



Newsletter for the I-40 HOV/CMS Study

First of a Three Part Series

November 2001

What's Here

Combating Congestion	1
Alternatives Under Consideration	1
What are HOV Lanes	2
HOV Options Being Considered	2
Public Participation	3
Upcoming Events/Contact Information	3
I-40 HOV/CMS Study Area Map	4

In This Newsletter:

This is the first newsletter in a three part series. This newsletter introduces the I-40 High Occupancy Vehicle (HOV) / Congestion Management Study and the HOV concept. This newsletter also offers ways you can get involved! Upcoming newsletters will report on specific study findings, as well as announce future open houses, study display locations and other useful information.

What Are Our Choices to Combat Congestion on I-40 ?

Increasing traffic congestion throughout the Triangle region has prompted the North Carolina Department of Transportation (NCDOT) to examine a variety of innovative transportation and congestion management techniques. There are many strategies that can improve the trip for I-40 travelers. These strategies become even more effective when they are combined and coordinated. Some of these strategies can ensure a faster and more reliable trip. Others can lessen the inevitable operational deterioration of our state's highway system. The overall approach to managing congestion must be multidimensional to achieve noticeable effects. In many cases, the effectiveness of these alternatives depends on the willingness of travelers to change their habits and alter their expectations.

Congestion Management Strategies Considered in this Study Include:

Roadway Improvements

- Expanding existing roadways
- Building new roadways
- Advanced technologies to better monitor and manage roadways to increase vehicle-carrying capacity

High Occupancy Vehicle Travel

Choice Improvements

- Providing HOV lanes
- Increasing public transit services, expanding park-and-rides
- Promoting carpooling
- Incentives to increase high occupancy vehicle travel, such as preferential carpool parking at worksites

Trip Management

- Flexible work hours (altering the time a commuter travels to use roadways when they are less congested)
- Telecommuting (eliminating "travel to work/travel-home" trips)

The challenge in each metropolitan area is to match the most appropriate solution to local needs and problems. Many growing metropolitan regions are considering the advantages of introducing high-occupancy vehicle systems into their mix of transportation choices because HOV lanes can increase the number of people – rather than the number of vehicles – who can safely and swiftly travel on a freeway or roadway to reach a diverse number of destinations.

What is Being Considered on I-40 ?

In 1999, the NCDOT, in partnership with regional transportation agencies, initiated a congestion management study of one of the region's most important transportation arteries, I-40. The I-40 Study was commissioned to review a broad range of strategies for addressing congestion in the corridor — identifying those that would have the greatest potential for success. **Phase I** of the study concluded there is no one solution for highway congestion. With the region's projected high rate of growth, it will only increase, and building our way out of congestion is not an economically or environmentally feasible option. Nevertheless, while congestion in the region cannot be eliminated, it can be managed – and alternatives that allow travelers to avoid congestion, can be provided. Phase I of the study also concluded that high occupancy vehicle lanes (HOV) figure prominently in I-40's future ability to provide travelers with an acceptable level of mobility. **Phase II** of the study – which is now underway – will further examine alternatives and eventually will be integrated into a Congestion Management Plan for I-40. The Congestion Management Plan will outline both short and long-term actions.





What are HOV lanes, and How Can They Help Me?

High Occupancy Vehicle (HOV) lanes are an effective tool to help manage traffic congestion by moving more people in fewer vehicles. An HOV lane is a highway lane reserved for the use of carpools and buses. The lane is identified by a white diamond symbol painted on the pavement. In the United States, the first exclusive freeway HOV lanes were opened in 1969 in the median between the northbound and southbound lanes of I-395 in northern Virginia. Today there are more than 2,500 HOV lane miles at 125 locations in North America. These HOV lanes guarantee millions of commuters quick, convenient, and safe daily commutes.

HOV lanes can:

- ◆ Increase the average number of people per vehicle.
- ◆ Preserve at least one lane for “free-flow” of cars, buses and emergency vehicles.
- ◆ Enhance bus transit operations.
- ◆ Provide predictable and daily travel timesaving.
- ◆ Support air quality goals.
- ◆ Serve a variety of land use development goals.

HOV lanes cannot:

- ◆ Force individuals to change their mode of transportation.
- ◆ Eliminate congestion.
- ◆ Be a stand-alone improvement.

HOV Options Under Consideration on I-40

An HOV could be a transit bus, vanpool, carpool, or any vehicle meeting minimum passenger requirements such as “2 or more” or “3 or more” passengers per vehicle. HOV lane options under study for I-40 include:

◆ Buffer Separated

Buffer separated HOV lanes provide an additional lane in each direction that is dedicated for HOV use. The lane would be separated from the general-purpose traffic by a “buffer” typically 2 feet wide. HOV use could be during the peak-periods only and the lane could convert to general-purpose use during non-peak periods.



◆ Barrier Separated

Barrier separated HOV lanes add an additional lane in each direction, separated from the general-purpose traffic by a concrete barrier. Traditionally, barrier separated HOV lanes are open 24-hours-a-day.



◆ Access Options

A variety of options that allow HOV travelers to easily access HOV lanes are being considered as part of the study. These options include direct freeway-to-freeway ramps, and local access

ramps to major employment destinations.



Transportation Secretary Announces HOV Measures

In June 2001, State Transportation Secretary Lyndo Tippet announced measures to improve traffic flow along I-40 in the Triangle.

“North Carolinians are spending too much time sitting in traffic, and I want the department to do everything it can to improve this situation.” Tippet said.

Tippet asked engineers to look specifically at the feasibility of HOV lanes along I-40 from Wade Avenue in Raleigh to U.S. 15-501 in Durham. Traffic engineers determined that an HOV lane is not feasible for Interstate 40 at this time.

“Transportation studies normally take years to complete, but because congestion is growing so rapidly in our urban areas, I have charged our staff to look at ways to speed up the process.” Tippet said. “These measures will help us better manage congestion as we work toward a long-term solution.”

Highway engineers determined that an interim HOV lane would not be feasible on I-40 at this time.

Number of vehicles needed to carry 45 people		
Bus		1
Vanpool		9
2+ Person Carpool		23
Single Occupant Automobile		45



Because there is not one common destination for the majority of motorists travelling this corridor, motorists would need to exit the HOV lane at several locations. Engineers concluded that crossing three lanes of traffic in a short distance would be too hazardous. They also determined that converting a general-purpose lane to an HOV lane at this time would have a negative effect on traffic. Specific research conducted on I-40, in addition to national experiences and other studies indicate this option is not effective in addressing congestion. Many sections of I-40 are already experiencing congestion during rush hours and traffic volumes are projected to increase. If an existing lane is converted to HOV, all the single occupant vehicles on I-40 would be forced into the remaining general-purpose lanes resulting in worse congestion. For this reason, converting an existing lane to an HOV lane is not considered an option.

At Tippet's request, engineers will continue to look at other options-including continuing to study a long-term HOV project in the corridor and dedicated lanes for motorists traveling through the corridor to places other than the RTP area.

Public Participation

Public participation is an important part of the I-40 High Occupancy Vehicle / Congestion Management Study. Incorporating citizen suggestions, concerns, and needs into the study process and outcomes will result in better decisions with greater support. NCDOT is dedicated to providing you with a variety of ways to get involved and stay informed.

The best way to stay informed of the study's progress is to add your name to the project mailing list. Persons on the mailing list will receive periodic newsletters, meeting announcements and other helpful information. You can be added to the mailing list by calling toll free (866) 527-7715, logging onto the project website at www.I40HOV.com or faxing your information to (919) 467-7322.

NCDOT knows that talking with citizens on-on-one is especially important when considering these essential highway improvements. To ensure your questions and concerns are considered, two series of informal open houses will be held. Each series of open houses will consist of three separate meetings – two in the evening and one in the afternoon. These open houses are good opportunities to get the latest information and to talk with project representatives. The open houses are scheduled for later this year and early next year. Add your name to the Project's mailing list to receive early notification of dates, times, and locations.

You can also contact the NCDOT to receive current project information or request a presentation in your community. Please contact us at our toll free phone number (866) 527-7715 to schedule a presentation.

Project Contact Information

Questions and comments are encouraged. Feel free to call the I-40 HOV Study hotline at 1-866-527-7715. You can also review information provided on the study website at www.I40HOV.com.

For additional information, contact us at:

I-40 HOV Study Team
909 Aviation Parkway
Suite 1500
Morrisville, NC 27560
866-527-7715 ♦ Toll Free
919-467-7322 ♦ Fax

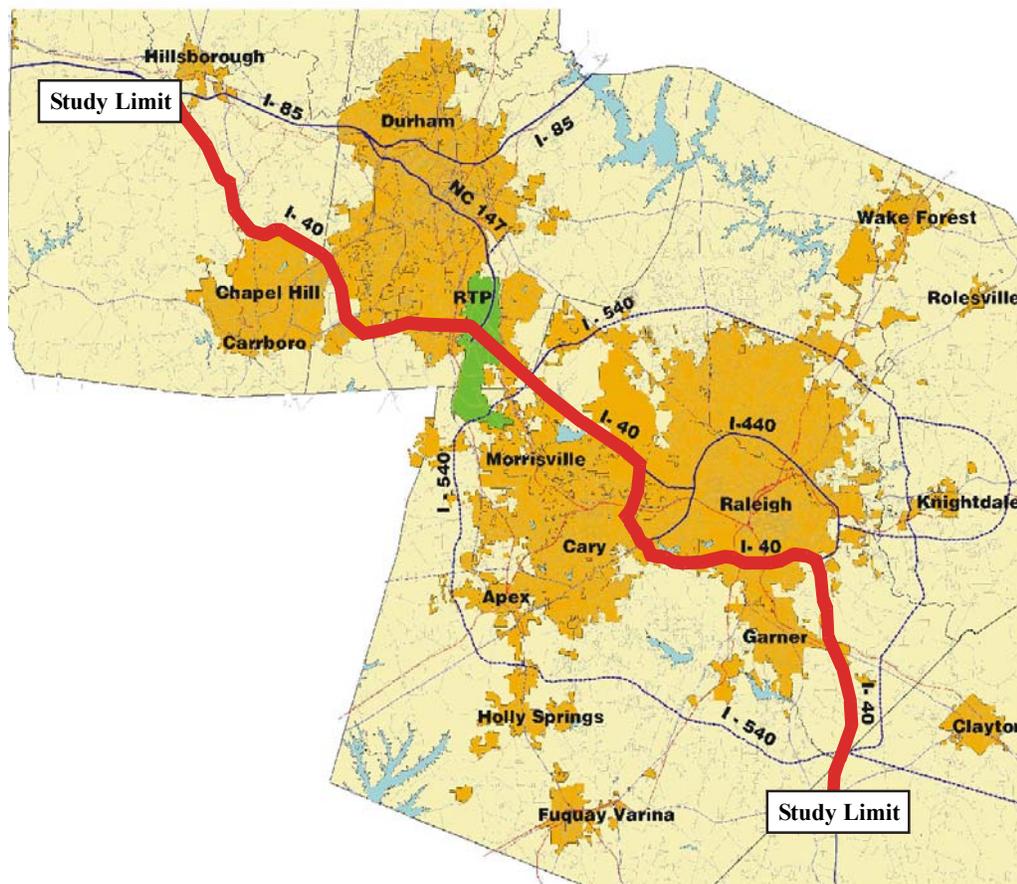


Upcoming Events

- December 10, 2001.....Open House *Raleigh Area, 5-8 pm, Herbert C. Young Community Center*
- December 11, 2001.....Open House *Durham Area, 5-8 pm, The Herald-Sun Newspaper Civic Room*
- December 12, 2001.....Open House *RTP Area, 11 am-2 pm, IBM Fitness Center (3039 Cornwallis Road)*
- March, 2002.....Open House – Series #2, Dates and Location, TBA

Schedule





I-40 HOV/CMS Study Area



North Carolina Department of Transportation Project Development and Environmental Analysis

1548 Mail Service Center
Raleigh, North Carolina 27699-1548