What are Express Lanes?

Highway facilities or a set of lanes where operational strategies are proactively implemented and managed in response to changing conditions.

Express Lane Terminology

• Many terms used
  — High Occupancy Vehicle (HOV) Lanes
  — High Occupancy Toll (HOT) Lanes
  — Priced Managed Lanes/Express Lanes
  — Bus Rapid Transit Lanes (BRT)
  — Truck Only Toll (TOT) Lanes

• Can be physically similar

• Business rules determine what they are
Why Express Lanes?

How do Express Lanes benefit a region?

• Trip reliability
• Time savings
• Improved mobility
• Congestion management
• Revenue generation
• Reduction in capital improvements
System Throughput: Congestion Pricing Concept

Congestion

Level of Service

AM

PM

Time

System Throughput: Congestion Pricing Concept
Travel Time Reliability: Northbound I-35W AM Peak
What are key consideration with Express Lanes?

- Three “feasibilities”: technical, institutional, financial
- Conflicting or compatible goals
  - Better management
  - Transit/rideshare promotion
  - Revenue generation
- Safety-speed differential
- Enforcement
- Sponsorship and governance
Route 91 Express Lanes Orange County, CA

Description:
- Opened December 1995 (Private Franchise)
- Purchased by OCTA January 2003
- 10 mi., 2-lanes each direction
- Buffer separated, access at ends
- Variable toll rates, predetermined rates by time of day
- Operates 24/7

Objectives:
- Use pricing to optimize the number of vehicles that can safely travel the toll lanes at free-flow speeds
- Finance the project to accelerate construction
SANDAG I-15 Express Lanes

- Extend to 20 mi. and widen to 4 lanes
- Bi-directional with movable barrier
- Add BRT Stations and intermediate access
- New toll collection system and enforcement system
- FHWA funding/VES pilot project for new technology
MnPASS I-394 – Minneapolis, MN

- Opened May 16, 2005
- Began as HOV – converted to HOT
- 10 mi. total, 8 mi. single lanes, 2-1/2 mi. reversible
- Striped buffer, 5 access locations in each direction
- Dynamic pricing, $8 max., HOV2+ free
- Reversible 6am – 1pm EB, 2pm – 5am and weekend EB
- Tolls 6am – 10am EB, 2pm – 7pm WB
Pricing Opinion on Express Lanes

- 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
Common Misconceptions

• Express Lanes make lots of money *(Not True)*
  – Mobility vs. revenue
  – Very different business rules and policies
  – Enforcement strategies

• Express Lanes will work everywhere *(Not True)*

• Express Lanes are Always great Public-Private Partnership projects *(Not True)*
Successful or not?

- All are successful
  - Met their individual goals and success criteria

- Public acceptance
  - Initial resistance, ultimate acceptance
  - All about choice

- Proliferation of new projects across the US
Where are Managed Lanes being considered?

- 91 Express Lanes in Riverside County, CA
- US 36 Corridor in Denver, CO
- I-495 Capital Beltway in Washington DC
- I-95/I-395 in Washington DC
- Managed Lane Networks: South FL, Atlanta, Seattle, SF, LA, Houston
- Congestion Charging: LA
- Truck Lanes in MO
What are the key lessons learned?

• Be realistic with expectations
• Don’t take any existing capacity away
• Use is highly discretionary
• Not all corridors are good candidates
• Capital cost recovery through pricing typically requires more than 1 lane and restricting free use
• Agency partnering is critical
• Regional lane systems provide the best opportunities
What are the key lessons learned?

- Intense public/media outreach and education needed
- Elected officials outreach/education program
- Electronic Toll Collection program publicity (no toll booths)
- Strong business rules and enforcement
- Design – signing, access, termini
- Transit is part of the solution – not whole solution
- If employing Public Private Partnerships, understand the impacts of a profit motive
- Learn from others, talk among peers
QUESTIONS

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