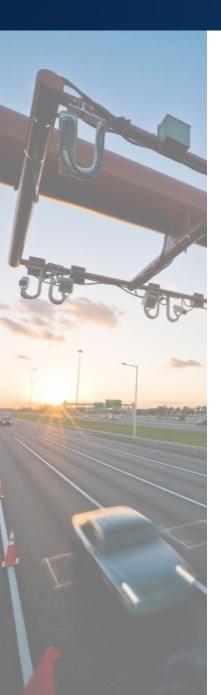


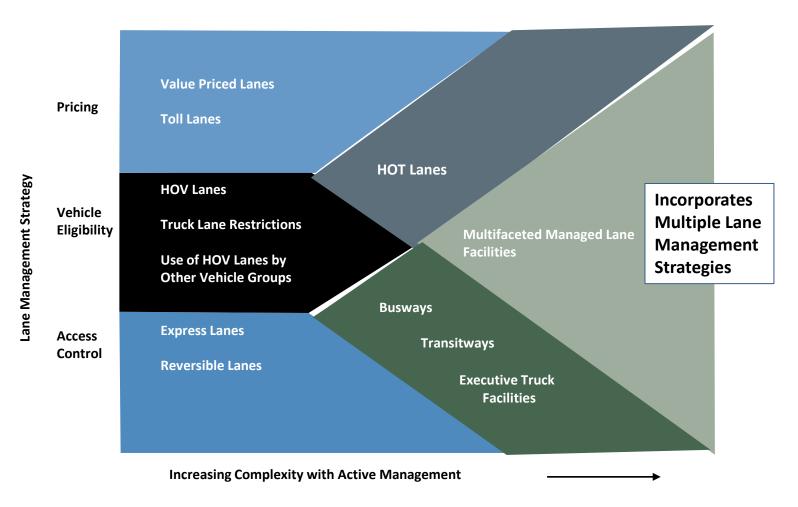
Priced Managed Lanes



- What are they?
- Where are they?
- Why do them?
- When to do them?
- Common issues
- Lessons learned

What are Priced Managed Lanes?

The subset of managed lanes where pricing is used as an operational strategy





What are Priced Managed Lanes?



What are Priced Managed Lanes?

- A tolled corridor inside of an existing road
- Congestion is managed with pricing





Priced Managed Lanes

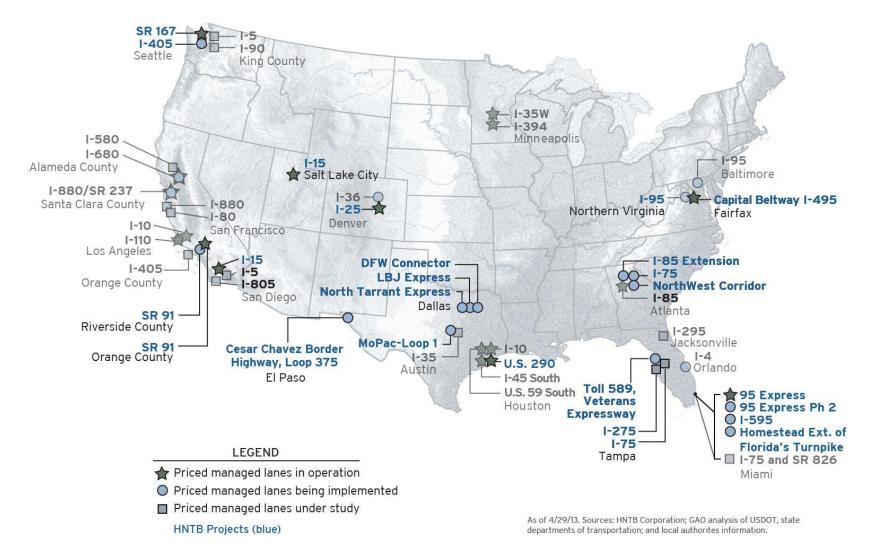


- Many terms used
 - High Occupancy Toll (HOT) Lanes
 - Managed Lanes/Express Lanes
 - Bus Rapid Transit Lanes (BRT)
 - Truck Only Toll (TOT) Lanes
- Can be physically similar
- Business rules determine what they are
 - Who can use the facility, who pays and how much?



Priced Managed Lanes

PMLs across the U.S.





Why Priced Managed Lanes?

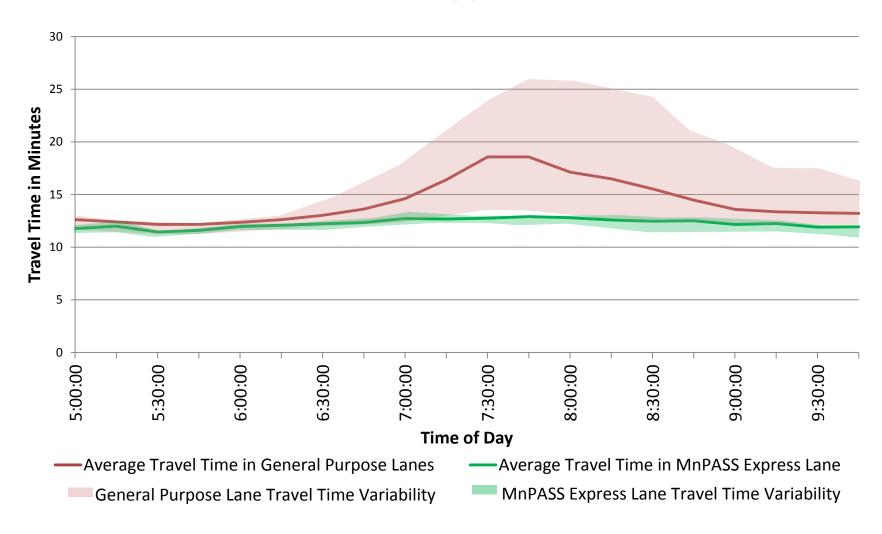


- Trip reliability
- Time savings
- Improved mobility
- Congestion management
- Revenue generation
- Reduction in capital improvements



Travel Time Reliability

Northbound I-35W AM Peak





When do PMLs?



- Significant recurring congestion in a corridor
- Toll revenues can at least cover tolling O&M costs
- Existing electronic tolling in area





What are Key issues with PMLs?



- Three "feasibilities": technical, financial, institutional (a.k.a. politics)
- Determining goals
 - Congestion management
 - Transit/rideshare promotion
 - Revenue generation
- Safety speed differential
- Enforcement
- Sponsorship and governance



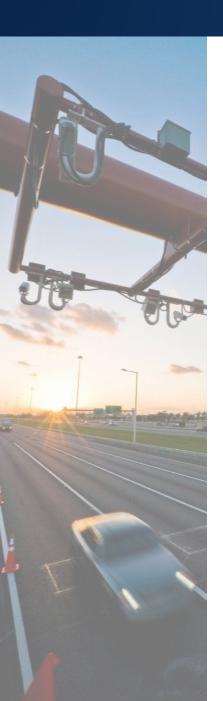
Recipe for Success



- Determine your vision
 - Mobility or revenue generation
 - Stand alone project or system of projects
 - Priority compared to other projects
- Appropriate business rules and policies
 - Pricing, eligibility, enforcement
- Must deliver improved mobility
- Public education
- Success criteria (aka performance metrics)



Common Misconceptions



- Managed lanes make lots of money
 - Mobility vs. revenue
 - Very different business rules and policies
 - Enforcement strategies
- Managed lanes will work everywhere
- Managed lanes are good P3 projects



Public Opinion of PMLs

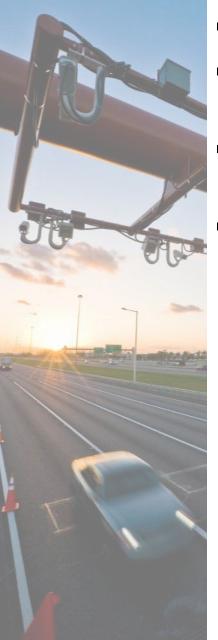


- 91% overall satisfaction
- 95% satisfaction with all electronic tolling
- 85% satisfaction with traffic speed in lane
- 76% satisfaction with dynamic pricing
- 66% satisfaction with safety of merging

Data from Survey of 500 MnPASS account holders in 2009



BRT on Express Lanes: I-95 - Miami



- Allows for multi-county BRT routes
- Express bus riders account for 18% of peak period throughput
- New BRT routes have increased service frequencies
- 95 Express Bus Service \$2.65 per trip





Houston Metro Express Lanes



- I-10, I-45, US 59, US290
- Allows METRO buses (60/hour), carpools, vanpools, and motorcycles
- SOVs pay a toll
- Originally funded with FTA dollars, \$1.4B



METRO HOT LANES: http://www.ridemetro.org/Services/HOTLanes.aspx





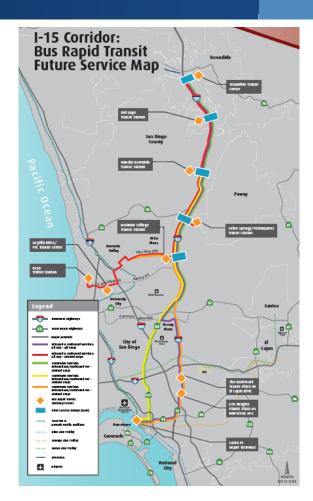
San Diego I-15 Express Lanes



- 20-mile, 4-lane facility
- 5 BRT stations along the corridor
- Buses, HOV free, SOVs pay toll
- Approx. \$1M/year for BRT funding



http://www.keepsandiegomoving.com/I-15-Corridor/I-15-transit-services.aspx



National Lessons Learned



- A "political champion" is a must
- Engage the media and public early and often
- Address equity issues early in the planning process
- Multi-modal approach increases public acceptance
- A system plan approach can be helpful

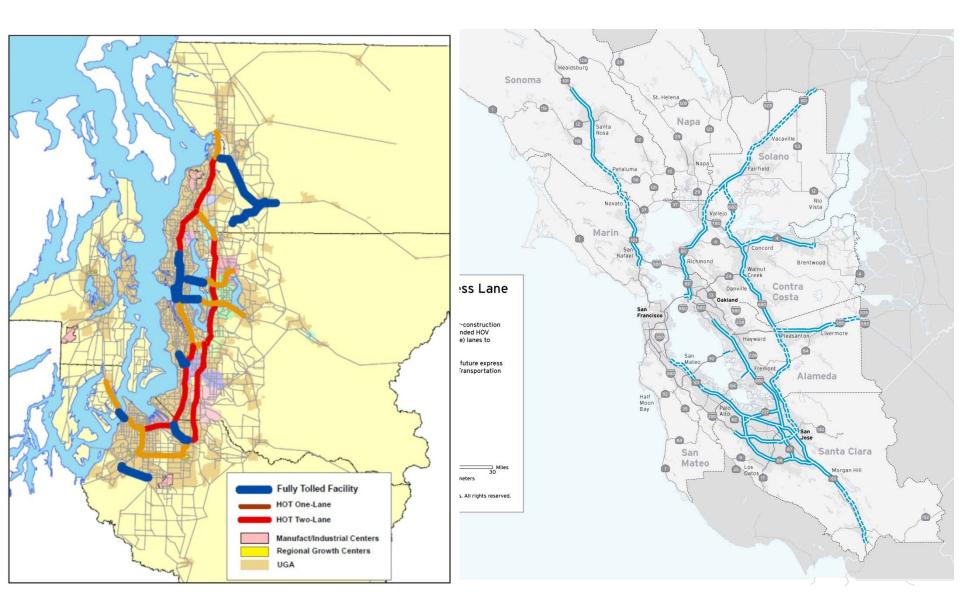


Priced Managed Lanes Networks



- Proven success, what's next?
- Build on the proof of concept
 - Operational efficiency / sustainable mobility
 - Escape valve for urgent trips
 - Multimodal efficiencies
 - Revenue enhancement
- PML Network Considerations
 - Does one size fit all?
 - Performance based triggers?
 - Toll rate setting and revenue sharing provisions
 - Non-revenue (or discounted) policy
 - Costs, operations and maintenance responsibilities
 - Finance and delivery

Proposed Networks Seattle, San Francisco





Evolutions of Thought



Current

- Easily communicated pricing schemes
- Project revenue ownership
- Simple governance
- Easy to manage

Future

- Complex pricing structures
- Lagging revenue from multiple sources and owners
- Minimize revenue leakage through MOU
- Two phases of "what do you want to accomplish"
- What's next?



Future Trends in Pricing Strategies



- Dynamic Pricing
- Less exceptions
- More multi-faceted pricing schemes
 - Parking
 - Cordon
 - Area
- Mileage Based Pricing
 - VMT



Summary



- Entering a new era where reliability and mobility optimization will be key
- Travel becomes increasingly discretionary and more valuable
- Multimodal solutions will be required
- We will need to redefine what our transportation network is



The Future





