

## **Congestion Pricing in Minnesota** Implications for System Performance and Transportation Financing

**Congestion Pricing Roundtable** 

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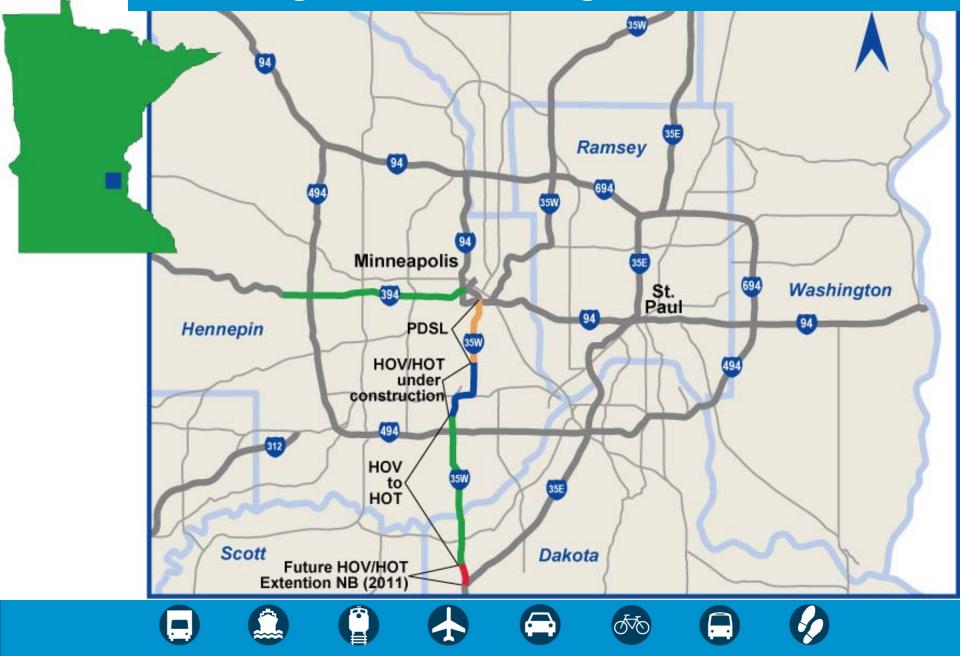






- Minnesota's Current and Future Congestion Pricing Systems
  - Overview of the current system and how it developed
  - Review of transportation performance and revenue implications of current and future systems
- Congestion pricing brand name in Minnesota:
  MnPASS

### **Congestion Pricing In Minnesota**





# Congestion Pricing Policy Development

- A long road in a State without tolling
- Developed through a Task Force, extensive outreach with policy makers, and Governor support
- Policy has evolved from one to allow access to HOV lanes to one where Express Lanes are the future for capacity expansion
- Region is realizing that this is only way to provide congestion free choice in long term













## MnPASS Congestion Pricing has Unique Costs Elements to Go with Revenue

### Added Roadway Costs

- Added lane width
- Sign infrastructure
- Unique striping
- Toll infrastructure
- Transit Infrastructure

**On-going Operating Costs** 

- Customer service
- Enforcement
- Technology
- Marketing
- Transit Operations

However, unlike traditional capacity projects MnPASS generates revenue









### Reducing costs: 35W MnPASS on Shoulder



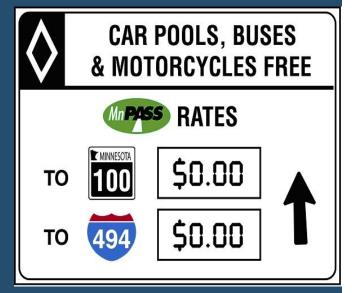


## **Revenue and Toll Rate Setting**

- Minimum Price: \$0.25 Max Price: \$8.00
  - I-394: 90% have paid \$3 or less per trip
  - I-35W: 90% have paid \$1.75 or less per trip
- Price based on real time MnPASS lane traffic conditions
- Price updated every 3 minutes
- Pricing during set hours only (i.e. not 24x7)

The current traffic conditions set the rate, so the rate is dynamic throughout the day and from day to day

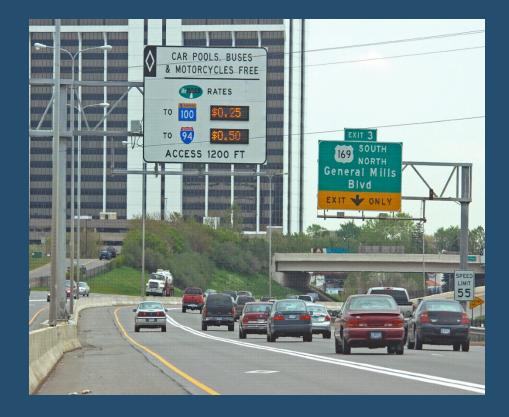
Dynamic pricing has proven effective at assuring congestion free choice for users





## MnPASS Users Satisfied with Congestion Pricing

- 91% overall satisfaction
- 95% satisfaction with all electronic tolling
- 85% satisfaction with traffic speed in lane
- 76% satisfaction with dynamic pricing
- 66% satisfaction with safety of merging





## **MnPASS Improves Corridor Performance**

#### MnPASS Lane Performs

- I-394 has 5,000+ MnPASS customers per day; avg. toll \$1.15
- I-394 MnPASS lane peak hour volumes increased 9 to 33%
- 98% of time speeds above 50 mph in MnPASS lane
- Transit ridership and carpools levels increased
  Entire I-394 Corridor Benefits
- Total I-394 peak hour roadway volumes increased by up to 5%
- Travel speeds in the regular lanes increased by 2 to 15%
- 45% reduction in crashes on Corridor











## Revenue from congestion pricing on I-394 exceeded operating costs by Year 2

Tolled trips	Year 1	Year 2	Year 3	Year 4	Year 5
Tolled Trips	874,000	909,000 (4% growth)	942,000 (3.6% growth)	972,000 (3.6% growth)	1,074,200 (10.5% growth)
Tolls Collected	\$575,000	\$1,057,000	\$1,083,000	\$1,113,000	\$1,246,000
Average Toll	\$0.65	\$1.16	\$1.15	\$1.15	\$1.16





# **Comparison of Two Toll Facilities**

#### First Six Full Months for each MnPASS Road

#### <u>I-35W</u>

- 4,800 Active Transponders
- 190,000 Trips
- \$161,000 in Gross Toll Revenue
- Average of 40 Trips per Transponder
- Average Toll of \$0.85

### <u>l-394</u>

- 9,000 Active Transponders
- 400,000 Trips
- \$291,000 in Gross Revenue
- Average of 44 Trips per Transponder
- Average Toll of \$0.73

Bottom line: similar patterns for users on frequency of use, revenue per user, trip lengths, and market areas in the two startup periods ...but slower growth in customer base/revenue on 35W due to phased implementation









# Lessons from 5 Years of MnPASS

- Congestion Pricing Works...in providing congestion free choices to users
- Customers like MnPASS
- MnPASS enables transit service improvements, transit ridership increases

#### • Revenue (in the Minnesota design):

- Revenue can exceed operating costs but capital costs are not recovered
- Revenue potential is tied closely to the following key areas:
  - 1. Policies on who pays and who is free (carpools free?)
  - 2. Pricing objective: congestion vs. revenue (different revenue outcomes for each)
  - 3. Congestion levels the more congestion a user can avoid the more they will pay to avoid it
  - 4. Minimum prices pricing for congestion may result in the price being set below what users are willing to pay
  - 5. Marketing /Customers Service levels the system must be treated like a product. On-going investment in customer service and marketing are required to recruit /retain customers and grow revenue
  - 6. Network effects: revenue increases faster than operating costs as the system expands

Technology can be used to substantially reduce roadway capital costs













# What's Next for MnPASS?

- Fall 2010 all existing HOV lanes converted to MnPASS
- Next MnPASS corridor requires new policy decisions
- Future MnPASS expansion in a Planning Phase
  - Updating MnPASS Network Study to identify candidate corridors and funding potential
  - Integrating MnPASS into Regional Transportation Policy Plan
  - Developing outreach and policy discussion around concept that all future capacity expansion is under congestion pricing design







#### Network Study MnPASS Corridors

- 1. TH 36: I-35W to I-694
- 2. I-94: TH 101 to I-494
- 3. I-35E: I-94 to CR E
- 4. I-35W: Minneapolis to Blaine
- 5. I-494: TH 212 to I-94
- 6. TH 169: TH 101 to I-94
- 7. TH 77: 141st Street to TH 62
- 8. I-94: Downtown Minneapolis to Downtown Saint Paul
- 9. I-394: TH 100 to I-94
- 10. I-494: TH 212 to MSP Airport
- 11. TH 212/TH 62: TH 5 to TH 77
- 12. I-94: Downtown Saint Paul to I-694
- 13. TH 280: I-94 to I-35W







## DRAFT Summary of New MnPASS Study

- Studying 13 corridors for MnPASS expansion
- Analysis includes planning level capital costs, 2015 traffic and revenue analysis, and modeling analysis on corridor performance
- Early DRAFT results indicate a few corridors may have positive revenue/cost results
- Study conclusions will be completed in September



# More Information:

Visit <u>www.mnpass.org</u>

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