



U.S. Department of
Transportation

Operations and Technologies for the 21st Century

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A Natural Evolution

Early days – Focus on Adding Physical Capacity

Luxury of Significant Excess Capacity

Now – Limited Physical Capacity Expansion

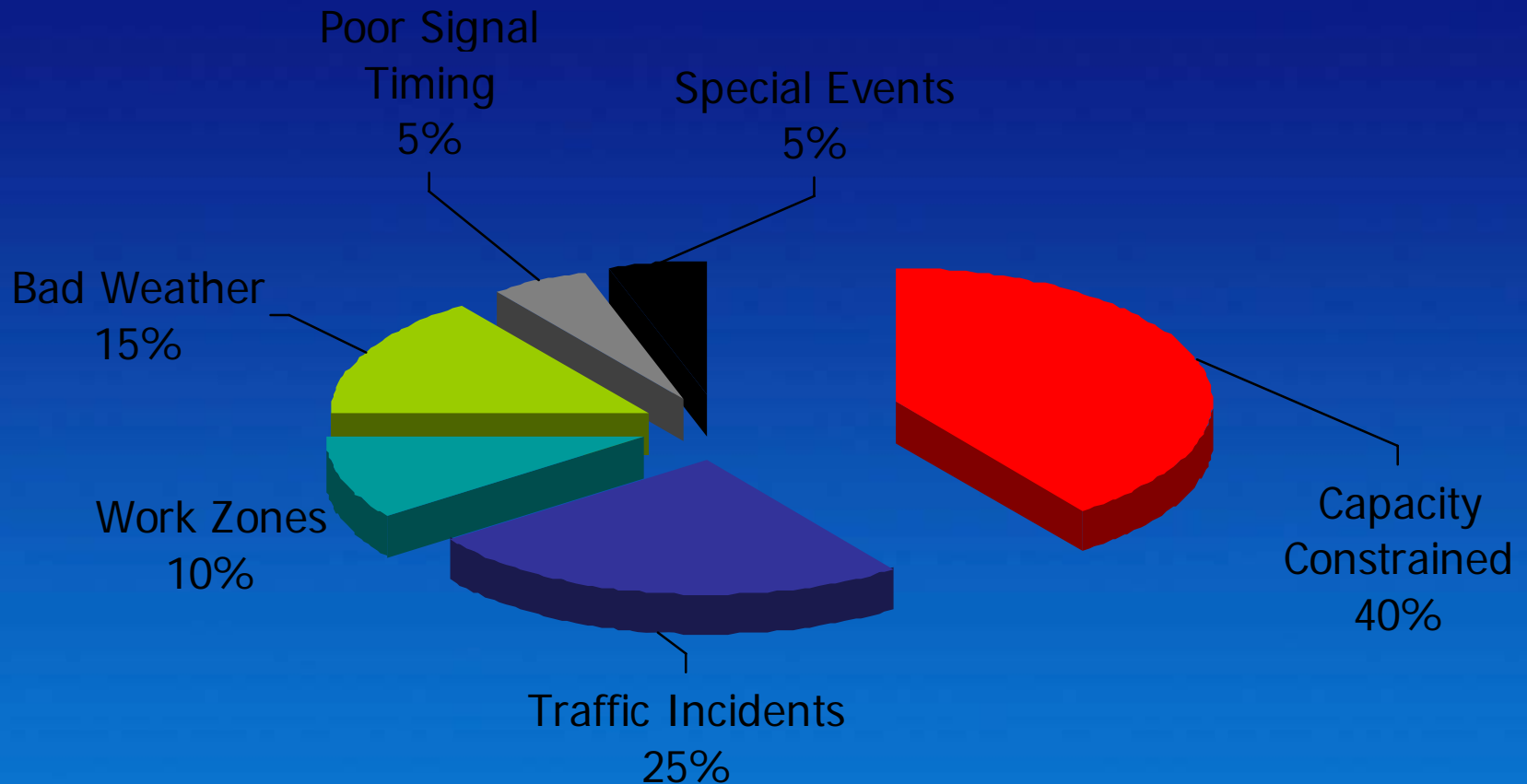
No cushion in system (one event away from gridlock)

Need to Shift to Optimizing Operation of the System

Future – Use Advanced Technology to Optimize Operation of the System

Allocate Transportation Service Through Pricing

The Opportunity



Knowledge, technology, and applications available today



- Improve traveler information
- Reduce incident delay
- Improve traffic signal timing
- Reduce weather delays
- Provide choices (e.g., HOT lanes and other TDM)

Knowledge, technology, and applications available today – but not fully deployed



- Only 1/3 of population has access to 511
- Limited service patrols with 24/7 incident management capabilities
- National Traffic Signal Report Card – D-

Some Jurisdictions have Realized the Promise – We Know it Works

MTC's Traveler Information



- 511 (Phone and Web)
 - Highway (Traffic Conditions, Driving Times)
 - Transit (Schedules, Routes, Fares)
 - Carpool and Vanpool Referrals
 - 24/7
 - First 6 months of 2006: 2.1 million calls and 8.2 million Web user sessions
- Travel Times on DMS

Some Jurisdictions have Realized the Promise – We Know It Works

Signal Timing

Denver Regional Council of Governments



- Partnership between the MPO and 30 traffic signal operating agencies to coordinate signals on major roads
- Reduced delay by more than 41,000 vehicle hours/day
- In general, B/C as high as 40:1

Some Jurisdictions have Realized the Promise – We Know It Works

Traffic Incident Management Atlanta, Georgia



- TIME Task Force (over 6 Agencies represented)
- HERO - Full Function Service Patrols Operating 24/7 (Across country, B/C up to 36:1)
- 90 Minute Clearance Goal
- “Steer It and Clear It” Law

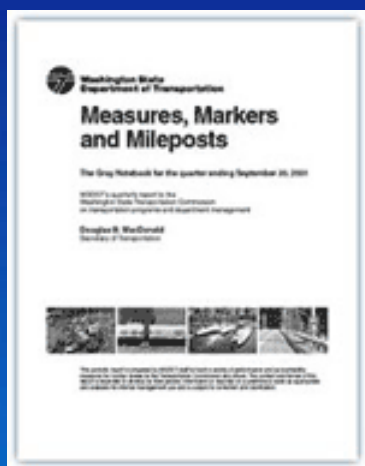
Haven't Quite Moved Out of the Early Days



- DOTs Organized to Provide Capital Intensive Projects and to Maintain those Projects
- Planning Geared to Facilities (Projects), Not Providing Services
- DOT Focus on “Our Highway” not “Our Customers”

Some Jurisdictions have Realized the Promise – We Know It Works

Performance Management Washington State DOT



- Accountability – State Transportation Commission and public receive quarterly progress reports (“Gray Book”)
- Performance Measures – Established and accepted
- Regional Coalitions – Clear goals promote cross-Agency and cross-regional partnerships

Some Jurisdictions have Realized the Promise – We Know It Works

Planning for Operations Hampton Roads, Virginia

- Operations Objectives are in the Long Range Plan (over 50% of TIP addresses Operations)
- Operations/Public Safety at the Table
- Resulting in . . .
 - Improved Signal Coordination
 - Coordinated Work Zones
 - Better Emergency and Event Planning
 - Improved Methods to Share Information

Moving Forward



- Base Funding and Management Decisions on Performance
- Create More Accountability between DOTs and their Customers
- Recast Planning Process to Fully Integrate Operations
- Operate System with a Regional Orientation