

A Federal Perspective on Congestion Pricing



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Overview

- Background on Congestion Pricing
- Benefits and Experiences of Pricing
- Case Study – Miami I-95 Express
- Lessons Learned
- Re-Authorization

The Federal Setting

- Federal law provides authority to toll and price motor vehicles on Federally-aided roads:
 - To finance construction/reconstruction
 - To promote efficient use of highways
 - To reduce traffic congestion
 - To improve air quality
- Six programs are now available.

What is Congestion Pricing?

- ***Variably priced lanes:*** Variable tolls on separated lanes within a highway, such as express toll lanes or high-occupancy toll lanes.
- ***Variable tolls on entire roadways:*** Both on toll roads and bridges, as well as on existing toll-free facilities during rush hours.
- ***Zone-based or cordon charges:*** Either variable or fixed charges to drive within or into a congested area within a city.
- ***Area-wide or system-wide charges:*** Per-mile charges on all roads within an area or on a roadway network that may vary by level of congestion.

Types of Priced Lanes: HOT-2+

Operating:

- I-15, San Diego
- SR 167, Seattle
- I-15, Salt Lake City
- I-394 and I-35W, Minneapolis
- I-10, Houston

In implementation process:

- I-110, Los Angeles

Types of Priced Lanes: HOT-3+

Operating:

- US 290, Houston – Lane added in median
- I-95, Miami (phase 1) – New lane with restriping

In implementation process:

- I-495, Northern Virginia – New lanes being constructed
- I-85, Atlanta - Conversion
- I-10, Los Angeles - Conversion
- I-95, Miami (phase 2) – New lane with restriping

Types of Priced Lanes: Express Lanes

Operating:

- SR 91, Orange County, CA – New lanes

In implementation process:

- I-95, Baltimore – New lanes
- I-595, Ft. Lauderdale – New lanes
- I-635 (LBJ), Dallas – New lanes
- I-30, Dallas
- I-35E, Dallas
- North Tarrant Expressway, Ft. Worth – New lanes

Non-Toll Congestion Pricing

- Variably Priced Metered Parking
- Variably Pricing of Off-Street Parking
- Parking Cash-Out
- Variable Port Access Charges
for Trucks



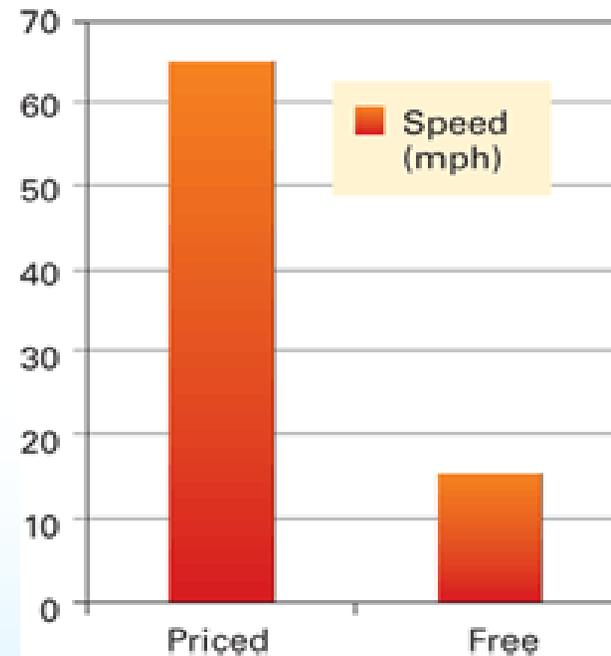
Transportation System Management

- Managing Demand
 - Modal alternatives (BRT, Light Rail, Park-and-Ride Stations)
 - **Congestion pricing**
 - Telecommuting and flexible work schedules
- Managing Supply
 - Advanced Traffic Management
 - Managed Lanes
 - Adding new lanes

Benefits

Reliability for:

- Transit Riders and Carpoolers
- Drivers
- Businesses



Traffic speeds on SR 91 during rush hours

Experience

- Effects on Driver Behavior, Traffic Volumes and Travel Speeds
 - **San Diego's I-15 reversible HOT lanes:** The number of vehicles increased by 54 percent over the first 3 years and the time advantage of the express lanes has been maintained.
 - **The California SR-91 Express Lanes:** Provides congestion free, high speed travel at 60-65 mph to paying customers during peak periods even while volume grows.

Experience

- Effects on Transit Ridership:
 - *The Port Authority of New York and New Jersey (PANYNJ):* 20 percent of auto users shifted to transit in response to variable, time-of-day pricing.
 - *The I-95 Express project in Miami:* Where the HOV requirement was raised from HOV 2+ to HOV 3+ and carpools are registered there was a 30 percent increase in transit ridership as a result of new bus service implemented to complement the I-95 Express HOT lanes.
- Effects on Air Quality
 - *There have been many instances where project implementation led to benefits to traffic flow, resulted in a calculated improvement to air quality.*

Experience

- Effects on Equity for Low-Income Individuals
 - **The perception of unfairness may not reflect user opinions.** HOT Lane conversions have encountered concerns in planning about catering to the rich. Such concerns tend to diminish among users and the public as operations get underway.
- Technology Development
 - **HOT lanes have demonstrated sufficient advances in technologies** to make variable pricing feasible, along with enforcement of violations by stationary and mobile means.

Case Study Miami – The I-95 Express Project Description

- Phase 1A:
 - HOV to HOT conversion **northbound** from downtown Miami to Golden Glades
 - Opened Dec 2008
- Phase 1B:
 - HOV to HOT conversion **southbound** from Golden Glades to downtown Miami
 - Opened Jan 2010
- Phase 2:
 - HOV to HOT Conversion both directions from Golden Glades Interchange to I-595
 - Construction will begin fall 2010, opening date scheduled for summer/fall 2012



Case Study Miami – Traffic Impacts

- 50,000 to 60,000 veh/day now use the Express Lanes (in both directions)
- Peak period average speeds are of 60mph
- Average peak period tolls range from \$2.50 to \$5
- Overall reliability is 45mph minimum 100% of the time.
- Sun Sentinel reported that high tolls may actually be encouraging motorists to use Express Lanes



Case Study Miami Transit Improvements

- 500 extra parking spaces added to Golden Glades Interchange in late 2009
- Southbound Express Lanes between downtown Miami and Golden Glades Interchange opened in mid January 2010
- Three new transit routes began operating in late January 2010
- 23 new articulated buses (58 seats) being phased in over next 2 years
- 14 ramp signaling locations added 4/2010



Lessons Learned

- Projects implemented have been valuable in demonstrating congestion pricing to the public.
- The projects are meeting strategic goals by providing reliable travel times and supported by enhanced public transit.
- These lanes have demonstrated the technical feasibility of pricing and have shown the potential to change travel behavior.

Lessons Learned

- Priced lanes have proven that many travelers are happy to have the option of buying a reliable trip.
- Pricing supports livable communities by increasing transportation choices, access to transportation services, and improving highway system performance.
- Pricing projects provide safe, reliable, effective, and sustainable mobility for all users

Re-Authorization and Congestion Pricing?



- Not Sure
- Streamline Opportunities
- Broaden Authority?
- Pricing New Capacity – Generally OK
- Pricing Existing Capacity - unclear

Final Thoughts

- Pricing is happening and will continue to evolve at various locations.
- Pricing is an important strategy to consider to address congestion and raise revenue.
- HOT &/or Express Lanes can be an important “Building Block” to introduce pricing to a region.
- Planning for HOT & Express Lanes is key to setting the stage.