

June 2002

# FAST LANE

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## Welcome to FastLane

This is the fourth edition of *FastLane*: a quarterly newsletter that highlights ongoing activities and research on managed lanes in Texas. This month's issue features articles on the New Jersey Turnpike, as well as highlights of news items on managed lanes. *FastLane* archives can be found on our website, <http://managed-lanes.tamu.edu>. Please feel free to forward this newsletter to anyone who might be interested in its contents, and as always, we welcome your comments and suggestions.

## Managed Lanes On the Web

Several new products and reports are now available on our website, <http://managed-lanes.tamu.edu>. They include the products from our concept marketing task, which are a position paper for policy makers —“Managed Lanes: A More Efficient Use of the Freeway System” (<http://managed-lanes.tamu.edu/products/reports/4160-P1.pdf>)— and a position paper for the media —“Managed Lanes: A New Concept for Freeway Travel.” (<http://managed-lanes.tamu.edu/products/reports/4160-P2.pdf>). Both papers are available in Adobe Acrobat format. We have also posted the Year 1 Annual Report of Progress ([http://managed-lanes.tamu.edu/products/reports/4160-2-Year\\_1\\_Annual\\_Report-Final.pdf](http://managed-lanes.tamu.edu/products/reports/4160-2-Year_1_Annual_Report-Final.pdf)).

As more tasks are completed, the resultant products will be posted on the web, so visit “Our Products” whenever you browse the website. We've also posted various presentations from recent meetings in the “Our Products” section of the web site, including key presentations from the

Symposium held in February 2001. If you have questions or comments regarding the website, please contact Beverly Kuhn at 979-862-3558 or [b-kuhn@tamu.edu](mailto:b-kuhn@tamu.edu).

## Managed Lanes — The New Jersey Turnpike

The New Jersey Turnpike, completed in 1952, is a 148-mile limited access facility that uses a variety of management strategies to optimize flow. The turnpike is a divided toll road that varies in lanes from four to fourteen. There are only 28 interchanges on the facility. Beginning in the 1970's, a distance of approximately 32 miles of the turnpike was expanded into two separate roadways in each direction. This expansion, known as a dual-dual roadway, has both inner and outer travel lanes in each direction. The inner lanes are reserved for passenger cars only while the outer lanes are open to cars, trucks and buses. In December 1996, two new lanes, one in each direction, were added to the outer roadway between Interchanges 11 and 14, approximately 14 miles. The new lanes are HOV lanes during the peak period and access is restricted to cars or vans with 3 or more occupants, buses or motorcycles. The peak period is defined as 6:00 a.m.- 9:00 a.m. northbound and 4:00 p.m.- 7:00 p.m. southbound.



Inner Lanes of New Jersey Turnpike

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## Managed Lanes — The New Jersey Turnpike

(Continued from page 1)



**Entrance for the Dual-Dual Section of the Turnpike**

The Turnpike Authority participates in a regional consortium with four other transportation agencies —the Delaware Department of Transportation, the New Jersey Highway Authority, the South Jersey Transportation Authority, and the Port Authority of New York and New Jersey. The consortium is also part of a larger Interagency Group (IAG) that consists of 16 northern toll agencies across seven states. The IAG has committed to offering a fully interoperable electronic toll collection system known as E-ZPass. This will allow motorists seamless transition to more than 700 toll lanes on 415 miles of roads, tunnels and bridges in the Northeast.

Tolls on the Turnpike are calculated according to the cost of maintenance and construction of the toll road between the point of entry and the point of exit and the type of vehicle being driven. Vehicles are divided into classes determined by the number of axles. All the toll lanes at each toll plaza on the Turnpike—a total of 344—are equipped with toll tag readers, and motorists are encouraged to participate in the E-ZPass program, although manual toll collection is still available. The Turnpike Authority has recently implemented a value pricing incentive to shift travel out of the peak. E-ZPass customers traveling in the off-peak hours (hours other than 7:00 a.m.- 9:00 a.m. and 4:30 p.m.- 6:30 p.m. Monday through Friday) will receive a 20 percent discount off the new increased toll rate. E-ZPass customers that travel in the peak period will have an 8 percent increase in the toll rate.

Headlines in New Jersey have highlighted the recent controversy over problems with the E-ZPass program erroneously charging customers. Nonetheless, most motorists say the E-ZPass program is a definite

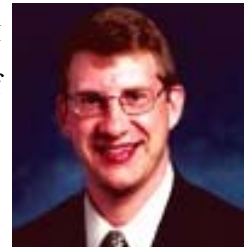
improvement over manual toll collection. Turnpike officials cite an overwhelming response to the program as the primary cause of the problems. E-ZPass demand was originally projected at 35 percent of motorists. In actuality, 58 percent of motorists are taking advantage of the program on the state's toll roads, and at some toll plazas that number is as high as 70 percent.

For information on the New Jersey Turnpike go to <http://www.state.nj.us/turnpike>. For more information on the E-ZPass program go to <http://www.ezpass.com/>.

### **Research Team Out in Front**

Our project team has been busy this quarter conducting research and informing others about the work going on in Texas. Beverly Kuhn gave a progress report at the June meeting of the TxDOT Research Management Committee 4 meeting in San Antonio. Also, the following researchers have given presentations of note:

Bill Eisele presented "Design Issues Regarding Managed HOV Lanes" at the 2002 Annual Meeting of AASHTO, Subcommittee on Design, in Savannah, Georgia on 14 June 2002.



Ginger Daniels Goodin was invited to speak on the Managed Lane Concept at the Statewide HOV Workshop sponsored by Florida Department of Transportation in Fort Lauderdale, Florida on 24 April 2002.

Kay Fitzpatrick discussed the Managed Lane Concept at the Design Conference 2002 sponsored by Texas Department of Transportation in San Antonio, Texas on 3 April 2002.



All of these presentations and many others are available on our website, <http://managed-lanes.tamu.edu>, under "Our Products".

## ***The Managed Lanes List***

A managed lanes listserv is available to interested readers. This list unlike many other listservs is not a discussion list. It is merely a means for the research team to disseminate information to members of the list in an efficient manner. This listserv is open to anyone interested in managed lanes topics or research. If you have concerns or questions about the list or would like to be added to the list, please contact Beverly Kuhn at [b-kuhn@tamu.edu](mailto:b-kuhn@tamu.edu).

## ***Managed Lanes in the News***

### ***10th International Conference on HOV Systems Proceedings and Compendium of Papers Now Available***

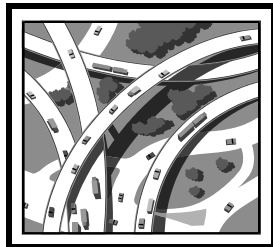
The proceedings and compendium of technical papers from the 10th International Conference on High Occupancy Vehicle (HOV) Systems that was held in Dallas in August 2000 have been published and are now available. This conference provided an opportunity for transportation professionals to share ideas on different topics, discuss current issues, and innovative opportunities that are available to HOV systems. The conference proceedings summarize the presentations that were provided at both the general and breakout sessions. The topics and subjects that were addressed included the deployment, implementation, marketing, management, operation, enforcement, bus use, public and political interests, air quality, performance evaluation and benefits.

Electronic copies are available at: <http://www.its.dot.gov/itsweb/welcome.htm>. Download Document No. 13663-10, *The International Conference on High-Occupancy Vehicle System Conference Proceedings* and Document No. 13648-10, *The International Conference on High-Occupancy Vehicle System Compendium of Technical Papers*.

Paper copies may be obtained by sending an e-mail to: [itspubs@fhwa.dot.gov](mailto:itspubs@fhwa.dot.gov) <<mailto:itspubs@fhwa.dot.gov>> stating the name, document number, and quantity of documents you would like. Please make sure to include the name and address of the receiver.

### ***Orange County HOV Study***

The *Orange County Register* reported in June that the county's transportation agency is evaluating whether to open car-pool lanes to single-occupant vehicles during off-peak hours, a strategy already in use in the Bay area. The move comes as the Orange County Transportation Authority (OCTA) and Caltrans are planning



to expand the 241-mile network by more than 50 percent to handle the county's 2.2 million daily commuters. By 2009, the first 24 miles are expected to be open on the Santa Ana (I-5) and Garden Grove (22) freeways, adding to the most extensive system in the state. Supervisor Todd Spitzer, OCTA's chairman, asked the agency's staff evaluate current placement of lanes, whether there should be more entry points and whether they can be opened to others when rush hour is over. For more information visit the OCTA web site at <http://www.octa.net>.

### ***Orange County Transportation Authority to Purchase 91 Express Lanes Toll Road***

The Orange County Transportation Authority (OCTA) board recently approved the purchase of the SR 91 Express Lanes Toll Road and operational franchise agreement for \$207.5 million. The OCTA sees the purchase of the facility as an opportunity to improve mobility in the corridor. To read the entire press release regarding the buyout, visit the OCTA website at <http://www.octa.net/news/late/042302.asp>

### ***California Legislative Analyst's Office Report - HOV Lanes on Route 14: Effects of Part-Time Operation***

The Legislative Analyst's Office in California has released a report addressing the effect of a statutory change in operation of the high-occupancy vehicle (HOV) lanes on State Route 14 in Los Angeles County from full-time to part-time operation. Due to this law, single-occupancy vehicles can now use the Route 14 HOV lanes during off-peak hours. This report examines the effect this change has had on Route 14 traffic patterns and concludes that the conversion to part-time operation had essentially no effect on traffic congestion, either positive or negative. The report is available in both HTML and Adobe Acrobat formats at the following links:HTML:

[http://www.lao.ca.gov/2002/hov/0402\\_hov\\_lanes.html](http://www.lao.ca.gov/2002/hov/0402_hov_lanes.html).

Adobe Acrobat:

[http://www.lao.ca.gov/2002/hov/0402\\_hov\\_lanes.pdf](http://www.lao.ca.gov/2002/hov/0402_hov_lanes.pdf).

### ***North Texas Tollway Authority Initiates O-D Survey to Aide Long-Range Planning of Future Transportation Facilities***

The North Texas Tollway Authority (NTTA) is currently planning a comprehensive origin and destination survey work program in various corridors throughout the Dallas-Fort Worth Metroplex. These surveys are being conducted to obtain important travel pattern information that will provide essential data required for various studies the NTTA is currently conducting. For more information about this effort or anything else regarding the NTTA, visit their website at <http://www.ntta.org>.

## ***Trans Texas Corridor Update***

The statewide corridor plan proposed by Texas Governor Rick Perry has had recent developments in the past few months. The vision of this plan is to advance Texas on a new multi-use, statewide transportation corridor that moves people and goods safely, efficiently and more reliably, improving our quality of life. The potential financing options for this project include exclusive development agreements, toll equity, regional mobility authorities, and the Texas Mobility Fund. In June 2002, the Texas Transportation Commission accepted a 95-page report that contained outlines for the basic design of the facility. The report's design includes 4,000 miles of multi-use transportation corridors, 1000' to 1,200' in width, with three lanes in each direction for passenger vehicles, two lanes in each direction for truck traffic, six rail lines for high-speed passenger, commuter, and freight rail, and a dedicated utility zone for water, petroleum pipelines, electricity, and data. Perry's original proposal did not include truck lanes. Proposals to build the network are already coming in as the project moves forward. To read a summary of this report and for the latest updates on this ambitious transportation project, visit TxDOT's Trans Texas Corridor website at

[http://www.dot.state.tx.us/ttc/ttc\\_home.htm](http://www.dot.state.tx.us/ttc/ttc_home.htm).

## ***Web Sites of Interest***

This portion of *FastLane* is intended to highlight other online resources that are germane to managed lanes.

★ The Transportation Research Board (TRB) Committee on High Occupancy Vehicle (HOV) Systems has a website designed to provide a one-stop link on the planning, operation, design, performance, and marketing of HOV and Managed Lane facilities, along with information about upcoming committee activities. The HOV Systems committee is concerned with priority measures for high-occupancy vehicle (HOVs), including guidelines for planning, designing, operating, and evaluating HOV priority facilities and the development, validation, and dissemination of theoretical, experimental and applied research related to HOV priority facilities. The objectives of the committee include assisting in enhancing the performance, safety, and efficiency of the priority HOV facilities and establishing preferential HOV improvements as an integral element of the urban transportation system. The web site can be found at <http://www.hovworld.com/>.

## ***Managed Lanes Terminology***

This feature of *FastLane* highlights several commonly-used terms in managed lanes that serve as a framework upon which our researchers will base future efforts. The entire glossary of terms may be accessed on the managed lanes

web site.

★ AVL —Automatic Vehicle Location— the use of advanced technologies, such as Global Positioning Systems (GPS) to monitor the location and movement of vehicles.

★ Buffer-Separated — a facility in which the HOV lane is separated from the general-purpose lanes by a designated buffer.

★ EA —Environmental Assessment— study to determine the potential impacts on the environment from a project.

★ EIS —Environmental Impact Statement— a comprehensive study of all the potential impacts of a project funded with federal dollars.

★ ILEV —Inherently Low Emission Vehicles— alternative fueled clean air vehicles. Related terms include Zero-Emission vehicles (ZEVs), Ultra-Low-Emission (ULEV), and Super-Ultra-Low-Emission (SULEV) vehicles powered by alternative fuels.