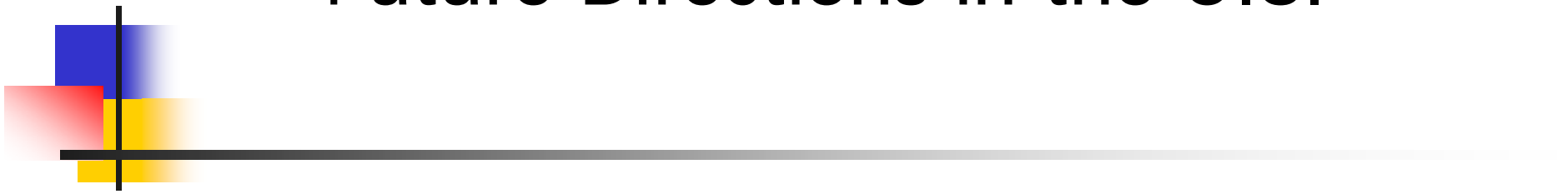
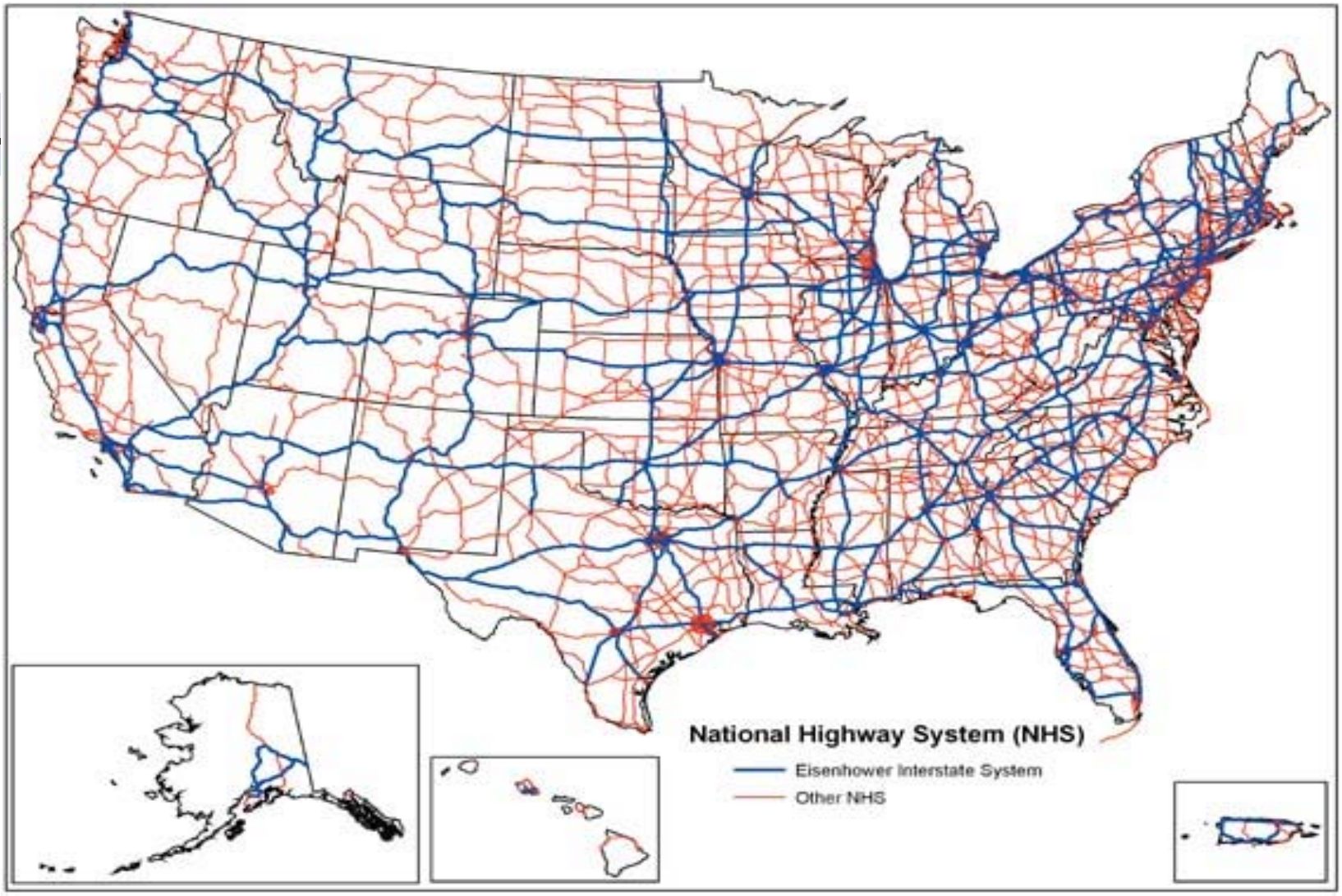
Improving Mobility & Managing Congestion – Future Directions in the U.S.



1st International Symposium on Freeway & Tollway Operations

Jon Obenberger
U.S. DOT Federal Highway Administration
June 2006

Interstate Highway System 50th Anniversary



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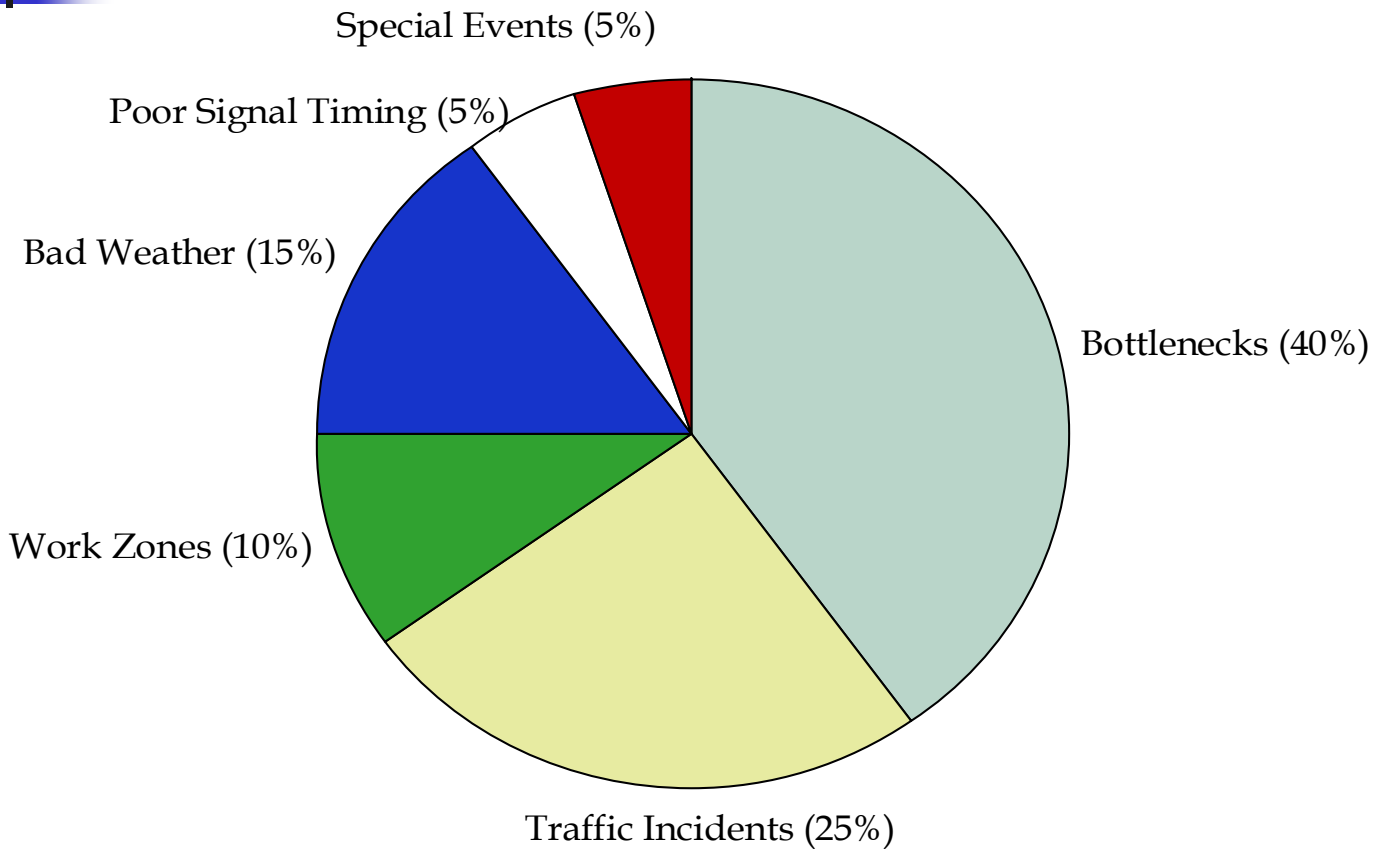
U.S. Challenges:

- Unrestrained travel demand resulting in congestion
- Price of highway travel – little relationship to congestion
- Enhancing safety
- Changing business trends
- Limited ability to expand highway capacity
- Insufficient funding from highway trust fund
- Improve improvement project efficiency & effectiveness
- Reach timely decisions - good for environment & for transportation

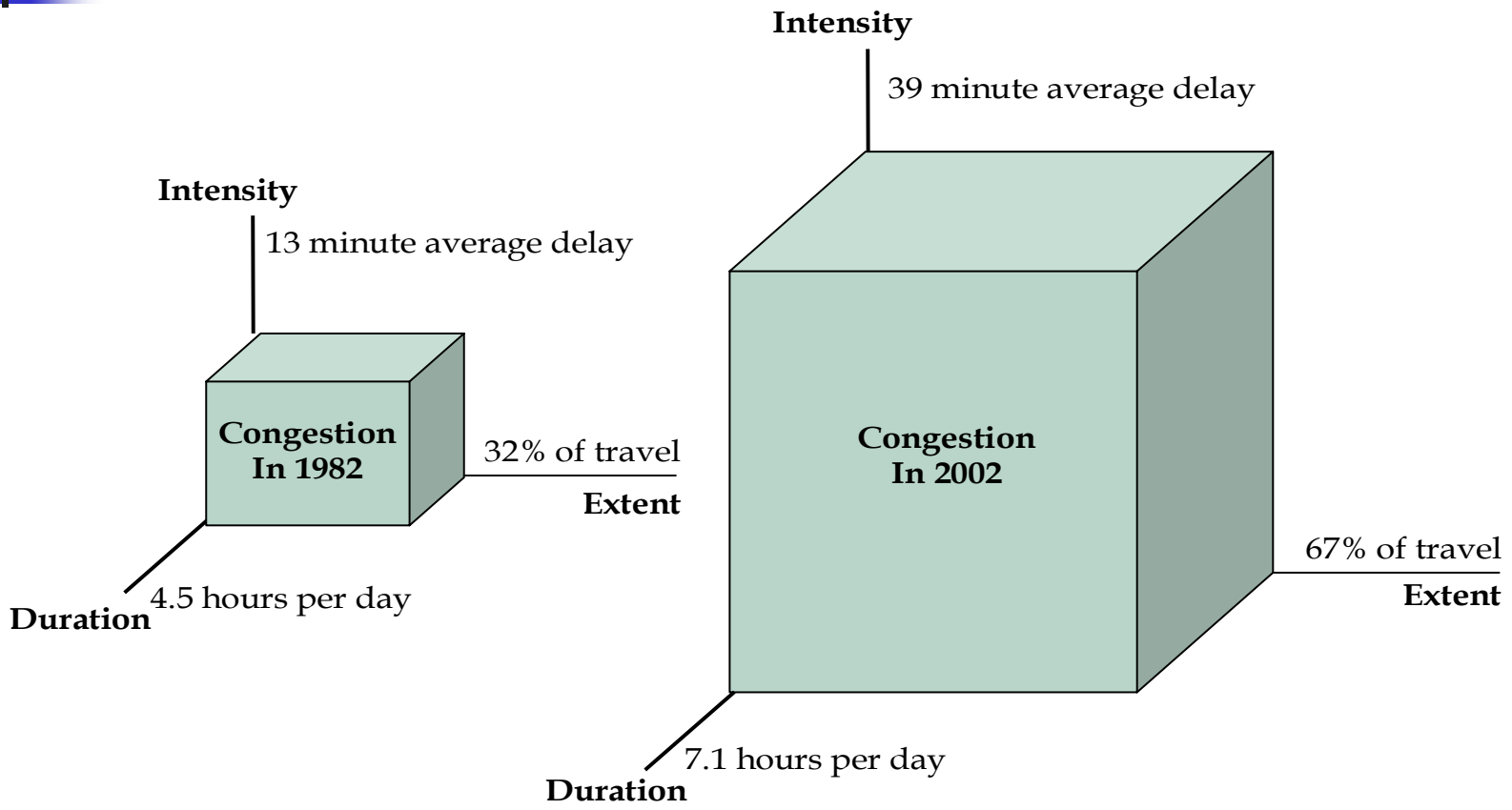
U.S. Opportunities:

- Reduce fatalities & traffic crashes
- Manage existing capacity to improve traffic operations
- Improve freight mobility
- Target highway bottlenecks & expand capacity
- Pursuing context sensitive solutions (CSS)
- Enhance community livability – collaborative planning & environmental stewardship
- Pursue private sector partnerships & financing

Sources of Congestion:



Congestion Getting Worse:



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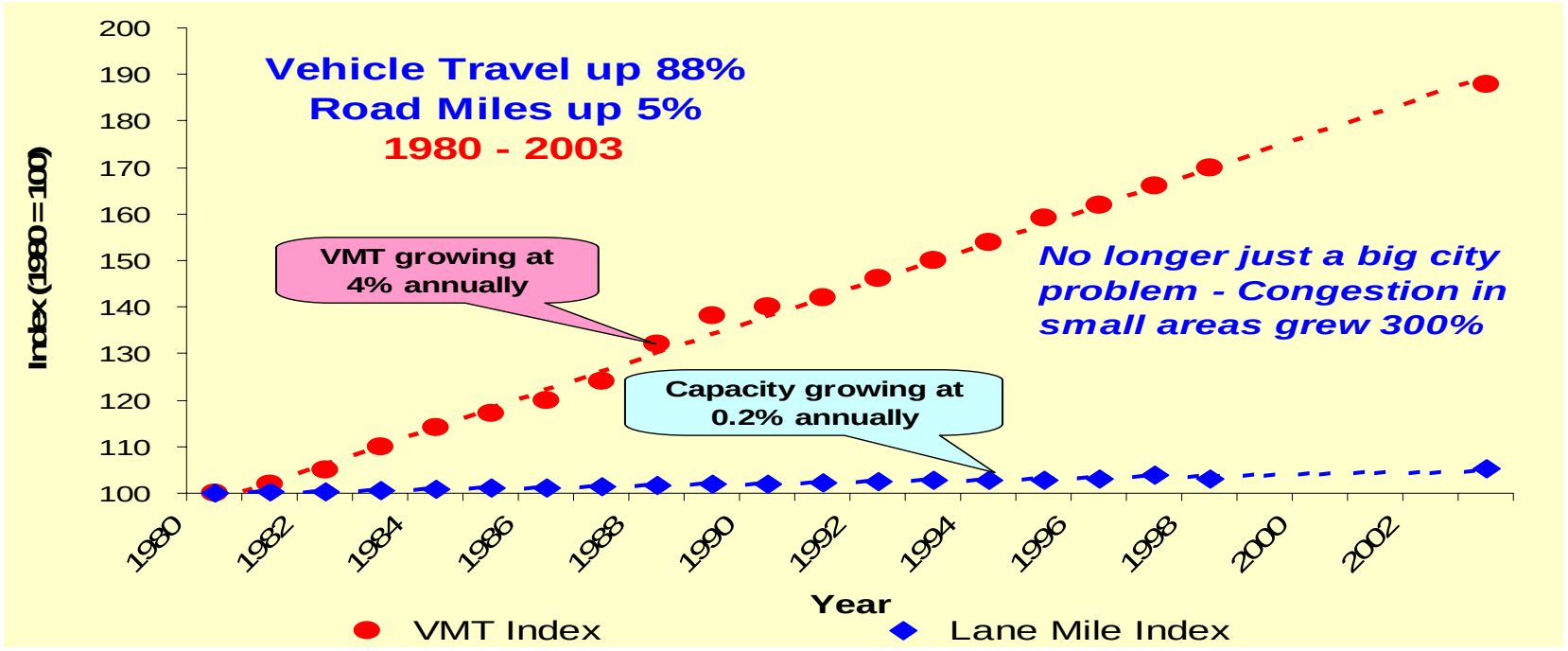
Traffic & Capacity Imbalance:

Interstate Highway System comprises ~1% of USA's total roadway mileage but carries almost 25% of all traffic.



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National Congestion Initiative:

U.S. DOT National Strategy to Reduce Congestion on America's Transportation Network

- 7-point Plan - tackle highway, freight & aviation congestion
- Blueprint for federal, state & local officials
- Focus resources, funding, staff & technologies on:
  - Cutting traffic jams
  - Relieve freight bottlenecks
  - Reduce flight delays

7-Point Congestion Plan:

1. Relieve urban congestion
2. Unleash private sector investment resources
3. Promote operational & technological improvements
4. Establish a “corridors of the Future” competition
5. Target major freight bottlenecks & expand freight policy outreach
6. Accelerate major aviation capacity projects & provide funding framework
7. Focus data & research resources

Relieve: Urban Congestion:

- Advocate Policies for:

  -Congestion pricing /high occupancy toll (HOT) lanes

  -Bus rapid transit

  -Telecommuting & flexible scheduling

  -Expedite completion of capacity projects

- Urban Partnership Agreements:

  -Open Roads Pilot Program - $100 million/year

  -Value Pricing Pilot Program

Unleash Private Sector Investment:

- Encourage States enact enabling legislation to enter into agreements w/ private sector
- Overcome institutional resistance to change:
  - Education & outreach
  - Demonstration projects
- Utilize existing Federal Programs to encourage formation of public-private partnerships

Operational & Technology Improvements:

- Dissemination of real-time information
- Emphasize congestion in ITS program initiatives
- Promote best practices:
  - Traffic incident management
  - Managed lanes
  - Freeway management & operations
  - Intersection management & traffic control

Corridors of Future Program:

- Accelerate development multi-state, multi-use transportation facilities
- Support corridor development by:
  - Compete & select 3-5 corridors in need of long term investment
  - Convening multi-state process to advance project development
  - Fast track development of corridor projects

Target Major Freight Bottlenecks:

- Intermodal team to assist convening stakeholders to forge consensus in metro areas
- Engage freight shippers in developing national freight policy framework
- Establish US DOT – DHS border congestion team to prioritize operational & infrastructure improvements @ border crossings

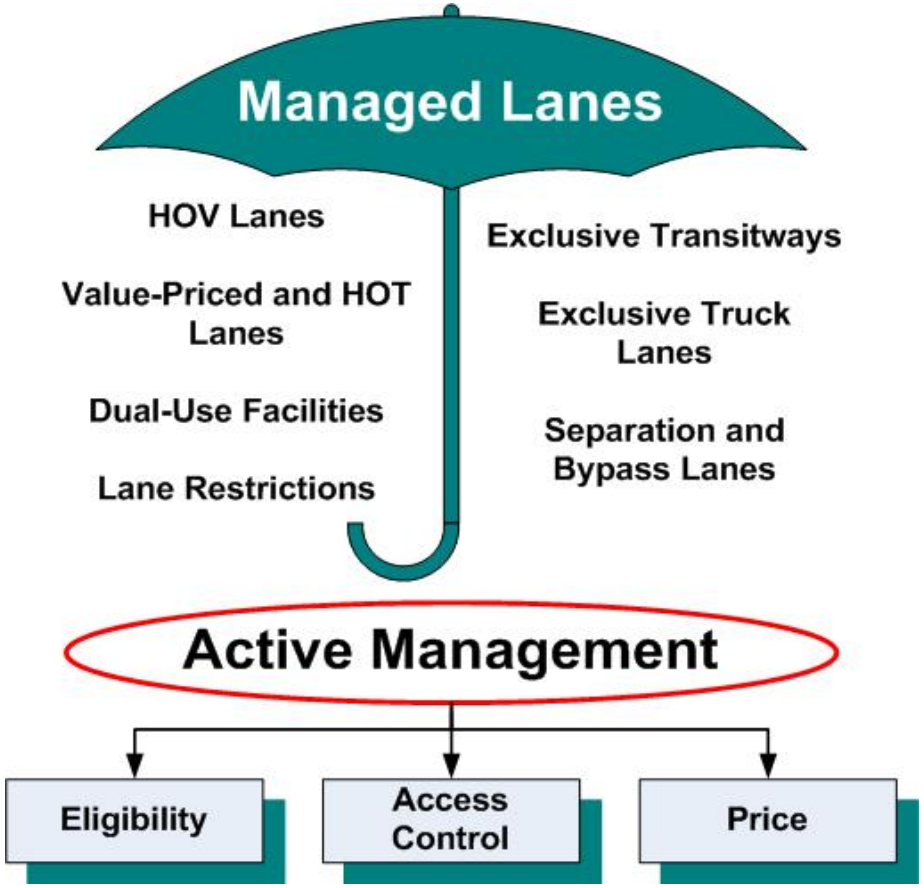
Study - Identify Future Needs:

- National Surface Transportation Policy & Revenue Study Commission
- Report back to U.S. Congress
- Charge: to develop plan w/ recommendations:
  - Raise revenue for highway & transit projects
  - Reduce cost of congestion
  - Vision for transportation system
  - Basis for future transportation legislation

What are managed lanes?

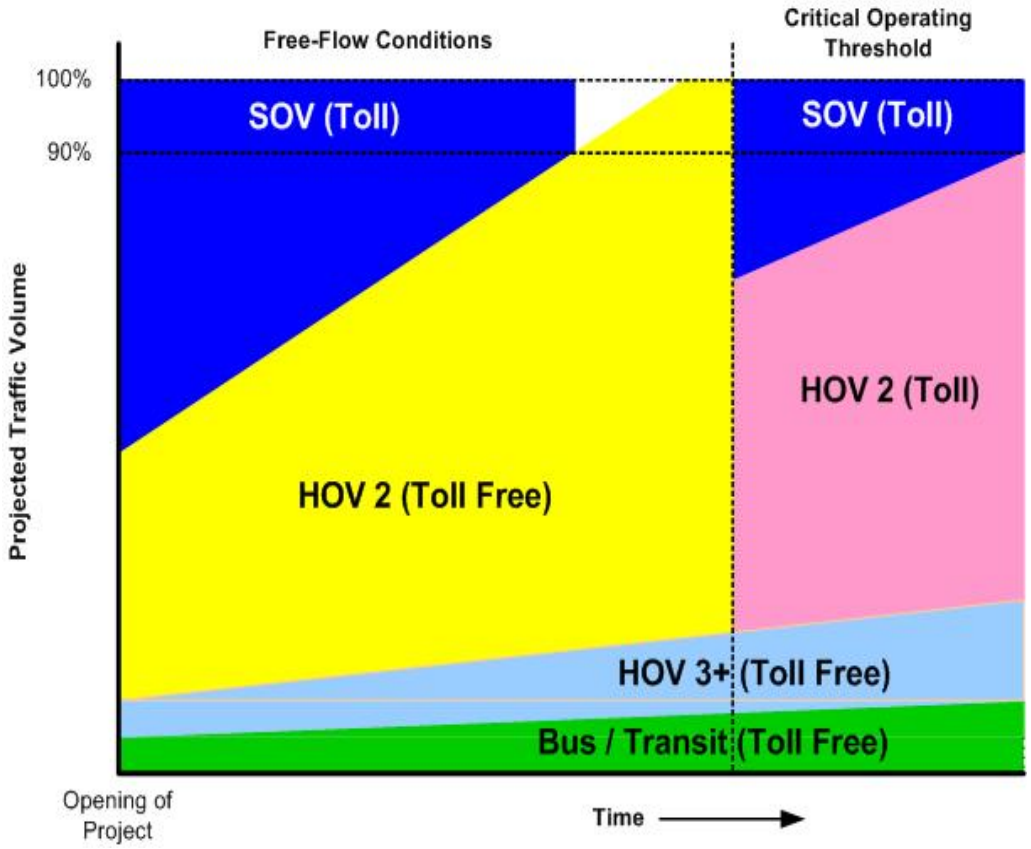
- Operational strategies proactively implemented & managed in response to changing conditions

- Typically:
  -“freeway-within-a-freeway
  -Highway or set of lanes



Managed Lanes: Vehicle Eligibility

- Eligibility varies based on demand & conditions:
  - Based on: time of day, day of week or congestion level
  - Adjustments based on changing conditions
- Examples:
  - HOV lanes
  - Truck lanes
  - Bus lanes



Managed Lanes: Access Control

- Limit entry to a facility based upon congestion levels or operational conditions
- Example: New Jersey Turnpike:

Texas Transportation Institute

Managed Lanes: Pricing

- Price per trip varied to manage demand:
  - Peak-period surcharge
  - Discounts
- Examples: express toll & HOT (HOV & priced) lanes:
  - SR 91 Orange County, CA
  - I-15 San Diego, CA
  - I-394 Minneapolis, MN

Thank you!

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