Who is implementing managed lanes with pricing strategies?
### Managed Lane Facilities in the U.S.

<table>
<thead>
<tr>
<th>Operational</th>
<th>Under Construction</th>
<th>Under Development</th>
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</thead>
<tbody>
<tr>
<td>I-10 (Katy Freeway), Houston, TX</td>
<td>I-95 Kennedy Expressway Express Toll Lanes, Baltimore, MD</td>
<td>C-470 Express Toll Lanes, Denver, CO</td>
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<td>US 290 QuickRide, Houston, TX</td>
<td>I-35W MnPASS, Minneapolis, MN</td>
<td>US 36 Express Toll Lanes, Denver, CO</td>
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<td>I-35W MnPASS, Minneapolis, MN</td>
<td>I-394 MnPASS, Minneapolis, MN</td>
<td>I-25 North Express Toll Lanes, Denver, CO</td>
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<td>I-680 Express Lanes, Alameda County, CA</td>
<td>I-495 Capital Beltway HOT Lanes, VA</td>
<td>I-680 HOT Lane, San Francisco CA</td>
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<tr>
<td>I-15 HOT Lanes, San Diego, CA</td>
<td>I-15 FasTrak Expansion, San Diego, CA</td>
<td>I-5 HOT Lanes, San Diego, CA</td>
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<td>SR 91 Express Lanes, Orange County, CA</td>
<td>SR 167 HOT Lanes, Seattle, WA</td>
<td>I-805 Managed Lanes, San Diego, CA</td>
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<td>SR 167 HOT Lanes, Seattle, WA</td>
<td>I-15 Express Lanes, Salt Lake City, UT</td>
<td>GA 400 HOT Lanes, Atlanta, GA</td>
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<td>I-25 HOT Lanes, Denver, CO</td>
<td>I-95 HOT Lanes, Miami, FL</td>
<td>I-75 / I-575 HOT Lanes, Atlanta, GA</td>
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<td>I-95 HOT Lanes, Miami, FL</td>
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<td>I-285 HOT Lanes, Atlanta, GA</td>
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<td>I-595 Express Lanes, Fort Lauderdale, FL</td>
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<td>Phase 2 I-95 Express Toll Lanes, Miami, FL</td>
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<td>Loop 1 (MoPac), Austin, TX</td>
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<td>I-30 Managed Lanes, Dallas / Ft. Worth, TX</td>
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<td>I-35W Managed Lanes, Dallas / Ft. Worth, TX</td>
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<td>I-820 / SH183 Managed Lanes, Dallas / Ft. Worth, TX</td>
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<td>I-635 LBJ Managed Lanes, Dallas / Ft. Worth, TX</td>
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<td>SH 288 Managed Lanes, Houston, TX</td>
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<td>SR 167 HOT Lanes, Seattle, WA</td>
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<td>I-405 Managed Lanes, Seattle, WA</td>
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<td>I-495 Capital Beltway Express Toll Lanes, MD</td>
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<td>I-270 Express Toll Lanes, MD</td>
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<td>I-95/I-395 HOT Lanes, VA</td>
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<td>I-77 HOT Lanes, Charlotte, NC</td>
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<td>Highway 217 Express Toll Lanes, Portland, OR</td>
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</tbody>
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Managed Lanes 2011: A Brief Overview

Robert W. Poole, Jr.
Director of Transportation Policy
Reason Foundation
http://reason.org

Key issues:

- Managed Lanes nationwide
- Next step: ML networks
- Key concerns of policymakers:
  - “Lexus Lanes”
  - “Lanes already paid for”
  - Impact on emissions
  - Impact on transit
Managed Lanes Projects, 2011

Managed Lanes Networks

- In Long Range Transportation Plan already:
  - Atlanta
  - Dallas
  - Houston
  - San Diego
  - San Francisco
  - Seattle

- Being considered:
  - Los Angeles
  - Miami-Dade/Broward/Palm Beach Counties
  - Washington, DC
The “Lexus Lanes” issue

- Data on commuter attitudes (San Diego, Seattle)
- Data on usage (91X, I-15, I-394, SR 167)
- Win-win (GP lanes benefit, too)
- Common-sense comparisons (restaurants, airlines, Amtrak, Postal Service)

“We’ve already paid for these lanes.”

- Applies to conversions, only
- Best answer: HOV-2 not working well
  - If empty lanes, taxpayers not getting full value from expensive pavement.
  - If congested, motorists aren’t getting promised benefits.
- HOV-2 not sustainable long-term.
Emission reductions from San Francisco Bay Area Network

San Diego’s I-15 Managed Lanes

Broward MPO Ft. Lauderdale | February 10 2011
Where Have We Been?

- Opened in 1988 to HOV only
- Reversible 8-mile, 2-lane barrier-separated facility
- Value Pricing demonstration began in 1996

Where Are We Now?

**Project Goals:**
- Improve mobility
- Relieve congestion
- Enhance transit service
Where Are We Now? (continued)

### Express Lanes
- 8 miles long
- 2 lanes
- Reversible
- Peak direction
- Focus on weekdays
- Access at two ends only

### Managed Lanes
- 20 miles long
- 4 lanes
- Movable Barrier
- Bi-directional
- Open all week
- Multiple access

---

Where Are We Now? (continued)

**Project Timeline:**
- Middle Segment – Open to traffic
- North Segment – 2011
- South Segment – 2012
Where Are We Now? (continued)

Where Are We Going?

Proposed Expansion of Managed Lanes in Draft 2050 Regional Transportation Plan
New Ideas for Using Price Management to Create Financially Sustainable Transportation

Martin Stone, Ph.D., AICP
Director of Planning
Tampa Hillsborough Expressway Authority
Tampa, Florida

and

Chris Swenson, P.E.
Senior Engineer
Wilbur Smith Associates
Fort Myers, Florida

Price Managed Bus Rapid Transit Toll Highway
Bus Toll Lane

- **New capacity** (not HOV conversion)
- **Barrier separated lanes using existing public ROW** (where feasible)
- **Dedicated 1st to public transit**
- **Sell ALL remaining capacity**
- **Use price management to guarantee free flow conditions**
- **Equity partnership between transit & toll agencies** divide net revenue based on owner %
- **Sustainable revenue for transit**

Managed Arterials

- **Recognize intersections as the “throttle” for arterial capacity**
- **Use queue jumps to bypass traffic signals** (and as toll collection point)
- **May be over or underpass**
- **Excellent tie in with BRT or Local Transit Service**
- **Consideration for stations within queue jump structure is underway**
New Ideas for Using Price Management to Create Financially Sustainable Transportation

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and

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Fort Myers, Florida

Equity Issues with Managed Lanes

Craig J. Stone
Director
Washington State Toll Division
Tolling in Washington State today

Tolling is a key part of state’s congestion management and revenue funding plan

Electronic tolling underway:
- Tacoma Narrows Bridge – ETC lanes, as well as cash toll booths, opened 2007
- SR 167 HOT Lanes pilot project – converted existing HOV Lanes to HOT Lanes in a 10-mile corridor in 2008
- SR 520 Bridge – Set to open Spring 2011 with all-electronic tolling and variable toll rates

Studying additional corridors for managed lanes
- 40-mile corridor of express toll lanes that would link the existing SR 167 HOT lanes with a two-lane Express Toll Lane system on I-405
- Converting existing reversible express lanes on I-5 through Seattle to Express Toll Lanes

2006 and 2009 Focus Groups – Delved into fairness issues for HOT Lanes

Focus groups convened both before HOT Lanes opened and after operating for a year
- Both included separate groups of low-income drivers
- Both also included groups reflecting the cross section of all drivers

Feedback was similar in all focus groups
- Did not have concerns about fairness to low-income users, particularly since it’s a choice
- More communication and education needed on how the system works
- Trip reliability is a priority for all groups
- Those who use HOT Lanes love them, some non-users in the groups indicated plans to join, once they learned at the focus groups how they worked

Environmental Justice finding:
- Project does not generally pose an undue burden to low-income users
Debunking “Lexus Lanes” perception

Five most frequently tolled vehicles in SR 167 HOT lanes:
1. Ford
2. Chevrolet/GMC
3. Toyota
4. Honda
5. Dodge

Based on Good To Go! account data for HOT Lanes users who paid a toll

User surveys in 2008, 2009 and 2010 examined equity issues

Our surveys show:
- Low income drivers are as supportive of HOT lanes as other income levels
- Middle- to high-income drivers use the HOT lanes more often
- Lower income people use the lanes when they need them, and appreciate them equally
- Low income populations are more likely to use transit or carpool
- All drivers, including low income, see benefit from improved travel speeds and reliability

2008 median household income for:
- Washington State - $58,081 (11.3% are below poverty level)
- King County - $70,091 (9.2% are below poverty level)
- Pierce County - $58,133 (11.3% are below poverty level)
Hearing from HOT Lanes users

- “I wish this was an option on all freeways”
- “Sleeping in an extra 15 minutes is worth it to me.”
- “I don’t like to be late taking my kids to school and games, and without the HOT lanes, I would be late!”
- “I LOVE the HOT lanes and would like to see the concept expanded.”
- “It’s the best $1.25 I’ve ever spent.”
- “I’d give up all my lattes to use the HOT lanes.”
Transportation Systems Management and Operations (TSM&O)

Florida TSM&O Definition

**What**
Integrated *program* to optimize the *performance* of existing *multimodal* infrastructure

**How**
Through integrated implementation of systems, services, and projects

**Outcome**
To preserve capacity and improve the security, *safety and reliability* of our transportation system
Sample TSM&O Techniques

- Implementation of a regional managed lanes network
- Congestion pricing
- Application of ramp management and control concepts
- Variable speed limit signs
- Lane-use control signals
- Bus rapid transit / Express Bus Service
- Transit ITS / Transit signal priority
- Traffic signal timing / progression
- Parallel / alternative corridors
- Grade separations
- Access management
- Parking demand and supply management
- Freight networks
- Park-n-ride
- Travel demand management techniques
- Queue jump lanes
- Other technology initiatives techniques

TSM&O Program Update

- Downtown Parking Supply and Demand Management
- Integrated Corridor Management (ICM) Initiative
- Virtual Freight Network
- Southeast Florida Mobility Project (Reason Foundation)
- South Florida Express Managed Lane Network
- And South Florida Express Managed Lane Network Concept of Operations
Regional
Meet Needs of Commuter Trips
Encourage Shift in Peak and Mode
Complemented by New or Improved Transit Service
I-595, I-75, Turnpike, Palmetto Expressway, Dolphin Expressway

Florida Department of Transportation

Q & A

Buckle Up, Sit Up, Hang Up, and Drive!