



# Introduction to Road Pricing and Public Outreach

**Patrick DeCorla-Souza, Tolling and Pricing Program Manager, FHWA**  
**Lee Munnich, Humphrey Institute, University of Minnesota**  
**Kenneth Buckeye, Minnesota Department of Transportation**  
**John Doan, SRF Consulting**

Office of Innovative Program Delivery  
Federal Highway Administration

First Part of a Webinar Series on Road Pricing Outreach





# Welcome

Innovative Program Delivery

## FHWA – IPD Road Pricing Public Acceptance and Outreach Webinar Mini-Courses

- Moderator:

- John Doan, SRF Consulting

- Presenters:

- Patrick Decorla-Souza, Tolling and Pricing Manager, FHWA
- Lee Munnich, Humphrey Institute, University of Minnesota
- Kenneth Buckeye, Minnesota Department of Transportation
- John Doan, SRF Consulting

- Audience Q&A:

- Type questions into the chat box. The moderator will field your question to the appropriate panelist. Questions will be answered at the end of each session and during the last 15 minutes of the webinar.





# Presentation Outline

## Innovative Program Delivery

1. Key factors that have led to public acceptance of road pricing in the U.S. (Patrick DeCorla-Souza)
2. A grasstops approach to outreach and communications (Lee Munnich)
3. Minnesota experience (Ken Buckeye)
4. Group Discussion and Preparation for Next Session (John Doan)





# Part 1

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## **Key factors that have led to public acceptance of road pricing in the U.S.**

**Patrick DeCorla-Souza,  
Tolling and Pricing Program Manager,  
FHWA**





# Types of Congestion Pricing

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- ***Priced lanes:*** High-Occupancy/Toll (HOT) or Express Toll lanes
- ***Priced highways:*** Variable tolls on toll facilities or on existing free roads
- ***Priced zones:*** Area or cordon
- ***Fully priced road networks:*** Commercial vehicles or all vehicles





# Priced Lanes: HOT Lanes

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## San Diego, I-15:

- Choice not to pay
- No lane “take-away”
- Most of net revenue allocated to transit





# Priced Lanes: Express Toll lanes

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## SR 91, Orange County, CA:

- Choice not to pay
- Only new lanes tolled
- Discount for high-occupancy vehicles





# Priced Highways

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### SR 520 Bridge, Seattle:

- Key factors:
  - High cost of bridge replacement
  - Lack of tax-based funding.
- Public understanding of the above







# Cordon Pricing

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## New York City proposal:

- Key factors:
  - Understanding of the economic cost of congestion (\$13 B annually)
  - Revenue generation for transit infrastructure (\$500 million annually)
  - Mitigation of negative impacts





# Fully Priced Road Networks

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| Trucks only  | All vehicles  |
|--|---|
| <ul style="list-style-type: none"><li>• Pilot test: New York State</li></ul> | <ul style="list-style-type: none"><li>• Pilot tests: Oregon, Seattle, Minnesota, Atlanta, and 12 other cities (VMT fee demonstration)</li><li>• Metropolitan area model-based studies</li></ul> |





# Metropolitan Area Study: Seattle, WA

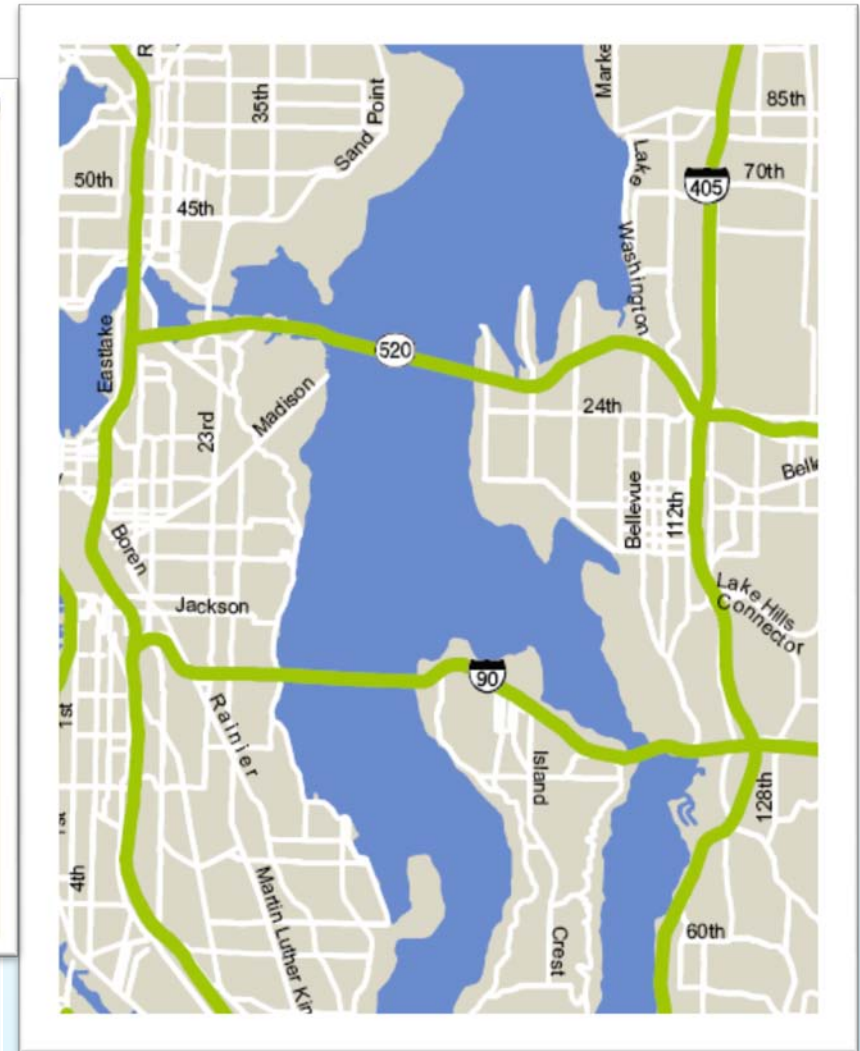
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## Traffic Choices study:

- Present value of revenues = \$87 B

## Transportation 2040

|       | TOLL RATES PER MILE<br>MONDAY — FRIDAY |              |
|-------|--|--------------|
|       | FREEWAYS                               | NON-FREEWAYS |
| 6 AM  | 40¢                                    | 20¢          |
| 9 AM  | 15¢                                    | 7.5¢         |
| 4 PM  | 50¢                                    | 25¢          |
| 7 PM  | 10¢                                    | 5¢           |
| 10 PM | no charge                              | no charge    |

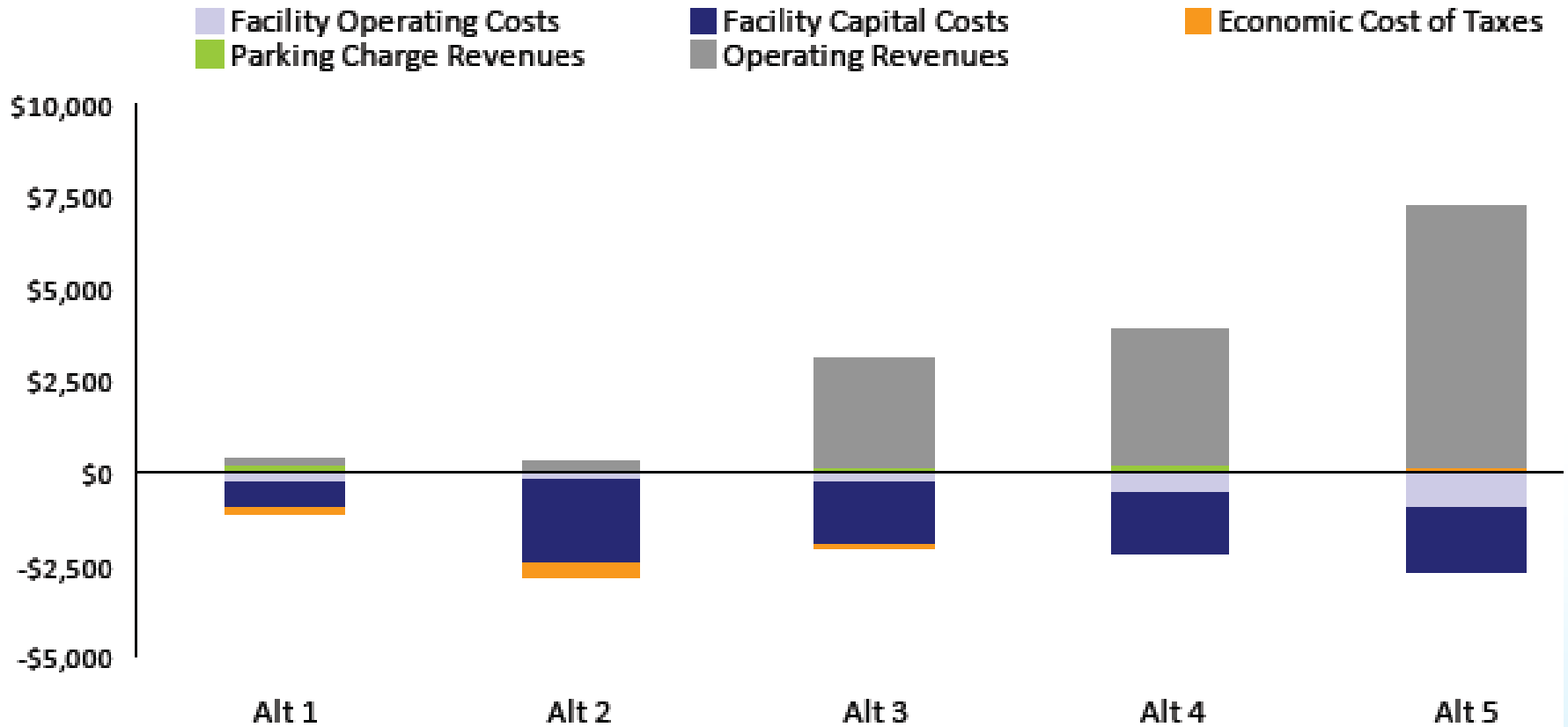




# Seattle Study: Finance

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### Annual Revenues and Costs Relative to the 2040 Baseline (millions of 2008 dollars)

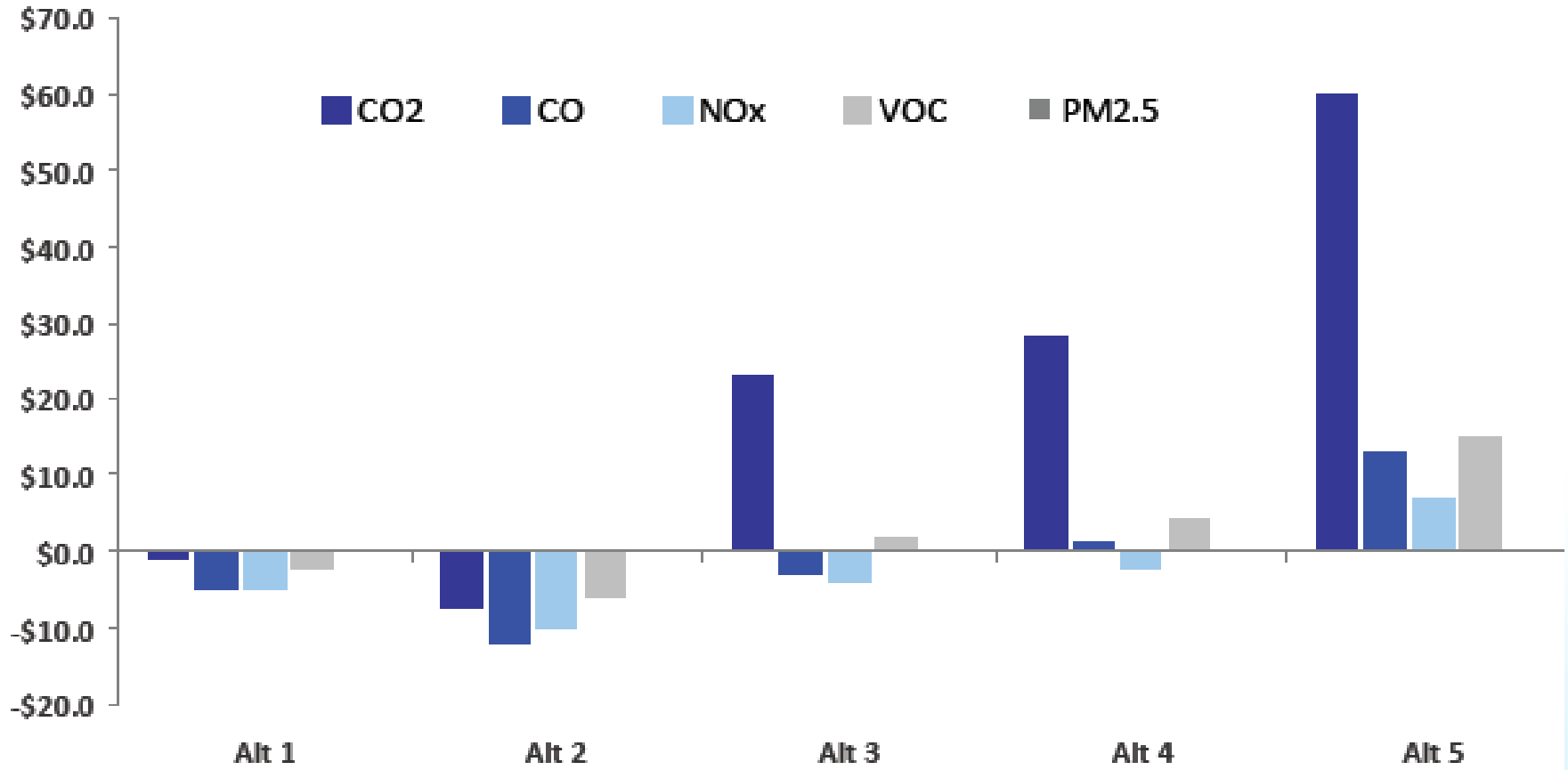




# Seattle Study: Emissions

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Change from 2040 Baseline in Annual Emission Reduction Benefits  
(millions of dollars)

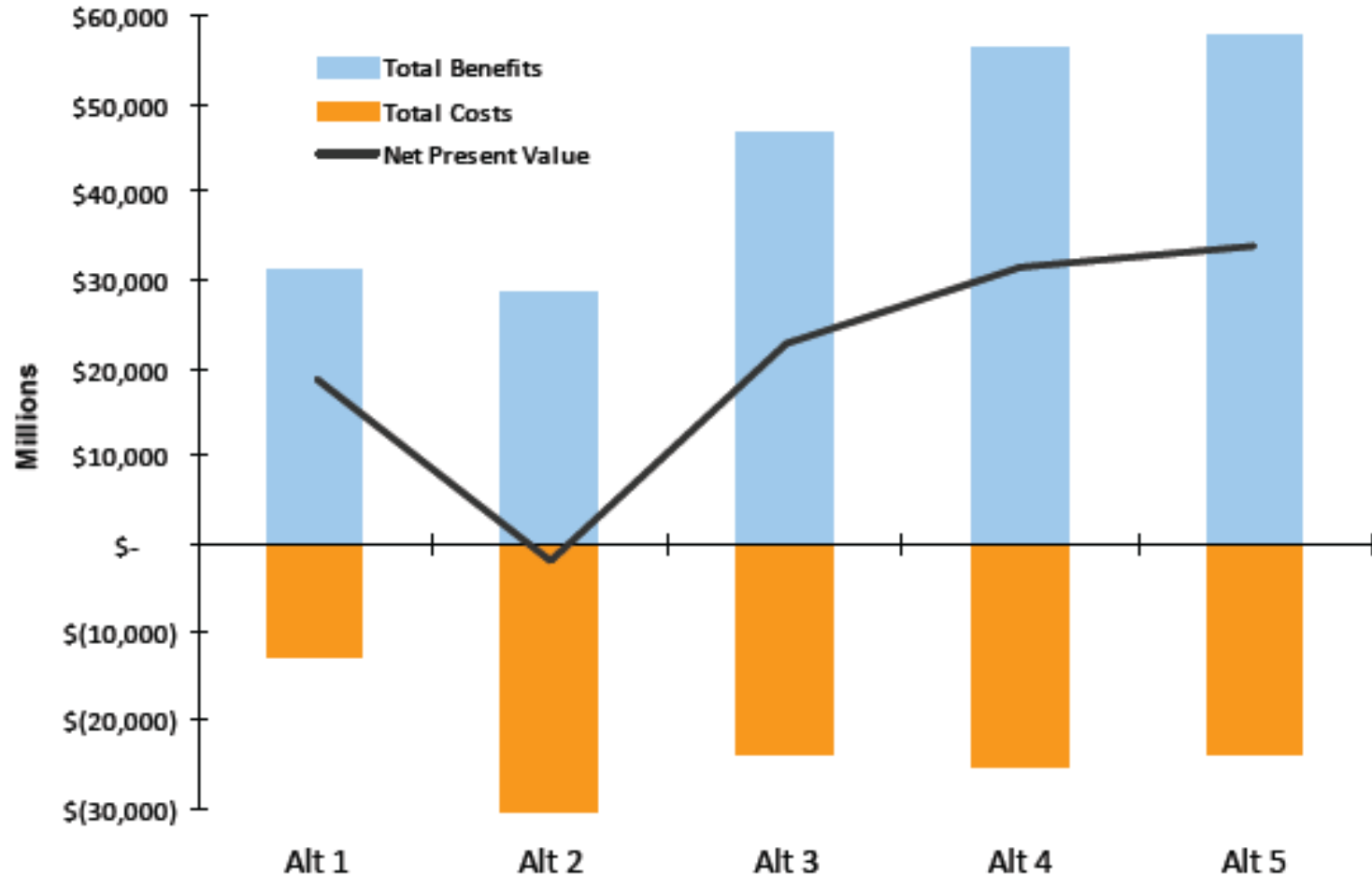




# Seattle: Benefits vs. Costs

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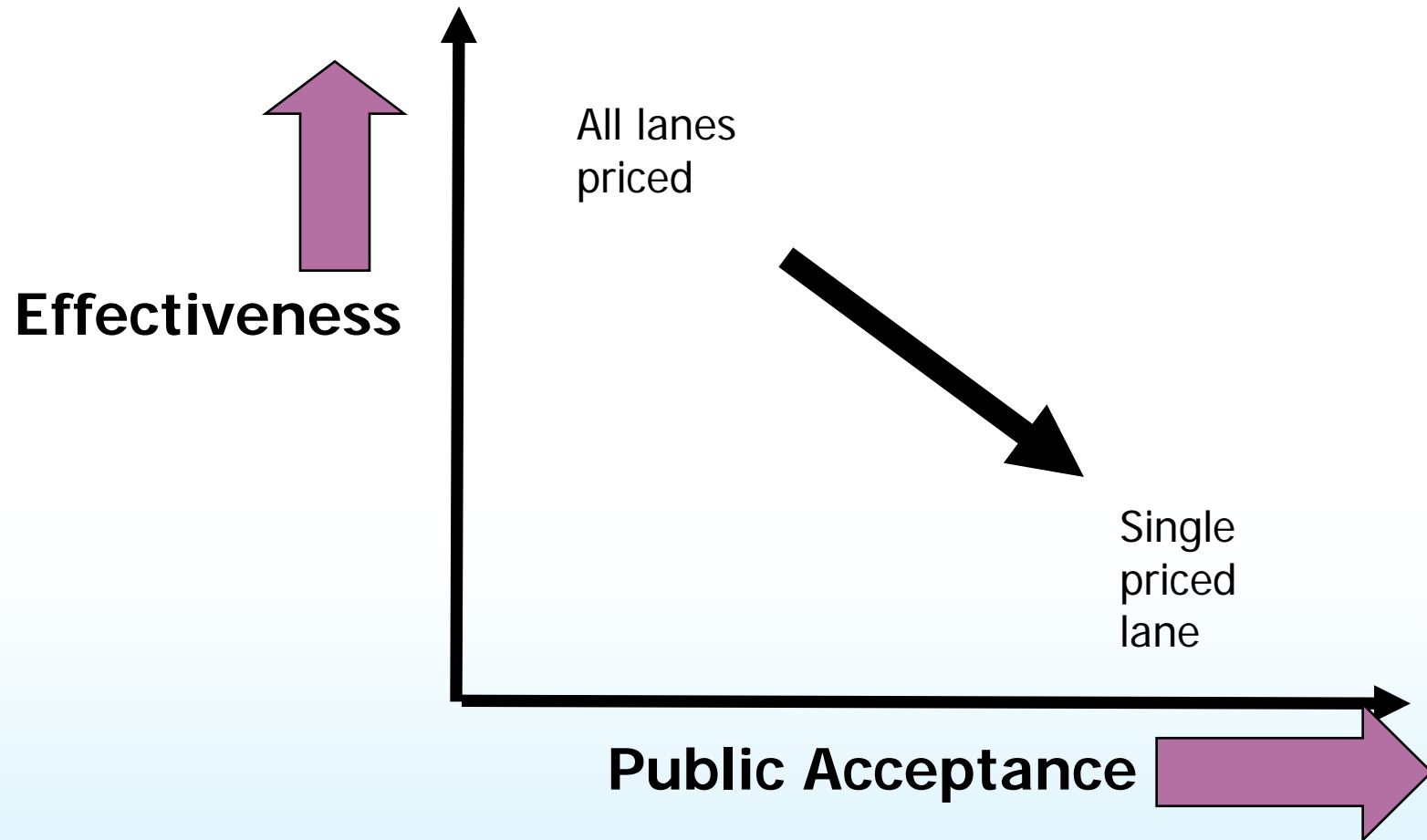
**Plan Alternatives: Present Value of Benefits and Costs 2010-2040**  
(2008 Dollars)





# Effectiveness vs. Acceptance

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# Public Acceptance: Opinion Surveys

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- **Priced Lanes:**
  - About 70% approval from all income groups
- **Priced Highways:**
  - **Seattle:** 64% approval for new tolls on SR 520 bridge
- **Priced Zones:**
  - **New York City:** 40% approval, rising to 59% if the revenue were used for expanded transit service
- **Priced Highway Network:**
  - Seattle's MPO has adopted full pricing of its network of limited access facilities in its Long Range Transportation Plan, with a 98% vote.







# Addressing Equity Concerns

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- **Income-based equity:**
  - Toll credits, discounts or reimbursements
- **Benefit-based equity:**
  - Congestion relief and physical infrastructure improvements
- **Modal Equity:**
  - Provide toll exemptions and dedicate some of toll revenue to alternative modes
- **Geographic equity:**
  - Region-wide approach vs. project-by-project approach





# Addressing Public Perceptions

## Innovative Program Delivery

|   |   |
|---|---|
| <b>Doubts about effectiveness</b>             | <ul style="list-style-type: none"><li>• Pilot tests, subject to referendum</li></ul>  |
| <b>Travel alternatives, traffic diversion</b> | <ul style="list-style-type: none"><li>• Enhanced alternative modes, enhanced signal coordination on parallel free arterials</li></ul> |
| <b>Paying twice</b>                           | <ul style="list-style-type: none"><li>• Engage public in debate on true costs of infrastructure and funding from taxes</li></ul>      |
| <b>Cost of toll collection</b>                | <ul style="list-style-type: none"><li>• Collecting taxes is less expensive, but does not provide the same benefits</li></ul>          |





# Addressing Public Perceptions (contd.)

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|   |   |
|---|---|
| <b>Privacy</b>  | <ul style="list-style-type: none"><li>• Legislative safeguards, anonymity of account information, electronic purse</li></ul>  |
| <b>Credibility and trust of government agencies or elected bodies</b> | <ul style="list-style-type: none"><li>• Money-back guarantee</li><li>• Dedicated use of revenue</li><li>• Identify the specific projects on which the revenues will be expended</li></ul> |





# Questions and Answers

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**5 minutes**





## Part 2

Innovative Program Delivery

# **A Grasstops Approach to Road Pricing Outreach and Communciations**

**Lee Munnich, Humphrey Institute,  
University of Minnesota**





# Outreach and Communications Process

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- Market research – *understanding*
- Education – *learning*
- Outreach – *involving*
- Communication – *explaining*
- Marketing – *selling*
- Evaluation – *confirming*





# Grasstops Approach

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- Get the Governor on board
- Engage legislative champions
- Keep it bipartisan
- Take your show on the road
- Take policy leaders on the road
- Look for media opportunities
- Leave no question behind





# Part 3

Innovative Program Delivery

## Road Pricing Public Acceptance and Outreach

### I-394 MnPASS Case Study

Kenneth R. Buckeye, AICP

Value Pricing Program Manager

Minnesota Department of Transportation







# I-394 MnPASS Express Lanes

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- Brief History
- Project Description & Goals
- Driving Forces
- Public Acceptance Issues
- Public Involvement
- Performance
- Satisfaction Levels
- Lessons Learned
- Related NCHRP Projects





# A Brief History of Tolling in Minnesota

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- 1993 Public-Private Partnership Law
- 1995 TranSmart tolling initiative
- 1997 Minnesota Road Pricing Study
- 1997 First attempt at MnPASS
- 1998-2002 Value Pricing Policy Debate
- 2003 HOV to HOT Conversion Legislation
- 2005 I-394 MnPASS launched
- 2009 I-35W MnPASS launched



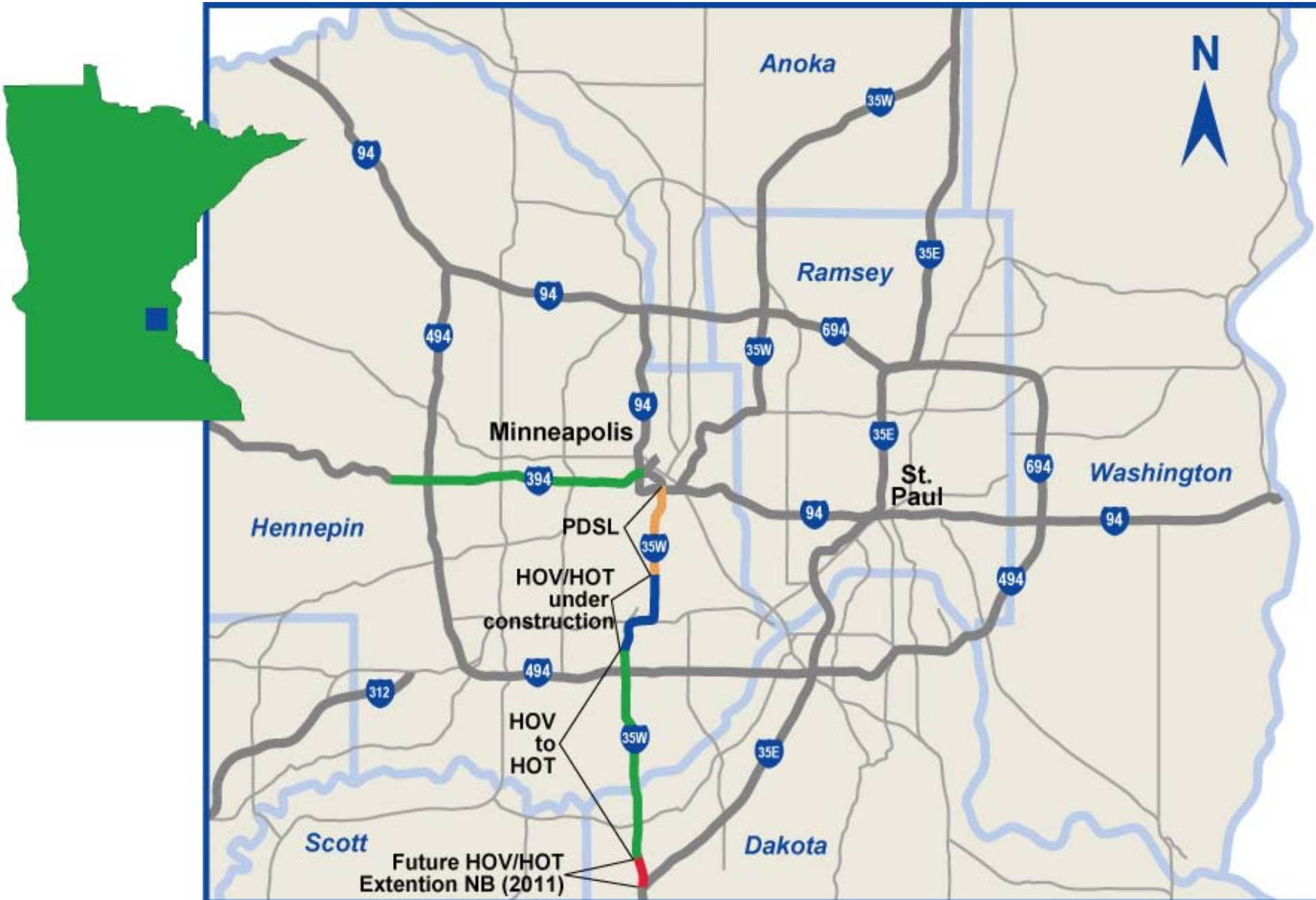


# I-394 MnPASS Goals

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1. Improve I-394 efficiency
2. Maintain free flow speeds for transit and carpoolers
3. Use revenues to improve highway and transit in corridor
4. Employ new technologies for pricing and enforcement



















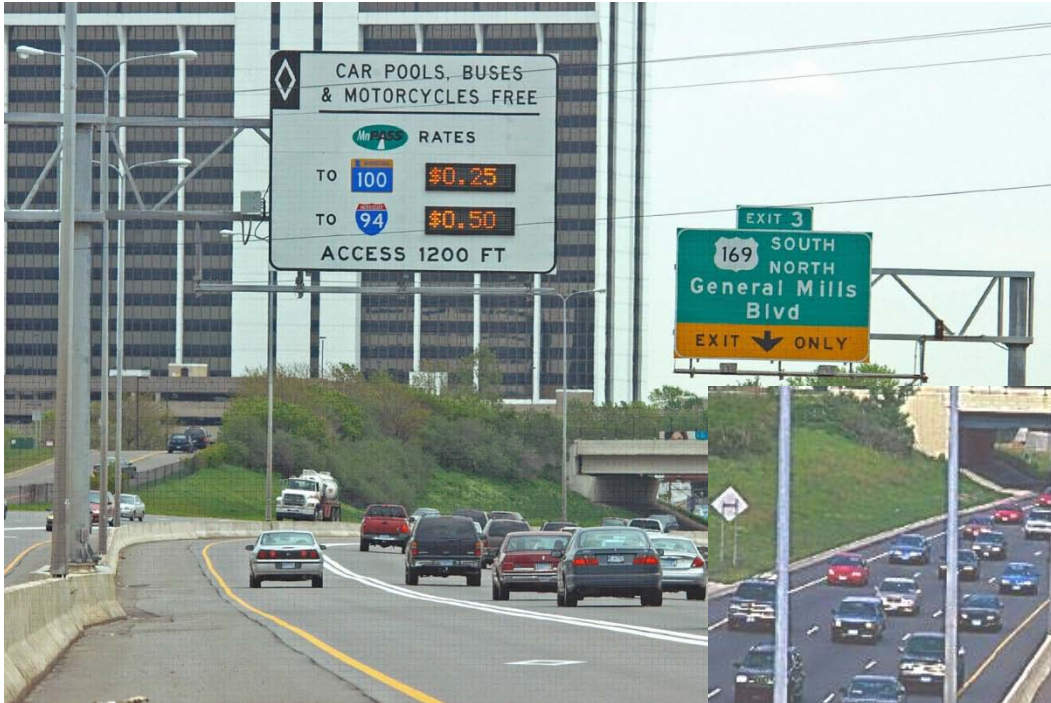






# I-394 MnPASS Express Lanes

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# MnPASS Driving Forces

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- Congestion
  - 150,000 ADT
  - Perception of under used lane
- Expansion or conversion not feasible
- Must manage system better
- Influence of other successful projects
- Outreach and education: Value Pricing Advisory Task Force
- Political leadership emerged
- Value Pricing Pilot Program





# Public Acceptance Issues

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- Public acceptance is by far the biggest challenge
- Minnesotans are toll averse
- Concerns
  - Equity
  - Double taxation
  - Performance
  - Toll booths!
  - Diminish level of service for transit
  - What is variable (dynamic) pricing





# Public Involvement

## Innovative Program Delivery

- Collaboration: MnDOT, FHWA, Met Council, Univ. of Minnesota
- Value Pricing Advisory Task Force
- I-394 Corridor Implementation Task Force
  - Advise Commissioner of Transportation on:
    - Hours of Operation
    - Safety and Enforcement
    - Dynamic Message Signs
    - Expected Revenues
    - Type of Vehicles Allowed
    - Access Points/Traffic Operations
    - Transponder
    - Toll Rates
    - Public Outreach
    - Project Evaluation
- Outreach and education





# Public Involvement

## Innovative Program Delivery

- Clearly articulate objectives
- Visit projects
- Framing solution: choice; use of revenue
- Build trust and expertise
- Provide ample opportunity for public input
- Answer every question!
- Conduct market research
- Make changes to project if necessary
- Pro-active communications and marketing
- Final report available online at [www.mnpass.org](http://www.mnpass.org)





# I-394 MnPASS Performance

## Innovative Program Delivery

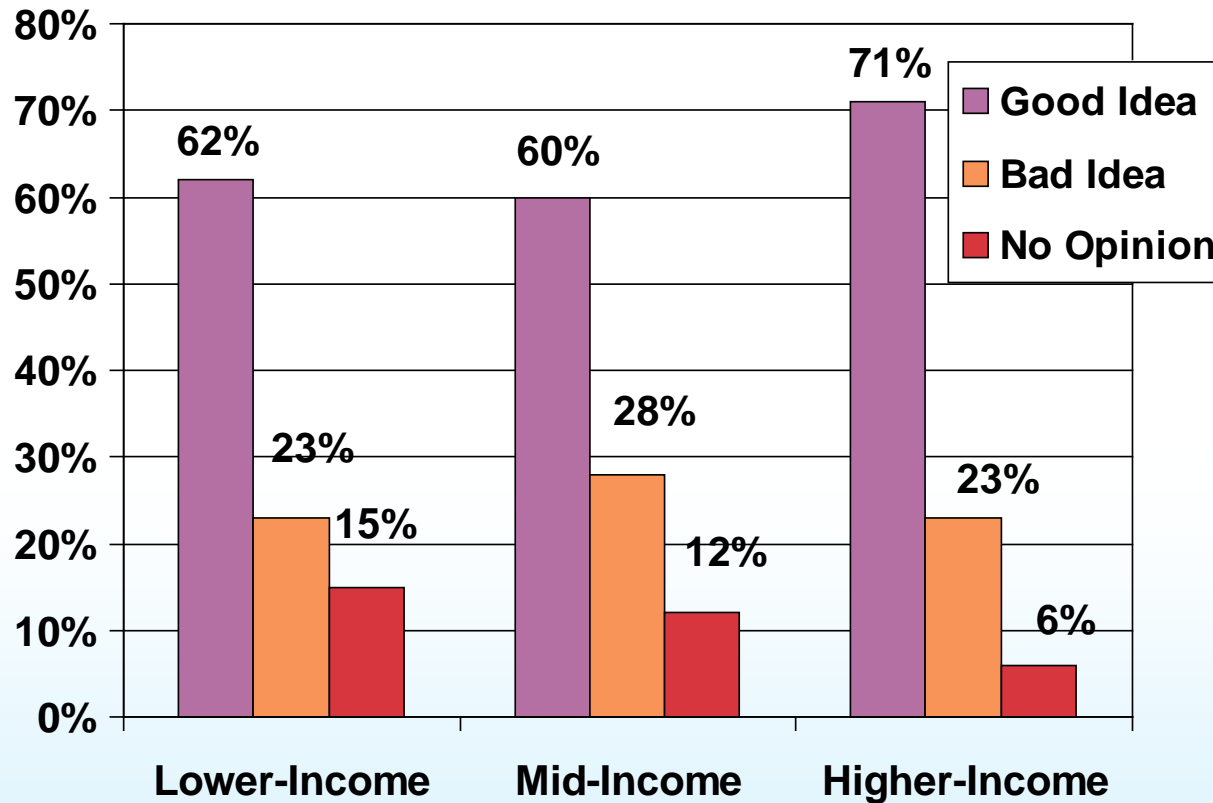
- Dynamic pricing works
- I-394 MnPASS lanes peak hour volumes increased 9 to 33%
- Total I-394 peak hour roadway volumes increased by up to 5%
- 98% of time speeds above 50 mph
- Travel speeds in the general purpose lanes increased by 2 to 15 %
- Transit ridership and carpools levels increase
- Safety has not been compromised
- Enforcement has been effective





# MnPASS Acceptance by Income

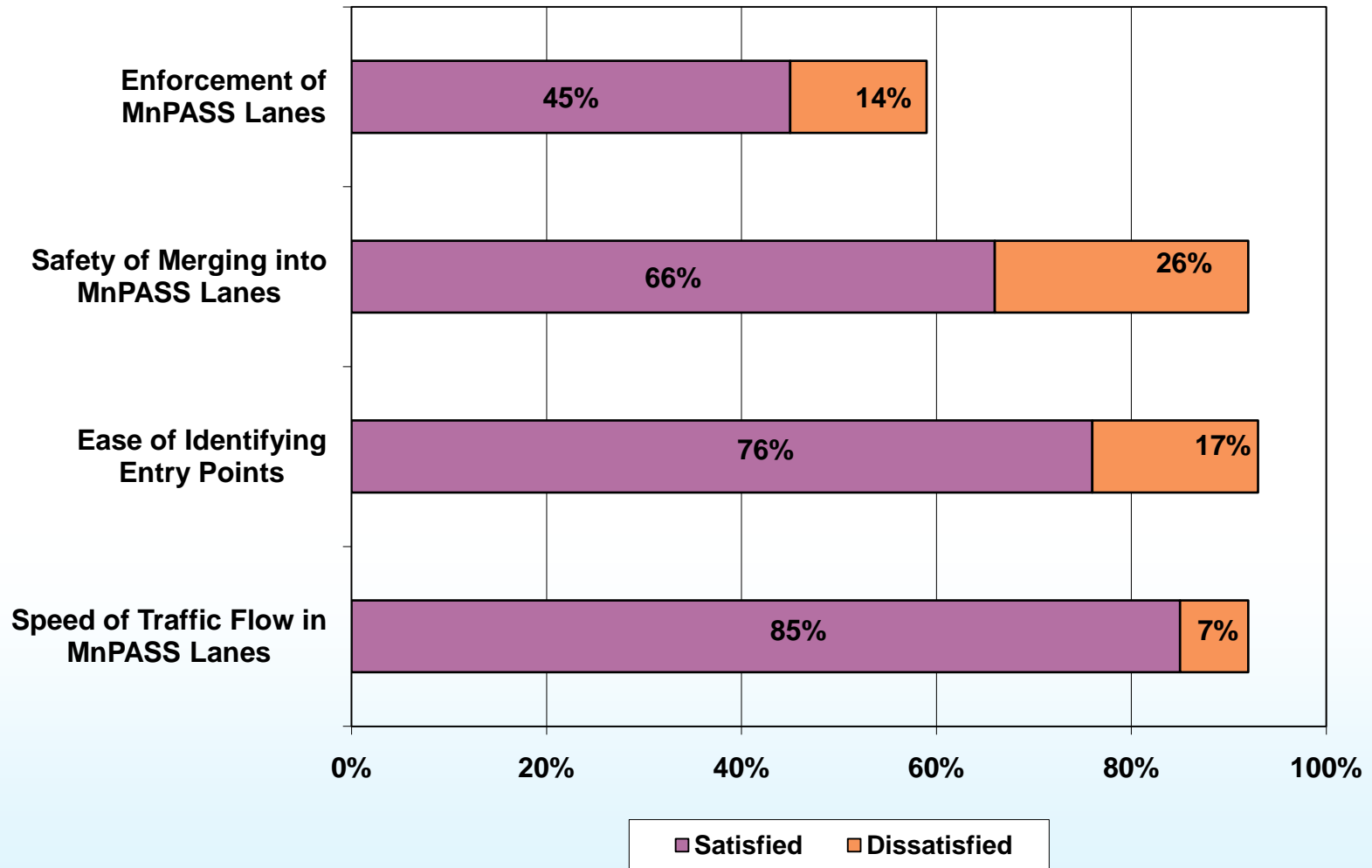
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# Satisfaction Among All MnPASS Lane Users

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# Comparison of MnPASS Corridors

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|                               | <b>I-394</b>  | <b>I-35W</b>   |
|-------------------------------|---|--|
| <b>Regional Support</b>       | Weak  | Strong   |
| <b>Legislative Comparison</b> | Cautious  | Supportive   |
| <b>Public Perceptions</b>     | Negative, a very high level of engagement   | Accepting, low level of engagement   |
| <b>Framing the Problem</b>    | Underperforming lane, high violations, must preserve HOV and Transit LOS, choice option | Underperforming lane and corridor, high violations, PDSL necessary for lane continuity, transit enhancements |
| <b>Agency Support</b>         | Weak to moderate  | Strong   |
| <b>EJ and Equity</b>          | No issues   | No issues  |





# I-394 MnPASS Meeting its Goals

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- Significantly reduces congestion and increases safety
- Non-barrier separated access is safe and reduces infrastructure requirements
- Dynamic pricing and technology works
  - Free flow speeds maintained
  - Lower violation rates
- Customers are highly satisfied and are getting value for their toll dollars
- Revenues meeting operating costs





# MnPASS Lessons Learned

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- Political leadership is essential
- Public will support projects if they can see benefits
  - Choice to pay to avoid congestion
  - No reduction in LOS for transit and carpools
  - Safety has been improved
  - Put the market to work
  - Sustainable
- HOT lanes are not a revenue generator
- Effective outreach, education and marketing are critical for success
- Pricing projects are more likely to generate support if linked to transit improvements
- Nothing succeeds like success!





# Related NCHRP Projects

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[trb.org/NCHRP](http://trb.org/NCHRP)

- 20-5 Synthesis Project 377 Compilation of Public Opinion Data on Tolls and Road Pricing
- 08-36 Task 93: Road Pricing Communications Practices (complete)
- 08-57 Toll Decision Model and Forecasting Tool (complete)
- 08-73 Road Pricing Public Perceptions and Program Development (Draft report)
- 08-75 (Guidelines for Evaluation and Performance Measurement of Congestion Pricing Projects (Draft report)





# Questions and Answers

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**5 minutes**





# Part 4

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## Group Discussion and Preparation for Next Session

**John Doan**  
**SRF Consulting**





# For More Information

Innovative Program Delivery

## FHWA Office of Innovative Program Delivery:

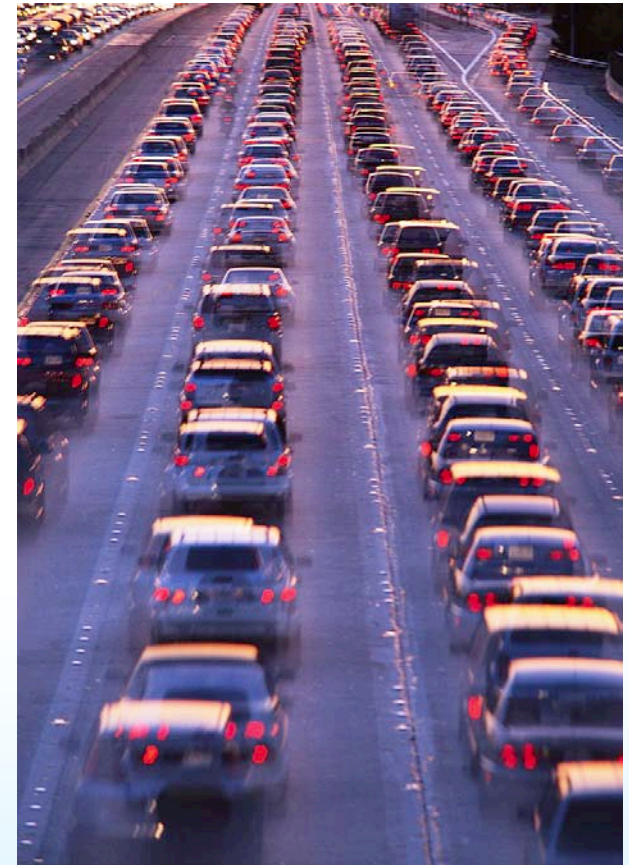
[www.fhwa.dot.gov/ipd](http://www.fhwa.dot.gov/ipd)

## FHWA Office of Operations:

[http://ops.fhwa.dot.gov/tolling\\_pricing/index.htm](http://ops.fhwa.dot.gov/tolling_pricing/index.htm)

## Webinar Mini-Courses:

[http://blog.lib.umn.edu/slpp/regionalities/2010/08/road\\_pricing\\_public\\_acceptance.php](http://blog.lib.umn.edu/slpp/regionalities/2010/08/road_pricing_public_acceptance.php)





# Contact Information

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# What's Next?

## Innovative Program Delivery

- Session 2: Seeking Approval – Lessons from PLANYC 2030 Congestion Pricing
  - September 7, 2:00-3:30PM EDT
  - Presenters: Bruce Schaller (NYCDOT), Lee Munnich (Humphrey Institute), John Doan (SRF Consulting)
- Session 3: Integration with the Planning Process and Outreach Strategies for Project Deployment
  - September 28, 2:00-3:30PM EDT
  - Presenters: Charlie Howard (PSRC), Patty Rubstello (WSDOT), Rob Fellows (WSDOT), Patrick DeCorla-Souza (FHWA), Wayne Berman (FHWA), John Doan (SRF Consulting)
- Registration and more information:

[http://blog.lib.umn.edu/slpp/regionalities/2010/08/road\\_pricing\\_public\\_acceptance.php](http://blog.lib.umn.edu/slpp/regionalities/2010/08/road_pricing_public_acceptance.php)

