

# US DOT's Congestion Initiative

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**Freeway & Tolling Operations in the Americas**  
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# The Costs of Congestion

- **The financial cost of congestion:**
  - **3.7B hours of delay and 2.3B gallons of wasted fuel annually\***
  - **Almost \$200B after accounting for unreliability, inventory, and environmental costs across all modes\*\***
- **Congestion hurts family and civic life, impacting:**
  - **Where people live and work**
  - **Where they shop**
  - **How much they pay for goods and services**



Congestion on I-95 in Northern Virginia

\* Texas Transportation Institute, 2005 Urban Mobility Report

\*\* USDOT internal analysis

## Federal Congestion Initiative

## A Virtual "Congestion Tax" on Large Urban Areas

Metro Area	Total Cost (\$ millions)	Cost Per Peak Traveler
Los Angeles-Long Beach-Santa Ana CA	\$10,686	\$1,598
San Francisco-Oakland CA	\$2,604	\$1,224
Washington DC-VA-MD	\$2,465	\$1,169
Atlanta GA	\$1,754	\$1,127
Houston TX	\$2,283	\$1,061
Dallas-Fort Worth-Arlington TX	\$2,545	\$1,012
Chicago IL-IN	\$4,274	\$976
Detroit MI	\$2,019	\$955
Miami FL	\$2,485	\$869
Boston MA-NH-RI	\$1,692	\$853
Phoenix AZ	\$1,295	\$831
New York-Newark NY-NJ-CT	\$6,780	\$824
Philadelphia PA-NJ-DE-MD	\$1,885	\$641

## The USDOT Congestion Initiative

- 1. Execute “Urban Partnership Agreements” with 1-5 major metro areas**
- 2. Encourage States to consider enacting public private partnership laws**
- 3. Develop new interstate highway and rail capacity through a “Corridors of the Future” competition**
- 4. Reduce bottlenecks at major freight gateways, including Southern California**
- 5. Find and implement solutions to border congestion**
- 6. Accelerate major airport capacity projects, reform airport pricing policies and overhaul the air traffic control system**

# The Urban Partnership Agreement (UPA)

## The "4 Ts"

1. Establishment of a variable tolling or congestion pricing demonstration
2. Utilization of cost-effective transit options (such as BRT)
3. Expansion of telecommuting and flexible work schedules
4. Utilization of cutting-edge technology and operational approaches



# The Urban Partnership Agreement

## (1) Congestion Pricing

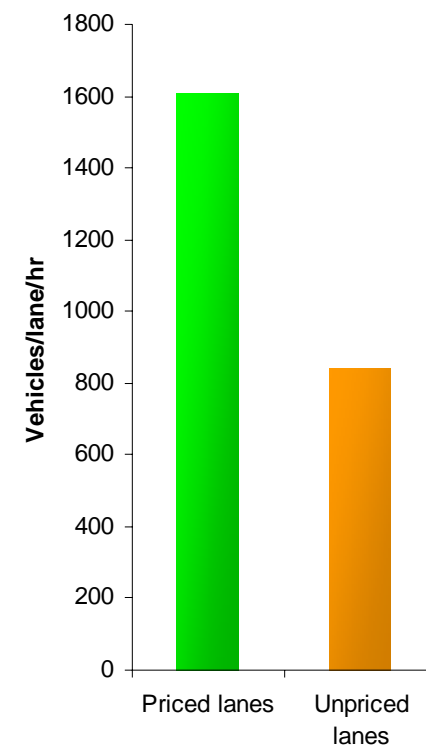


- **Goal**
  - **Maintain free-flow conditions on highways**
- **Key elements**
  - **Direct user charge based on use of facility**
  - **Charge varies based on level of congestion**
  - **Toll collection via electronic means (no toll booths)**
  - **Different configurations (cordon pricing, HOT lanes, etc.)**
- **Rationale**
  - **Demonstrated impact on congestion**
  - **Quick, cost-effective implementation**
  - **Takes advantage of travel time flexibility (most rush hour drivers aren't commuters)**

# Impact of Pricing on Congestion

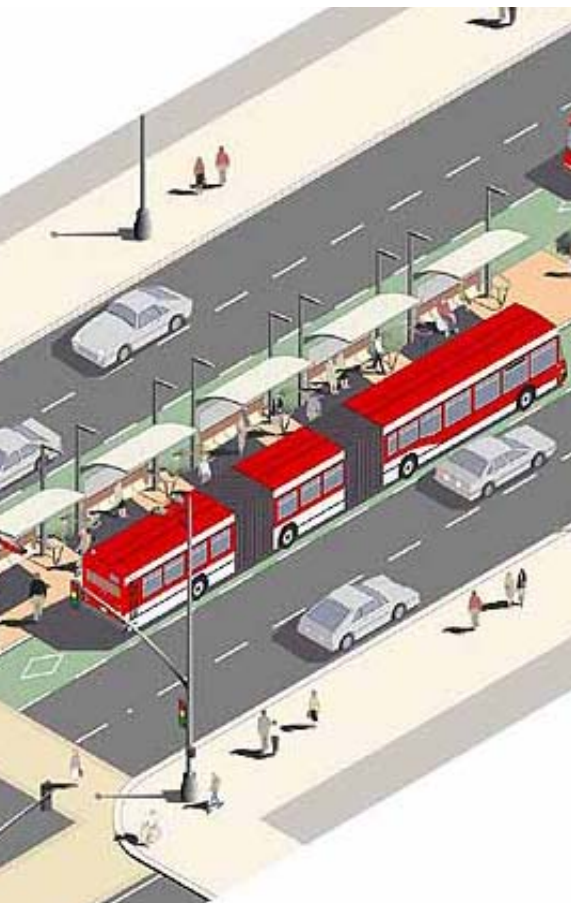
- **Increased vehicle throughput**
  - **CA SR-91 priced lanes carry twice as many vehicles/lane during rush hour as the adjacent toll-free lanes**
- **Reduced traffic and increased travel speeds**
  - **London: delay ↓30%, bus delay ↓50%, road speed ↑37%**
  - **Stockholm: traffic ↓25%, transit ridership ↑8%,**
  - **Singapore: peak hour traffic ↓13%, road speed ↑20%**
  - **Minneapolis: 85% of users happy with priced lanes' traffic flow**
- **A little less traffic can mean a lot less delay**

Peak period throughput on California SR-91, priced vs. unpriced lanes



# USDOT's Urban Partnership Agreement

## (2) Transit



- **Goal**
  - Provide a convenient, comfortable, and cost-effective alternative to personal automobile travel
- **Key elements**
  - High-quality bus service, operating in free-flow lanes
  - Improvements to stations, vehicles, and fare collection
- **Rationale**
  - Easy implementation due to limited capital costs
  - Meets mobility needs of former peak period drivers
  - Free flow conditions improve BRT performance & reliability
  - Increased ridership, cost-efficiencies, and (potentially) dedicated toll revenues strengthen transit funding base

# USDOT's Urban Partnership Agreement

## (3) Telecommuting

- **Goal**
  - Reduce peak period commuting on highways
- **Key elements**
  - Commitment by major employers to expand telecommuting and flexible work schedules
  - Removal of regulatory impediments to telecommuting
  - Different configurations (work from home, telework centers, etc.)
- **Rationale**
  - Ease and cost-effectiveness of implementation
  - Popularity of working from home
  - Demonstrated reductions in peak driving



# USDOT's Urban Partnership Agreement

## (4) Technology and Operations



Dynamic messaging signs in Madison, Wi

- **Goal**
  - Utilize technological and operational tools to enable pricing and other congestion-reduction measures
- **Key elements**
  - Electronic toll collection to allow for system pricing without congestion-causing tollbooths
  - Technologies to enable more informed choices by travelers (e.g., real-time multi-modal transportation info)
  - Operational strategies (e.g., reversible lanes, improved incident response) to add capacity during peak periods
- **Rationale**
  - New technologies and operational approaches offer the potential to significantly reduce congestion

**Federal Congestion Initiative**

What USDOT Brings to the Table: Up to \$1.1 B in DOT Discretionary Grants\*

Program	MAXIMUM potential amount available (i.e., up to...)
FTA Discretionary Programs	
<b>Alternatives Analysis</b>	\$ 12 M
<b>New Starts / Small Starts</b>	\$ 267 M
<b>Bus &amp; Bus Facilities</b>	\$ 438 M
FHWA Discretionary Programs	
<b>Delta Region Development Program</b>	\$ 10 M
<b>Ferry Boat Discretionary</b>	\$ 60 M
<b>Highways for Life</b>	\$ 20 M
<b>Innovative Bridge Research &amp; Construction</b>	\$ 5 M
<b>Public Lands Highway Discretionary</b>	\$ 80 M
<b>Transportation, Community, and System Preservation (TCSP) Program</b>	\$ 61 M
<b>Truck Parking Pilot Program</b>	\$ 6 M
<b>Value Pricing Pilot Program (VPPP)</b>	\$ 30 M
RITA Discretionary Programs	
<b>Intelligent Transportation Systems Operational Testing to Mitigate Congestion (ITS-OTMC)</b>	\$ 100 M
Total	\$ 1,089 M

\* Over three years (FY07-09)

## What USDOT Brings to the Table

### Other Potential Support

- **Another \$125 M in President's FY08 budget request**
  - **\$100 M for VPPP**
  - **\$25 M for ITS-OTMC**
- **DOT loans and credit assistance**
  - **Private Activity Bond authority**
  - **TIFIA loan and credit assistance**
- **Other support**
  - **Authority to price portions of the Interstate**
  - **Sponsorship of projects by senior departmental leadership**
  - **Expedited project delivery (e.g., Environmental Stewardship Executive Order)**
  - **Extensive technical expertise and advice**