VALUE PRICING PROJECT QUARTERLY REPORTS
July - September 2006

CONVERTING HOV LANES TO HOT LANES

CALIFORNIA: HOT Lanes on I-15 in San Diego

San Diego's HOT Lanes were originally approved as part of the FHWA'S Congestion Pricing Pilot Program in ISTEA-1991. The first implementation effort consisted of collecting tolls via monthly permits with a decal in the window (July 1997); subsequently, the FasTrak™ pricing program was implemented in April 1998. Under this program, customers in single-occupant vehicles (SOVs) pay a toll each time they use the Interstate 15 HOV lanes. The unique feature of this program is that tolls vary dynamically with the level of congestion on the HOV lanes. Fees can vary in 25-cent increments as often as every six minutes to help maintain free-flow traffic conditions on the HOV lanes. Motorists are informed of the toll rate changes through variable message signs located in advance of the entry points. The normal toll varies between $0.50 and $4.00. During very congested periods, the toll can be as high as $8.00. Pricing is based on maintaining a LOS "C" for the HOT facility.

On average, approximately 75 percent of the weekday daily traffic using the HOT lanes is HOVs with two or more occupants, and 25 percent are paying SOV/FasTrak customers. I-15 toll revenues range between $1.3 to $2.2 million per fiscal year (July 1st to June 30th) and pay for operation of express transit (bus) service in the I-15 corridor, enforcement on the HOV lanes by the California Highway Patrol (CHP), and maintenance and operation of the electronic toll collection (ETC) system and Customer Service Center, by TransCore.

SANDAG has conducted extensive outreach to measure public response to the value pricing concept. These efforts have revealed broad support for managed/HOT lanes. Equity was not perceived to be a major obstacle to implementing pricing on HOT lanes in the San Diego region.

Study Completed 2002: The original study was funded under the Congestion Pricing Pilot Program. Archives of the project reports can be found at: http://www.sandag.org/services/fastrak/pubsarchive.asp?classid=29&fuseaction=home.classhome.

For More Information Contact: Derek Toups, San Diego Association of Governments; Phone (619) 699-1907, e-mail dto@sandag.org

CALIFORNIA: I-680 SMART Carpool Lanes in Alameda County
The Alameda County Congestion Management Agency in collaboration with Santa Clara Valley Transportation Authority, Caltrans, and the Metropolitan Transportation Commission previously examined options for the I-680 corridor and the feasibility study is complete. It concluded that the proposal to utilize the planned high-occupancy vehicle (HOV) lanes on Interstate 680 as high-occupancy toll (HOT) lanes is financially, operationally, and physically feasible. Environmental advocacy groups, business and labor organizations, and the metropolitan planning organization, Metropolitan Transportation Commission supports the project. Initial work on pr AB 2032, the authorizing legislation required to implement this project, becomes effective January 1, 2005. A consultant was retained to begin systems engineering for the project. Preliminary engineering began using local funds. The VPPP grant will provide $714,000 in federal value pricing funds for preliminary engineering and environmental clearance to convert the southbound HOV lane that opened in 2002 to a combined HOT facility on a 14-mile segment of I-680 in Alameda County, CA. The I-680 corridor connects employees in Southern Alameda County and the Silicon Valley with homes in the Tri-Valley, East Contra Costa County and the San Joaquin Valley. The project will use innovative design, technology and enforcement elements.

***Pre-Implementation Funds Awarded**: 2002*
***Phase II Anticipated Completion Date**: 2007*

***July - September 2006 Update*:** FHWA provided comments on the Systems Engineering Management Plan Guidelines and draft System Requirements. The comments will be incorporated in final documents. The Team submitted a design update to Caltrans. The plans will be combined with other improvements proposed for the corridor. The Team continued to work on developing the methodology for dynamic pricing. The project allows multiple entry points. The challenge is to price the lane to maintain required levels of service while maintaining capacity for downstream users. The Alameda CMA continues to work with other HOT Lane operators and Caltrans to organize a statewide meeting on HOT Lane signage. The meeting is scheduled for October 19th in Oakland. Construction is scheduled for the end of 2007.

For More Information Contact: Jean Hart, Deputy Director, Alameda County Congestion Management Agency; telephone (510) 836-2560, fax (510) 836-2185, email jhart@accma.ca.gov.

CALIFORNIA: HOT Lanes on I- 880 in Alameda County

Interstate 880 is a major congested freeway in Alameda County. It has one high-occupancy vehicle (HOV) lane plus three contiguous mixed flow lanes in each direction for approximately 17 miles, from just south of Oakland to Fremont. This corridor has the highest volume of truck traffic in the region. It connects the Port of Oakland and Oakland International Airport with high technology companies in Santa Clara and southern Alameda counties and with goods distribution centers to the east. A study was done to determine whether excess capacity does exist, whether there is a market among potential users, and how to address the physical and operational issues associated with such a plan. Study results indicated that, while excess capacity exists, it is not sufficiently high to make local officials comfortable that additional priced vehicles could be accommodated. Also, the demand by light duty commercial vehicles was perceived as modest, and the California Highway Patrol expressed strong reservations about its ability to conduct effective enforcement.

Study completed.

For More Information Contact: Jean Hart, Deputy Director, Alameda County Congestion Management Agency; telephone (510) 836-2560, fax (510) 836-2185, email jhart@accma.ca.gov

COLORADO: HOT Lanes on I-25/US 36 in Denver
The I-25 Bus/HOV lanes, also known as Downtown Express lanes, consists of a two-lane barrier-separated reversible facility in the median of I-25 between downtown Denver and 70th Avenue, a distance of 6.6 miles. In 2002 & 2003, CDOT received $2,800,000 toward its request for $4 million in Federal funds for implementation of the project.

***Implementation Funds Awarded**: 2002*
***Opened**: June 2, 2006*

Project Status: The I-25 Express Toll lanes opened on June 2, 2006. Drivers currently pay from $.50 to $3.25 per trip, depending on the time of day for this seven-mile trip. In doing so, many drivers have claimed to save between ten and twenty minutes for their daily commute. Approximately one third of the vehicles traveling in the Express Lanes are toll-paying customers. Moreover, carpooling has increased as a byproduct of some of the publicity that the facility has earned. Bus service in the corridor is among the best in the Metro Area, with over 300 buses a day serving the corridor. Preliminary estimates are that between 10% and 15% of all of the daily person trips on this stretch of I-25 occur in the Express Lanes, at full highway speeds, while the adjacent general-purpose lanes experience stop and go congestion in the peak periods. Buses continue to meet their travel time targets, as each and every bus trip is measured to monitor travel time performance. In fact, over 99% of buses meet their full speed limit travel time targets.

Toll revenue projections for the first year were approximately $800,000. This assumed that $40,000 of toll revenue would be collected in the first two months, ramping up to about $80,000 in month six and then leveling off. In fact, revenues have far exceeded expectations. It is anticipated that the first year toll revenues will be between $1.25 million and $1.5 million. This will cover Maintenance, Operations, loan repayment (principle of approximately $3million), and increased law enforcement. What CDOT did not anticipate was that fees and fines from violations would result in additional revenues. CDOT conservatively estimated that violation enforcement would be revenue neutral. In fact, the state has collected over $200,000 in fees and fines and gross revenues were approaching $650,000 through the end of October.

You can find additional project information at the new implementation website: http://www.dot.state.co.us/CTE/ExpressLanes/index.cfm

For More Information Contact: Peggy Catlin, Colorado Department of Transportation, 2000 S. Holly St., Denver, CO 80222; phone 303-757-9208, e-mail **peggy.catlin@dot.state.co.us**

FLORIDA: HOT Lanes on I-95 in Miami-Dade County
This project will conduct investment grade traffic and revenue study, market research, outreach efforts, and development of monitoring and evaluation plans. The Florida Department of Transportation (FDOT) already funded a preliminary feasibility study.

A proposed new lane would be added in I-95's median. A moveable zipper barrier would permit multiple lane configurations of between two and three HOT lanes in the peak direction. The additional lanes would use the two existing HOV lanes. The HOT lanes would allow multiple ingress and egress points.

FDOT hopes to carry out this project via a public-private partnership. A private firm or consortium would be selected to design, finance, build, and operate the HOT lanes. FDOT would make use of a non-profit corporation to run the facilities and issue the toll revenue bonds. FDOT would not permit a non-compete clause in the public-private partnership agreement.

The overall project, which includes new ramps and several minor improvements to the mixed flow lanes, would provide a 20 percent increase in peak hour, peak direction capacity without having to widen I-95. The project's estimated benefits, in terms of travel time savings and reduced vehicle operating costs, are $3.77 billion and the cost is about $600 million. This produces a very impressive benefit-cost ratio in excess of 6.0.

In November 2004, FDOT received additional funds to conduct two additional focus groups, additional surveying for traffic and revenue forecasting in Broward County, and joint agency and educational outreach.

***Implementation Funds Awarded**: 2004*
Anticipated Completion Date: 2007

***July – September 2006 Update**:* The simplified PowerPoint presentation was updated to reflect revisions suggested by FDOT and resubmitted for use at various briefing sessions scheduled for various State, County and Community agencies. The proposed sensitivity tests described in last quarter's update were reviewed and refined. The Team continued to prepare the draft final report for review by FDOT by the end of October 2006.

For More Information Contact: Kenneth Jeffries, Office of Planning, FDOT, District 6; phone (305) 470-6736, fax (305) 470-6737, email ken.jeffries@dot.state.fl.us

MINNESOTA: HOT Lanes on I-394 in Minneapolis

Minnesota implemented I-394 *MnPASS*, which converts the existing high occupancy vehicle (HOV) lane into the state's first high occupancy toll (HOT) lane. The lanes, which are dynamically priced, remain free to HOVs and motorcyclists during peak hours, and are free to all users in off-peak periods. The first phase of the project opened in May 2005.

The I-394 MnPass project has been the culmination of years of research and planning aimed toward the implementation of a value pricing demonstration project in Minnesota. Guiding this process was the I-394 Community Task Force, made up of local elected officials, citizens and community leaders. A comprehensive evaluation plan has been developed and is being implemented to thoroughly understand conditions and public attitudes before and during project operations. Preliminary performance data for I-394 MnPASS for the first six months of operation indicates the following:

Toll trips per week (avg.):	17,500
Revenue per week (avg.):	$20,000
Toll per trip (avg.):	$1.10

***Pre –Implementation Funds Awarded**: 2004*
***Project Implemented:** 2005*
***Additional Pre-Implementation Funds Awarded:** June 2005*
***Anticipted Study Completion Date**: 2007*

July – September 2006 Update: Phase II planning for I-394 MnPASS is underway. Planning includes facility design concepts, land use and urban design analysis, transit advantages, and outreach and education. The Team conducted preliminary analysis of park-and-ride facility utilization and an assessment of future service needs. SRF Consulting has been retained to conduct preliminary design and engineering for lane and interchange improvements in the corridor. MnDOT hired the Center for Changing Landscapes at the University of Minnesota to conduct community land use and urban design analysis. The Team solicited a request for proposals for planning and analysis of transit advantages in the corridor and intends to award a contract in October 2006. Work is currently underway to assemble a corridor advisory committee to guide the technical, land use and transit advantages work.

For More Information Contact: Ken Buckeye, Program Manager Value Pricing (651) 296-1606, e-mail: kenneth.buckeye@dot.state.mn.us.

TEXAS: HOT Lanes on I-10 and US 290 in Houston

In January 1998, Houston's "QuickRide" pricing program was implemented on existing HOV lanes of I-10, also known as the Katy Freeway. It was implemented on US 290 in November 2000. The HOV lanes are reversible and restricted to vehicles with three or more persons during the peak hours of the peak periods. The pricing program allows a limited number of two-person carpools to buy into the lanes during the peak hours. Participating two-person carpool vehicles pay a $2.00 per trip toll while vehicles with higher occupancies continue to travel free. Single-occupant vehicles are not allowed to use the HOV lanes. The QuickRide project is completely automated and no cash transactions are handled on the facility. Results from surveys conducted on I-10 indicate that the primary source of QuickRide participants is persons who formerly traveled in single-occupant vehicles on the regular lanes. Toll revenues from several hundred vehicles each day pay for all program operational costs.

Project Status: The final report has not been completed, but preliminary reports and findings may be found at http://houstonvaluepricing.tamu.edu/reports.

For More Information Contact: David Fink, Transportation Operations Engineer, Texas Department of Transportation; Phone (713) 881-3063; dfink1@houstontranstar.org

WASHINGTON: HOT Lanes on SR 167 in the Puget Sound Region

The Puget Sound Regional Council of Washington State estimates that by 2030, 45% of the core freeway system in the Seattle metropolitan area will be congested. The State Route (SR) 167 High-Occupancy Toll (HOT) Lanes Pilot Project will convert the existing HOV lanes on SR 167 within King County/Seattle, Washington to HOT lanes, from Southwest 15th Street in Auburn to I-405 in Renton without expansion of the existing freeway. This four year pilot project will evaluate the ability of the HOT lane concept to manage congestion and generate revenue. During the four-year pilot, the facility's performance, socio-economic impacts, and public interest/acceptance of the facility will be assessed on an annual basis.

Visit the project website: http://www.wsdot.wa.gov/Projects/SR167/HOTLanes/

***Pre-Implementation Funds Awarded**: 2004*
***Implementation Funds Awarded**: 2005*
***Anticipated Opening Date**: 2008*
***Anticipated Pilot Completion Date**: 2012*

July – September 2006 Update: The project team received final clearance for its environmental justice report that completed the environmental review for the project. The team also completed a review of the access design and development of new signing for the civil portion of the project, and released the request for proposals (RFP) for the tolling elements of the project. Final bids for the tolling RFP are due at the end of October.

For More Information Contact: Patty Rubstello, Project Manager, Washington State DOT, (425) 450-2720, rubstep@wsdot.wa.gov

CORDON TOLLS

CALIFORNIA: Area Road Charging and Parking Pricing in San Francisco

The goal of this proposal will be to implement the first area-wide parking pricing pilot and lead to the first national implementation of an area-wide pricing pilot. The San Francisco County Transportation Authority and the San Francisco City/County Board of Commissioners have identical membership. In the AM peak, twelve major arterials and five major freeways serving the city experience level of service (LOS) F and in the PM peak the number of facilities at LOS F rises to twenty and seven respectively. Double parking and people circling to locate parking exacerbate the problem. In order to address the problem, the City proposes a two-pronged approach: 1) implement priced parking at the metered spaces (this is already implemented at city-owned garage facilities); and 2) develop a plan to implement area road pricing within 2 years.

The study will educate citizens about congestion pricing in anticipation of the area road pricing pilot. Additionally work will be necessary to identify any socio-economic impacts and make plans to mitigate them; and to involve the public in order to identify the area/facilities to be priced and technology necessary to implement the area road pricing pilot. The study will also develop necessary before/after studies; model scenarios for use in decision-making; examine financial and economic benefits; and perform other related activities.

Pre-Implementation Funds Awarded: January 2006
Anticipated Completion Date: ***2008***

July - September 2006 Update: This is a new project. No Update Provided.

For More Information Contact: Tilly Chang, Deputy Director, San Francisco County Transportation Authority, tilly_chang@sfcta.org

FLORIDA: Cordon Pricing in Lee County

The Town of Fort Myers Beach in Lee County, Florida, is an island community with a heavy influx of visitors during the tourist seasons. Access to the Town is provided by road at two points of entry. Travel within the Town can be challenging, particularly during the winter tourist season. Due to the relatively small land area and environmental issues, options for additional roadways on the island are not practical. Further, due to limited right-of-way on the only non-local road on the island, and the high financial and social costs of obtaining additional right-of-way, significant widening is not considered practical. The Town was awarded a grant to study the feasibility of introducing a new variable toll at both approaches to the Town.

Project Cancelled

For More Information Contact: Damon Grant, Public Works Director, Fort Myers Beach, (239) 765-0202, damon@ci.fort-myers-beach.fl.us

FAIR LANES

CALIFORNIA: FAIR Lanes with Dynamic Ridesharing in Alameda County

This FAIR lanes study focused on the congested Interstates 580 and 680 in Alameda County and will built upon the existing Interstate 680 value pricing study. The "Sunol Grade" portion of Interstate 680 is, by voter-approved ordinance, required to operate new value-priced carpool lanes. New carpool lanes were also planned for I-580. The FAIR lanes feasibility study examined options in this integrated corridor, including FAIR lane connector ramps at the I-580/I-680 interchange near the Dublin-Pleasanton Bay Area Rapid Transit (BART) station. Complementary measures to increase public acceptability were to be implemented in the study corridor. They included "dynamic ridesharing" and priority parking for ridesharing users at participating BART stations. Dynamic ridesharing enables travelers to respond to pricing in flexible ways that traditional ridesharing and transit options do not. It uses web-based and telephone-based systems to allow users to find carpool partners on a "real-time" basis, close to the time that travel is needed. It was anticipated that this new type of ridesharing would be more readily acceptable in the Bay Area than elsewhere, because casual carpooling with strangers is already prevalent there, and this project would add some new security features. In addition to cost and time savings (due to free use of express lanes), dynamic ridesharing would be further facilitated with reserved premium parking spaces at participating BART stations, on-demand backup services, and in-station electronic information screens providing necessary details about individual ride matches.

Study Completed: The study focused on limited eligibility FAIRlanes, which would provide credits for low-income travelers in the corridor. The study was completed in August 2005. The name of the study was changed to HOT/Credit (HOT/C) Lanes to better reflect the focus of the effort to provide credit for low income travelers in the general purpose congested lane to be used for the HOT/C lane. Overall, the study concluded the following: that HOT/C users reduce the speeds on the HOT lane; HOT revenues would be reduced and the credit rate would have an effect on the HOT lane; more generous credit and easy eligibility would lead to the most adverse impact, but avoiding the negative impacts would mean that the credit rates would need to be negligible. HOT/C would be relatively inexpensive to implement if a HOT lane was already operational. Polling indicated that HOT/C was not well supported by the public. The CMA Board accepted the final report.

Dynamic Ridesharing: The study focused on using web-based and telephone-based systems to allow users to find carpool partners on a "real-time" basis and close to the time that travel was needed. The study was completed in July 2006. The evaluation showed that 121 participants registered for RideNow and made 1,170 ride match requests that resulted in 140 ride matches. It was recommended that the RideNow program be simplified, that dynamic ridesharing programs could be more successful and cost effective if incorporated into regional ridesharing programs, and that person-to-person marketing strategies worked the best for this type of program. The final Evaluation Report is available on the CMA's website www.accma.ca.gov.

For More Information Contact: Elizabeth Walukas, Senior Transportation Planner, Alameda County CMA; telephone (510) 836-2560 ext. 26, fax (510) 836-2185, email **bwalukas@accma.ca.gov.**

PRICED NEW LANES

CALIFORNIA: Express Lanes on State Route 91 in Orange County

The 91 Express Lanes opened in December 1995 as a four-lane toll facility in the median of a 10-mile section of one of the most heavily congested highways in the U.S, the Riverside / State 91 freeway. Toll revenues have been adequate to pay for construction and operating costs. The toll lanes are separated from the general purpose lanes by a painted buffer and plastic channelizers. In the toll schedule effective August 2005, tolls on the express lanes vary between $1.10 and $7.75, with the tolls set by time of day to reflect the level of congestion delay avoided in the adjacent free lanes, and to maintain free-flowing traffic conditions on the toll lanes. All vehicles must have a "FasTrak™" transponder to travel on the express lanes. Beginning in May 2003, vehicles with three or more occupants travel free except when traveling Eastbound, Monday through Friday between the hours of 4:00 p.m. and 6:00 p.m., when they pay 50 percent of the regular toll. This policy also applies to individuals on a motorcycle. Other toll discount offers are extended to zero-emission vehicles and vehicles with disabled person's license plates.

There were over 172,000 transponders in circulation at the end of fiscal year '05. During the fiscal year ending June 30, 2004, the facility served over 12.7 million vehicles, averaging almost 35,000 vehicles per day, with approximately $32.5 million in gross potential revenue. The Express Lanes carry over 40 percent of the total SR-91 traffic during heavily congested periods, even though they comprise only one-third of the total freeway capacity. This amounts to a 33 percent higher throughout per Express Lane, relative to the general-purpose lanes. The higher throughput occurs because freeway vehicle throughput under free flow conditions is significantly higher than when it is congested.

Study Completed: The project was completed in 2000. Study Results can be accessed at http://ceenve.calpoly.edu/sullivan/sr91/sr91.htm

For More Information Contact: Kirk Avila, Toll Road & Motorist Services; (714) 560-5988; e-mail kavila@octa.net

CALIFORNIA: I-15 Managed Lanes in San Diego

The I-15 HOT lanes (described in the previous section on "Converting HOV Lanes to HOT Lanes") are being extended to create a 20-mile "Managed Lanes" facility in the median of Interstate 15 (I-15) between State Route 163 and State Route 78. When completed, there will be a four-lane facility in the median with a moveable barrier, multiple access points from the regular highway lanes, and direct access ramps for buses from five transit centers. A high frequency bus rapid transit (BRT) system is under development and will operate in the managed lanes. Seven pricing alternatives were considered. A preferred pricing alternative was selected which calls for dynamic tolling involving a skewed per mile rate, which would vary the toll based on actual congestion levels and distance traveled, derived from the entry and exit points to the lanes.

Pre-Implementation Study: *The study was completed* in 2002. The project site URL at http://www.sandag.org/index.asp?projectid=67&fuseaction=projects.detail includes links to numerous reports.

Project Status*:* Caltrans continues to make progress on the construction of the first stage of the I-15 Managed Lanes. The first stage adds eight miles directly abutting the existing 8-mile reversible HOT lanes and is scheduled to open to traffic by January 2008.

This period the I-15 Managed Lanes Electronic Toll Collection System (ETCS) Concept of Operations was finalized and posted to the Project Web page, http://www.sandag.org/uploads/publicationid/publicationid_1251_5827.pdf. A report comprising of I-15 Managed Lanes Value Pricing Business Rules, Operating Policies, and Functional Requirements for the proposed I-15 Managed Lanes Toll Schedule and Dynamic Pricing Algorithm was also submitted this period. This period SANDAG also completed the Risk Management Plan for the I-15 Managed Lanes Value Pricing implementation. Finally, in August the engineer's capital cost estimates for the I-15 Managed Lanes toll system were updated.

For More Information Contact: Derek Toups, San Diego Association of Governments; Phone (619) 699-1907, e-mail dto@sandag.org

CALIFORNIA: Dynamic Pricing on SR 91 in Orange County
The California DOT previously received funding in the amount of $314,762 to evaluate the performance of the facility following implementation. This is a distinct project to implement dynamic pricing on the facility. This project will implement dynamic pricing on the SR-91 facility, making it the third dynamically priced facility operating in the United States. Deployment of dynamic pricing optimizes facility capacity through the use of pricing. The primary elements of this project will include: an operational simulation to develop the dynamic pricing algorithm including preparation and testing; data collection; micro simulation; post testing and adjustments; installation of the network; software development; operational testing including offline testing, off-hour testing, and operational testing; monitoring and evaluation; and transition to operational status. This project will potentially lead to the implementation of dynamic pricing on SR-91; increase the knowledge base in the area of dynamic pricing applications; and provide transferability to other projects nationally.

Implementation Study Awarded: January 2006

July - September 2006 Update: No Update Provided.

For More Information Contact: Kirk Avila, Toll Road & Motorist Services; (714) 560-5988; e-mail kavila@octa.net

CALIFORNIA: Violation Enforcement System on I-15 Managed Lanes in San Diego

SANDAG is studying the feasibility of applying state-of-the-art violation enforcement systems (VES) to improve accuracy in verifying vehicle passenger counts and enforcing SOV toll provisions of the future I-15 Managed Lanes (described above "Extension of I-15 HOT Lanes in San Diego"). Some aspects of the VES study are being developed concurrently with, and will be integrated into, the FasTrak™ electronic toll collection system for the I-15 Managed Lanes. Other more advanced approaches would require proof-of-concept testing which may be conducted on the existing barrier-separated reversible HOT lanes subsequent to the deployment of the I-15 Managed Lanes toll system in January 2008. The VES will utilize a combination of technology and business rules for the effective processing of HOT-lane violators.

***Pre-Implementation Funds Awarded**: 2005* ***Anticipated Completion Date**: 2008*

***July - September 2006 Update**:* This quarter SANDAG initiated work on the I-15 Managed Lanes Violation Enforcement Study Public Involvement Program. In August, the project team conducted three focus groups with FasTrak customers, carpool/vanpool commuters, and other general-purpose lane users of the I-15 corridor. In September the team developed a Stakeholder Discussion Guide for interviews that will commence in October. The final phase of the outreach program will include a telephone survey of the general public. The team decided to put on hold the work on the technical evaluation of enforcement strategies pending completion of the public involvement portion of the study. SANDAG will select its preferred enforcement strategy based on input from the outreach efforts.

For More Information Contact: Derek Toups, San Diego Association of Governments; Phone (619) 699-1907, e-mail **dto@sandag.org**

CALIFORNIA: HOT Lanes on State Route 1 in Santa Cruz County
A five-mile section of State Route 1 is proposed for widening. The facility is currently a four-lane divided freeway. The segment operates under severe congestion during weekday peak hours and extended periods on summer weekends. Within the study corridor limits there are seven interchanges. Five HOT lane alternatives were studied in detail, including: (1) one lane in each direction with barrier separation, no intermediate access; (2) one lane in each direction, with buffer separation, no intermediate access; (3) one lane in each direction with striped separation, 1 or 2 intermediate access points; (4) one lane in each direction with striped separation, continuous access; and (5) one reversible lane with barrier separation, no intermediate access. The results of the study indicated that HOT lanes in the study corridor would be subject to a number of design and operation constraints, due to the short study corridor, multiple interchanges on the adjacent main lanes, and anticipated high levels of HOV traffic. In June 2002, the Regional Transportation Commission voted not to include a HOT lane alternative in further consideration, however it did select a carpool lane alternative with a footprint that would allow conversion to a HOT lane at a future date, should demand warrant it.

Study Completed: The Final Report is available on the Santa Cruz County Regional Transportation Commission's website (http://www.sccrtc.org/highway.html#hot). There are no additional activities expected on this project.

For More Information Contact: Karena Pushnik, Santa Cruz County Regional Transportation Commission; tel: 831/460-3210; karena.pushnik@co.santa-cruz.ca.us.

COLORADO: Express Toll Lanes on C-470 in Denver

A feasibility study was recently completed which evaluated the design, operational and financial feasibility, and expected public acceptance of Express Lanes on the 26-mile C-470 beltway in the southwest part of the Denver metro area. The feasibility study was conducted in parallel with an Environmental Assessment (EA) investigating possible solutions to congestion and reliability problems on the roadway. C-470 is a four-lane beltway between I-70 and I-25 with 18 interchanges. Commuters are typically destined to the Denver Technological Center and adjacent offices, a regional employment hub with over 100,000 employees. The segments that do not currently experience severe congestion are all projected to experience such conditions by 2020. Future projected traffic volumes indicate that a phased implementation of added managed lanes may be viable. The concept studied is a four lane barrier-separated facility in the median of four general purpose lanes would manage volumes in the Express Lanes by charging a variable toll to ensure reliable, free-flowing traffic conditions.

Study Completed: The C-470 Express Lanes Feasibility Study Final Report can be accessed through the FHWA Knowledge Exchange website at: http://knowledge.fhwa.dot.gov

Project Status: The traffic and revenue forecasts were refined and a detailed financial analysis indicated that approximately 100% of the capital costs could be covered by toll revenues after payment of annual O&M, debt service, and capital reserve fund. The study team optimized the traffic and revenue, trimmed capital costs, and considered alternative financial strategies to achieve this outcome. This alternative is now being considered in the EA along with a general-purpose lane capacity improvement and the no-action alternative.

The Colorado Department of Transportation released the EA document for public review on February 28, 2006; comments were accepted through April 30, 2006. CDOT and FHWA are currently reviewing comments and considering a decision on the EA. Go to www.c470.info for updated information.

For More Information Contact: Ron Buck, Colorado Department of Transportation; Phone 303-972-9112, **ron.buck@dot.state.co.us**

FLORIDA: Priced Queue Jumps in Lee County
This project follows on a $309,280 grant provided in FY 2000 for a feasibility study of Queue Jumps in Lee County, Florida. The feasibility analysis indicated that while queue jumps did not appear to be a good candidate for traditional toll bond financing, they are nonetheless financially feasible. The analysis has shown favorable public acceptance. Lee County DOT and FDOT are experienced partners in efforts to introduce pricing. The final report and a Monitoring and Evaluation Plan are complete and available.

FY03 funds are for two separate Queue Jump projects: one at Summerlin Road and San Carlos Boulevard and one at Metro Parkway and Colonial Boulevard. Funds would pay for critical project development and design costs, as well as Electronic Toll Collection (ETC) and Visual Enforcement Systems. Costs for monitoring and evaluation efforts and outreach tasks are also included.

A Queue Jump is a facility that can be used to bypass points on the transportation network where congestion is particularly severe and occurs in a predictable pattern. Tolls would vary by time of day and would be levied electronically, and would be tied in with the County's existing ETC system. A significant characteristic of queue jumps is their ability to generate revenue for needed roadway improvements while simultaneously contributing to travel demand management.

Goals of this effort include traffic demand management using variable pricing; evaluation of various types of pricing programs; information on the impact of pricing at "point" locations; reduced emissions from reduced congestion; increased overall effectiveness of the County's existing variable pricing program; and fast-tracking of infrastructure improvements.

Implementation Funds Awarded: 2004
Anticipated Completion Date: 2007

July – September 2006 Update: The project team successfully completed Phase I of this project and design is underway at Colonial and Metro Parkway. As a first step, a user preference survey was conducted in September of 2005. Preliminary right-of-way maps were submitted and the design team is studying various scenarios for frontage/access roads to develop a circulation plan for surrounding businesses/properties as part of the ongoing coordination with the City of Ft. Myers. The 2030 traffic model is being evaluated in conjunction with another Lee County project to develop design traffic for both projects. Phase I plans will be submitted once the traffic modeling is complete.

For More Information Contact: Sarah Clarke, Lee County Department of Transportation; Phone (239) 479-8718; sclarke@leegov.com

GEORGIA: Express Toll Lanes on I-75 in Atlanta
This study examined the I-75 travel corridor in Atlanta to determine if value pricing in combination with Bus Rapid Transit (BRT) could reduce the existing high levels of congestion. The I-75 facility is ranked among Atlanta's six most congested corridors. The study team conducted public outreach and a traffic and revenue analysis for the corridor. The project evaluated the feasibility of implementing value pricing concepts and Bus Rapid Transit in the I-75 corridor.

***Feasibility Funds Awarded*:** 2004

Project Completed: The final report is available on the State Road Toll Authority website at www.gerogiatolls.com.

For More Information Contact: David Weir, State Road and Tollway Authority, 404-893-6126, E-mail: dweir@georgiatolls.com.

GEORGIA: I-75 South HOT/Truck-Only Toll (TOT) Study in Atlanta
In 2004, Georgia State Road and Tollway Authority (SRTA) was awarded $400,000 to study implementing HOV/bus rapid transit (BRT) in the I-75 corridor north of Atlanta. Building upon that study, this project will examine the feasibility of incorporating high occupancy toll (HOT) and truck-only tolls (TOT) in combination with other strategies on I-75 south of Atlanta from I-285 to SR-16 to manage travel and optimize use of the facility. The I-75 facility is ranked among Atlanta's six most congested facilities. The proposal includes elements to improve the travel demand model to address pricing of truck travel, and to conduct market research and other activities. This project has the potential to lead to implementation of value pricing concepts in the I-75 corridor.

Pre-Implementation Study: Awarded January 2006

July - September 2006 Update: SRTA issued a request for proposals to assist with the study on June 9, 2006. The project team evaluated responses in July and August 2006. Based on that evaluation, in mid-August SRTA began negotiations with a consultant team. Efforts to negotiate a contract to assist with the study were still underway as of the end of September 2006.

For More Information Contact: David Weir, State Road and Tollway Authority, 404-893-6126; E-mail: dweir@georgiatolls.com

MARYLAND: Express Toll Lanes on the I-95/JFK Expressway in Baltimore
In 2005, FHWA and the Maryland Department of Transportation amended its Value Pricing Pilot program cooperative agreement to include further studies evaluating the possible implementation of variable tolls on selected state highways and toll facilities in the State of Maryland. The amendment allowed MDOT to study an integrated statewide network of facilities that have the potential to provide a comprehensive approach to making improvements to congested facilities that would allow MDOT to reduce travel delays and offer premium service.

In July 2005, a Value Pricing Pilot program Toll Agreement was executed between the Federal Highway Administration, the Maryland Department of Transportation, and the Maryland Transportation Authority (MdTA) to authorize the collection of tolls on the I-95/JFK Expressway in Baltimore. MdTA will construct Express Toll Lanes (ETLs) on the most congested portion of I-95 north of Baltimore City. Known during planning studies as "Section 100", the project will ease congestion and increase safety by making improvements to the mainline roadway, reconstructing bridges and interchanges, and adding ETLs to a 10-mile stretch of I-95.

Project Status: This project did not receive Value Pricing Pilot program funds; however the project received FHWA approval to toll the facility through the VPP program.

Construction began on the first I-95 ETLs section, the Rossville Boulevard overpass, in November 2005. Mainline construction will begin in Fall 2006. It is anticipated that the project will be completed in late 2011.

For More Information Contact: Melissa Williams, Planning Manager, Maryland Transportation Authority-Capitol Planning Division. Phone (410) 537-5651; email mwilliams9@mdta.state.md.us

NORTH CAROLINA: HOT Lanes on I-40 in Raleigh/Piedmont Triad
HOT lanes and other potential value pricing options are being explored on I-40 in North Carolina's Piedmont (Greensboro, High Point, and Winston-Salem) and Research Triangle (Raleigh and Durham) areas. I-40 is the principal east-west corridor for the southern half of the U.S. The highway segments in the Research Triangle area are seriously over-capacity. Due to continued employment and residential growth, the segments in the Piedmont Triad are showing signs of similar effects during the peak periods.

Study Completed: The study was completed in October 2005 and NCDOT continues to work with the North Carolina A& T to finalize the report.

For Additional Information Contact: Mustan Kadibhai, NCDOT; tel: 919/508-1819, e-mail: mkadibjai@dot.state.nc.us

OREGON: Express Toll Lanes on Highway 217 in Portland

The Highway 217 corridor, which connects I-5 to US 26, is the major north-south transportation route in the Washington County portion of the Portland metropolitan area. It runs through two major regional centers, connects the region's high tech centers, and serves one of the highest growth areas in the region. There is a need for additional capacity in the corridor. Value pricing options are being integrated into the mix of alternatives being evaluated and considered for implementation. A prior study, the Traffic Relief Options study, evaluated value pricing in the Portland metro area from a regional perspective and recommended that value pricing be considered whenever major new highway capacity is added. The current study will develop and evaluate several rush hour toll and ramp meter bypass alternatives in this corridor, including consideration of FAIR lanes among other value pricing approaches at ramp meters.

Study Completed 2005: Phase one and two of the study were completed using Value Pricing funds. Study findings are available at http://www.metro-region.org/article.cfm?articleid=3518

For More Information Contact: Ms. Bridget Wieghart, Metro Project Manager; Phone (503) 797-1775; wieghartb@metro.dst.or.us.

TEXAS: Value Priced Express Lanes on I-10 in San Antonio
This project will examine the use of value pricing on I-10 on a 19-mile segment between SH 1604 and SH 46. The region anticipates a 68% increase in population over the next 30-years. In the two-year period from 1995 to 1997, the area experienced an increase of 42% in traffic between Texas and Mexico. Truck travel in the corridor is 80% higher than the next highest volume freight corridor in the region. The study will consider use of tolling for demand management and public acceptability of tolling; integrate value pricing with financial and mobility goals; and establish baseline travel characteristics for development of future monitoring and evaluation plans.

Pre-Implementation Study: Awarded January 2006

April – June 2006 Update: Cooperative agreement executed.

For More Information Contact: Mark Burris, Ph.D., Texas Transportation Institute; Phone: (979) 845-9875, email MBurris@tamu.edu. Tina S. Collier, Texas Transportation Institute; Phone (512) 467-0946, email t-collier@tamu.edu

TEXAS: HOT Lane Enforcement and Operations on Loop 1 in Austin
Loop 1, known as the Mopac Expressway is one of two major existing north-south controlled-access freeways in the Austin area. Austin has consistently been rated as the most congested U.S. city for its size according to the Texas Transportation Institute's annual Urban Mobility Study. The Loop 1 corridor extends from State Highway (SH) 45 in southern Travis County to Farm-to-Market (FM) 734 (Parmer Lane) in Northern Travis County. The expressway serves commuters from both the north and south areas of Austin accessing downtown, the State Capitol Complex and the University of Texas. The Loop 1 HOT lane is envisioned as a facility that will provide a high level of service and travel time advantages for express bus/BRT, vanpools and carpools while allowing paying Single Occupant Vehicles to use the lane. It is also envisioned that the HOT lane will be actively managed according to an operational plan that triggers changes in price in order to maintain free flow conditions for express bus/BRT. This study would develop an enforcement and operations strategy for this facility.

Pre-Implementation Study: Awarded January 2006

July – September 2006 Update: No update provided.

For More Information Contact: Judy Friesenhan, Planning Engineer, Texas Department of Transportation; 210/615-5814; e-mail: Mark Burris, Ph.D., Texas Transportation Institute; Phone: (979) 845-9875, email MBurris@tamu.edu. Tina S. Collier, Texas Transportation Institute; Phone (512) 467-0946, email t-collier@tamu.edu
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TEXAS: Express Toll Lanes on the LBJ Freeway in Dallas

The LBJ Freeway (I-635) is the major circumferential roadway in the Dallas region. The total length of the corridor is 21 miles. Traffic on certain portions of the LBJ Freeway is heavily congested for many hours of each day. The major attractors in this portion of the Dallas/Fort Worth region include regional malls, thriving business districts, and adjacent residential communities. Currently, the West Section facility consists of eight general-purpose lanes and one HOV lane in each direction. The facility will be upgraded with up to six managed lanes (three in each direction). The proposed lane configuration would vary – the West Section would have six express lanes, the East Section from US-75 to I-30 would vary from having four express lanes (two in each direction) to having two reversible lanes to I-30. The LBJ express lane project design uses variable tolling to provide free-flowing traffic conditions and connections to transit centers to support Bus Rapid Transit (BRT). This project is being actively implemented as a "Comprehensive Development Agreement" (CDA) geared toward a concession approach.

Project Status: This project did not receive direct Value Pricing Pilot (VPP) program funds; however TXDOT is currently seeking authority to toll the facility through the VPP program.

Four Developer teams sent Qualification Submittals and all four have been short-listed. The level of Local, State and Federal funding that has been identified for the project is $475 million dollars. These funds will be combined with private developer debt and equity and other sources and will be structured as a concession. TxDOT has been undergoing due diligence in the form of securing additional financial support from the stakeholders within the region, Value Engineering to help reduce cost, exploring opportunities for increasing potential revenues and re-evaluating any additional environmental impacts caused by these enhancements. This has resulted in a project scope that makes the project more fiscally attractive to the private sector. The CDA was a solicited request for qualifications to Develop, Design, Construct, Finance, Maintain, and Operate the proposed express lanes and the remaining elements of the facility. The base initial project would be along I-635 from US 75 heading west to I-35E and then southbound along I-35E to the I-35E/LP 12 split. The Region and TxDOT have developed regional and project specific express lane policies to augment this effort.

A key aspect of the approved project is that the two sections of the east-bound and west-bound express lanes will be located below grade in some combination of U-Wall, cantilevered, straddle or tunnel segments to maintain TxDOT's and the region's commitment to "No Higher, No Wider" than what has been previously approved in the public involvement phase. TxDOT plans to issue requests for proposals this fall once all due diligence activities are completed. Additional project information can be found at the project web site: http://www.635project.org

For More Information Contact: John Hudspeth, P.E. CDA/Tollway Office; Phone 214/320-4490, jhudsp1@dot.state.tx.us

TEXAS: HOT Lanes on the Katy Freeway in Houston

Katy Freeway (I-10), in the western portion of Houston, is a heavily congested urban interstate facility. The existing freeway is 23 miles long and consists of six general-purpose main lanes (three in each direction), with two-lane continuous one-way frontage roads in each direction for most of its length. Additionally, the freeway has a one-lane reversible high occupancy vehicle (HOV) lane between I-610 and State Highway 6, and one HOV lane in each direction between State Highway 6 and the Grand Parkway (State Highway 99). West Houston is one of the fastest growing areas in the Houston metropolitan region. Population and employment along the corridor is projected to increase by 40 percent in the near future, with population in certain portions of the corridor expected to grow by up to 130 percent. The freeway is proposed to be expanded to eight general-purpose lanes, four in each direction, with continuous three-lane frontage roads in each direction. In addition, in the center of the facility from I-610 west to State Highway 6, four HOT lanes are proposed, two in each direction. From State Highway 6 to the Grand Parkway, two HOT lanes are proposed, one in each direction. A re-evaluation of the Final Environmental Impact Statement (FEIS) was completed and made available to the public in January 2003. A press conference was held March 14, 2003 to formally sign a tri-party agreement.

Project Status: The Katy Freeway HOT Lanes project did not receive Value Pricing funds, however the project obtained the authority to toll through the Value Pricing Program in 2002.

July- September 2006 Update:

Two sections have been completed and construction continues on six of the nine sections of the roadway:

- I-10/I-610 (West Loop) interchange,
- East of Kirkwood to East of Beltway 8 this includes the BW 8 direct connectors
- East of Eldridge to East of Kirkwood
- East of Beltway 8 to East of Campbell
- East of Campbell to East of Silber
- West of SH 6 to East of Eldridge

To date, all sections under construction are still on or ahead of schedule. The last section to go for bid is located east of I-610 and has been rescheduled for letting in November 2006.

For More Information Contact: David Fink, Texas Department of Transportation; Phone (713) 881-3063**,** dfink1@houstontranstar.org.

TEXAS: Express Toll Lanes on I-30/Tom Landry in Dallas
This project is currently scheduled to open in summer 2007. The I-30 West Managed HOV Lane will be a phased implementation. The project will open as an interim HOV lane and transition to express lanes in later phases. The I-30 project features elements not yet implemented in Texas. These features proposed for I-30 West are also being proposed on other facilities in the Dallas / Ft. Worth region and in other Texas urban areas. As a result, the findings from the I-30 project will serve as a precedent for facilities to follow in implementation.

***Pre-Implementation Funds Awarded**: 2005*
***Anticipated Completion Date**: 2008*

July – September 2006 Update: TxDOT completed the scope definition for this project and prepared to send the operations plan for the project to FHWA. To find out additional information about this project go to: **(**www.keepitmovingdallas.com)

Activities planned for the next two quarters include:

1. Prepare for and hold a public hearing for the project on Nov 16, 2006
2. Initiate a traffic and revenue study to provide a basis for what the tolling structure would be with respect to the phasing, and regional managed lane policy.
3. Initiate use of the VPP project funds to measure, monitor, evaluate, and propose adjustments to the implementation of managed lanes based on the performance of the phase I HOV project.
4. Prepare for receiving bids for phase one in January/February 2007.

For More Information Contact: Matthew MacGregor, P.E., Texas Department of Transportation; CDA/Tollway Director Dallas District, Phone 214/319-6571, mmacgre@dot.state.tx.us.

TEXAS: Express Toll Lanes on I-35 in San Antonio
The San Antonio district of the Texas Department of Transportation (TxDOT) evaluated managed lane options for a 15-mile section of the Northeast Corridor (I-35). Public involvement was key in developing the I-35 project. Pre-project studies provided some guidance in developing managed lanes, including incorporation of value pricing. Although TxDOT is an existing partner with value pricing projects in Dallas and Houston, this was San Antonio's first VPPP grant.

The project evaluated potential operating strategies, including value pricing, which could be used as tools to manage travel demand on I-35. The team evaluated alternative pricing scenarios that could be utilized to allow certain user groups into the managed lanes at different stages over the facility's life. The I-35 Managed Lanes study was expected to show congestion-reducing benefits on a 15-mile stretch of the Northeast Corridor.

Project Completed: The final report will soon be available on the web.

For More Information Contact: Judy Friesenhan, Planning Engineer, Texas Department of Transportation; 210/615-5814; e-mail: jfriese@dot.state.tx.us.

PRICING ON TOLL FACILITIES

CALIFORNIA: Peak Pricing on the San Joaquin Hills Toll Road in Orange County

The San Joaquin Hills Toll Road (State Route 73) is 15 miles long and extends from Interstate 5 near San Juan Capistrano to Interstate 405 in Newport Beach. It provides an alternative to heavily congested portions of I-5 and I-405, two north-south freeways in the southern portion of the Los Angeles metropolitan area. It carries in excess of 2.3 million vehicles monthly (2.7 million annual average) on a six-lane facility. Currently the Toll Road is near capacity during peak periods. A small peak period premium of 25 cents was implemented at the mainline plaza in February 2002. This was increased to 50 cents in July 2005 and to 75 cents in July 2006. The premium was designed to reduce congestion and spread peak demand to shoulder and off-peak periods, while maintaining revenues at levels required to maintain the covenants on the Agency's revenue bonds.

Project Completed: The project team submitted their draft final report to FHWA. Despite toll increases of 50 cents at peak and 25 cents off-peak at the mainline plaza implemented on July 3rd, 2006, traffic volumes continued to grow at about 1-2% each year. In September, toll revenue growth increased over 10% from last year. High gas prices in Southern California seem to have had a significant effect on the second quarter 2006 traffic volumes, but traffic is now rebounding.

For More Information Contact: David Lowe, San Joaquin Hills Transportation Corridor Agency; phone: 949-754-3488, **lowe@sjhtca.com.**

FLORIDA: Pricing on Bridges in Lee County
In August 1998, Lee County implemented a value pricing strategy on two toll bridges between the cities of Ft. Myers and Cape Coral. The project created a peak/off-peak pricing structure offering bridge users a discount toll during times before and after the peak traffic periods. Under the pricing plan, a fifty percent toll discount was provided for trips made during the half-hour period before the morning peak of 7:00-9:00 a.m. and in the two-hour period following the morning peak. In the evening, the discount period is during the two hours before the evening peak of 4:00-6:30 p.m. and during the half hour after the peak. The program has been successful in inducing significant shifts in traffic out of the peak congestion period. Surveys indicate that over seventy-one percent of eligible motorists (i.e., those with vehicle transponders) shifted their time of travel at least once a week to obtain a toll discount amounting to just 25 cents.

Study Completed: This project was originally funded with Congestion Pricing Pilot Program funds. Information on the project study results along with final reports can be accessed at the following website www.leewayinfo.com. This successful Value Pricing Pilot Program (VPPP) project is still operating.

For More Information Contact: Kris Cella, Cella & Associates, Inc.; Phone (239) 337-1071; e-mail kcella@cella.cc or Chris Swenson, P.E., CRSPE, Inc.; Phone (239) 573-7960; e-mail crs@crspe.com; Scott Gilbertson, Director, Lee County Department of Transportation; Phone (239) 479-8580; gilbersm@leegov.com

FLORIDA: Value Pricing on the Sanibel Bridge and Causeway in Lee County
Currently, Lee County has one active value pricing project and has been successful in studying and implementing other types of value pricing projects since 2000. Lee County has received Value Pricing grant awards amounting to over $2.3 million since FY 2000. This project will study lowering tolls prior to the morning peak and just after it, as well as studying a mid-morning toll differential. This project also offers a toll credit component for motorists willing to travel during off-peak hours.

Implementation Study Awarded: January 2006

July - September 2006 Update: A request for proposals (RFP) was completed and a final ranking will be presented to the Board of County Commissioners in October. It is anticipated that the study will begin in November.

For More Information Contact: Amelia Davies, Lee County Department of Transportation; Phone (239) 479-8718; adavies@leegov.com

FLORIDA: Variable Tolls on the Sawgrass Expressway in Broward County
In May 2003, Florida began a pilot project to combine Open Road Tolling and Value Pricing entitled *Sawgrass Expressway: A Study of New Technologies*. Open Road Tolling (ORT) utilizes electronic toll collection to create a tolled highway system free from toll plazas and delays. This technology has the potential to change the toll industry by improving customer service, lowering operating and maintenance costs, and providing potential savings in capital costs. Under ORT, toll roads would be open to everyone and completely transparent to customers. There would be no toll plazas, tollbooths, or lane restrictions. All traffic would operate at highway speeds, yet every vehicle would pay a toll. Toll collection would occur through equipment located on overhead gantries. Eliminating the toll plazas themselves and the merging and weaving that occur while entering and exiting the plazas enhances roadway capacity and safety. Customers with a transponder would already have a pre-paid account with the toll agency. The toll charge would be automatically debited from their accounts. Value Pricing could be utilized during heavily congested peak periods along the corridor.

***Study Completed*:** The final report**,** Sawgrass Expressway: Study of New Technologies is not available electronically. You can access a copy of the project summary at: http://knowledge.fhwa.dot.gov/cops/hcx.nsf/384aefcefc48229e85256a71004b24e0/0aa49a654a697d2c85256db9004db2aa?OpenDocument

Please contact the project manager for a copy of the final report.

For More Information Contact: Randy Fox, AICP – Turnpike Planning Manager, Phone (407) 532-3999, E-mail: Randy.Fox@dot.state.fl.us

FLORIDA: Variable Tolls for Heavy Vehicles in Lee County
The on-going Variable Pricing Program in Lee County (see "Pricing on Bridges in Lee County") was restricted to light duty vehicles. This project expands the existing program to allow three plus axle vehicles to participate in the program and encourages them to travel during off-peak times. The program became operational in December 2003.

Study Completed: The project was implemented in December 2003. The monitoring and evaluation study was completed in February 2005. The Final Report Executive Summary and Table of Contents can be accessed on the FHWA Highway Community Exchange Website at:
http://knowledge.fhwa.dot.gov/cops/hcx.nsf/All+Documents/A121E53AD894B1E885256DC500688CCB/$FILE/EXECUTIVE%20SUMMARY%20&%20TABLE%20OF%20CONTENTS.pdf

Please contact one of the project managers to obtain a copy of the full report.

For More Information Contact: Kris Cella, Cella & Associates, Inc.; Phone 239-337-1071; e-mail **kcella@cella.cc** or Chris Swenson, P.E., CRSPE, Inc.; Phone 239-573-7960; e-mail crs@crspe.com; Scott Gilbertson, Director, Lee County Department of Transportation; Phone 239 479-8580; gilbersm@leegov.com

FLORIDA: Pricing Options on the Florida Turnpike in Miami-Dade County
The Florida Turnpike Enterprise recently completed a study of the feasibility of implementing value pricing on a 21-mile section of the Homestead Extension of Florida's Turnpike (HEFT) in Southwest Miami-Dade County. The facility can be divided into two unique and distinct segments. The southern segment extends from SR 874 to SR 836. It is approximately eight miles long and includes four interchanges. The northern segment extends from SR 836 to I-75. It is approximately 13 miles long and includes six interchanges. For the southern segment, the study recommended widening the HEFT from six to eight lanes in the short-term. The long-term recommendation (by 2010) was to add two reversible, elevated, value-priced Express Lanes. The recommendation for the northern segment was to widen from four to six lanes in the short-term. The long-term recommendation was to add an additional four value-priced express lanes at ground level by 2015.

Study Completed: Contact project manager for hard copy of the final report. Electronic copy not available at this time.

For More Information Contact: Kenneth Jeffries, Office of Planning, FDOT, District 6; phone (305) 470-6736, fax (305) 470-6737, email ken.jeffries@dot.state.fl.us

GEORGIA: Variable Pricing Institutional Study for the GA-400 in Atlanta
The State Road and Toll Authority (SRTA) will study the institutional challenges and feasibility of moving from a fixed-priced toll to a variably priced toll system using GA-400 as a case study. The major tasks of the proposal include thorough examination of the Toll Authority's internal processes and procedures; legal, contractual & bond covenants; conceptual traffic & revenue forecasts necessary to meet financial obligations; and development of an implementation plan. The study will produce reports identifying key issues as well as model documents for other toll authorities considering similar conversions. The study will identify issues facing toll authorities considering changing from a fixed toll to a variable toll policy, as well as develop model documents.

Pre-Implementation Funds Awarded: January 2006

July - September 2006 Update: On June 9, 2006, SRTA issued a request for proposals (RFP) to assist with the study. Responses to the RFP were evaluated in July and August 2006. Based on that evaluation, in mid-August a consultant team was identified to negotiate a contract with. Negotiations to enter into a contract to assist with the study continued through the end of September 2006.

For More Information Contact: David Weir, State Road and Tollway Authority, (404) 893-6126, E-mail: dweir@georgiatolls.com

ILLINOIS: Illinois Tollway Value Pricing Pilot Study
A value pricing pilot project is being conducted on the Illinois State Toll Highway Authority (Illinois Tollway) system. The Illinois Tollway operates 274 miles of interstate tollways in twelve counties in northern Illinois including the Chicago suburban area. The eastern portion of the I-88 Ronald Reagan Memorial Tollway (formerly the East-West Tollway) from Illinois 31 to the Tri-State Tollway (I-294) a distance of 23 miles is the section chosen for the pilot project study. Phase 1 was designed as a basic feasibility study and evaluation of possible value pricing options. This included identification of alternative pricing strategies, extensive market research, and traffic and socioeconomic impact analysis.

***Project Completed*:** The Illinois Tollway approved a comprehensive ten-year Congestion-Relief Plan on September 30, 2004. This plan includes a toll rate structure that incorporates some of the value pricing concepts included in this study. The new toll rates went into effect and variable pricing was introduced in January 2005. The Tollway is now evaluating the impacts of the new toll rate structure. The original idea of this study was to test a value pricing strategy on a portion of the system on a pilot basis. This possible pilot test has in effect been replaced by a system-wide implementation of a limited value pricing approach. A summary of the new toll rate structure is as follows: For passenger car users the structure provides a strong incentive for participation in the electronic toll collection program that is called I-PASS on the Illinois Tollway. There was no toll increase for drivers using I-PASS, while tolls were doubled for drivers using cash to pay the toll. Time of day pricing was instituted for commercial vehicles. All commercial vehicles traveling overnight (10 pm to 6 am) receive a discount on tolls. Commercial vehicles using I-PASS traveling off-peak on weekdays and on weekends also receive a discount.

Results of the analysis were presented in a poster session at the Transportation Research Board Annual Meeting in January 2006. The project is essentially complete. A final report is nearing completion and will be issued shortly.

For More Information Contact: Eugene Ryan, Wilbur Smith Associates, phone: (630) 434-8111 x-107 eryan@wilbursmith.com; or Dean Mentjes, Mobility Engineer, FHWA, phone: (217) 492-4631 dean.mentjes@fhwa.dot.gov.

NEW JERSEY: Variable Tolls on the New Jersey Turnpike

The New Jersey Turnpike Authority operates a 148-mile facility with 28 interchanges. It is one of the most heavily traveled roadways in the country with average daily trips exceeding 500,000 vehicles. The Turnpike's variable pricing program began in the fall of 2000. The program provides for tolls that are about twelve percent higher during peak traffic hours than during off-peak periods for users of the electronic toll collection system. The price differential is scheduled to increase in a phased manner over several years.

The NJ Turnpike's time of day pricing initiative was one of the most significant efforts launched in the United States, not only with respect to the numbers of people affected and the volume of traffic utilizing NJ Turnpike Authority (NJTA) facilities, but also in its attempt to affect the behavior of commuters traveling in peak periods. Observations from the final report included the following:

The average trip delay was reduced by about 3 -18 percent from 2000 to 2001 after the concurrent introduction of E-ZPass and the first phase of the time of day pricing program. The major reason for this reduction was, however, observed to be the reduction in toll plaza delays due to the introduction of E-ZPass.

E-ZPass deployment was observed to reduce the toll plaza delays by 44-74 percent between 2000 and 2001, the year after the introduction of the E-ZPass for the first time. It was also observed that there was no increase in toll plaza delays despite the increase of traffic volumes from 2001 to 2003. This was due to the increase in the percentage of E-ZPass users over the years.

Simulation analyses showed that between 2000 and 2001 there was a reduction in vehicle emission levels as high as 10.7 percent. After 2001 a slight increase in emissions was observed due to the increasing demand, which can be interpreted as an expected outcome given the relationship among the demand, delays and emissions.

The estimated value of time (VOT) for a specific E-ZPass user was highly influenced by the trip purpose (work or leisure trip), period choice (peak or peak shoulder periods), income level, toll amount, travel time, and desired arrival time. Peak period users gave higher value to travel time savings than peak shoulder users.

Study Completed: The final report can be accessed from the FHWA Highway Community Exchange website at:
http://knowledge.fhwa.dot.gov/cops/hcx.nsf/384aefcefc48229e85256a71004b24e0/ba2414ce1eac182685256dc500674090?OpenDocument

For More Information Contact: Kaan Ozbay, Ph.D., University Principal Investigator, Rutgers University; phone 732/445-2792; fax 732/445-0577; email kaan@rci.rutgers.edu.

NEW JERSEY: Variable Tolls on Port Authority Interstate Crossings
The Port Authority of New York and New Jersey (PANYNJ) adopted a variable toll strategy for users of the electronic toll collection system (E-ZPass) in March 2001. The Port Authority provides a 20 percent ($1.00) discount for off-peak tolls on its bridges and tunnels crossing the Hudson River between New York and New Jersey. Peak toll rates are effective on weekdays form 6-9 a.m. and 4-7 p.m., as well as on weekends from 12 Noon to 8 p.m. An estimated 125.2 million vehicles used the tunnels and bridges in 2002, and approximately 62 million interstate bus passengers use the interstate crossings annually.

The data indicates that 35 out of 505 (representing 6.93% of individuals and 7.4% of car trips) individuals changed behavior after the Time of Day Pricing Initiative. The analyses indicate that users responded in a combination of ways to the new toll schedule. This includes: decreased travel by car; increased use of transit (2.6%); increased use of transit plus increased carpooling (1.8%); decreased number of trips during peak and increased off peak trips (1.5%); and decreased number of trips during both peak and off peak (1.3%).

The analyses conducted using a data set collected for another purpose for the PANYNJ indicate that among E-ZPass users who are aware of the off-peak discount program, 16% had changed their travel schedules to enjoy the off-peak discounts. This represents 7.68% of the E-ZPass users and 5.33% of the total number of users. The data also suggest that carriers are responsive to receivers' desires in terms of delivery times. Ninety-three percent of the carriers that indicated they couldn't change delivery times, cited receivers' opposition as the key factor. The project team will corroborate these findings using a survey targeting commercial carriers.

Study Completed. The final report was completed in March 2005. It can be accessed on the FHWA Highway Community Exchange website at:
http://knowledge.fhwa.dot.gov/cops/hcx.nsf/384aefcefc48229e85256a71004b24e0/f28934ff571ff3c685256db10063e81b?OpenDocument

For More Information Contact:
José Holguín-Veras, Ph.D., P.E., Associate Professor, Rensselaer Polytechnic Institute; 110 8th Street Building JEC 4030, Troy NY 12180-3590; e-mail:jhv@rpi.edu or Mark F. Muriello, Assistant Director, Tunnels, Bridges and Terminals Department, The Port Authority of New York and New Jersey, One Madison Avenue – 5th Floor, New York, NY 10010, e-mail: mmuriello@panynj.gov

NEW JERSEY: Express Bus/HOT Lane Study for the Lincoln Tunnel
The Port Authority of New York and New Jersey (PANYNJ) is advancing this project designed to assess the feasibility of pricing a new managed lane application intended to connect the New Jersey Turnpike and New Jersey highways to the Lincoln Tunnel and the Port Authority Bus Terminal in Midtown Manhattan.

On weekdays from 6-10 a.m., the PANYNJ currently operates a 2.5-mile eastbound contra-flow Exclusive Bus Lane (XBL) along the westbound Route 495 approach to the Lincoln Tunnel from the New Jersey highway interchanges. The XBL carries approximately 1700 buses and 62,000 passengers each morning to Midtown Manhattan, saving about 15-20 minutes in travel time as compared to bus passengers on the regular travel lanes. Since the XBL has reached its capacity, the PANYNJ is assessing the physical and operational feasibility of adding a second XBL to the Route 495 corridor on weekday mornings by taking one lane from the east bound direction.

The project will assess options of pricing the excess capacity of a second Bus Lane in a High-Occupancy Toll (HOT) Lane application. The objective of this project is to determine whether value pricing might be used to allow non-bus traffic to use the excess capacity of a potential second Exclusive Bus Lane on NJ Route 495 leading to the Lincoln Tunnel and Midtown Manhattan. This study will consider whether pricing is an appropriate mechanism to manage the demand of non-bus traffic wishing to take advantage of the reliability and the improved service levels on a converted bus lane. A second phase of this study will provide an assessment of potential commercial vehicle applications in a converted managed lane during non-peak commuting hours. The concept that will be explored is the potential to use the existence of a separated managed lane and pricing to allow small trucks to take advantage of travel time and reliability advantages that such a lane would offer. It has been a long-standing objective of the PANYNJ to find more reliable and efficient service standards to small package and local delivery trucks serving Midtown Manhattan.

The major benefit of this study is the potential to increase service levels for buses through providing more reliable travel times. This enhanced service would meet increased demand for buses and may potentially increase bus ridership.

Pre-Implementation Funds Awarded: *2004*

Anticipated Completion Date: *2007*

July – September 2006 Update: The project team selected a consultant based upon a recent request for proposals. The project team continues to work on negotiating a contract.

For More Information Contact: Mark Muriello, PANYNJ, Assistant Director (212) 435-4836 telephone, mmuriello@panynj.gov.

NEW JERSEY: Upgrade of Electronic Toll Collection Technology in New York
In 2002, NJDOT received value pricing funds to monitor and evaluate a variable pricing structure established on Port Authority water crossings in March 2001. E-ZPass[sm] electronic transactions are deeply discounted in the weekday and weekend off-peak hours, with higher E-ZPass[sm] toll rates during the congested peak hours. This pricing program has managed to achieve some meaningful and sustained shifts of traffic from the most congested periods to less congested time periods, especially during the early morning commuting hours. Currently, tolls are only charged in-bound into New York City.

This project was awarded $988,000 to undertake a technology and market assessment of equipment and systems that can accommodate cashless toll transactions at a level of accuracy that is currently provided by the existing cash and E-ZPass[sm] system; assess the operational challenges and financial risks of implementing such a system; and determine the potential to deploy such a system in both the New York-bound and New Jersey-bound travel directions in order to facilitate more meaningful congestion charging rates and traffic management incentives in the current non-tolled direction.

The project will potentially encourage travel during less-congested off-peak hours in the current non-tolled direction, which is heavily congested. The project has the potential to make toll transactions more efficient through improved open road toll operations, potentially reducing vehicle-hours-traveled and hours of delay at some of the region's most congested toll-collection bottlenecks.

Feasibility Funds Awarded: *September 2006*

For More Information Contact: Mark Muriello, PANYNJ, Assistant Director (212) 435-4836 telephone, mmuriello@panynj.gov.

PENNSYLVANIA: Variable Tolls on the Pennsylvania Turnpike
The project involved a study of the potential for value pricing strategies to alleviate congestion; to facilitate the timely, efficient, and economical movement of commercial vehicles to industrial and commercial destinations; and to improve the movement of daily commuter vehicles to and from the workplace. Concurrent with the value pricing study, the Pennsylvania Turnpike Commission (PTC) implemented electronic toll collection (E-ZPass) for travel between the ticket interchanges on its mainline system.

***Study Completed*:** The final report summary can be accessed from the FHWA website at:
http://knowledge.fhwa.dot.gov/cops/hcx.nsf/All+Documents/750C4F311CB4924A85256DC500657FE0/$FILE/Summary%20PA%20Turnpike%20Final%20Report.pdf

For More Information Contact: Robert J. Smith, Director of Finance, PA Turnpike; phone (717) 939-9551, x 2432, rsmith@paturnpike.com, or George L. Hannon, Special Assistant, PA Turnpike, (717) 939-9551, x 5124, ghannon@paturnpike.com.

TEXAS: Truck Traffic Diversion Using Variable Tolls in Austin
This project will examine the use of value pricing to encourage truck traffic to divert from I-35 to a newly constructed, parallel toll facility. Because of the congestion on I-35, commercial trucks may be more willing to shift to the alternate facility that is a toll facility. Additionally, the project will examine methods to encourage route and time-of-travel shifting. When completed in 2007, Phase 1 of SH 130 will stretch from just north of Georgetown, Texas to US 183 near the Austin-Bergstrom International Airport. This 49-mile tolled highway will be a four-lane divided facility with major interchanges at I-35, US 79, SH 45 North, US 290 and SH 71. Subsequent phases of the project will connect the road to I-10 north of San Antonio.

This project will evaluate value pricing applications to shift truck traffic from I-35 to SH 130 by utilizing variable tolls on SH 130. Surveys will measure truckers' willingness to pay, in order to determine price elasticity of demand for the new toll road. The potential for credits to encourage use at off-peak times to alter the time of day for truck travel will also be investigated. Diversion rates for trucks from I-35 to SH 130 will be developed for various toll scenarios. TxDOT has contacted the American Trucking Associations and has developed a plan to involve the trucking community in the study. Additionally, the study will produce market research related to truck tolling from both international and U.S. trucking interests.

***Pre-Implementation Study Awarded*:** January 2006
Anticipated Completion Date: *2008*

July - September 2006 Update: No update provided

For More Information Contact: David Powell, Texas Department of Transportation, dpowell@dot.state.tx.us. Mark Burris, Ph.D., Texas Transportation Institute; Phone: (979) 845-9875, email MBurris@tamu.edu. Tina S. Collier, Texas Transportation Institute; Phone (512) 467-0946, email t-collier@tamu.edu

USAGE-BASED VEHICLE CHARGES

CALIFORNIA: Car Sharing in the City of San Francisco

City CarShare is the nation's only non-profit, fully automated car-sharing program. Its vehicles are located throughout the City of San Francisco, and coverage is expanding rapidly throughout the Bay Area. Prior to the end of the study, there were 2,700 members sharing 80 vehicles, located in the cities of San Francisco, Oakland, Berkeley, Palo Alto, and Mountain View, and at twelve Bay Area Rapid Transit stations. Surveys of members and a comparable group of non-members (located in similar neighborhoods, but without convenient car sharing) suggest a decrease in driving from members, reduction in gasoline consumption and emissions, and sizable dollar and travel time savings, suggesting that cars were used to replace some of the least convenient off-peak transit trips. Future surveys will seek to identify how vehicle ownership and residential location choices, when combined with the availability of car sharing, affect travel patterns.

Study Completed: Existing reports prepared by Prof. Robert Cervero are available on FHWA's website at: http://knowledge.fhwa.dot.gov/cops/hcx.nsf/home?openform&Group=Value%20Pricing&tab=REFERENCEBYALPHA click on the project name. Final report by Dr. Cervero is expected soon.

For More Information Contact: Rick Hutchinson, Executive Director; phone (415) 995-8588, email rick@citycarshare.org; www.citycarshare.org

GEORGIA: Simulation of Pricing on Atlanta's Interstate System
This test will assess the effects of converting fixed automotive insurance costs into variable driving costs. The research is monitoring one full year of baseline travel activity for approximately 285 participating households. Approximately 500 vehicles in these households are equipped with instrumentation that monitors the second-by-second vehicle speed and position for every trip. Travel diaries and employer commute options surveys were also collected from each participating household and employer (as well as from a control group). In Phase II of the study, the impact of mileage-based insurance incentives will be examined. In Phase III, a simulated freeway congestion pricing scheme will be examined. The research team will monitor the changes in driving patterns and will use statistical analyses of household characteristics, vehicle travel, and relevant employer survey data (parking costs, transit accessibility, etc.) to examine the relationships between the incentives offered and subsequent travel behavior changes. Phases II and III will provide extensive data for the first time on how commuters respond to various types of pricing policies. This will allow evaluation of the impacts of pricing policies on travel behavior, and will provide data from real-world experience to improve the ability of regional travel demand models to estimate the impacts of various types of pricing alternatives.

***Pre-Implementation Funds Awarded*:** 2001
Anticipated Completion Date: 2007

July – September 2006 Update: The project team completed mileage and incentive calculations for the third quarter of the Phase II initiative. During Phase II, 102 households participated in the 9-month pricing experiment. Travel significantly decreased during the study period in response to increased gasoline prices and cent-per-mile incentives. The team is currently undertaking a case-by-case analysis of household response to pricing.

The team is finalizing the Phase II data for detailed analysis of the pricing effect. The team finished several tasks to get ready for Phase III (real-time road pricing deployment). The server setup was finalized and real-time data transfer/processes were tested with the beta unit. The new in-vehicle display terminal was field-tested and real-time update capabilities were confirmed. The electronic travel diary procedures are being finalized. The team used week-long peak-period license plate surveys at five freeway sites to identify target census block groups for recruitment of morning peak period commuters.

The team used the vehicle/travel activity data for various research efforts in the areas of travel behavior, transportation operation and safety, and air quality modeling. These research activities have resulted in nine research papers, including one ASCE conference presentation in August; six papers accepted for presentation at the 2007 TRB Annual Meeting; and two manuscripts for publication in leading journals.

For More Information Contact: Randall Guensler, Georgia Institute of Technology; Phone 404-894-0405, randall.guensler@ce.gatech.edu.

MINNESOTA: Variabilization of Fixed Auto Costs
The Minnesota Department of Transportation and its consultant team led by Cambridge Systematics have completed a demonstration of how drivers change their travel behavior when some of the fixed costs of owning and operating a vehicle are converted to variable costs. The pilot project simulated conversion of vehicle lease and/or insurance pricing from traditional fixed payments to payments based on actual miles driven. This demonstration may help lease companies consider structuring incentives to reduce miles driven over the life of the lease, thus improving the resale value of vehicles, and may help insurance companies better understand the mileage-based insurance market.

Implementation Funds Awarded: *2001*

Study Completed: The study was completed in November 2005 and final analysis and recommendations were complete in March of 2006. Project results will be posted on the research web site at the Minnesota Department of Transportation.

This project supports the notion that some drivers will reduce mileage in response to price signals, although the range of responses, variability of the data, small sample size, short experiment period, and lack of negative consequences make it difficult to come to definitive conclusions. However, if structured in a fashion where consumers see themselves benefiting, PAYD products may be able to fill a significant market niche.

The project advisory committee accepted the final reports. Part I is titled "Pay-As-You-Drive Experiment Finding" and Part II is titled "Potential Public Policy Implications of Pay-As-You Drive Leasing and Insurance Products." In late March, the results from the demonstration were reported to the Transportation Research Forum at New York University.

For More Information Contact: Kenneth R. Buckeye, Mn/DOT, ph: (651) 296-1606, Fax: (651) 215-0443, E-mail: kenneth.buckeye@dot.state.mn.us; Jeffrey Buxbaum, Cambridge Systematics, Inc., ph: (617) 354-0167, E-mail: jbuxbaum@camsys.com.

MINNESOTA: Mileage-Based User Fee Regional Outreach Statewide
The Minnesota Department of Transportation (MnDOT) previously played a leadership role in the related national pool-funded project, "A New Approach to Assessing Road User Charges." This 2 ½ year pre-implementation project will focus on building public understanding and acceptance in Minnesota for fuel tax alternatives, such as mileage fees to use roadways. The project will entail a substantial amount of outreach by the Humphrey Institute, which has an excellent track record and is highly experienced in involving the public in transportation pricing issues. Program elements include a baseline survey of public understanding and attitudes, focus groups, expert interviews, developing and testing messages, and publishing a final report with recommendations.

This project has the potential to result in a far better understanding than exists today of the public perception challenges and opportunities relating to implementing mileage fees in lieu of the gasoline tax in Minnesota.

Pre-Implementation Funds Awarded: September 2006

For More Information Contact: Ken Buckeye, Program Manager Value Pricing (651) 296-1606, e-mail: kenneth.buckeye@dot.state.mn.us

OREGON: Mileage-Based Road User Fee Evaluation

Under a mandate from the Oregon State Legislature, the Road User Fee Task Force (RUFTF) has examined various revenue raising alternatives for replacing the fuels tax as the primary source of revenues for Oregon's roads. The Oregon Department of Transportation (ODOT) is administering the task force. The driving motivation behind this effort is concern over the steadily eroding purchasing power of the fuels tax, a phenomenon resulting from: a) the fact that the fuels tax is not indexed for inflation; b) a general reluctance on the part of voters to approve periodic increases in the tax rate; and c) continued increases in the fuel efficiency of new vehicles, especially hybrids and alternative-fuel vehicles. Given these issues, the Legislature asked the task force to evaluate the potential of alternate strategies to replace the fuels tax, focusing in particular on technical strategies for implementing a mileage-based charge and congestion pricing.

ODOT is conducting a test designed to demonstrate the feasibility of area-wide, mileage-based road user fees as well as congestion pricing. The pilot test is designed to demonstrate the technical and administrative feasibility of implementing an electronic collection system for mileage-based user fees and congestion tolls. The on-board technology was demonstrated in May of 2004. Twenty trial vehicles were equipped with the on-board devices in the Fall of 2005. In the spring 2006, after verifying successful functionality, 260 trial participants in Portland, Oregon, had the on-board equipment added to their vehicles. For a period of one year, participants are paying distance charges rather than the fuels tax (when they fill up at the station, the fuels tax will be deducted from the bill and the mileage charge will be added).

At the conclusion of the study, ODOT expects to have demonstrated the feasibility of both mileage-based user fees and congestion pricing. ODOT intends to write a final report with its findings available Summer 2007.

***Pre-Implementation Funds Awarded**: 2002*
***Implementation Funds Awarded:** 2004*
***Anticipated Completion Date**: 2007*

July - September 2006 Update: During the third quarter of 2006, ODOT continued with the control phase of the study and began preparations to change over to the test phase which will occur in November. Participants purchased fuel at participating service stations twice per month at which time their mileage was read. During the test phase, participants will continue to pay the fuel tax, however, beginning in November, most participants will pay the mileage fee and not the fuel tax.

For More Information Contact: Mr. James M. Whitty, at (503) 986-4284, jim.whitty@odot.state.us or Betsy Imholt, at (503) 986-4077, betsy.imholt@odot.state.or.us.

WASHINGTON: Global Positioning System (GPS) Based Pricing in the Puget Sound Region

In this pilot, meters were placed in the vehicles of voluntary participants. Different prices per mile were imposed depending upon the location and time of travel. Drivers were made aware of the pricing both though maps and other printed material, as well as a real-time read-out on the in-vehicle meter. By relying on in-vehicle meters, the need for expensive wayside antennae is eliminated, and even arterial roads can be priced cost-effectively. At the start of the pilot, participants received a billing account with a positive cash balance. Any cumulative in-vehicle meter charges were debited against this balance. Any funds remaining in the account at the end of the pilot were kept by the participants. This "hold-harmless" study design gave participants the opportunity to participate without committing their own funds, yet also gave them the incentive to adjust their driving behavior so as to enjoy the surplus remaining in the account at the end of the experiment.

***Pre-Implementation Funds Awarded**: 2002*
***Implementation Funds Awarded:** 2005*
***Anticipated Completion Date**: 2008*

July - September 2006 Update: The team completed the operational portion of the project in the Spring of 2006. Project participants were equipped with GPS/GSM tolling on board units and exposed to tolls that were deducted from a pre-set travel budget. The project team has been assembling all the behavioral data into analytical data sets and beginning the detailed analytical work. During the project, the toll systems were in operation for over 18 months. The project fielded hundreds of customer service calls, issued over 4,000 billing invoices, logged over 100,000 data transactions to the central system, and recorded over 750,000 individual participant trip records. The project is the first large-scale operational test showing the feasibility of area-wide road use and congestion-based charging. The project has garnered significant interest internationally, with special attention received from the Dutch government as it designs a national kilometer-charging scheme.

Preliminary analysis estimated short-run demand elasticities in the range of -0.05, which translated into approximately 7% reduction in vehicle use during the peak travel periods, with the potential for considerably more traffic reduction on specific facilities. Detailed analysis of the behavior data will continue over the next 6 months and beyond. To date the project has contributed significantly to knowledge related to the application of road use charging. Valuable information collected included: road user choice and behavior under a broadly implemented and sustained tolling treatment; proof of technical applications and systems design; and assistance in identifying and understanding key policy variables and requirements.

For More Information Contact: Matthew Kitchen, Puget Sound Regional Council; 1011 Western Avenue, Suite 500, Seattle, WA 98104-1035; (206) 464-6196; mkitchen@psrc.org.

"CASH-OUT" STRATEGIES/PARKING PRICING

MINNESOTA: Parking Pricing Demonstration in the Twin Cities Area

The Minnesota Department of Transportation (MnDOT) has studied parking pricing in the Twin Cities and a successful parking cash-out program (where employers provide their employees the option of cash in lieu of a parking benefit) has been demonstrated. The City of Minneapolis is currently undertaking a major downtown transportation study where parking will be an important consideration. This project will entail a substantial amount of outreach by the Humphrey Institute, which has an excellent track record and is highly experienced in involving the public in transportation pricing issues. The 18-month outreach program will include efforts tailored specifically to the media, local governments, and community leaders and will create a high level parking pricing task force. Demonstration sites will be selected and parking pricing will be implemented at these sites. A comprehensive evaluation will be performed.

A variety of pricing innovations will be explored, as will integration with the I-394 MnPASS project and the University of Minnesota Metro Transit smart-card system. This has the potential to lead to greater political support for parking pricing. Pilot projects will showcase parking pricing innovations which in turn could be applied to many other parking facilities and on-street parking spaces.

Feasibility Funds Awarded: September 2006

For More Information Contact: Ken Buckeye, Program Manager Value Pricing (651) 296-1606, e-mail: kenneth.buckeye@dot.state.mn.us.

WASHINGTON: Parking Cash-Out and Pricing in King County
The King County Parking Cash Out demonstration project was designed to implement Parking Cash Out and other parking management strategies in downtown high-rises in cooperation with building owners and employers. The purpose was to provide building owners or managers with incentives to shift existing parking supply to carpool, vanpool, or short-term parking; and to reduce the supply and increase the cost of single-occupant monthly vehicle parking. Unfortunately, a serious downturn in the Seattle economy stalled implementation. However, for the 167 employees offered Parking Cash Out, 17 (over 10 percent) took the cash in lieu of the parking, resulting in an annualized reduction of over 82,000 vehicle miles traveled.

***Study Completed 2004*.** The final report can be accessed the FHWA Highway Community Exchange Website at:
http://knowledge.fhwa.dot.gov/cops/hcx.nsf/384aefcefc48229e85256a71004b24e0/a19c77018189d09f85256dba0063d8f4?OpenDocument

For More Information Contact: Kathy Koss, King County Metro, ph: (206) 684-1649, fax: (206) 684-2058, Kathy.Koss@metrokc.gov; 400 Yesler Way, M.S. YES-TR-0600, Seattle, WA 98104.

WASHINGTON: Cash-Out of Cars in King County

The *Way to Go, Seattle!* "One-Less-Car Demonstration Study" asked households to use one less car and keep daily records of how they got around. Households were provided with information on how much their car actually costs to own and operate, as well as information on how to get around by biking, riding transit, and walking. Participant households were provided with a weekly study stipend during the times they were not supposed to use their cars to simulate the financial savings they would realize if they were to actually sell one of their cars (the national average cost of owning/operating a second car is $85 per week). Daily records, odometer readings, and anecdotal stories were analyzed to document costs and to understand whether or not households made significant behavior changes such as consolidating trips, carpooling, taking transit, biking, or walking.

The eighty-six participant households reduced total miles driven by 41,463, or an average of 1,974 miles not driven per week. Likewise, participants collectively saved a total of 8,003 fewer car trips, or an average of 381 fewer trips per week. Finally, the eighty-six households reduced total CO_2 emissions by 30,198 pounds, or an average of 1,438 pounds per week. Additionally, 20 percent sold their "extra" car after participating in the study or during the selection process.

***Study Completed*:** The Final Report with stand-alone Executive Summary and Replicability Package is complete. Fifty CD-ROM copies of the Replicability Package disc were made and arrangements were also made to post all of the documents on the project webpage (www.seattle.gov/waytogo).

A pilot version of the "One Less Car Challenge" was launched in September 2003. The Challenge was based on the results of the Demonstration Study that showed that many types of households from all over Seattle were able to reduce drive-alone car trips, and the accompanying mileage and emissions, when given information about 1) the availability of multi-modal transportation choices and 2) the actual costs of owning and operating their second (and in some cases their primary) car.

For More Information Contact: Ms. Jemae Hoffman, Mobility Manager for the Policy, Planning, and Major Projects Division of Seattle Department of Transportation; ph: (206) 684-8674; fax: (206) 684-5180; Email: jemae.hoffman@seattle.gov or visit www.seattle.gov/waytogo.

REGIONAL PRICING INITIATIVES

FLORIDA: Sharing of Technology on Pricing

The Federal Highway Administration, the Organization for Economic Cooperation and Development (OECD), the Transportation Research Board (TRB), and the Florida Department of Transportation collaborated in sponsoring an international symposium to set the stage for consideration of wider implementation of innovative pricing strategies to meet congestion relief, emission reduction, and fiscal objectives. The symposium assembled key pricing experts from across the U.S. and overseas and provided a unique opportunity to synthesize the lessons learned about pricing policies throughout the world. It generated a greater understanding of economic, institutional, and administrative issues and concerns relating to pricing strategies, and is expected to provide invaluable impetus for broader consideration of value pricing strategies throughout the U.S.

Study Complete: The symposium was held in Key Biscayne, Florida on November 19–22, 2003. It explored U.S. and international applications of road pricing strategies in different governmental and socio-economic settings. Case studies from the United States, Europe, and Asia were the principal focus of the symposium. An international group of participants discussed the rationale and motivations for implementing pricing; factors affecting the political and public acceptance of pricing strategies; the use of pricing revenues; and project outcomes. Drawing on papers, presentations, and symposium discussions, the TRB Steering committee evaluated the current state of practice, assessed future directions and opportunities, and identified research and information needs.

The final report can be accessed on FHWA's Highway Community Exchange Website at: http://knowledge.fhwa.dot.gov/cops/hcx.nsf/384aefcefc48229e85256a71004b24e0/9c1501c3320f3fe485257067004941e3?OpenDocument

MARYLAND: Feasibility of Value Pricing

In the 2001 legislative session, the Maryland General Assembly directed the Maryland Department of Transportation (MDOT) to examine the potential for variable pricing strategies in highway project planning; and include such strategies in metropolitan and statewide transportation planning to boost transportation efficiency and equity, expand travel choices, and reduce emissions. In June 2001, former Governor Parris N. Glendening decided to remove consideration of High Occupancy Toll (HOT) lanes from Maryland transportation plans. The former Governor's decision was based on the perceived inequity of linking an easier commute with a person's ability to pay.

In 2003, FHWA and the Maryland Department of Transportation amended the Cooperative Agreement to undertake a feasibility study to evaluate implementing HOT lanes on I-270 from I-495 (Capital Beltway) to I-70 (Frederick County).

Feasibility Funds Awarded: 1999
Feasibility Study Amended: 2003
Anticipated Completion Date: 2007

July – September 2006 Update: No update provided.

For More Information Contact: Michael J. Haley, Chief of Regional & Intermodal Planning, Maryland State Highway Administration. Phone (410) 545-5675 or 1-888-204-4828; email mhaley@sha.state.md.us

MINNESOTA: FAST Miles in the Twin Cities
The VPP program funded outreach efforts in FY1999, FY2002 and FY2004. This led to the implementation of I-394 MnPASS HOT lanes in May 2005. The HOT lanes are currently operating successfully. MnDOT was awarded $60,000 in FY 2006 to explore the political feasibility of an innovative pricing concept called "FAST Miles". Under the FAST Miles concept, each motorist is provided a number of dollar credits per month, analogous to the "free minutes" given by cell phone providers. The motorist, at his or her discretion, can apply those credits to use priced lanes. Once credits are exhausted, the motorist is charged the going rate to use the priced lanes, analogous to the process when a cell phone user consumes more than his or her allocated "free" minutes.

FAST Miles promotes carpooling by allowing motorists to "pool" their credits. For instance, a four-person car pool has at its disposal four times the "free" miles of a single occupancy vehicle. Depending on road use charges, savings for carpoolers can be substantial. Likewise, should a commuter turn to public transportation, unused toll credits can be rebated through reduced vehicle registration fees or property taxes. In both cases, occupants of multiple occupancy vehicles are rewarded by improved access to free flowing traffic and lower use costs. The project will explore the feasibility of an innovative pricing concept to ease highway congestion on limited access facilities by promoting the use of car pools and public transportation.

***Implementation Funds Awarded*:** September 2006

For More Information Contact: Ken Buckeye, Program Manager Value Pricing (651) 296-1606, e-mail: kenneth.buckeye@dot.state.mn.us.

MINNESOTA: Project Development Outreach and Education
Previously, a 30-member task force of state legislators, mayors, and business, environmental and transportation leaders examined value pricing options in Minnesota and met regularly to develop support within the state to conduct a demonstration project. The task force completed its work in 2002. The objective of this project is to continue the work of the task force by developing local champions and educate the citizens of Minnesota to help bring about value pricing implementation projects in Minnesota. A visible group of local leaders will advocate value pricing in Minnesota and succeed in convincing doubters that pricing should be tested and implemented. The University of Minnesota Humphrey Institute's project team will work with Mn/DOT Metro Division staff, Metropolitan Council transportation staff, and members of the Value Pricing Advisory Task Force to develop support for value pricing alternatives and specific projects. Specific activities will include examining the technical and political feasibility of alternative approaches, giving presentations to elected officials, transportation advocacy and other interest groups, and the formation of a local advocacy group for value pricing.

Pre-Implementation Funds Awarded: 2003

Study Completed: It is anticipated that the final report will be available October 2006. The Humphrey Institute is now working with Mn/DOT and the Metropolitan Council on the next phase of value pricing outreach and education. This next phase focuses on how to integrate transit improvements in the current I-394 MnPASS project as well as Phase II of the I-394 project and future MnPASS corridors.

The Humphrey Institute continues to manage the Congestion Pricing (CON-PRIC) and Project Partners list serves, maintain the www.valuepricing.org web site, and conduct national outreach and education activities on pricing through TRB annual and mid-summer meetings.

For More Information Contact: Lee Munnich, Sr. Fellow and Director, State and Local Policy. Phone 612 625-7357; Fax 612 626-9833; E-mail Lmunnich@umn.edu.

TEXAS*:* Regional Value Pricing Feasibility Study in Dallas
The North Central Texas Council of Governments (NCTCOG), as the Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth Metropolitan Area, in cooperation with Dallas Area Rapid Transit (DART), the Fort Worth Transportation Authority (The T), the Denton County Transportation Authority (DCTA), the North Texas Tollway Authority (NTTA), and the Texas Department of Transportation (TxDOT), initiated a review of value pricing concepts for applicability in the Dallas-Fort Worth Region. The regional study established criteria, policies, and procedures to identify potential candidates for short-term and long-term value pricing demonstration projects, and studied the applicability of value pricing concepts in existing corridors. The study also proposed potential managed facilities for the next metropolitan transportation plan. Additionally, the results of this study were incorporated into the ongoing implementation approval and work processes for the I-635/LBJ Major Investment Study and planning recommendations.

The 2005 Regional Value Pricing Corridor Evaluation and Feasibility Study is now complete. This study discusses the historical and current experiences of value pricing applications around the world. A guide as to how the Dallas-Fort Worth Region plans on evaluating candidate facilities for both short-term and long-term applications is detailed. The criteria developed are then applied to determine the selection of a demonstration project in the Dallas-Fort Worth Region. I-30/The Tom Landry Freeway between the Dallas CBD and Arlington, Texas to the west was selected as the demonstration project.

Study Completed: The public can view and download this study from NCTCOG's website at http://www.nctcog.org/trans/mtp/valuepricing/index.asp.

For More Information Contact: Tim Young, North Central Texas Council of Governments; Phone (817) 695-9288; email tyoung@nctcog.org

TEXAS: HOT Lane Network Evaluation in Houston
This project will examine Houston's six HOV lane facilities with a goal of developing a detailed implementation plan for a HOT lane network. This will include a plan to expand current HOT activities on the Katy and Northwest Freeways and add tolling to the other four HOV lanes to develop an integrated network of HOT lanes. Plans are being developed to optimize the entire network of HOV lanes in Houston using value pricing, to provide the maximum benefits for Houston travelers through reduced congestion and delays. This project will potentially lead to implementation of a HOT network in Houston, TX.

Pre-Implementation Funds Awarded: *2004*
Anticipated Completion: August *2008*

July -September 2006 Update: A contract was signed with the Texas Transportation Institute (TTI) in late August to begin 4 of the 10 tasks on this project. A kick-off meeting was held with the TTI project team, Texas Department of Transportation (TXDOT) officials and Houston Metro on August 28, 2006. The tasks currently underway include: coordination amongst all interested parties, traffic volumes and travel speed data collection on all six freeways with HOV and HOT lanes, examination of current HOT lane use, and examination of legislative issues regarding the adaptation of Houston HOV lanes to HOT lanes.

For More Information Contact: David E. Fink, Texas Department of Transportation, 6922 Old Katy Rd., Houston, TX 77024; Phone (713) 881-3063; dfink1@houstontranstar.org or Mark Burris, Texas Transportation Institute, 979-845-9875, email Mburris@tamu.edu.

VIRGINIA: Regional Network of Value Priced Lanes

As the Metropolitan Planning Organization (MPO) for the Washington metropolitan region, the National Capital Region Transportation Planning Board (TPB) is responsible for coordinating transportation plans for Northern Virginia, Suburban Maryland and the District of Columbia. The TPB is initiating a study evaluating a regional network of value priced lanes. The TPB has made progress in laying the groundwork for such a network through a variety of efforts including: hosting a value pricing conference; the establishment of a TPB value pricing task force; and the inclusion of three major value-priced projects in the regional transportation plan. Currently, the plan includes four new high occupancy toll (HOT) lanes along 15 miles of the Capital Beltway in Virginia, and six new variably priced lanes along 18 miles on the future Inter-County Connector in Maryland. It also includes a study of the conversion of existing HOV lanes into HOT lanes and construction of new HOT lanes along 47 miles of the I-95/395 corridor in Virginia.

This study will evaluate the potential benefits and performance of a regional network of variably priced lanes. Tasks to be performed include:

• Examine corridors in the regional network to identify how specific segments of the regional system are performing, such as the Capital Beltway, existing Potomac River crossings, and major radial corridors;

• Apply the regional model and conduct sensitivity analysis to investigate the potential demand, revenue and costs, the viability of transit (including possible transit operating assumptions and direct access ramps) and changes in land use activity for specific corridors;

• Analyze identified corridors as a Phase 1 regional network. This regional network will be analyzed for financially feasibility and effectiveness;

• Identify methods for examining the regional impacts of implementing pricing on low income and minority populations;

While the current plan does not include pricing existing general purpose lanes, this study will examine value pricing on existing "free" lanes, such as on the Potomac River crossings.

Pre-Implementation Funds Awarded*: 2006*
Anticipated Completion Date*: October 2007*

July – September 2006 Update: Cooperative Agreement executed in September.

For more information contact: Michael Eichler, Metropolitan Washington Council of Governments; meichler@mwcog.org (202) 962-3763

VIRGINIA: Value Pricing for the Northern Virginia and Hampton Roads Regions
Although the emphasis of the project is on Northern Virginia, the effort will essentially consist of two regional studies with strong outreach and education components. The initial tasks will focus on determining the corridors for which value pricing holds the greatest potential to improve regional mobility. Later tasks will include detailed analyses of those corridors. Both regions currently have extensive networks of HOV lanes as well as transit services. Northern Virginia is considered to have some of the most successful HOV lanes in the country. In some corridors, however, HOV lanes currently operate with excess capacity and could potentially be candidates for value pricing.

This study will focus a significant amount of effort in educating the public about pricing. It is recognized that an effective public outreach component is integral to successfully implementing pricing. The goal of the study is to ultimately lead to recommendations for potential implementation of value pricing concepts across the Northern Virginia metropolitan area and the Hampton Roads region.

***Pre-Implementation Funds Awarded**: 2003* ***Anticipated Completion Date**: 2007*

July – September 2006 Update: In an attempt to strategize opportunities and define the direction for VPPP efforts in Hampton Roads, several discussions and meetings were conducted with the VDOT Transportation and Mobility Planning Division (TMPD), Hampton Roads District, FHWA, and the Hampton Roads Planning District Commission (HRPDC). With the possibility of tolling two tunnels in the Region within the next 3-6 years, the goal of the study is to prepare the citizens of Hampton Roads for tolling. A proposal was solicited to help VDOT assess public awareness of congestion pricing and electronic tolling technologies. One of the goals is to assess how public perceptions and level of support change before and after awareness/knowledge of tolling strategies.

A combination of surveys and focus groups will be used to accomplish this effort with a cross section of population in the Hampton Roads region from October through December. Electronic surveys will be conducted with 600 participants to assess knowledge and to steer the focus group discussion. Focus groups will be conducted with four distinct cross sections of the population including the media, tunnel/bridge users, employers and the trucking industry. Following the focus groups will be a 1,200 participant telephone survey to better gage awareness of electronic tolling technology. A report should be ready for presentation at the Transportation Research Board Congestion Pricing Committee meeting in January 2007. Activities have also been initiated toward establishing a one-stop-shop website coordinated with VDOT and the HRPDC to provide information to the public. VDOT has also established an in-house multi-disciplinary team to determine a chain of control and responsibility for VP efforts from inception through implementation and maintenance with the first meeting to be held this fall.

For more information contact: Marsha Fiol, Virginia Department of Transportation, 804-786-2985, Marsha.Fiol@VDOT.Virginia.gov

WASHINGTON: Tolling Strategies in the Seattle Area
In FY2002, the VPP program funded a GPS-based region-wide pricing simulation that is in its final phase. In FY2004, the VPP program funded pre-implementation efforts for HOT lanes on State Route 167. The Washington State Transportation Commission recently completed public opinion research to assess the awareness and acceptance of tolling for revenue generation and traffic management.

The Washington State Department of Transportation (WSDOT) was awarded $935,000 in FY 2006 funds to advance public awareness and acceptance of value pricing and associated operational toll concepts from a "user's perspective," incorporate previous study findings into near and mid term policies and project planning, and improve state and regional coordination.

The project will communicate to the public and elected officials the concept of value pricing and how tolling can help manage traffic. The inability of public agencies to effectively communicate these concepts has hindered and delayed acceptance of pricing concepts.

Pre-implementation Funds Awarded: September 2006

For More Information Contact: Patty Rubstello, Project Manager, Washington State DOT; phone (425) 450-2720; email rubstep@wsdot.wa.gov.

TRUCK ONLY TOLL FACILITIES

GEORGIA: Northwest Truck Tollway

The study will examine a truck-only toll facility extending from Georgia State Route 21 near I-95 to I-16 at the intersection of I-516 (Savannah, GA). This project was proposed in cooperation with the State Road Tollway Authority (SRTA), the Georgia Department of Transportation, the Georgia Ports Authority, the Chatham County-Savannah Metropolitan Planning Commission, and the Chatham Urban Transportation Study (CUTS) –which is the metropolitan planning organization for the region. The study will initiate a peer-to-peer exchange; conduct market research on the potential for truck-only toll facilities; develop additional data on truck travel; refine the travel model related to truck travel; examine options for selling additional capacity to other modes (single occupant vehicle, high occupant vehicle, transit, etc.); examine use of revenues and other activities.

This study will expand the knowledge base on truck-only toll facilities, including market research. It may potentially lead to the implementation of the first truck-only toll application in the United States.

***Pre-Implementation Funds Awarded*:** January 2006
***Anticipated Completion Date*:** 2008

July - September 2006 Update: SRTA issued a request for proposals (RFP) to assist with the study. Responses to the RFP were evaluated in July and August 2006. Based on that evaluation, in mid-August a consultant team was identified to negotiate a contract with. Negotiations to enter into a contract to assist with the study were continuing as of the end of September 2006.

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