

The USDOT Congestion Pricing Program: *A New Era for Congestion Management*

Patrick DeCorla-Souza, AICP
Federal Highway Administration

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Overview

- Why congestion pricing?
- Congestion pricing examples
- US DOT's congestion pricing program

Why Congestion Pricing?

- “Tolling”
 - Purpose to generate revenue
 - “Flat” tolls
- “Congestion pricing”
 - Purpose to manage demand
 - Tolls vary
 - Results in a range of benefits

1. Economic Efficiency

- Costs of highway use:
 - *Internal* – vehicle operation costs
 - *External* – congestion, pollution, accidents, climate change
- Drivers not faced with external costs
- Leads to overuse, congestion, and increased social costs

Construction Costs for Adding Urban Freeway Lanes vs. Gas Tax

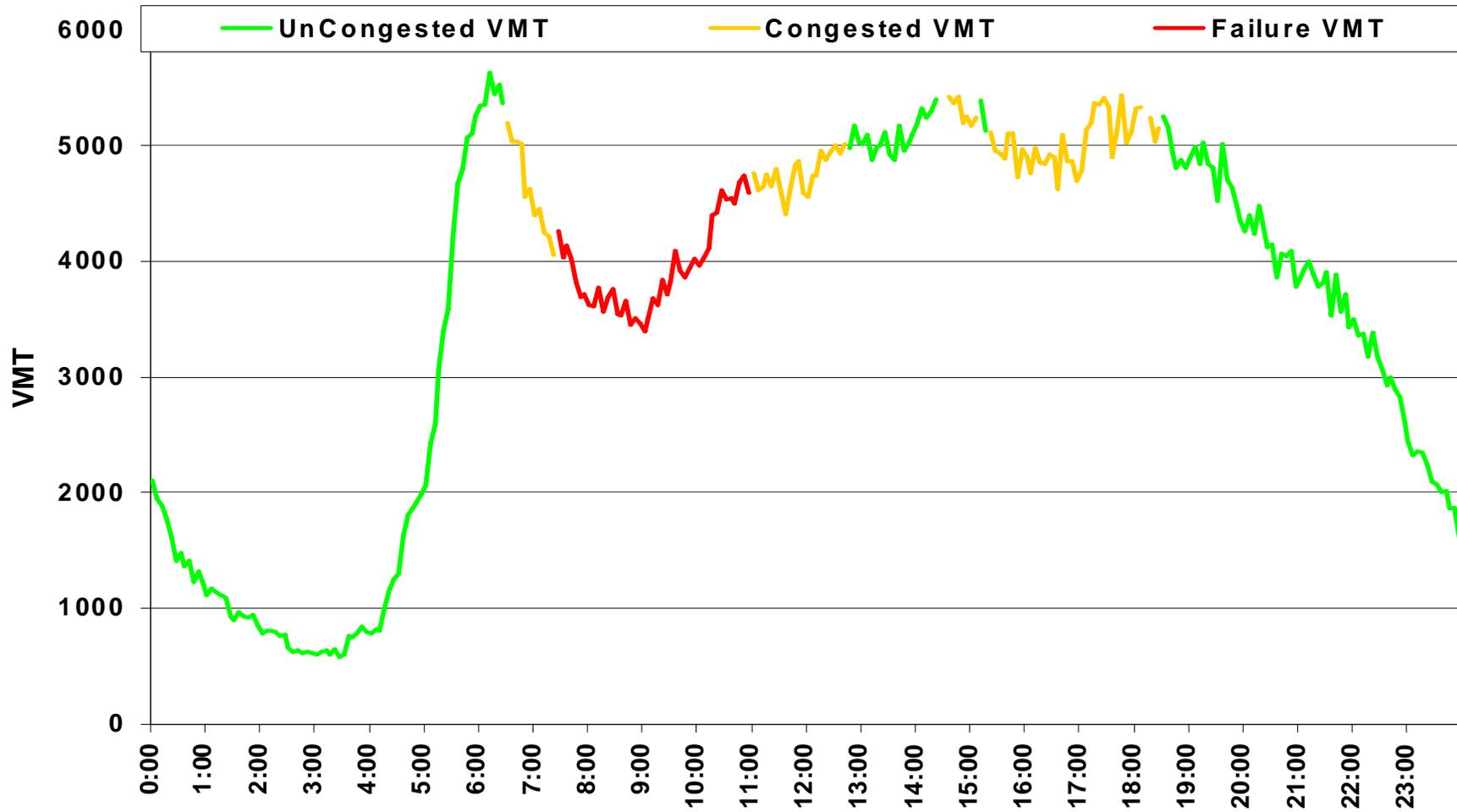
	Per mile	For 10-mile trip	For 20-mile round trip
Construction cost/ lane	\$15 M.	\$150 M.	\$300 M.
Daily traffic volume in peak periods (5-6 hours/day)	10,000 vehicles	10,000 vehicles	10,000 vehicles
Const. cost per vehicle	\$1,500	\$15,000	<u>\$30,000</u>
Gas tax per vehicle	\$0.02	\$0.20	\$0.20
Present value of gas taxes paid over 30 years	\$62	\$620	<u>\$1,240</u>

How Congestion Pricing Works

- Variable toll reflects actual “marginal” social cost
- Some will shift to using “substitutes”
 - Transit
 - Carpool
 - Travel at less busy times
 - Telework

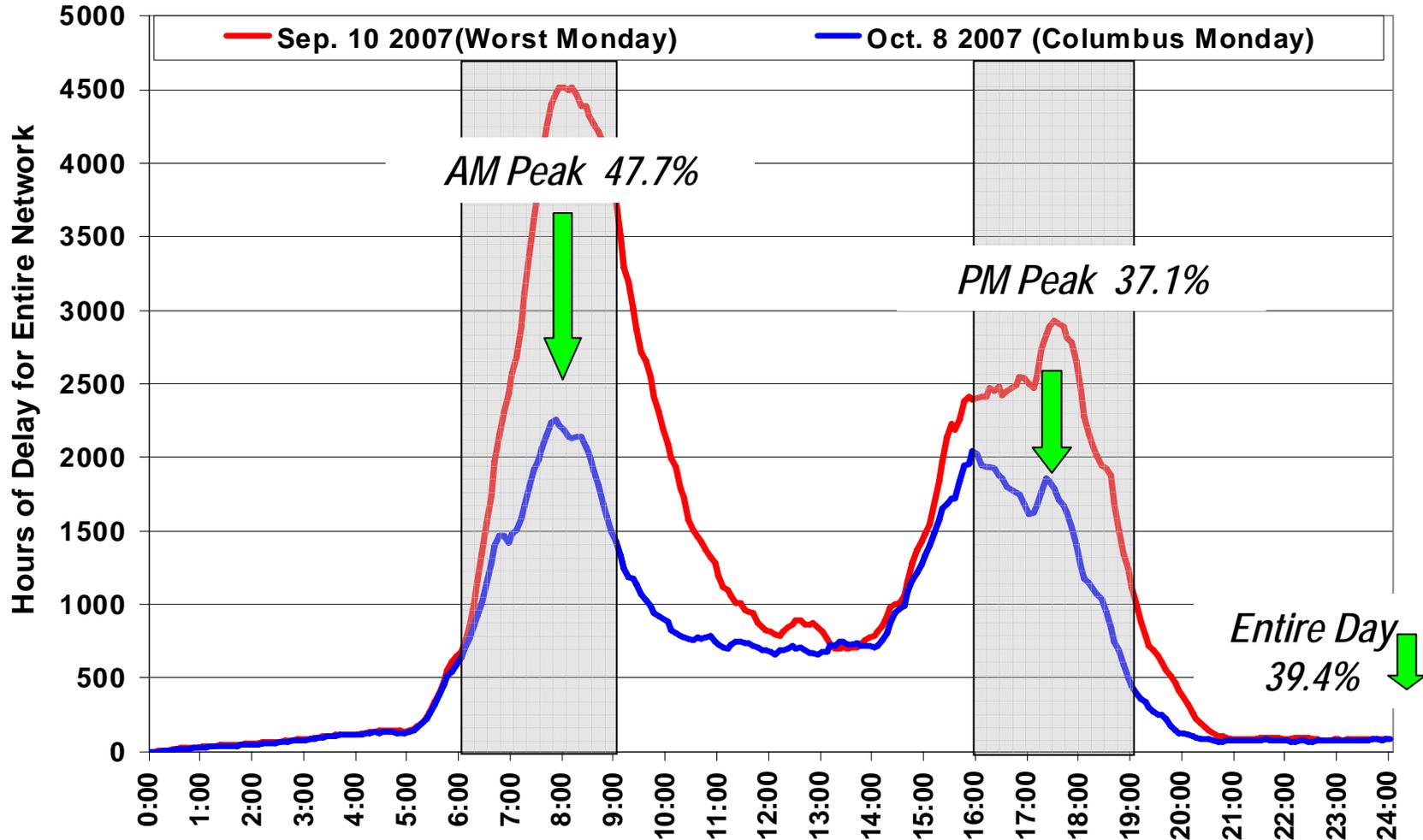
2. System Efficiency

Vehicle Throughput on a Congested Freeway



Aggregate System-Level Delay

Los Angeles, CA



3. Market Signals for Investment

Leads to efficient level of investment

- Congestion-based toll rates measure people's willingness to pay and *value* they place on the service
- High toll rates signal the need for investment in additional capacity

4. New Travel Options

Stimulates the development of viable alternatives:

- Transit – better service reliability and frequency, may be financed by toll revenues
- Carpooling/vanpooling – monetary incentives to share the ride
- Employers encouraged to offer telecommuting/flexible hours

Summary of Benefits

1. Economic efficiency
2. System efficiency
3. Market signals for investment
4. New travel options
5. New source of funding
6. Environmental benefits
7. Energy savings
8. Long-term growth in GDP

Overview

- Why congestion pricing?
- **Congestion pricing examples**
- US DOT's congestion pricing programs

Managed or “HOT” Lanes

- San Diego
- Minneapolis
- Houston
- Denver
- Seattle
- Salt Lake City



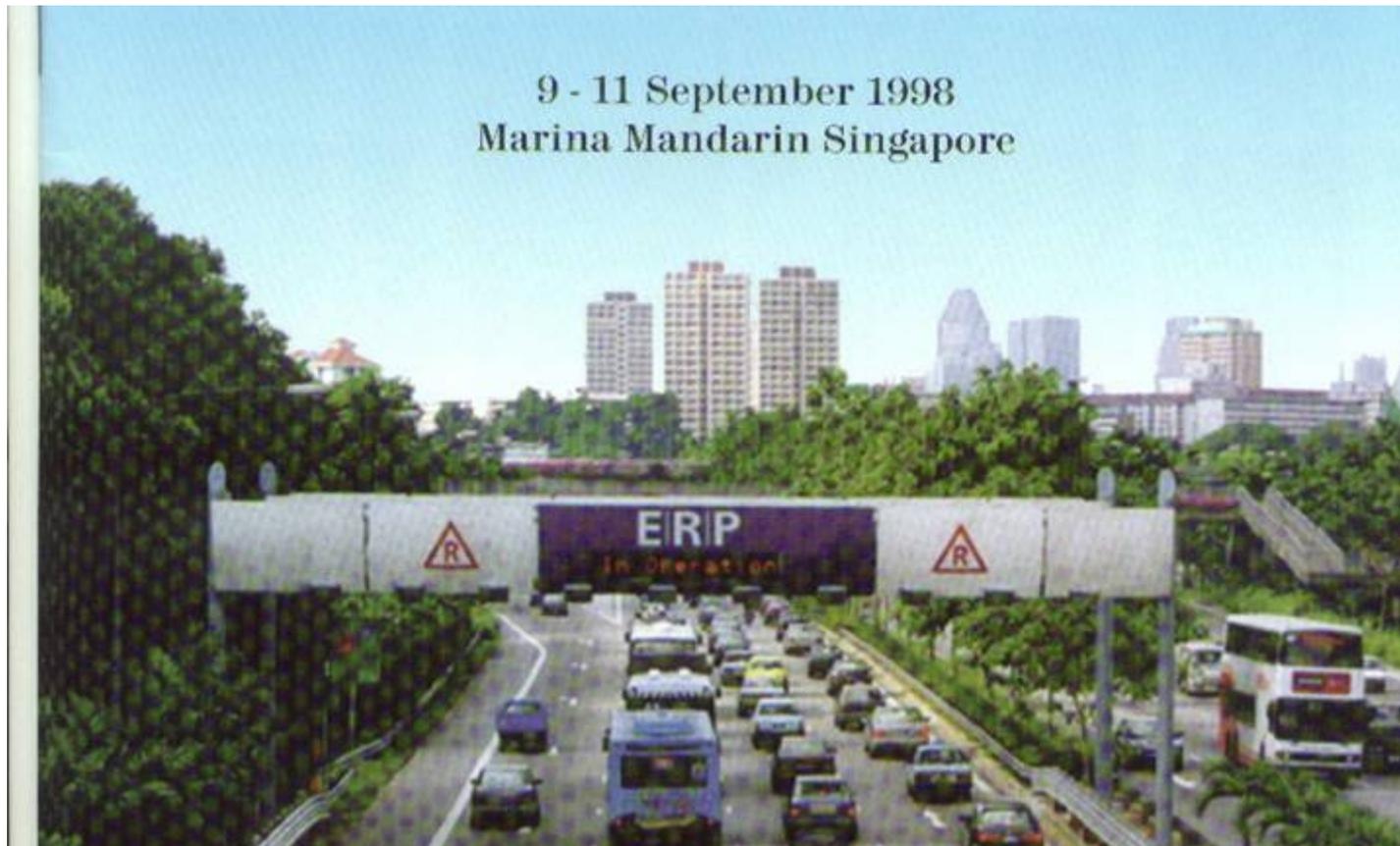
Graduated Toll Rates: San Diego

Evening Period Northbound

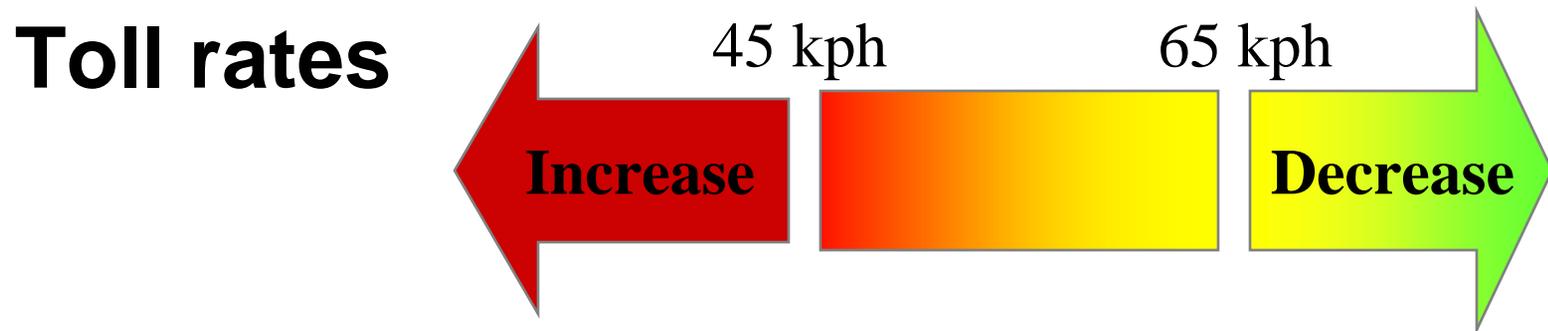
\$4.00								
\$3.00								
\$2.00								
\$1.00								
\$0.75								
	3:00 - 3:30	3:30 - 4:00	4:00 - 4:30	4:30 - 5:00	5:00 - 5:30	5:30 - 6:00	6:00 - 6:30	6:30 - 7:00

Maximum Toll Schedule for I-15 HOT Lanes, San Diego, California

Managed Highways

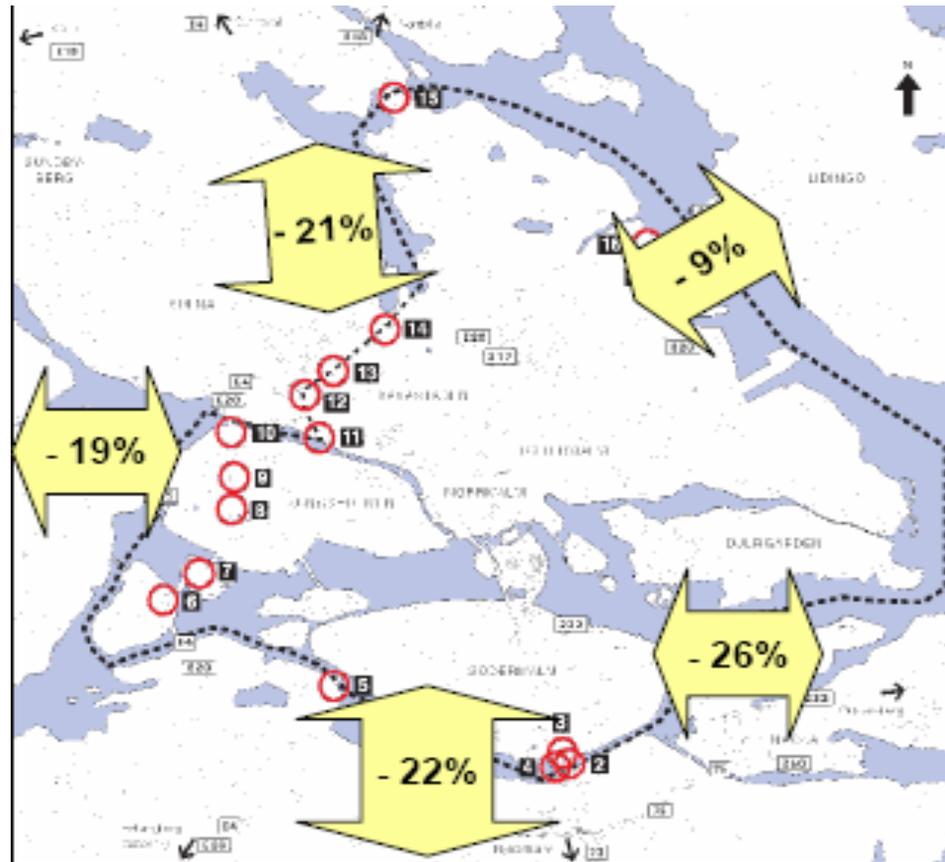


Tolls Rates on Singapore Expressways



Charges vary from 50 cents to \$2.50

Cordon Pricing - Stockholm



Stockholm Toll Rates

6:30-6:59 a.m.	\$1.38
7:00-7:29	2.07
7:30-8:29	2.76
8:30-8:59	2.07
9:00 a.m.-3:29 p.m.	1.38
3:30-3:59	2.07
4:00-5:29	2.76
5:30-5:59	2.07
6:00-6:29	1.38
6:30 p.m.-6:29 a.m.	Free

Overview

- Why congestion pricing?
- Congestion pricing examples
- **US DOT's congestion pricing programs:**
 - **Projects underway**
 - **Studies**

USDOT Pricing Programs

- **Since 1991:**
 - Congestion Pricing and Value Pricing Pilots:
 - More than 70 funded projects
- **Since 2005:**
 - HOT Lanes and Express Lanes programs
 - Urban Partnership Agreements (UPA)
 - Congestion Reduction Demonstration (CRD)

UPA and CRD Programs

- ***Direct user charges*** that vary with level of demand
- **Support strategies:**
 - ***Transit***
 - ***Technology:***
 - Multimodal traveler information
 - Active traffic management and operations

Urban Partners



Urban Partners

- **Managed Lanes:**
 - **Miami:** Convert HOV to HOT
 - **Minneapolis:** Convert shoulder to HOT
 - **Los Angeles:** Convert HOV to HOT
- **Managed Highways:**
 - **Seattle:** Convert free bridge to variably tolled
 - **San Francisco:** Convert free road to variably tolled
- **Area Pricing:**
 - **Chicago:** Variably priced curbside parking in CBD
 - **San Francisco:** Variably priced parking in CBD

Recent Studies

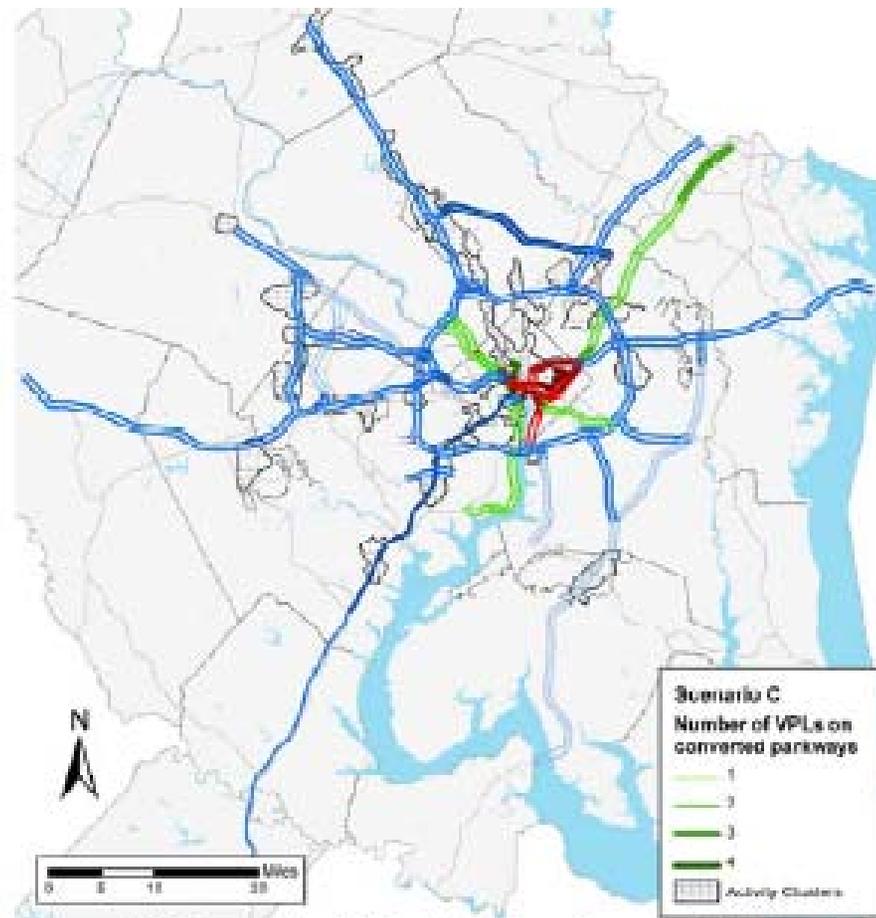
HOT Network in Washington DC

Annual revenue:

- \$1.5 to \$2.8 billion annually

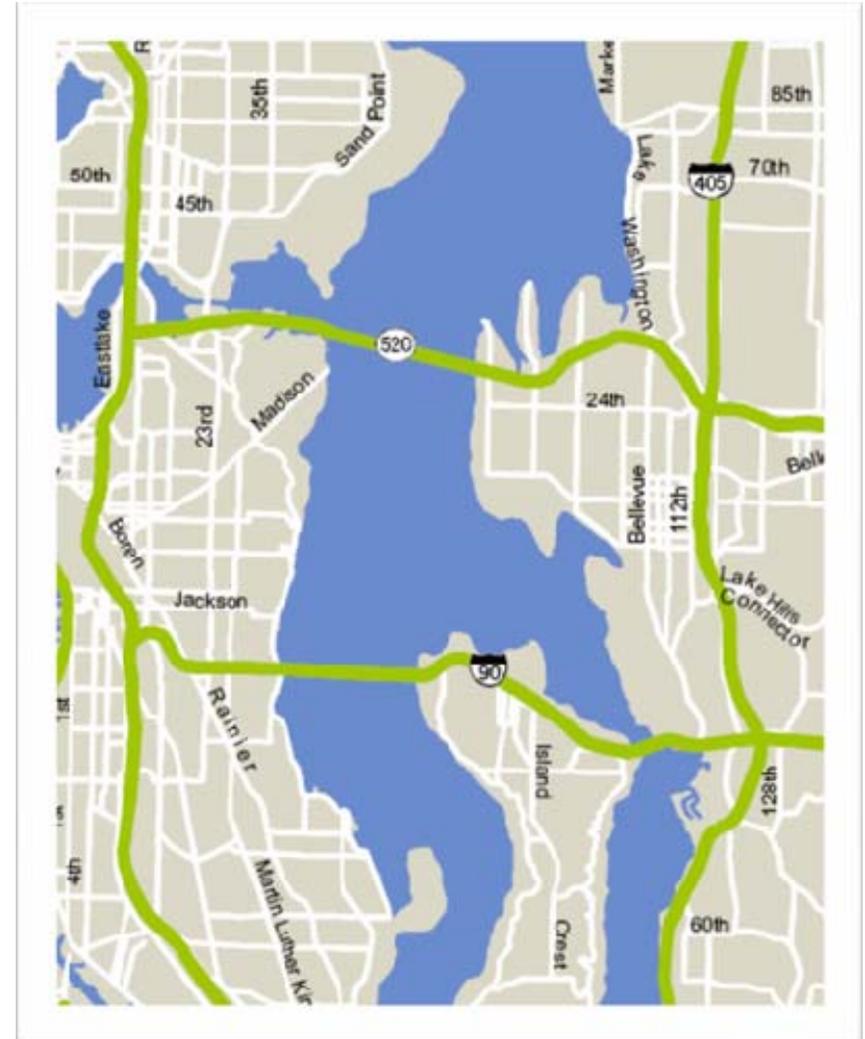
Capital cost recovery:

- 43% to 48% for new lanes
- 58% to 110% with pricing of existing general purpose lanes



Pricing All Roads in Seattle, WA

TOLL RATES PER MILE MONDAY — FRIDAY		
TIME	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



- Present value of revenues = \$87 B

Area Pricing in New York City

Annual *net* revenue:

- \$500 million
- Dedicated to transit



Public Opinion Surveys

- **Managed Lanes:**
 - 60-70% approval from all income groups
- **Managed Highways:**
 - **Seattle:** 64-74% approval for new tolls on currently free SR 520 bridge which needs rehabilitation
- **Area Pricing:**
 - **New York City:** 60% approval (67% approval in City Council vote)

Summary

- Congestion pricing has many benefits
- Operates successfully worldwide
- Bold and innovative projects are underway in several U.S. cities
- Studies suggest promise in addressing funding shortfalls
- Public opinion can be positive

**For more information contact:
Patrick DeCorla-Souza
Federal Highway Administration
202-366-4076**

Patrick.decorla-souza@dot.gov

www.FightGridlockNow.gov