

MANAGED LANES

Managed Lanes in Texas: What Are the Challenges and Opportunities?

**82nd TRB Annual Meeting
January 12-16, 2003
Washington, DC**

**Carlos Lopez, P.E.
Texas Department of Transportation**

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Challenges and Opportunities

- **Current operations**
- **Public / political perceptions**
- **Different operational strategies**
 - ✓ Value pricing
 - ✓ Lane restrictions
 - ✓ Exclusive lanes
- **Flexibility**
- **Ongoing challenges**

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Growth and Change in Managed Lane Facilities




- **1970's - Early contraflow facilities**
- **2002 - Over 200 route miles & 350 lane miles of various designs and operational strategies**

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Types of Managed Lane Facilities

- **HOV lanes**
 - ✓ Concurrent flow
 - ✓ Contraflow
 - ✓ Reversible
- **HOT lanes**
- **Lane restrictions**
- **Exclusive busway**
- **Queue bypass**




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Operating Hours

- **24 / 7**
- **Extended hours**
- **Peak period**



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Operating Characteristics – Vehicle Occupancy Requirements

- **2+**
- **2+/3+**
- **Buses only**




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HOV Utilization

- Overutilized
- Underutilized
- And – just right

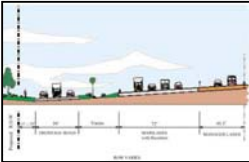



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Challenge: Houston

- IH-10 (Katy)
- Currently has 1 reversible HOV lane
- Plans
 - ✓ 4 general-purpose lanes in each direction
 - ✓ 2 managed lanes in each direction
- Challenges
 - ✓ Access to managed lanes
 - ✓ User information and signing
 - ✓ Tolling




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Challenge: Dallas

- IH-635 (LBJ)
- Currently has concurrent flow HOV lanes
- Plans
 - ✓ 4 general-purpose lanes in each direction
 - ✓ 3 HOT lanes in heavily congested area
 - ✓ Part of HOT lane section below grade
- Challenges
 - ✓ Number of general-purpose lanes
 - ✓ Ramp access
 - ✓ Tolloed vs. non-tolloed users
 - ✓ Traffic growth
 - ✓ Intermodal connections




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Challenge: San Antonio

- IH-35 (Northeast)
- Currently only general-purpose lanes
- Plans
 - ✓ 4 general-purpose lanes in each direction
 - ✓ Additional express lanes in each direction
- Challenges
 - ✓ Number of express lanes
 - ✓ Possibility of reversible HOV lane
 - ✓ Future conversion of express lane to HOV lane
 - ✓ Limited support from the public
 - ✓ Accommodate future pricing




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Challenge: Fort Worth

- SH 114 north of DFW Airport
- Currently only 4 general-purpose lanes in each direction
- Plans
 - ✓ 1 additional general-purpose lane in each direction
 - ✓ 2 managed lanes in each direction
 - ✓ Access at beginning and end only
- Challenges
 - ✓ Combine benefits of express and HOV
 - ✓ Manage through hours of operation, occupancy, and value pricing




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Challenge: Austin

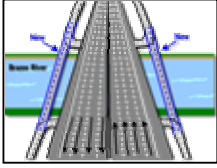
- Loop 1 / US 183
- Currently only general-purpose lanes
- Plans
 - ✓ Managed lane system one concept
 - ✓ 2 lanes in each direction for central section
 - ✓ Managing through metering access, pricing, and time of day
- Challenges
 - ✓ Political and public opinion



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**Challenge:
Waco**




- IH-35 Corridor
- Currently 2-3 general-purpose lanes
- Rural and urban
- Truck volumes up to 30%
- Plans
 - ✓ Overall reconstruction
 - ✓ Exclusive truck lanes lane restrictions
- Challenges
 - ✓ Long corridor with multiple jurisdictions
 - ✓ Legislative barriers

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**Opportunity:
Value Pricing**

- Occupancy
- Vehicle type
- Time of day
- Pricing
- Access



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**Opportunities:
Lane Restrictions / Exclusive Lanes**

- Separate vehicle types
- Operational improvements
- Potential safety benefits
- Political challenges

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Texas Legislation Needs

- Authorize transportation agencies to operate all strategies
 - ✓ Changes and additions to current lane restriction authority
- Allow operational flexibility
- ILEV authorization should follow federal regulations

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Ongoing Challenges


- Institutional Arrangements
- Multiagency Coordination & Cooperation
- Project Champions
- Performance Monitoring
- Communicating with Public/Policy Makers
- Funding

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Questions?

- Carlos Lopez - TxDOT
 - ✓ clopez@dot.state.tx.us
 - ✓ 512-416-3200



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