

# High Occupancy Vehicle (HOV)/ High Occupancy Toll (HOT)/ Managed Lane

## Presentation to Mecklenburg/Union Metropolitan Planning Organization

November 14, 2007



# WHAT ARE MANAGED LANES?

- ◆ Separate Dedicated Lane System
- ◆ One or More User Groups
- ◆ Strategies used to Preserve Lane Operating Capacity
- ◆ Unimpeded travel during Periods of Peak Demand



**BEFORE**

Orange County, SR-91



**AFTER**



# TYPES OF HOV/ MANAGED LANES



Continuous Access  
10-inch (painted) buffer

EXAMPLE FROM I-77  
CHARLOTTE, NC

Access Prohibited  
6-inch (painted) buffer



# TYPES OF HOV/ MANAGED LANES



Buffer Separated  
I-405 HOV, Orange Co.



Barrier Separated  
US 59, Houston, TX.

# WHAT ARE HOT/ MANAGED LANES



- ◆ Managed priced lanes giving preference to HOVs.
- ◆ Highest HOVs are typically free.
- ◆ Offers unimpeded travel and reliability benefits during peak periods



I-394 Minneapolis



SR 91, Orange County

State Route 91 Express Lanes  
Orange County, California

# MANAGED LANE BENEFITS

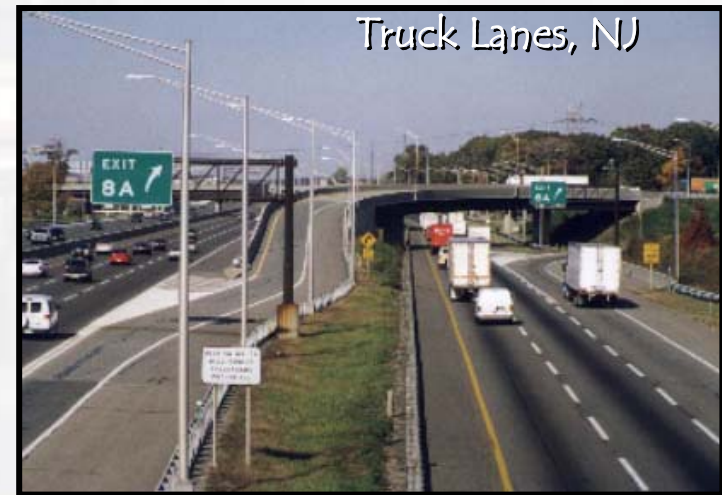


## System Benefits

- ◆ Greater throughput
- ◆ Opens up mainline capacity
- ◆ Encourages transit & carpool use
- ◆ Preserves options in corridor
- ◆ Decreased fuel consumption
- ◆ Improved air quality
- ◆ Revenue generation

## User Benefits

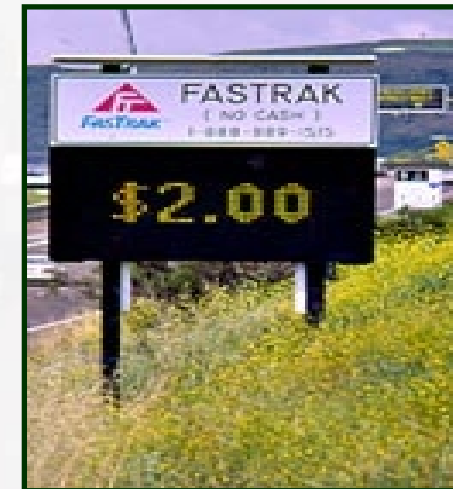
- ◆ Reliable travel time
- ◆ Reduced delay
- ◆ More Choices



# FORMS OF LANE MANAGEMENT



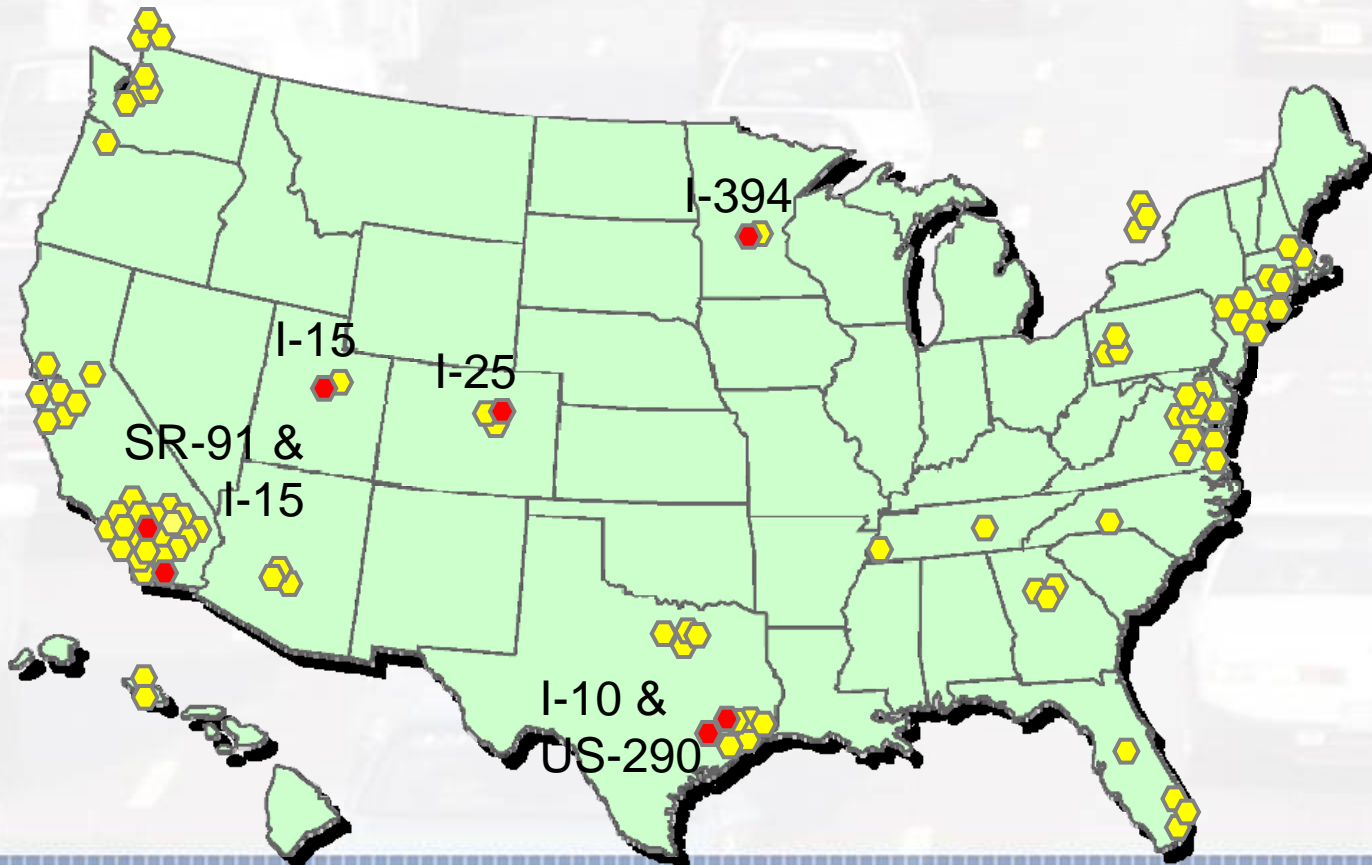
- ◆ Eligibility/Occupancy
- ◆ Access Restrictions
- ◆ Pricing



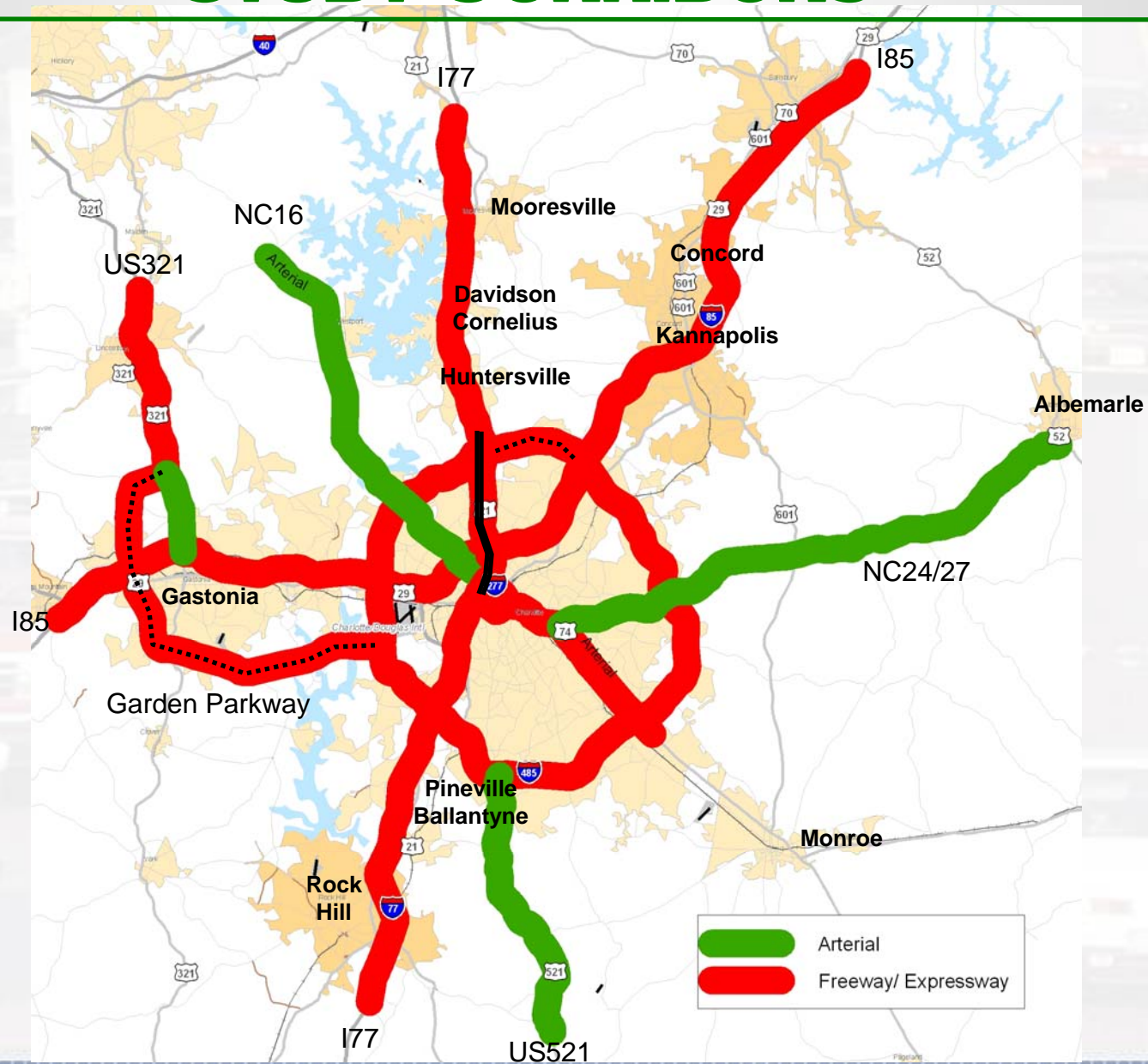
# WHERE HOV AND HOT LANES ARE OPERATING?

◆ Currently over **130** managed lanes projects in US and Canada

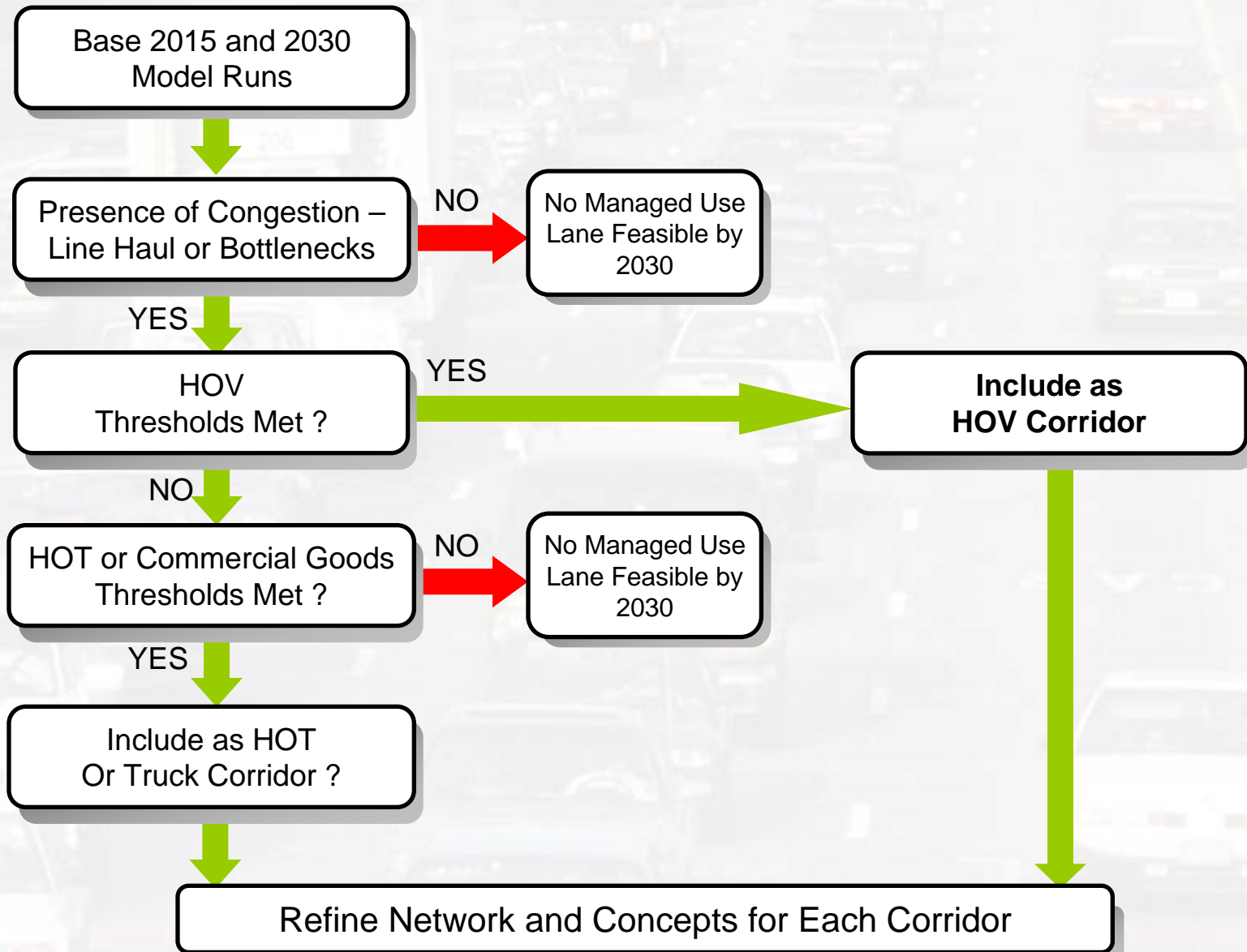
— **7** projects currently use pricing



# STUDY CORRIDORS



# SCREENING PROCESS



# SCREENING CRITERIA



## ◆ Presence of Congestion

- Travel Speeds
- Volume-Capacity Ratio

## ◆ HOV Demand

- Persons & Vehicles
- Travel Patterns

## ◆ HOT/TOT Demand

- Vehicle
- Travel Patterns
- Revenue Potential

## ◆ Physical Attributes

Not good

Less than Average

Average

Above Average

Excellent

1

2

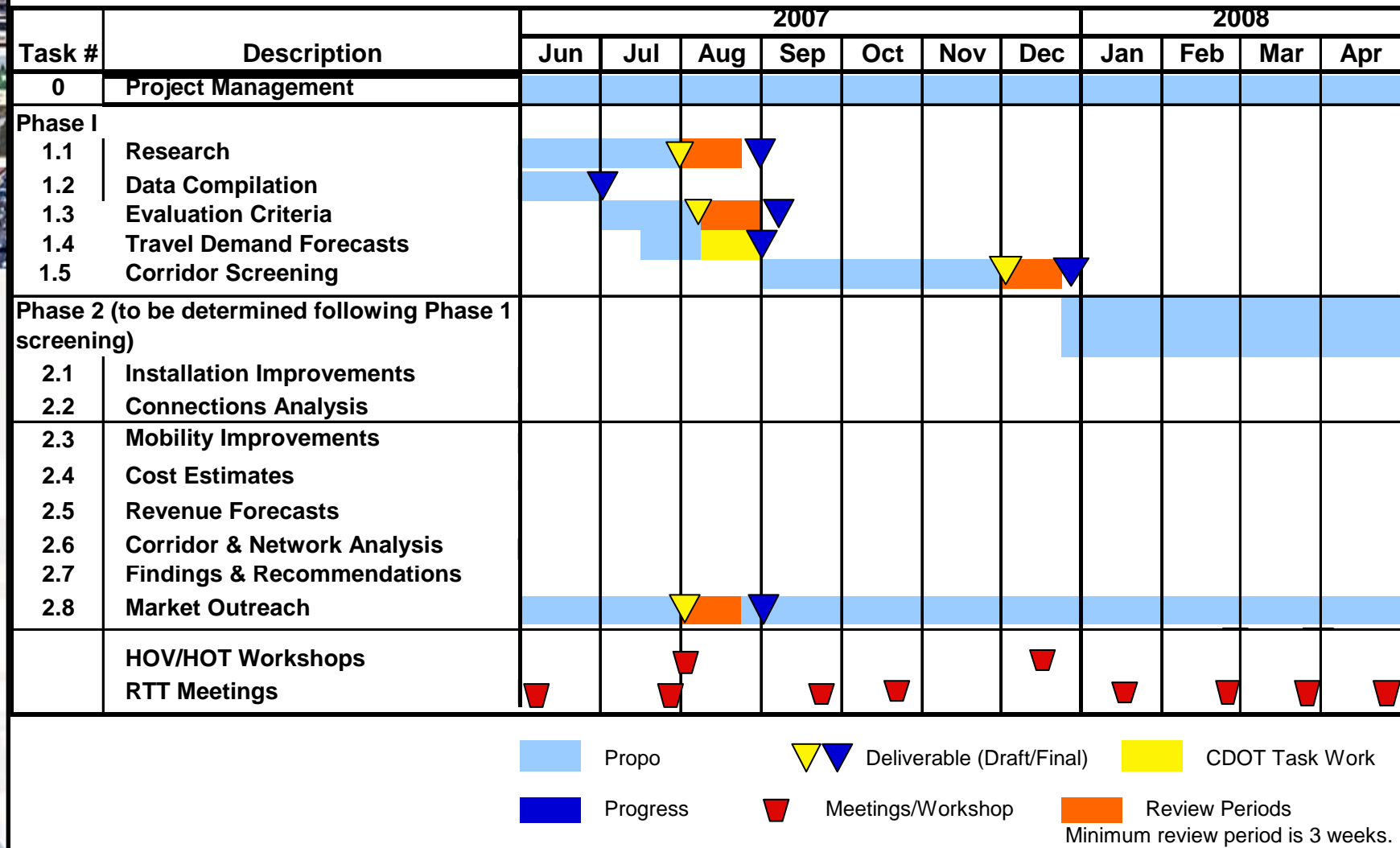
3

4

5

# SCHEDULE

## Development of a Regional HOV/HOT Managed Lane Analysis



# ITEMS IN PROGRESS

HOV / HOT / Managed Lanes Study - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites RSS Feeds 72° Forecast 78°/55°

Search the Web Search Address http://www.mumpo.org/HOV.htm

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## HOV / HOT / Managed Lanes Study

- [Experiences with Managed Lanes in the US](#) (59 Pages)
  - [Executive Summary](#) (3 Pages)
- [Project Timeline](#)
- [Frequently Asked Questions](#)
- [Evaluation Criteria](#)

Recent Meeting Information

Work has begun on a High Occupancy Vehicle (HOV) / High Occupancy Toll (HOT) / **Managed Lanes** study that will determine the technical, financial and institutional feasibility of dedicating lanes on major highways in the Charlotte region for active traffic management.

**Study Need**  
This study has been undertaken because it is recognized that traditional approaches to congestion relief (e.g., widening existing roads) alone will likely not be sufficient to solve existing or future problems. In addition, the North Carolina Department of Transportation (NCDOT) has identified \$55 billion in potential funding for transportation projects over the next 10 years.

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Website

Logo

Flyer/ Information Sheet