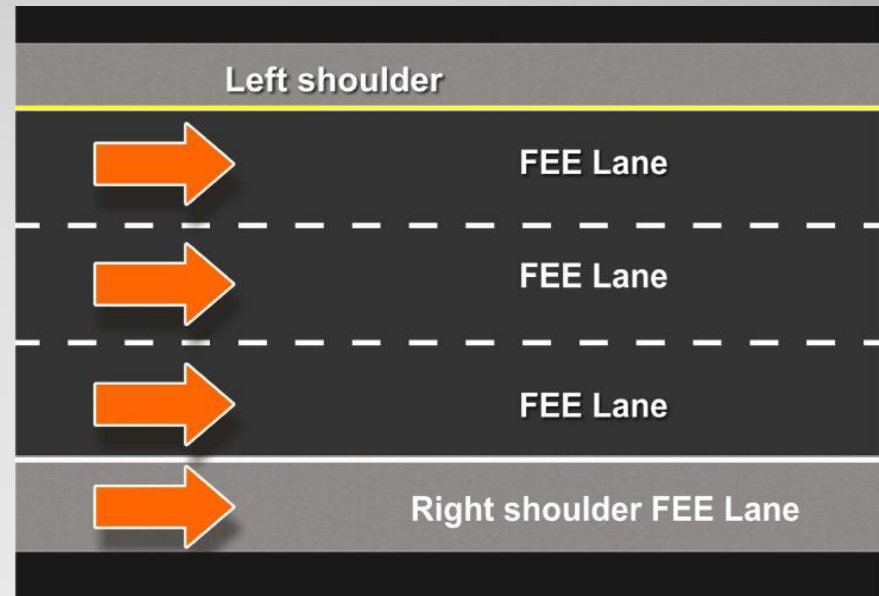
- Need more information on credit system
- Logistics of FEE Lanes (how they operate)
- Carpools should be free
- More flexibility with credits
- Open shoulder for special events
- Build transponder into license plate

FEE Lane Configuration B: Suggestions

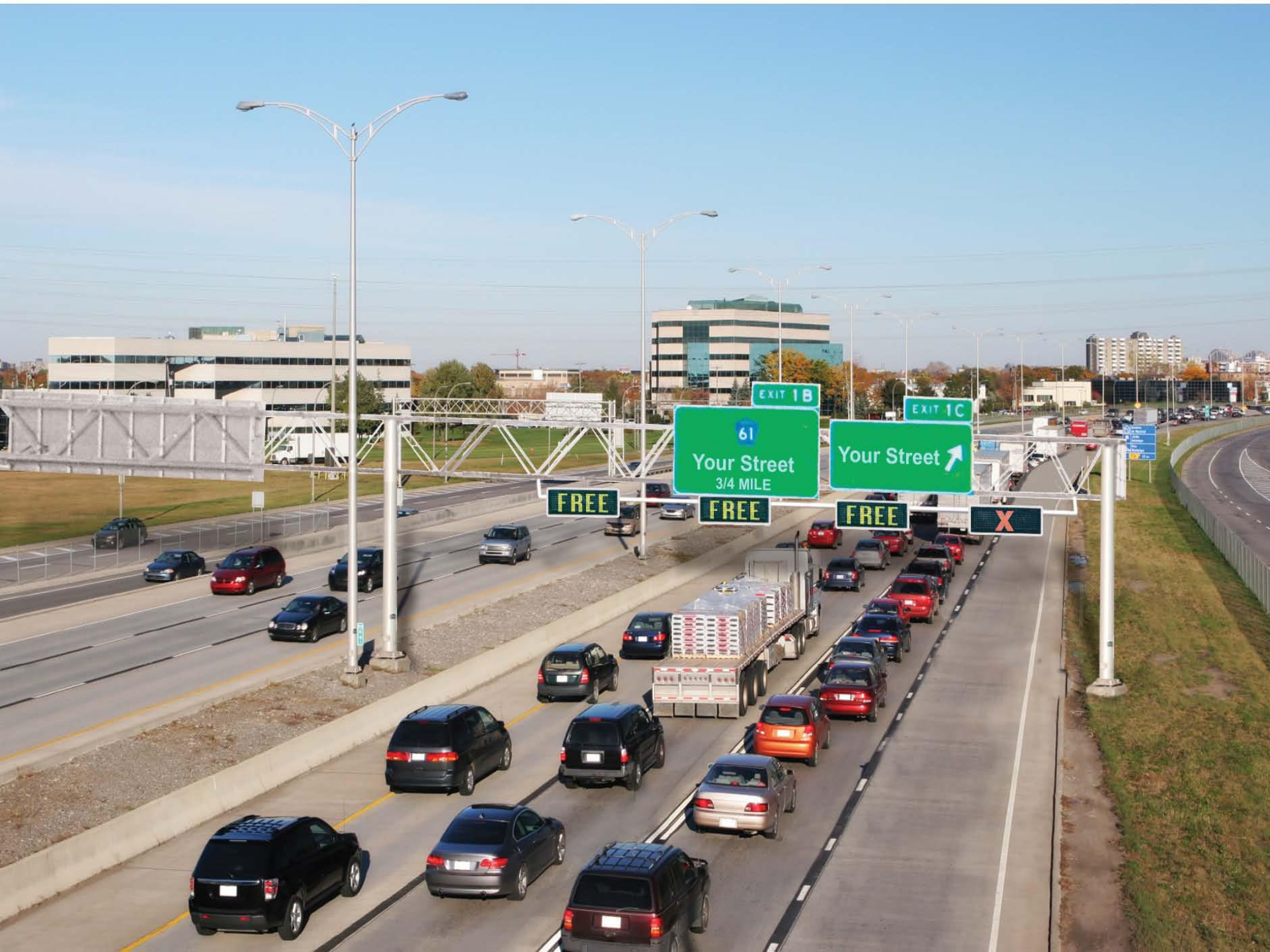
- **Off Peak**



- **Peak Period**



Configuration C



61
Your Street
3/4 MILE

Your Street ↗

FREE

FREE

FREE

X

EXIT 1B

EXIT 1C



61
Your Street
3/4 MILE

Your Street ↗

EXIT 1B

EXIT 1C

FEE

FEE

FEE

FEE

- Understandable
- Inevitable
- Equality – all lanes are tolled
- After drivers get used to it they won't think it is a bad idea
- Need a trial like Stockholm
- OK if government lightens taxes
- Would be great for commercial businesses

FEE Lane Configuration C: Likes

- No choice
- Unfair
- Credit system
- Logistics (how they operate)
- Resistance to fees, public will hate idea
- Diversion to local roads
- Where do credits come from?
- Where does revenue go?
- Need new bureaucracy to manage
- Would kill business
- Would require work schedule changes
- How will traffic improve if everyone has credits?
- The road is paid for already
- Confusion for travelers from outside area

FEE Lane Configuration C: Concerns

- Credit system improvements
- Business could cover fees through surcharges
- Receive credits when you renew license tabs or toll tags
- Don't give credits to drivers who don't have cars

FEE Lane Configuration C: Suggestions

- What is next for MnPASS
 - Are FEE Lanes a potential model?
- Advantages
 - Raises more revenue than HOT lanes
 - Enhances transit option
 - Enforcement is easier/cheaper
 - Uses more of existing highway footprint
 - No takeaway
 - Development cost savings
- Concerns
 - Merging and exiting on right
 - Safety and enforcement
 - Right shoulder unavailable in peak

Closing Observations

- Public resistance to HOT lane concepts is diminishing
- Expectation for better use of highway footprint is growing
- FEE Lane Config. A is preferred
 - Fairness to carpools is a concern
 - Credit logistics is big concern
- Config. A and B offer free peak period alternatives
- Config. C imposes tolls on everyone in peak period, however fees and charging period may be reduced
- Credit system needs definition
- DOT must clearly define the problem these solutions address
- Extensive education and marketing is necessary

Closing Observations

"Our goal is to effectively use every inch of pavement so that we have the most efficient transportation system possible."

**Victor Mendez, Federal Highway Administrator
September 28, 2009**

"We have to sell road pricing as by far the most cost-effective way to add capacity to the system."

**Doug McDonald, former DOT Secretary, Washington State
January 22, 2012**