

MANAGED LANES

Managed Lanes in Freeway Operations

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Overview

- Key Planning Issues
- Key Operations Issues
- Current Research
- Final Remarks




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Key Planning Issues

- User groups
- Marketing
- Financing
- Legislative




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Possible Vehicle User Groups

- SOV
- HOV
- Bus/BRT
- Truck
- ILEV
- Taxi, shuttle
- Emergency vehicles
- Motorcycles
- Future rail


Selection of user groups will depend upon

- ✓ Corridor characteristics
- ✓ Project goals/objectives
- ✓ Policy issues



Selection of user groups will drive

- ✓ Design
- ✓ Operations
- ✓ Enforcement
- ✓ Technology



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Marketing Managed Lanes

- Common messages
 - ✓ Choice
 - ✓ Tool
 - ✓ Efficiency
 - ✓ Operations
 - ✓ Enforcement
 - ✓ Revenue use
 - ✓ Funding
- Determine public perception at the project level
- Gain support through political champions





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Funding & Financing

- Match available financing method to project goals
 - ✓ What is being managed?
- Legislative changes needed to attract private investment

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Legal & Policy Issues

- Permanence in the value-price / HOT lane program
- Violations and enforcement strategies may require legislative action
- Challenges of exclusive lanes and lane restrictions



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Key Operations Issues

- Design
- Traveler information and signing
- Enforcement
- Incident management
- Technology and interoperability
- Evaluation and monitoring



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Design for Good Operations

- Intended users
- Pricing and enforcement
- Technology infrastructure and interoperability issues
- Allow for flexibility in operational strategies
- Support operational goals

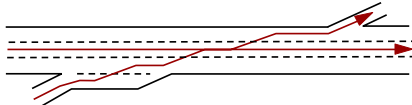



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Considering Access

- Weaving distances should be between 500' and 1000' per lane
- Look at direct connect ramps
 - ✓ Preserve freeway speeds: 400 veh/hr
 - ✓ Preserve speeds of weaving vehicles (more conservative): 275 veh/hr




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Pricing & Enforcement

- Critical to success
- Electronic tolling
- License plate recognition
- Technology to detect/enforce vehicle occupancy needs to mature

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Technology & Interoperability


- "One tag – one account" anywhere
- Coordination & agreement between agencies
- Technology standards and capabilities
- Interoperability with other systems in region, across U.S.
- Sufficient and adaptable infrastructure from the beginning


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Texas Research Project Objectives

- . . . to investigate the complex and interrelated issues surrounding the safe and efficient operation of managed lanes.
- . . . to develop a comprehensive manual to help TxDOT make informed decisions.




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Final Remarks

- **Flexibility to maximize freeway efficiency and managed lane effectiveness 24/7**
 - ✓ Flexibility presents unique challenges
 - ✓ Plan for change
- **Type of managed facility needed in a corridor depends on corridor characteristics**
- **Facility type drives technology and interoperability needs**

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Web Site & Newsletter





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Questions?

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