

Active Traffic Management: The Next Step in Congestion Management

FHWA Activities

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Active Traffic Management - Definition:

Dynamically managing & controlling traffic based on prevailing conditions to:

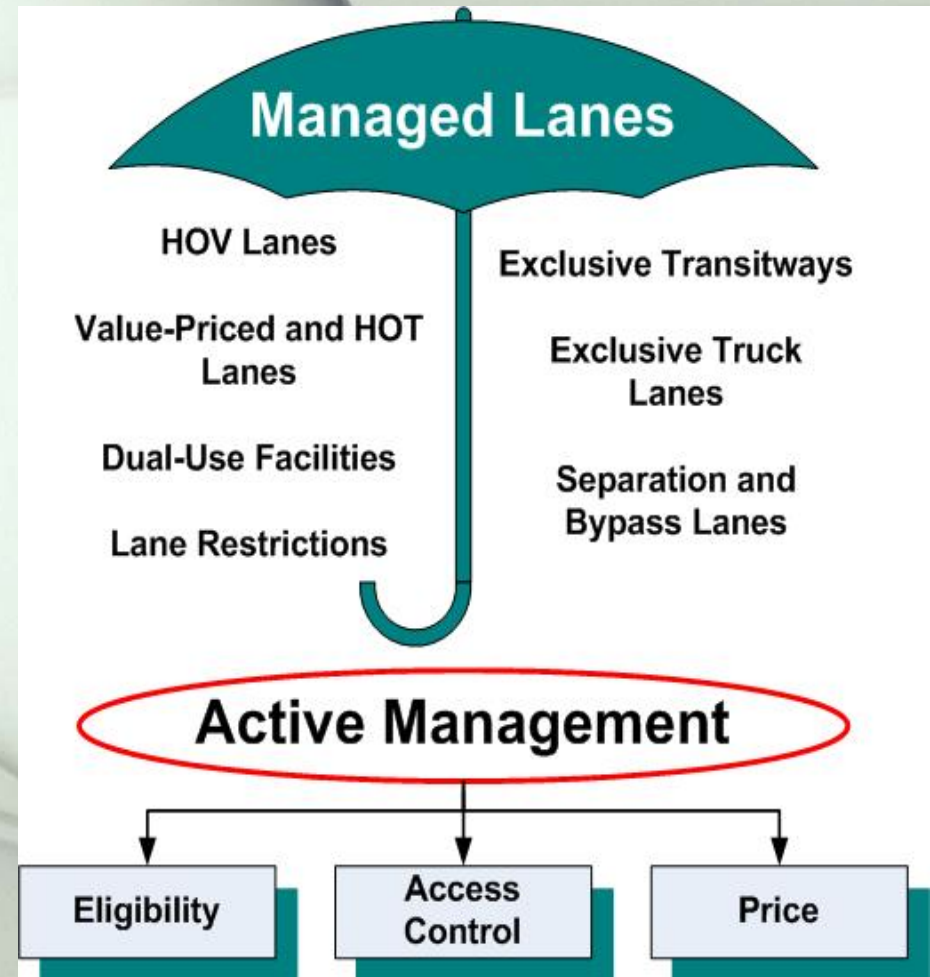
- ✓ Improve safety
- ✓ Respond to recurring & non-recurring congestion
- ✓ Enhance mobility - increase throughput & reliability

Complete package: commitment to:

- ✓ Manage & operate in real-time
- ✓ Distribute current roadway & traveler information
- ✓ Deploy range of operational strategies & control plans
- ✓ Use of integrated systems & coordinated response

Managed Lanes:

- 2 or more operational strategies proactively implemented & managed in response to changing conditions
- Applications:
 - "freeway-within-a-freeway"
 - Entire freeway
 - Set of lanes
 - System or corridor specific



Active involves:

- Actively managing in response to changing conditions & demands on freeways
- Delivering roadway & traveler information
- Deploying ITS & TMCs
- Traffic incident management
- Automatic implementation of operational strategies & traffic control plans
- Range of operational strategies & plans available to implement

Active Traffic Management: (Cont.)

Range of operational strategies & control plans:

- *Speed harmonization*
- *Lane control - lane open/closed, vehicle restrictions (e.g., truck) & queue warning*
- *Temporary shoulder use*
- *Junction control*
- **Dynamic signing & advisory traffic routing**
- **Specific plans - construction traffic management**

Recent Activities:

- Active Traffic Management International Scan:

<http://international.fhwa.dot.gov/pubs/pl07012/index.cfm>

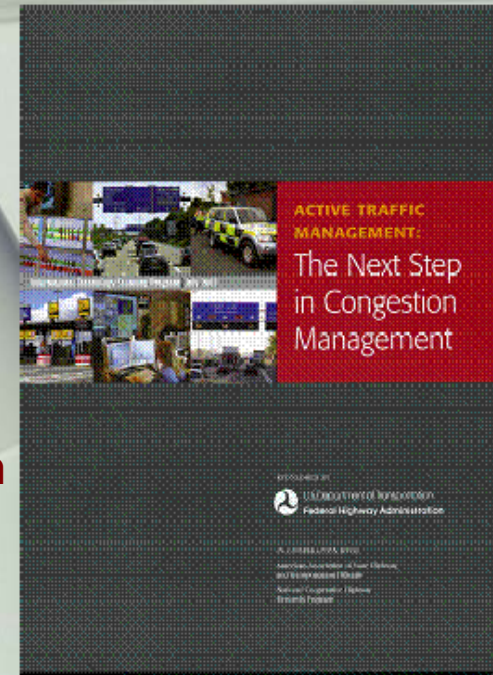
- Managed Lanes:

- ✓ Video, primer & outreach material
- ✓ Technical guidance & publications

http://ops.fhwa.dot.gov/freewaymgmt/managed_lanes.htm

- Executive forum on Active Traffic Management & TDM

- ✓ AASHTO, TRB & FHWA, June 18-19, 2007 in DC
- ✓ Identify successful European examples
- ✓ Identify opportunities to move practices in metropolitan areas



Current Activities:

- **FHWA:**
 - ✓ Domestic managed lane scan - 2008
 - ✓ Freeway Management & Operations Handbook:
 - » Combine HOV into Managed Lanes chapter
 - » Develop proposal to update handbook (e.g., ATM)
 - ✓ Develop synthesis of active traffic management experiences in Europe
 - ✓ Prepare outreach materials (e.g., fact sheets, briefing paper, brochures, power point &/or Q&A's)

Current Activities: (Cont.)

- FHWA: (Cont.)
 - ✓ Develop lessons learned on Active Traffic Management - Urban Partnership Agreements:
 - » Miami
 - » Minneapolis
 - » Seattle
 - » San Francisco
 - » New York City
- TRB & Freeway Operations Committee:
 - ✓ 2 video ATM focused conferences - Spring 2008
 - ✓ 2nd International Symposium on Freeway & Tollway Operations, June 21-24, 2008

Current Activities: (Cont.)

- **Other US ATM Developments of Interest:**
 - ✓ **New York feasibility studying potential of ATM within freeway corridors**
 - ✓ **Detroit metropolitan area exploring if there is any potential for variable speeds and ATM**
 - ✓ **Virginia DOT considering variable speeds in Northern VA in addition to hot lanes**
 - **Managed Lanes:**
 - ✓ **Video, primer & outreach material**
 - ✓ **Technical guidance & publications**
- http://ops.fhwa.dot.gov/freewaymgmt/managed_lanes.htm

2nd International Symposium on Highway & Tollway Operations - 2009:

- **2nd International Symposium – June 21 – 24, 2009:**

- **Honolulu, Hawaii**

- **http://www.eng.hawaii.edu/~panos/2nd_ISFO_web1.pdf**

- **1st International Symposium, June 2006:**

- **Athens, Greece proceedings posted at:**

<http://www.trb-freewayops.org/reports.html>

