Innovative Program Delivery

Road Pricing and Public Outreach: Session 2

Patrick DeCorla-Souza, Tolling and Pricing Program Manager, FHWA
Lee Munnich, Humphrey Institute, University of Minnesota
Bruce Schaller, New York City Department of Transportation
John Doan, SRF Consulting

Office of Innovative Program Delivery
Federal Highway Administration

Second Part of a Webinar Series on Road Pricing Outreach

Welcome

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

- Moderator:
  - John Doan, SRF Consulting
- Presenters:
  - Patrick DeCorla-Souza, Tolling and Pricing Program Manager, FHWA
  - Lee Munnich, Humphrey Institute, University of Minnesota
  - Bruce Schaller, New York City 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

1. Communicating with stakeholders (Patrick DeCorla-Souza)
2. Public perceptions and congestion pricing (Lee Munnich)
3. New York City experience (Bruce Schaller)
4. Case study (John Doan)

Part 1

Communicating with Stakeholders

Patrick DeCorla-Souza
Tolling and Pricing Program Manager, FHWA

Equity Concerns

Types of equity concerns:

- Income-based
- Modal
- Geographic
- Fairness (paying twice)

Income-Based Equity

Social Justice Advocacy Groups' concern:

This will be a regressive tax on those who can least afford it.

New Priced Lanes: Equity Concerns

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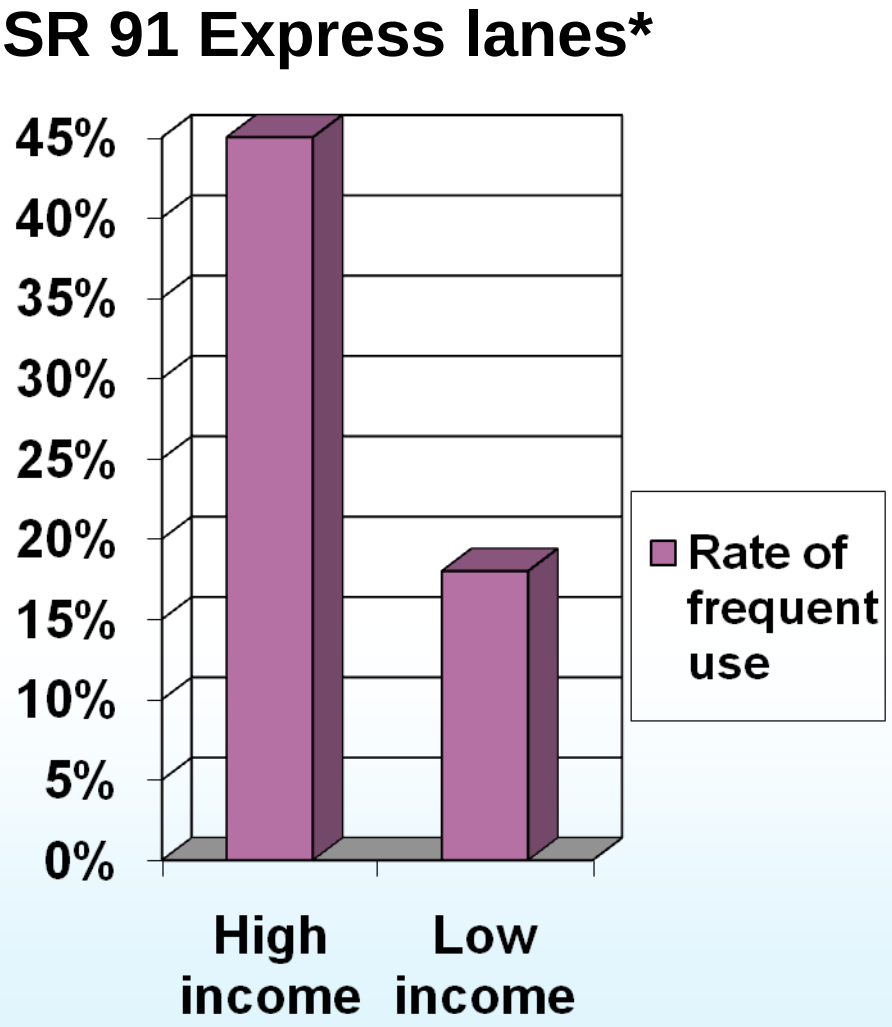
- Tolls require a larger share of the income of low-income commuters.
- So lower-income drivers use priced facilities less often
- This creates an equity issue (“Lexus lanes”)`



*Source: Edward Sullivan, Continuing Study to Evaluate the Impacts of the SR 91 Value-Priced Express Lanes, Final Report, December 2000 (p.87)

Share of Income Spent on Tolls

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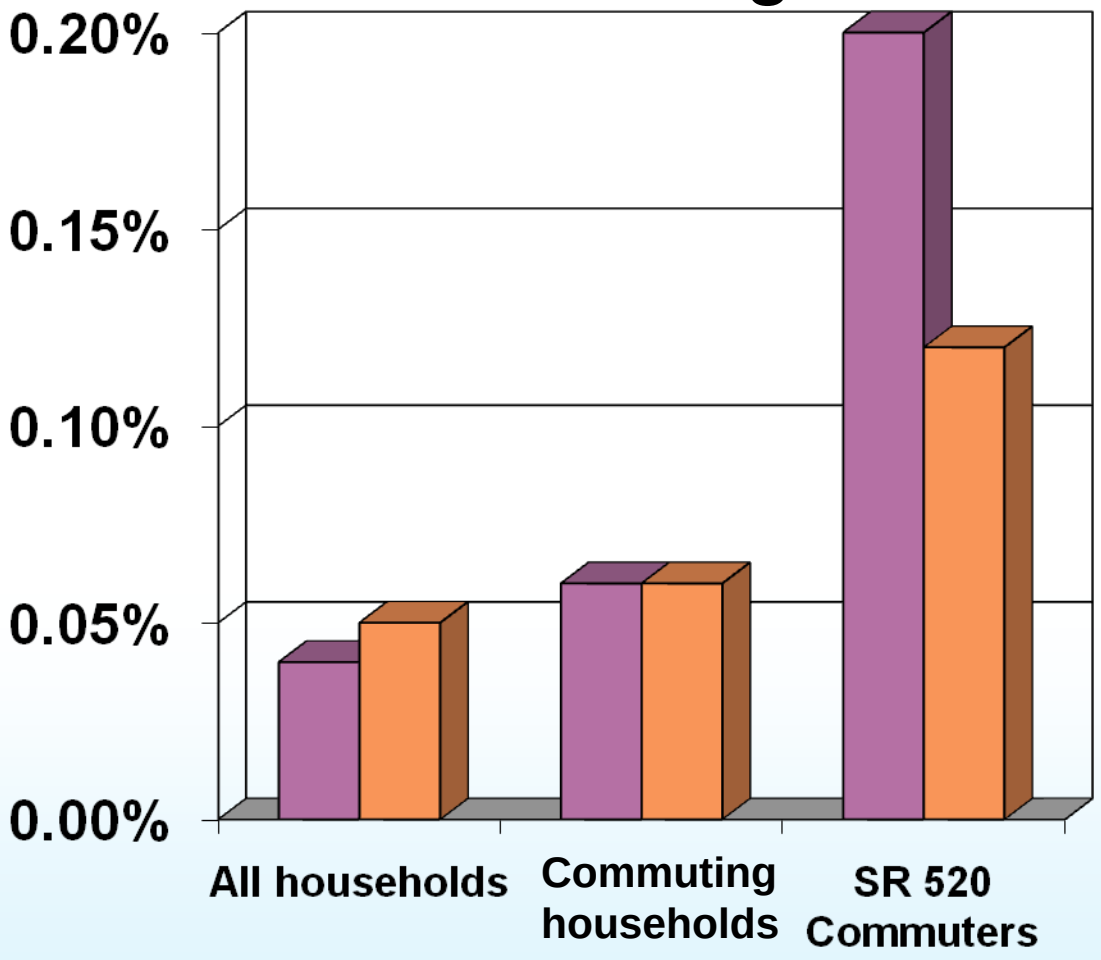
$2.00 bridge toll on SR 520 bridge



Source: Plotnick, Romich, Thacker and Dunbar, *The Impacts of Tolling on Low-income Persons in the Puget Sound Region.* U. of WA, April 2009

Addressing Equity Concerns

- **Addressing income-based equity:**
  - Improved and/or lower cost transit service
  - Toll credits or discounts for means-tested drivers
  - Reimbursements of the amount of toll above the transit fare (NYC)
  - Convenient ways for the “unbanked” to pay

Modal Equity

Transit Advocacy Groups' Concern:

Congestion relief will encourage choice transit riders to abandon transit and go back to their cars.

Transit and Congestion Pricing

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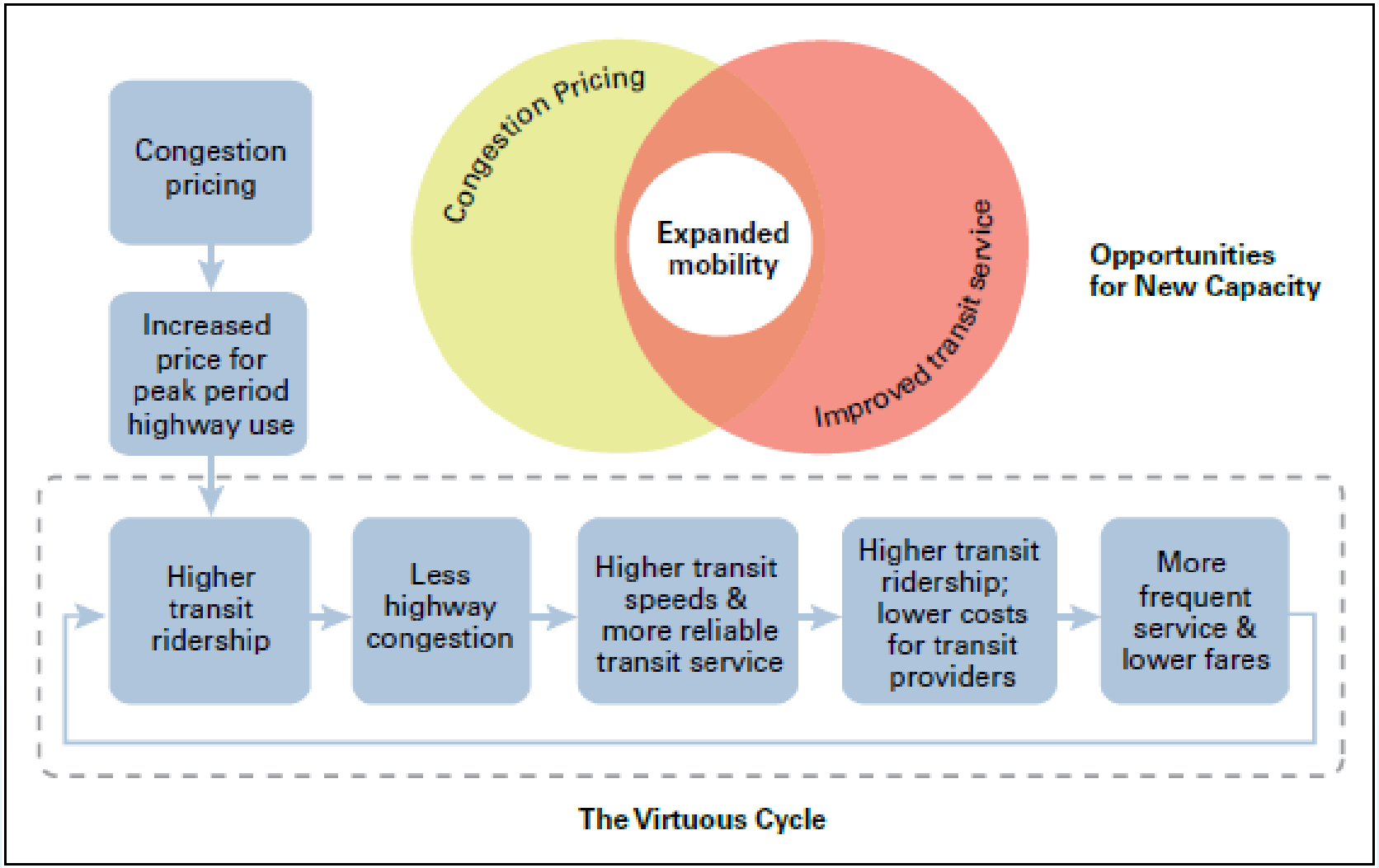

Addressing Modal Equity Concerns

- **Addressing Modal Equity:**
  - Dedicate some of toll revenue to transit (San Diego, Minneapolis)
  - Provide free or discounted service for carpools (HOT lanes)

Geographic Equity

Local residents' concerns:

Why do I have to pay for <u>my</u> road, when my tax dollars went to pay for the other guy's road?"

Region-wide Approach

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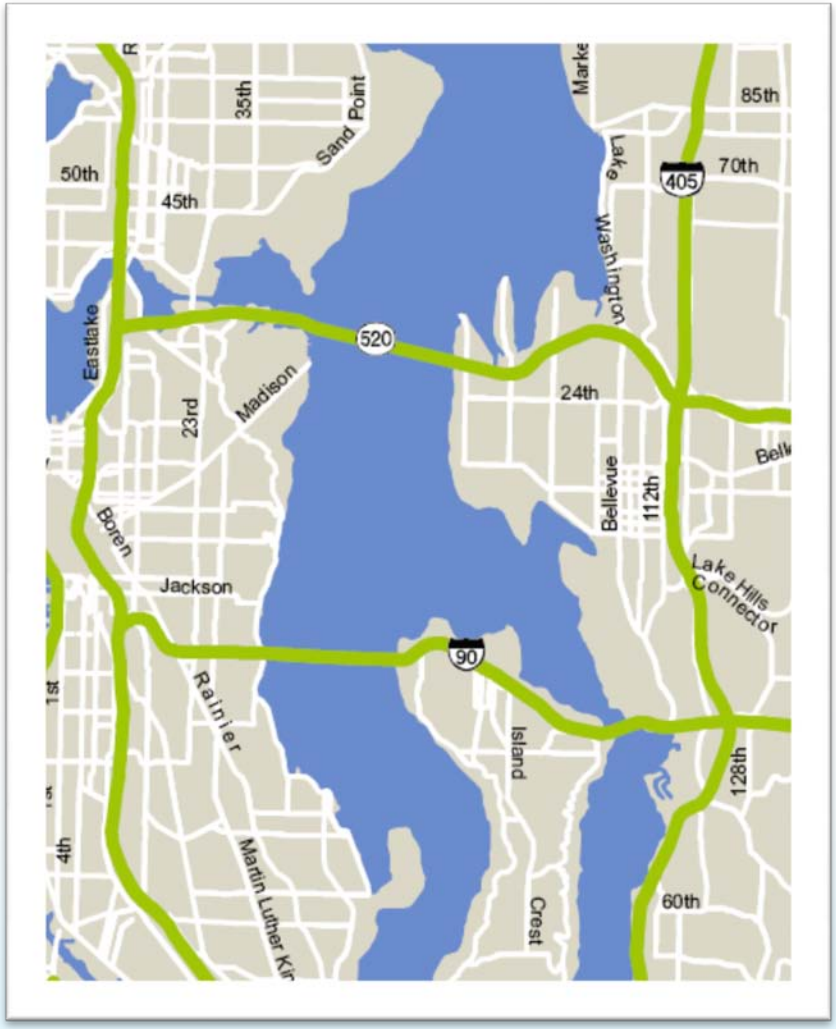
***Long-Range Planning*:**

- Incorporate road pricing into long-range planning
- All regional residents share in the burden



Region-wide Approach vs. "Patchwork"

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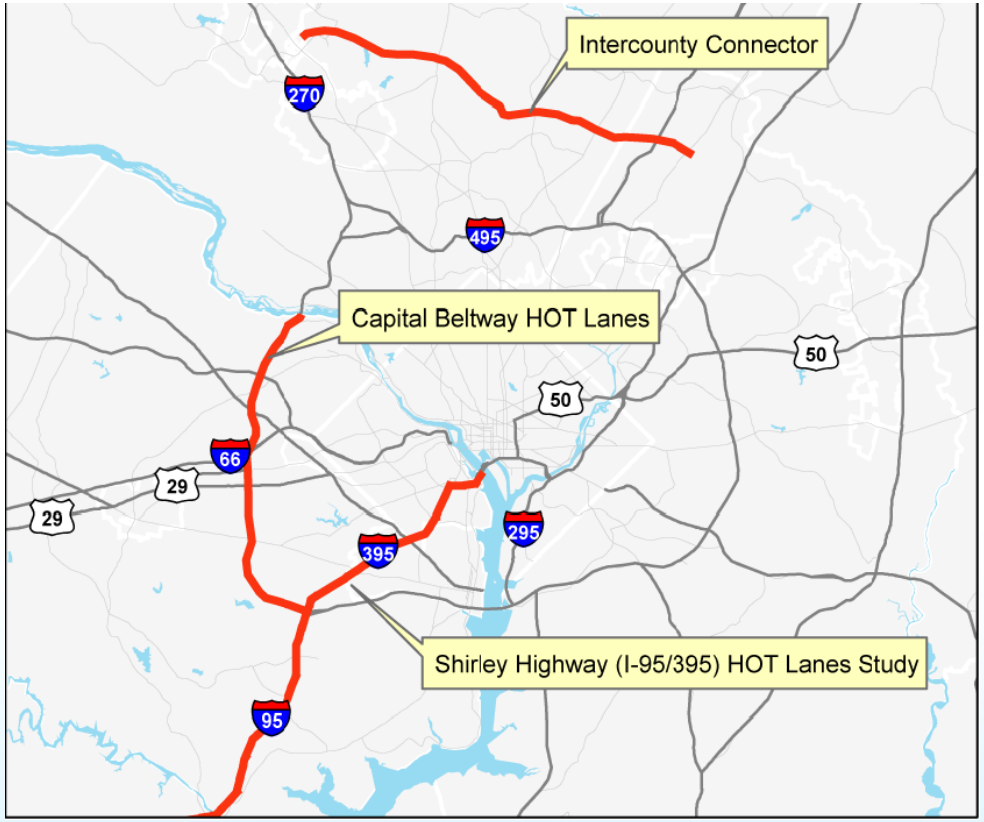
Affordability:

•Lower tolls can be charged, since the financial burden is spread over more drivers



Region-wide Approach vs. "Patchwork"

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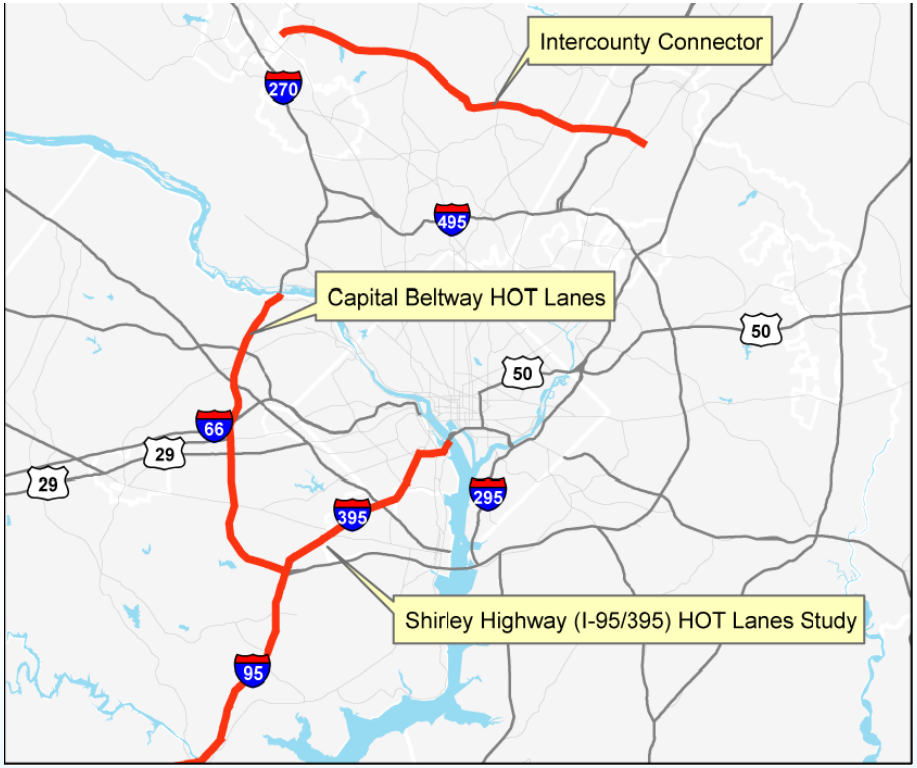
Efficiency:

- Tolls on *only* improved facilities will lead to sub-optimal use in off-peak
  - Discourages use in off-peak
  - Causes diversions to free facilities



Paying Twice

Motorist Advocacy Groups' Concern:

Why impose tolls on existing free roads already paid for with taxes?

Construction Cost of New Lanes

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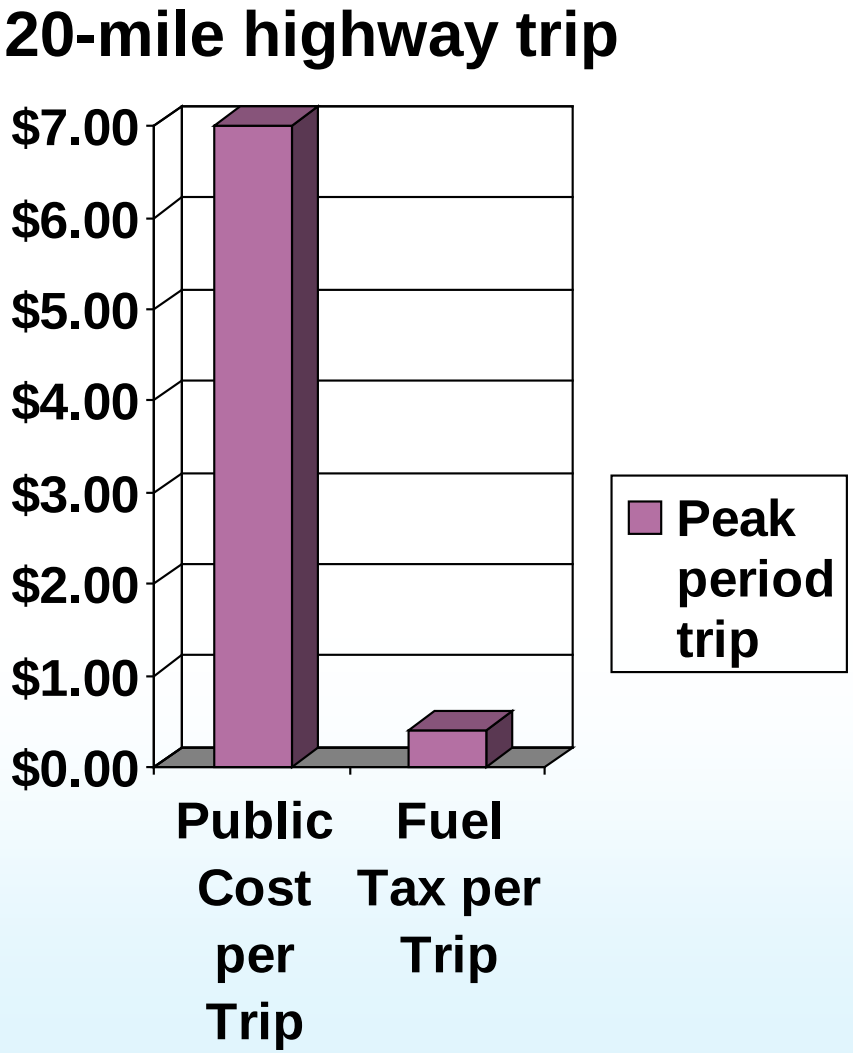
- Providing “free” new capacity is financially unsustainable
- Fuel tax receipts from peak trips are less than 6% of capital cost for constructing a new lane



Construction Cost per Peak Trip

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Costs in Major Urbanized Areas	Normal Cost	High Cost
Highway construction cost/ lane mile*	$13.4 M.	$55.9 M.
Daily traffic volume in **peak periods** (5-6 hours/day)	10,000 vehicles	10,000 vehicles
Const. cost per vehicle per mile	$1,340	$5,590
Const. cost for 20-mile round trip	$26,800	$111,800
Annualized const. cost for 20-mile trip**	**$1,742**	**$7,267**
Cost for 20-mile trip per working day	$7.00	$29.00
Gas tax paid for 20-mile trip (2 cents/mile)	**$0.40**	**$0.40**

*Source: FHWA, in 2006 dollars

**Annualization factor 0.065 assuming a 5.25% discount rate and 30-years

Costs for Reconstruction per Trip

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Costs in Major Urbanized Areas	Average Cost
Cost per lane mile*	$6.7 M.
Daily traffic volume (24 hours)	20,000 vehicles
Reconstruction cost per vehicle per mile	$335
Reconstruction cost for 20-mile round trip	$6,700
Annualized cost for 20-mile trip**	**$436**
Cost for 20-mile trip per day	$1.20
Gas tax paid for 20-mile trip (2 cents/mile)	**$0.40**

*Source: FHWA, in 2006 dollars

**Annualization factor 0.065 assuming a 5.25% discount rate and 30-years

Taxes vs. Tolls

Trucking Advocacy Groups' Concern:

Why not just raise taxes – they are less expensive to collect than tolls.

Taxes vs. Tolls: Congestion Delay

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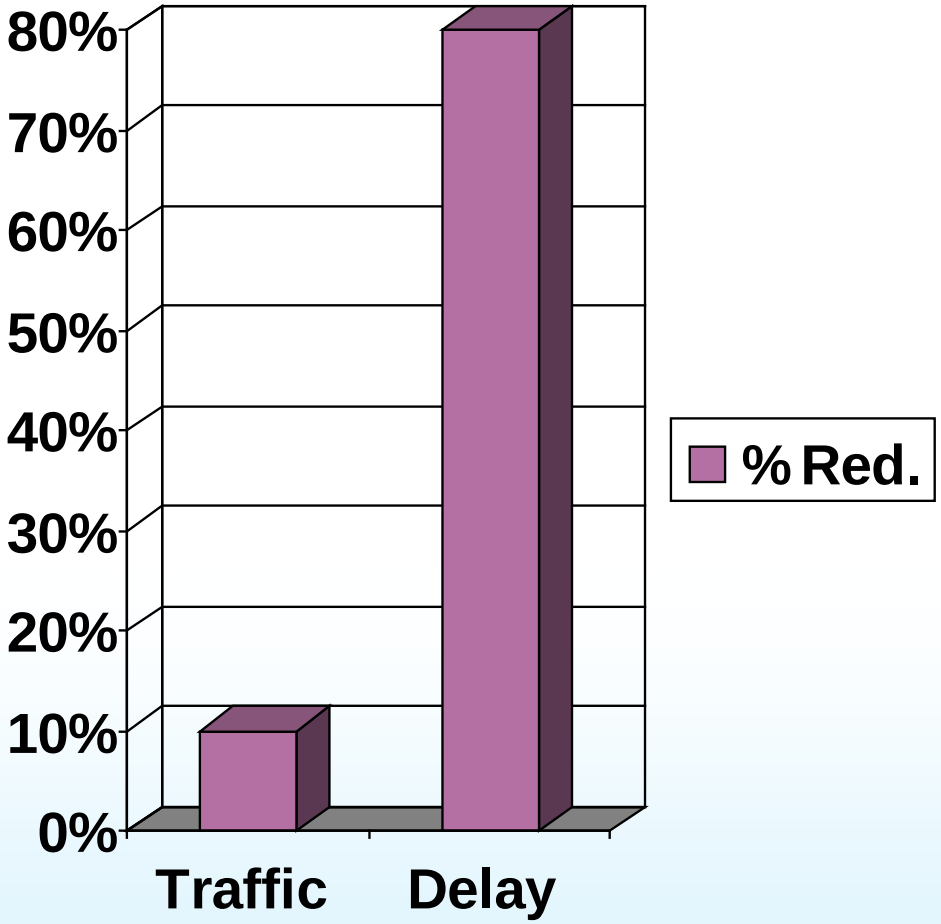
- Rush hour tolls reduce traffic
- A 10-14% reduction in traffic results in an 80% reduction in travel delays



Source: The Louis Berger Group Inc. *Examining the Speed-Flow-Delay Paradox in the Washington, DC Region: Potential Impacts of Reduced Traffic on Congestion Delay and Potential for Reductions in Discretionary Travel during Peak Periods*, 2009.

Benefits to Governments and Public

Government services:

- **Investment**: Reduces new capacity needs
- **Emergency services**: Not stuck in traffic

Societal benefits:

- **Economic: Improves freight transportation productivity**
- **Environment**: Reduced greenhouse gases and improved air quality
- **Community**: Encourages use and development of alternative modes

Questions and Answers

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5 minutes

Part 2

Public Perceptions and Congestion Pricing

Lee Munnich, Humphrey Institute, University of Minnesota

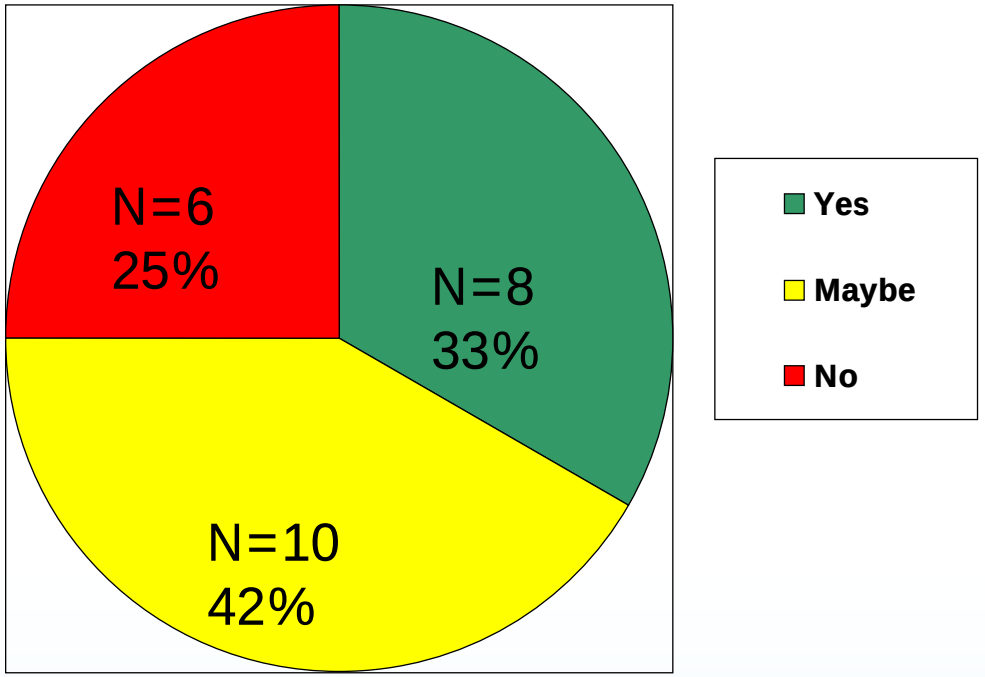
Citizens Jury

- In 1995, the Humphrey Institute conducted a week-long Citizens Jury with 24-randomly selected citizens from the Twin Cities area.
- Although the Citizens Jury voted 17-7 against congestion pricing as a way to manage congestion and fund transportation, the exit survey was quite enlightening.
- While 16 opposed congestion pricing, 18 of the 24 were open to considering congestion pricing as an effective solution in the future. Their primary concerns were
  1. Congestion not bad enough yet,
  2. Congestion pricing not fair – Lexus Lane concern,
  3. Congestion pricing costs too much – raise gas tax instead; and
  4. Congestion pricing won't work.

Should Minnesota consider congestion pricing in the future?

Citizens Jury Exit Survey

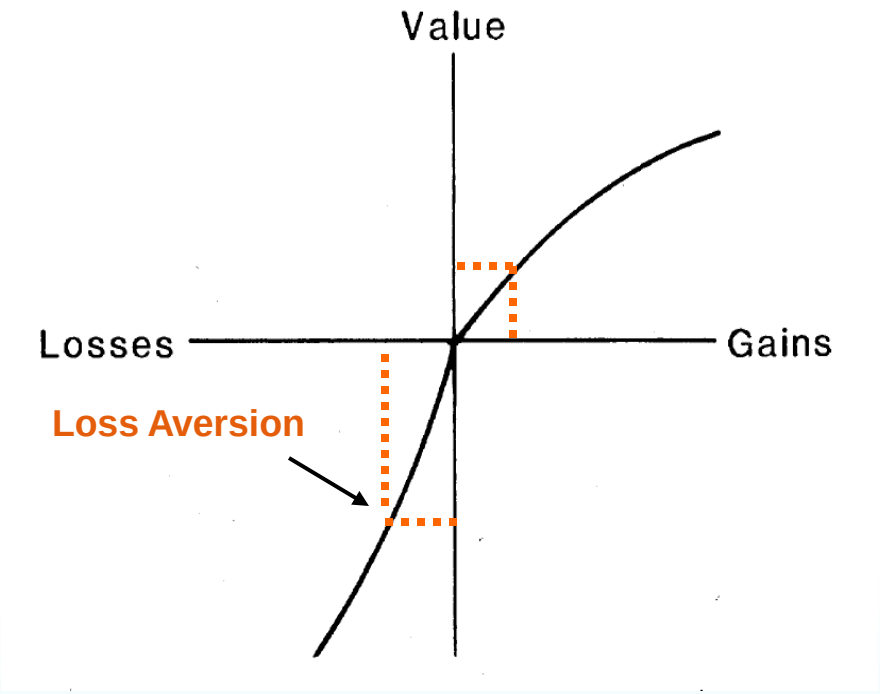
- 25 percent were solidly against congestion pricing
- 33 percent were in favor of congestion pricing
- 42 percent were opposed to congestion pricing but open to consideration if their concerns were addressed



Source: Twin Cities Congestion Pricing Citizens Jury, May 1995

Loss Aversion

- In behavioral economics and decision theory, ***loss aversion*** refers to people's tendency to strongly prefer avoiding losses to acquiring gains.
- Behavioral studies suggest that losses are twice as powerful, psychologically, as gains.



Source: Amos Tversky & Daniel Kahneman. “The Framing of Decisions and the Psychology of Choice” *Science*, New Series, Vol. 211, No. 4481. (Jan. 30, 1981), pp. 453-458.

CURACAO

- A European study of congestion pricing, CURACAO (2008), found that based on European congestion proposals and projects, the public tends to be open to congestion pricing when discussed generally but becomes more opposed to congestion pricing as projects move closer to implementation.
- Referenda on congestion pricing before implementation have failed miserably – 75 percent against in Edinburgh, Scotland and 78 percent against in Manchester, England.
- However, projects that were implemented in London and Stockholm in spite of public opposition resulted in high levels of public support after implementation and are still in operation.

Public Support for Congestion Pricing

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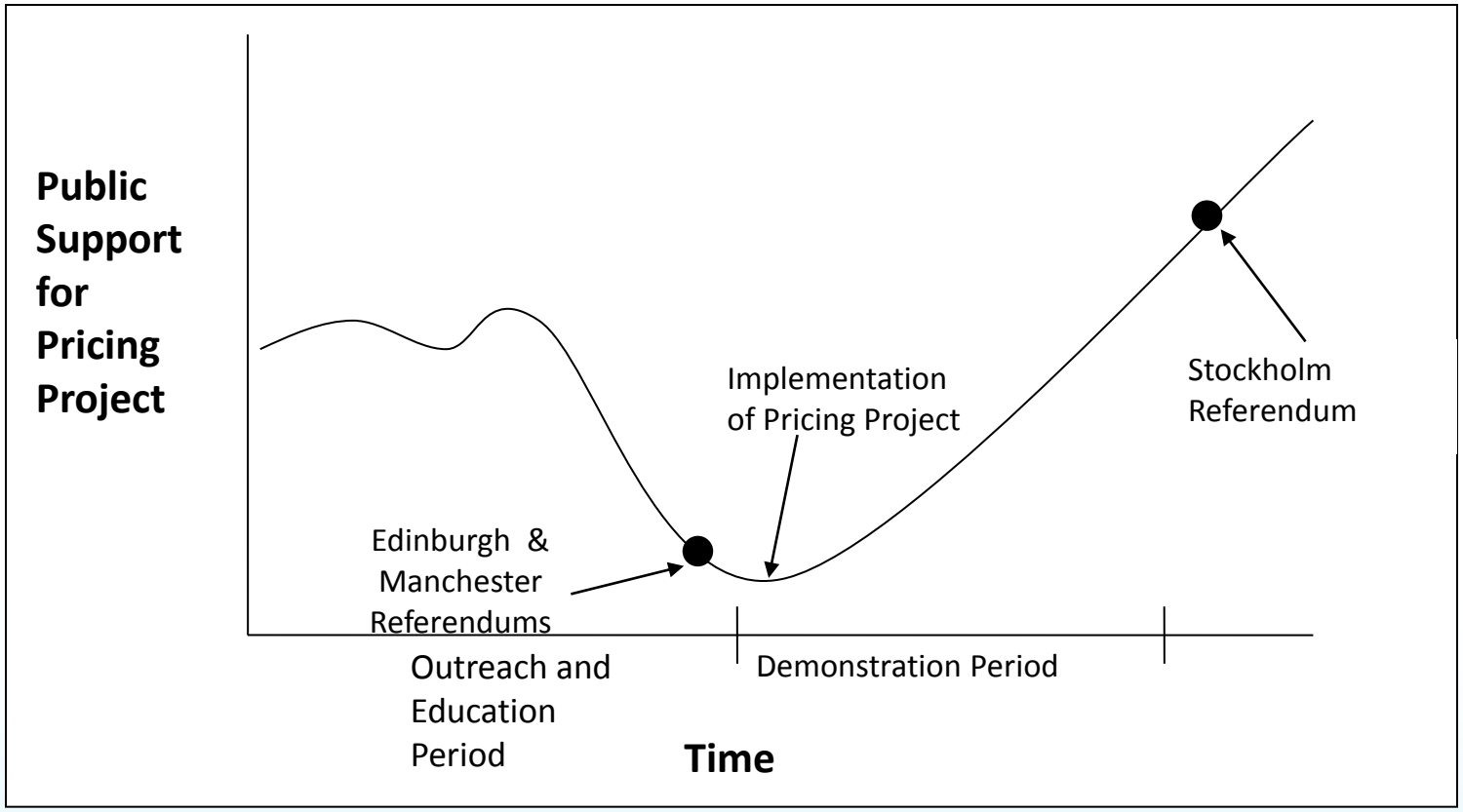

Source: CURACAO State of the Art Interim Report, April 26, 2008. p. 94, http://www.curacaoproject.eu/state-of-the-art-report.php

Part 3

New York City Congestion Pricing

Bruce Schaller

Deputy Commissioner, Planning & Sustainability

New York City Department of Transportation

NYC Congestion Pricing Proposal (Jan. 2008)

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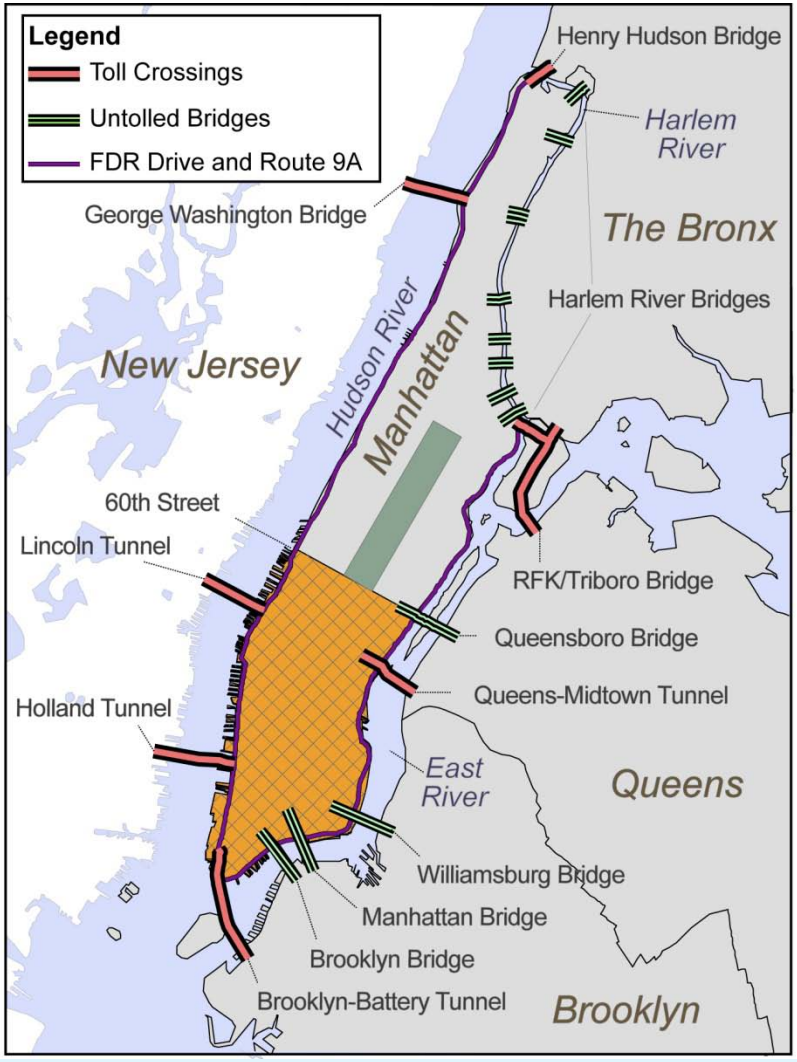

Distinguishing attributes of NYC experience

- Required approval of City Council and State Legislature
  - Provided three opportunities for opponents to block proposal
- Priced existing capacity
- No free driving alternative
  - Everyone entering zone must pay; contrasts with HOT lanes
- MTA credibility issues affected public perception of transit as a viable alternative to driving

Summary of views on congestion pricing

Assessment area		Views of congestion pricing supporters	Views of congestion pricing opponents
Societal impacts		**Reduces traffic congestion** **Funds better mass transit** **Reduces air pollution** **Furthers the goals of sustainability, urban quality of life** Reasonably discourages often-unnecessary driving	Congestion pricing targets "working person" driving to work, medical appointments, etc. Pricing represents social engineering by Manhattan-based elites Little impact on Manhattan traffic (trucks and taxis seen as main cause of congestion in central business district) Revenue will be diverted from the MTA MTA cannot be trusted to use new revenue for better service
Individual level impacts (evaluated both for oneself and others)	Impact on transit riders	Funds better transit Transit improvements will absorb increased ridership from drivers switching to transit	Trains and buses will be more crowded
	Impact on auto users	Drivers will have reasonable transit alternative Will benefit drivers by reducing traffic congestion	Transit is not and will not be viable alternative to driving Value of travel time savings (if any) not worth the $8 fee

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Lessons Learned

- Importance of vision and top-level leadership
- Pricing part of comprehensive plan that includes improved transit service, and served transportation, climate change and land use goals
- Public involvement shaped the final plan
- Extensive public outreach and education critical
- Leadership from civic, business, environmental and advocacy groups
- Availability of federal funding ($354m UPA)

Lessons Learned

- Public engagement should shape program design.
- Pricing must provide value proposition to those who will pay
  - Particularly challenging when all drivers entering a cordon will pay
- Need clear rationale why some drivers pay and others do not
- Need to demonstrate delivery of benefits (reduced congestion, improved transit)

Questions and Answers

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5 minutes

Part 4

Group Discussion

John Doan
SRF Consulting

For More Information

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FHWA Office of Innovative Program Delivery:

www.fhwa.dot.gov/ipd

FHWA Office of Operations:

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

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What's Next?

- Session 3: Integration with the Planning Process and Outreach Strategies for Project Deployment
  - September 28, 2:00-4:00 PM 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