

VALUE LANE STUDY LOOKS AT WAYS TO RELIEVE GROWING TRAFFIC CONGESTION IN MARICOPA COUNTY

Freeway traffic in Maricopa County is getting worse everyday. As the region continues its fast-paced economic and residential growth, traffic continues to clog the I-10 and I-17 freeways, U.S. 60, and State Routes 51, 101 and 202 — especially during morning and evening rush periods.

With an additional 50 percent population increase projected over the next 20 years and a projected 70 percent increase in travel through the region, even an aggressive freeway construction program will not be able to keep pace. State and local transportation planners are saying that new ways need to be found to move more people and to effectively manage the county's growing traffic congestion problem.

FINDING SOLUTIONS TO TRAFFIC CONGESTION

To identify solutions, the Arizona Department of Transportation (ADOT), in partnership with the Maricopa Association of Governments (MAG), is conducting a formal study of alternatives to alleviate freeway traffic congestion in Maricopa County. The study, to be completed in early 2000, seeks to evaluate and compare various carpool or HOV (High Occupancy Vehicle) lane location options. The study will also look at the possible creation of "Value" lanes or HOT (High Occupancy Toll) lanes, which allow solo motorists the option of using carpool lanes for a fee. HOT lanes are an example of a new transportation concept called "value pricing." The intent of value pricing is to offer drivers -- for a fee -- the option of using alternative road facilities that provide a higher level of service. The users of HOT lanes obtain a tangible value -- for a fee, they regain some control over something of value to them -- the hours they spend in traffic. The study's findings will help define the most viable freeway traffic management solutions for Maricopa County.

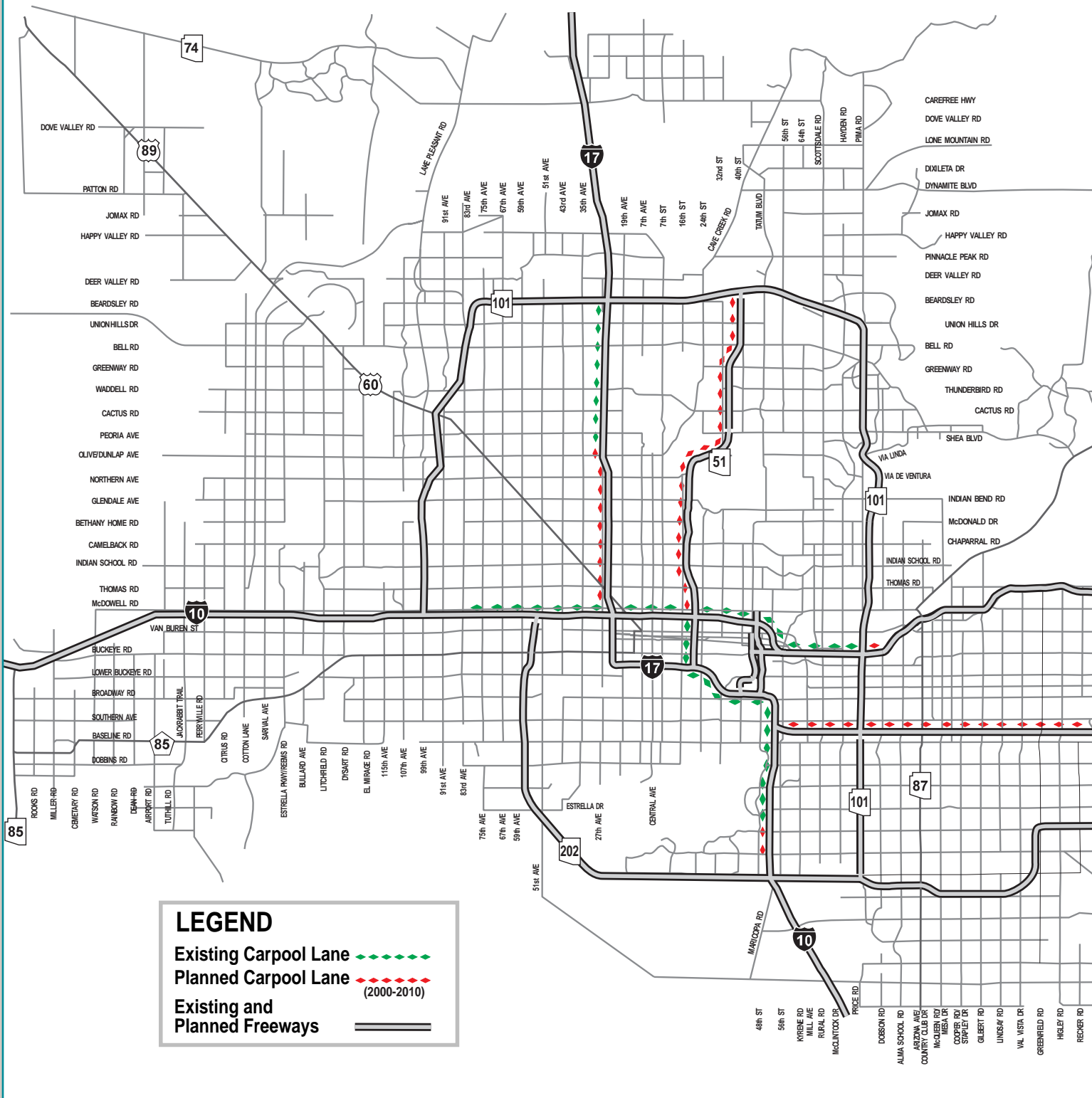
CARPOOL LANES IMPROVE THE MOBILITY AND EFFICIENCY OF THE FREEWAY SYSTEM

Carpool lanes first opened in Maricopa County in 1988 along a 6-mile stretch of the I-10 Freeway. Today, the county operates a busy network of over 42 miles of HOV lanes with most of the lanes located on I-10, State Route 202, and a small portion of I-17. HOV lanes operate each weekday morning from 6 to 9 a.m. and in the afternoon from 3 to 7 p.m., with the exception of southbound I-17, which is always in operation as an HOV lane. During the remainder of the day, these HOV lanes are made available for general purpose use.



Over the next 20 years, travel is expected to increase 70 percent throughout the region.

Existing and Planned Carpool Lanes in Maricopa County





The county's HOV lanes have proven to be very successful and popular with the motorists who use them, with the I-10 Freeway west of the I-17 interchange getting extremely heavy use. A recent Maricopa Association of Governments study vividly demonstrated the people moving capacity of these lanes. The study showed that the eastbound I-10 HOV lane at 39th Avenue carried more people during the average peak morning rush hour (3,250 people) than the average in each of the three regular-use lanes (2,250 people). During the evening peak period, the westbound I-10 HOV lanes carried 2,000 more people than the average in the three regular-use lanes.

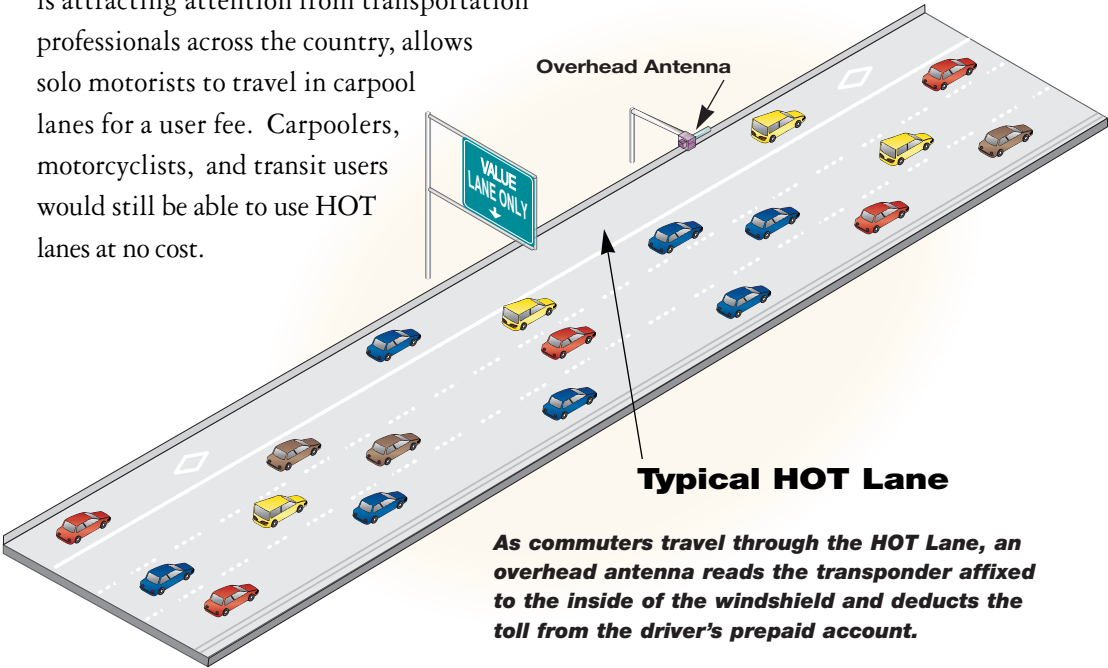
More carpool lanes are soon planned for construction along U.S. 60 (Superstition Freeway), State Route 51 (Squaw Peak Freeway), and an additional portion of I-17, with some freeway-to-freeway connectors being added to help link the system. State and local transportation planners see HOV lanes as an important alternative that will ease growing freeway congestion, improve air quality, conserve energy, and increase mobility and efficiency.

The objective of the HOV program is to stretch the existing freeway system to make it more effective and efficient. The central concept is to move more people rather than more cars. By only allowing vehicles with two or more passengers to travel in them, HOV lanes are able to increase the people moving capacity of the freeway system. Fewer vehicles utilize the carpool lane than the regular freeway lanes, but each carpooling vehicle carries more people and transports them faster.

The personal advantages to the carpooler are significant. Making a personal decision to carpool provides a more reliable means of transportation, helps save valuable time and money, and reduces stress. People who choose to drive solo also benefit from HOV lanes. Each carpool traveling in the HOV lanes means at least one less vehicle on the regular freeway lanes, thus helping to alleviate congestion.

HOT LANES OFFER COMMUTERS ANOTHER ALTERNATIVE

A new transportation alternative that is being explored in the ADOT and MAG study is the use of HOT lanes. This unique concept, which is attracting attention from transportation professionals across the country, allows solo motorists to travel in carpool lanes for a user fee. Carpoolers, motorcyclists, and transit users would still be able to use HOT lanes at no cost.



The HOT lane alternative would help improve existing freeway efficiency by maximizing unused carpool lane capacity. Freeway drivers are offered a choice to travel on faster, more predictable, and less stressful free-flowing carpool lanes if they are willing to pay. By diverting some solo drivers, HOT lanes further reduce congestion on regular freeway lanes while generating valuable new revenue that could be used to support additional carpool lane service and local transit in Maricopa County. HOT lanes can be implemented on existing carpool lanes without additional cost to taxpayers for new freeway lane construction or negative environmental impacts.

HOT lanes feature an innovative and convenient electronic toll collection system. The system utilizes an antenna positioned above the carpool lane and a small portable electronic device (transponder) that is affixed to the inside windshield. When the vehicle passes under the antenna, the transponder is read and the posted fee is automatically deducted from the driver's prepaid account. With this system, the user only pays for the trips they actually choose to take on the carpool lanes.

THE SAN DIEGO EXPERIENCE

A three-year, federally sponsored HOT lane demonstration project in San Diego, California has proven very successful at alleviating traffic congestion on one of that area's busiest freeways. As the first experiment of its type in the nation, the I-15 Express Lanes program is a model for reducing rush hour congestion in a growing community by making maximum use of all traffic lanes and improving local transit service.

Solo motorists are allowed to use existing I-15 carpool lanes for a fee, while carpoolers, bus customers, vanpoolers, and motorcyclists continue to use the lanes at no cost. To keep traffic in the Express Lanes moving, the fee varies according to traffic conditions, thus preventing congestion and maintaining maximum usage of the carpool lanes' capacity. The results have been impressive. Customers report timesavings as much as 10 to 40 minutes each way on their daily commute. They also note reduced stress while driving and an increased feeling of safety in the Express Lanes as stop-and-go traffic in the regular freeway lanes is avoided. Carpool usage has increased 20 percent, as motorists begin to see the real value of the "free" HOV lanes.

The success of the demonstration project has recently prompted the San Diego Association of Governments to seek an additional four-year extension of the project.

WHERE TO FIND ADDITIONAL INFORMATION

If you would like additional information regarding the study of alternatives to alleviate growing freeway congestion in Maricopa County, please visit the Arizona Department of Transportation (ADOT) Web site at www.dot.state.az.us, or call (602) 852-9195.



Arizona Department of Transportation
206 South 17th Avenue
Phoenix, Arizona 85007
(602) 255-7011



Maricopa Association of Governments
302 North 1st Avenue, Suite 300
Phoenix, Arizona 85003
(602) 254-6300