

# VALUE PRICING PROJECT QUARTERLY REPORTS

## October - December 2006

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## **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 San Diego Association of Governments (SANDAG) celebrated 10 years of road pricing on Interstate 15 this past December. The first road pricing implementation effort consisted of collecting tolls via monthly permits with a decal in the window (December 1996); subsequently, the FasTrak<sup>®</sup> electronic toll collection system in use today 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 traffic using the priced HOV lanes goes for free (vehicles with two or more occupants qualify as carpools). The remaining drive-alone commuters are FasTrak<sup>®</sup> customers who pay the toll. FasTrak revenue from tolls on I-15 ranges between \$1.2 to \$2.2 million per fiscal year (July 1<sup>st</sup> to June 30<sup>th</sup>) and net income from the program is used to subsidize Commuter Express Bus service in the corridor. Other expenditures include HOV enforcement, provided by the California Highway Patrol (CHP); and maintenance and operation of the electronic toll collection (ETC) system and Customer Service Center. The current I-15 FasTrak<sup>®</sup> operation is managed under contract by a private sector partner, TransCore, L.P.

SANDAG conducts periodic outreach to measure public response to the value pricing concept. These efforts have revealed broad support for managed/HOT lanes through the years. 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](mailto:dto@sandag.org)

### **CALIFORNIA: I-680 SMART Carpool Lanes in Alameda County**

The Alameda County Congestion Management Agency (CMA) 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***

***October – December 2006 Update:*** FHWA approved the Systems Engineering Management Plan. The 65% design of the roadway improvements and capital components for the electronic toll system were submitted to Caltrans. These plans will be combined with an underlying HOV lane project. The final methodology for dynamic pricing was approved and will be incorporated into the RFP for the System Integrator. A statewide meeting on HOT Lane signage was held with Caltrans and other California Toll operators. Focus groups were held for input on signage, dynamic pricing and acceptability of the HOT Lanes. An important issue that recently emerged is the need and timing for rehabilitation of the entire roadway. The CMA is working with Caltrans to identify the cost, potential fund source and options for rehabilitation. Construction of the HOT lane may be delayed if the rehabilitation project is incorporated into the HOT/HOV Lane project. Currently, construction is scheduled for spring 2008.

**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](mailto: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](mailto: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 70<sup>th</sup> 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. After six months of operation, traffic has stabilized in the lanes. 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 to twenty minutes travel time on their daily commute. Approximately one third of the vehicles traveling in the Express Lanes are toll-paying customers. 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 during the peak periods. Buses continue to meet their travel time targets, as each and every bus trip is measured to monitor travel time performance. During the months of November and December, the Denver area was hit by several snowstorms that were not typical for the area. In fact the lanes were closed for 32 hours during the worst of the blizzards on December 21. As a result, bus travel time targets were not met at the same level as in earlier months. From June through October, over 99% of buses meet their full speed limit travel time targets, but in November, that percentage dropped to 91%. In December, only 94% of buses met their target travel time. However, on non-snow days, 99% of buses met their target travel times.

Toll revenue projections for the first full year were approximately \$800,000. Revenues continue to exceed expectations, but have leveled off somewhat. December revenues were lower than October and November. This may have been caused by lower usage on the holidays and full closures of the lanes due to inclement weather. The first six months of operations yielded approximately \$650,000 in toll revenues and \$330,000 in revenues from fees and fines. Revised estimates are that first year toll revenues will be between \$1.25 million and \$1.5 million and revenues from violation fees and fines will approach \$600,000. Collectively, the approximately \$2 million gross revenue will cover Maintenance, Operations, loan repayment (principle of approximately \$3million), and increased law enforcement.

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, 4201 East Arkansas Avenue, Suite 260 Denver, CO 80222; phone 303-757-9208, e-mail [peggy.catlin@dot.state.co.us](mailto: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

***October – December 2006 Update:*** The consultant made additional revisions to the simplified presentation and resubmitted it to FDOT. The consultant continued to work on the draft final report that has an anticipated delivery date of January 2007.

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](mailto: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.): | 17,625   |
| Revenue per week (avg.):    | \$20,377 |
| Toll per trip (avg.):       | \$1.16   |

*Pre –Implementation Funds Awarded: 2004*

*Project Implemented: 2005*

*Additional Pre-Implementation Funds Awarded: June 2005*

*Anticipated Study Completion Date: 2007*

**October – December 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. URS has been hired to develop the transit plan and corridor master plan components of the project. A corridor advisory committee has been convened 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](mailto: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](mailto: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 15<sup>th</sup> 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*

*October – December 2006 Update:* The project team completed a 90 percent review of the civil portion of the project. The team also released the final request for proposals (RFP) for the tolling elements of the project. Proposals for the tolling RFP were received and evaluated. The winning proposal was selected at the end of December.

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

Since award of the VPP grant last year, the San Francisco County Transportation Authority has worked with Federal, state and regional agencies to finalize arrangements to begin their Congestion Pricing Feasibility Study. Caltrans executed a cooperative agreement with FHWA, and the Authority procured their consultant teams to support project planning, development and analysis, transportation modeling, and public involvement activities. The Authority also established a set of committees with local and regional stakeholders to advise the study team throughout the effort.

The Authority has also worked with regional partners to settle on a modeling approach that not only includes modifications to increase sensitivity to pricing, but also expands the activity-based SF model to include all Bay Area counties in order to better analyze trips made into and out of the city. A local match was secured (including an MPO contribution) and the notice to proceed recently issued from the State DOT Caltrans. The study is poised to kick-off in February 2007.

**For More Information Contact:** Tilly Chang, Deputy Director, San Francisco County Transportation Authority, [tilly\\_chang@sfcta.org](mailto: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](mailto: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 FAIR lanes, 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](http://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](mailto: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 throughput 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](mailto: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 replace the existing express buses that serve the corridor. Caltrans is constructing the managed lanes using the design-sequencing method of contracting. Ground was broken on the first of three stages in November 2003 and will open to traffic in 2008. The first stage adds eight miles directly abutting the existing 8-mile reversible HOT lanes and latter stages will be added in 2011 and 2012.

***Pre-Implementation Study:*** Seven pricing alternatives were considered by SANDAG. A preferred pricing alternative was selected in 2003 which calls for dynamic tolling through a skewed, per-mile rate. The distance-based fares will fluctuate based on the value of travel time saved between the managed lanes and adjacent general purpose lanes, and from the level of congestion in the managed lanes. The toll system will read vehicles upon entry and exit to calculate the toll rate. The I-15 Managed Lanes Value Pricing Planning Study was completed in 2002 and project deliverables are available at: [www.sandag.org/index.asp?projectid=67&fuseaction=projects.detail](http://www.sandag.org/index.asp?projectid=67&fuseaction=projects.detail).

***October - December 2006 Update:*** This period SANDAG issued a Request for Proposals (RFP) for I-15 Managed Lanes Toll Collection System Integration. A mandatory pre-proposal meeting was held in October 2006. A copy of the RFP and related documents is maintained at [www.sandag.org/index.asp?rfpid=127&fuseaction=rfps.detail](http://www.sandag.org/index.asp?rfpid=127&fuseaction=rfps.detail). The proposal deadline is January 31, 2007. Forecast traffic volumes for the managed lanes were updated in October and a Traffic Analysis report was published to the project Web site listed above (under *Pre-Implementation Study* section). Also, SANDAG and Caltrans completed development of I-15 Traffic Operations and Incident Management Plans. In the future, those copies will be available at the same project Web site listed above.

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

***October – December 2006 Update:*** The Orange County Transportation Authority continues to analyze dynamic pricing and the impacts to the 91 Express Lanes operations. A new project manager was assigned and during the quarter the manager met with FHWA representatives to gain an understanding of the project and the requirements.

**For More Information Contact:** Kirk Avila, Toll Road & Motorist Services; (714) 560-5988; e-mail [kavila@octa.net](mailto: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 HOV and 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<sup>®</sup> 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 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*

**October - December 2006 Update:** SANDAG continued work this period on the public involvement program. Between October and December, the project team conducted 25 stakeholder interviews with elected officials, technical/content-area experts, peer toll/HOT-lane operators, and other public interest groups both inside and outside the San Diego region. In December, the team developed a survey instrument that will be used for telephone and intercept surveys of the public and I-15 corridor commuters that will be conducted next quarter. Following the closing of the public involvement program, SANDAG will complete its technical evaluation of enforcement strategies and finalize its enforcement strategy for the managed lanes. Solicitation of vendors for VES proof-of-concept testing is expected by late 2007.

For More Information Contact: Derek Toups, San Diego Association of Governments; Phone (619) 699-1907, e-mail [dto@sandag.org](mailto: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; phone 831/460-3210; [karena.pushnik@co.santa-cruz.ca.us](mailto: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 close to 100% of the capital costs could be covered by toll revenues after payment of annual operations and maintenance, debt service, and capital reserve fund. The study team optimized the traffic and revenue projections, 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](http://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](mailto: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

*October - December 2006 Update:* The project team successfully completed Phase I of this project and design is underway at Colonial and Metro Parkway. Conceptual geometric layout is complete and 30% design plans are being developed. The consultant team began working on the Bridge Design Reports and traffic modeling efforts are being coordinated with adjacent projects.

For More Information Contact: Sarah Clarke, Lee County Department of Transportation; Phone (239) 479-8718; [sclarke@leegov.com](mailto: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](http://www.gerogiatolls.com).

For More Information Contact: Jannine Miller, State Road and Tollway Authority, 404-893-6106; E-mail: [jmiller@georgiatolls.com](mailto:jmiller@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

*October - December 2006 Update:* The contract with the HNTB team was negotiated and executed in December 2006. Foundational work has begun, including collection of traffic data, determination of the optimal sensitivity tests in the traffic and revenue analysis, and review of the travel demand model. SRTA will be working in collaboration with its transportation planning partners in the region including the Atlanta Regional Commission (the Atlanta MPO), to evaluate optimal land use plans and transportation improvements in the vicinity of the proposed I-75 South VPPP project.

For More Information Contact: Jannine Miller, State Road and Tollway Authority, 404-893-6106; E-mail: [jmiller@georgiatolls.com](mailto:jmiller@georgiatolls.com)

### **MARYLAND: Express Toll Lanes on Section 100 of 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 new Express Toll Lanes (ETLs) on the I-95/JFK Expressway in Baltimore. MdTA will construct 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](mailto:mwilliams9@mdta.state.md.us)



### **MARYLAND: Express Toll Lanes on Section 200 of 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.

The I-95 Section 200 Project Planning Study began in the fall of 2005. Three alternatives are currently being considered; they include the No-Build, General Purposes Lanes and Express Toll Lanes (ETLs) alternatives. The ETLs Alternative would ease congestion and increase safety by making improvements to the mainline roadway, reconstructing bridges and interchanges, and adding ETLs to approximately a 10-mile stretch of I-95. The Section 200 ETLs would be immediately north of the Section 100 ETLs, providing a total of nearly 20 miles of ETLs.

**Project Status:** This project is currently in the project planning phase. Approval of the final environmental document is anticipated in Fall 2008.

For More Information Contact: Melissa Williams, Planning Manager, Maryland Transportation Authority-Capitol Planning Division. Phone (410) 537-5651; email [mwilliams9@mdta.state.md.us](mailto: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. NCDOT continues to work with the North Carolina A& T to finalize the report.

For Additional Information Contact: Mustan Kadibhai, NCDOT; phone (919) 508-1819, e-mail: [mkadibhai@dot.state.nc.us](mailto:mkadibhai@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](mailto: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

*October – December 2006 Update:* No update provided.

For More Information Contact: Judy Friesenhahn, Planning Engineer, Texas Department of Transportation; 210/615-5814; e-mail [jfriesenhahn@dot.state.tx.us](mailto:jfriesenhahn@dot.state.tx.us)

### **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

**October – December 2006 Update:** In mid-September, two open houses were held to gather public input as a part of the environmental process. No design schematics were presented, but value pricing as an option was discussed.

TxDOT administration decided that the Central Texas Regional Mobility Authority (CTRMA) would be the operator of the facility if built. The team has held monthly meetings between FHWA, TxDOT (district and division traffic operations personnel), CTRMA, Caseta (CTRMA's toll integrator), the Texas Transportation Institute (TTI), and the design consultants to discuss numerous operational and enforcement issues. The project team has also been working with the Austin area Managed Lanes Working Group (formerly Austin HOV Task Force) to coordinate with and educate the various local entities (FHWA, planners, emergency responders, law enforcement, transit, the local MPO, etc.) about how managed lanes work and to provide updates on the status of the project.

The project team worked on developing a schematic based on input from the public during the September open houses, and in coordination with other stakeholders, that focuses specifically on operations (access, equipment, eligibility, safety, etc.), geometric requirements for the facility (including enforcement requirements, the managed lane envelope, etc.) and guide signing (static and dynamic). The schematic will be used to share preliminary results of the environmental process during the second round of public outreach scheduled to begin in January 2007.

For More Information Contact: Mark Herber, Texas Department of Transportation; (512) 832-7077; e-mail [mherber@dot.state.tx.us](mailto:mherber@dot.state.tx.us); Ginger Gooden P.E., phone: 512-467-0946, email: [G-goodin@tamu.edu](mailto:G-goodin@tamu.edu)

### **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 any direct Value Pricing Pilot (VPP) program funds; however TXDOT has been encouraged and agreed to seek tolling authority through the *Express Lane Demonstration (ELD)* program. This application is being prepared and will retain the overlapping and companion features of the Value Pricing Pilot (VPP) program for implementation.

TxDOT is finalizing 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. A public meeting was held on November 16, 2006 to share this effort with the community. Details are located at: <http://www.635project.org>

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 has provided a “draft” requests for proposals to the four short listed teams. 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](mailto: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.

**October-December 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 is scheduled for letting in January 2007. All construction should be finished by the first quarter of 2009.

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

**October – December 2006 Update:** TxDOT received consent from FHWA on the operation scope to proceed. TxDOT completed the agreement process with an expected notice to proceed in January 2007. To find out additional information about this project go to: ([www.keepitmovingdallas.com](http://www.keepitmovingdallas.com))

Progress on planned activities:

1. Held a successful public meeting on Nov 16, 2006.
2. The project design plans were completed, the project received environmental clearance, the project was scheduled for letting in Jan 2007
3. Initiated the traffic and revenue study with a couple of working meetings. Collected traffic data.

Activities planned for the next two quarters include:

1. Prepare to receive bids for phase one in January 2007. **Note:** Two bids came in with the low bid of \$ 6.2 million that was \$ 1.3 million under the engineer's estimate of \$ 7.5 million.
2. Provide notice to proceed on 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.
3. Complete the traffic and revenue study in the spring of 2007 to provide a basis for what the tolling structure would be with respect to the phasing, and regional managed lane policy.

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](mailto: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: [jfrieese@dot.state.tx.us](mailto:jfrieese@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 3<sup>rd</sup>, 2006, traffic volumes continued to grow at about 1-2% each year. In November, fiscal year-to-date toll revenue growth increased over 9.2% from last year while traffic is up 1.5%.

For More Information Contact: David Lowe, San Joaquin Hills Transportation Corridor Agency; phone: 949-754-3488, [lowe@sjhtca.com](mailto: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](http://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](mailto:kcella@cella.cc) or Chris Swenson, P.E., CRSPE, Inc.; Phone (239) 573-7960; e-mail [crs@crspe.com](mailto:crs@crspe.com); Scott Gilbertson, Director, Lee County Department of Transportation; Phone (239) 479-8580; [gilbersm@leegov.com](mailto: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*

*October - December 2006 Update:* Wilbur Smith Associates has been chosen as the consultant for this project. A “not to exceed” contract was approved by the Board of County Commissioners. FHWA and FDOT are currently reviewing the Scope of Services. A notice to proceed will be issued next quarter.

For More Information Contact: Amelia Davies, Lee County Department of Transportation; Phone (239) 479-8718; [adavies@leegov.com](mailto: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](mailto: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](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](mailto:kcella@cella.cc) or Chris Swenson, P.E., CRSPE, Inc.; Phone 239-573-7960; e-mail [crs@crspe.com](mailto:crs@crspe.com); Scott Gilbertson, Director, Lee County Department of Transportation; Phone 239 479-8580; [gilbersm@leegov.com](mailto: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](mailto: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

*October - December 2006 Update:* In December 2006, SRTA negotiated and executed a contract with the Wilbur Smith Associates team. Foundational work has begun, including collection of traffic data and development of the public involvement plan. SRTA will be working in collaboration with its transportation planning partners and stakeholders in the GA 400 corridor.

For More Information Contact: Jannine Miller, State Road and Tollway Authority, (404) 893-6106, E-mail: [jmiller@georgiatolls.com](mailto:jmiller@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](mailto:eryan@wilbursmith.com); or Dean Mentjes, Mobility Engineer, FHWA, phone: (217) 492-4631 [dean.mentjes@fhwa.dot.gov](mailto: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](mailto: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 from 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](mailto: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 – 5<sup>th</sup> Floor, New York, NY 10010, e-mail: [mmuriello@panynj.gov](mailto: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.

***Pre-Implementation Funds Awarded: 2004***

***Anticipated Completion Date: 2007***

***October – December 2006 Update:*** A consultant team was selected and a contract was executed. The project team conducted preliminary traffic data collection to ensure up-to-date volumes, turning movements, and travel time within the corridor. These data are essential to update and expand an existing microscopic traffic simulation model that will be used in analyzing all traffic-related impacts associated with the HOT Lane options. During the 4th Quarter, a series of stated-preference surveys instruments were developed and a survey plan designed to reach auto drivers, bus passengers, and truck operators in the corridor. Survey testing and implementation is anticipated during the latter portion of the 1st Quarter 2007.

**For More Information Contact:** Mark Muriello, PANYNJ, Assistant Director (212) 435-4836 telephone, [mmuriello@panynj.gov](mailto: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<sup>sm</sup> electronic transactions are deeply discounted in the weekday and weekend off-peak hours, with higher E-ZPass<sup>sm</sup> 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<sup>sm</sup> 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***

***October – December 2006 Update:*** The overall toll system replacement project is moving forward for formal authorization. Three distinct pieces of work are anticipated to be bid for professional, technical and advisory services in 2007: (1) outreach, communication and legislative support services, designed to identify the processes and measures required to adequately ensure collection of video tolls; (2) business and market assessment study, intended to forecast the conversion of existing cash customers to E-ZPass and evaluate the financial and business risks of the business model; and (3) preliminary design and engineering services, in order to determine costs estimates for project implementation. The project team will be working with FHWA regional offices to establish the federally funded tasks of the first two elements of the overall system replacement project.

**For More Information Contact:** Mark Muriello, PANYNJ, Assistant Director (212) 435-4836 telephone, [mmuriello@panynj.gov](mailto: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](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@paturndpike.com](mailto:rsmith@paturndpike.com), or George L. Hannon, Special Assistant, PA Turnpike, (717) 939-9551, x 5124, [ghannon@paturndpike.com](mailto:ghannon@paturndpike.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

***October - December 2006 Update:*** The project began August 25, 2006. Preliminary tasks included a literature review and development of a survey. One important section of the literature review completed examined projects where trucks and heavy vehicles were influenced by variable tolling.

The survey under development is designed to better understand potential reaction to innovative tolling strategies on SH130 for heavy vehicles. Several truckers were interviewed at rest stops and weigh stations to further refine the survey. Additionally, firms that run a lot of trucks around the Austin region (such as Federal Express) were contacted and attempts were made to schedule interviews to begin after the first of the year. All of this information will be compiled in the final report - and will be used to develop the final survey to be distributed to hundreds of truckers, trucking firms, and logistics managers.

Finally, a large segment of SH130 just opened to traffic in November. At this point no tolls are being charged (tolls start in early 2007). Traffic data is being collected by the Texas Turnpike Authority and will be examined as part of this value pricing project.

**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](mailto:MBurris@tamu.edu). Tina S. Collier, Texas Transportation Institute; Phone (512) 467-0946, email [t-collier@tamu.edu](mailto: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](mailto:rick@citycarshare.org); [www.citycarshare.org](http://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](mailto: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. In March of 2006, the consultant team completed their recommendations. 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.

The complete final reports can be found on the web at:

<http://www.lrrb.org/PDF/200639A.pdf>

<http://www.lrrb.org/PDF/200639B.pdf>

<http://www.lrrb.org/PDF/200639C.pdf>

The reports are separated into experiment findings, market research, and policy implications.

**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](mailto:kenneth.buckeye@dot.state.mn.us); Jeffrey Buxbaum, Cambridge Systematics, Inc., ph: (617) 354-0167, E-mail: [jbuxbaum@camsys.com](mailto:jbuxbaum@camsys.com).

**MINNESOTA: Mileage-Based User Fee Regional Outreach Statewide**

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.

***October – December 2006 Update:*** Anticipated start date is spring 2007.

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

**October - December 2006 Update:** In November 2006, the Road User Fee Pilot Program switched from the control phase of the study to the test phase. Participants are successfully purchasing fuel at participating service stations at which time their mileage is read, the state gas tax is determined from the bill and a mileage fee is added automatically and wirelessly. The study will conclude in March 2007.

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

**October - December 2006 Update:** The team completed the operational portion of the project in Spring 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 -0.12, which translated into approximately 10% reduction in vehicle use during peak travel times, with considerably more traffic reduction on specific facilities. Results suggest there is a very real practical opportunity to reduce wasted time resources and convert them to significant revenues for investment. 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](mailto: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.

*October – December 2006 Update:* Anticipated start date is February 2007.

For More Information Contact: Ken Buckeye, Program Manager Value Pricing (651) 296-1606, e-mail: [kenneth.buckeye@dot.state.mn.us](mailto: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](mailto: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<sub>2</sub> 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](http://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](mailto:jemae.hoffman@seattle.gov) or visit [www.seattle.gov/waytogo](http://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

*October - December 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](mailto: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.

***October – December 2006 Update:*** Anticipated start date is spring 2007.

For More Information Contact: Ken Buckeye, Program Manager Value Pricing (651) 296-1606, e-mail: [kenneth.buckeye@dot.state.mn.us](mailto: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:*** The final report is available at <http://www.hhh.umn.edu/img/assets/20844/Final%20Report%20102606.pdf>. 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 into 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](http://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](mailto: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](mailto: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*

*October - December 2006 Update:* Work proceeded on the four tasks currently underway in this project. A report on the current use of HOT lanes was developed based on QuickRide use from 1998 to September of 2006. In examining the use of QuickRide we found only a small portion (approximately 8 percent) of enrollees use QuickRide for 125 or more trips a year. The majority of users use QuickRide infrequently. A report on legislative issues surrounding the potential adaptation of all of Houston's HOV lanes to HOT lanes is almost complete. The study team did not find any serious legislative impediments to the adaptation of HOV lanes to HOT lanes in Houston. One minor issue that must be dealt with is that the FTA rules regarding the adaptation of HOV to HOT lanes are currently undergoing a rule change regarding what is considered fixed guideway miles.

For More Information Contact: David E. Fink, Texas Department of Transportation, 6922 Old Katy Rd., Houston, TX 77024; Phone (713) 881-3063, email [dfink1@houstantranstar.org](mailto:dfink1@houstantranstar.org); or Mark Burris, Texas Transportation Institute, 979-845-9875, email [Mburris@tamu.edu](mailto: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 Inter-County Connector in Maryland. It also includes a study of the conversion of existing HOV lanes into 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* identified in Task 1;
- Analyze the corridors examined in Task 2 as a regional network. This Phase 1 regional network will be analyzed for financial feasibility and with measures of effectiveness;
- Examine ways of identifying regional impacts of pricing projects 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 the Potomac River crossings.

***Pre-Implementation Study:*** Tentatively approved, January 2006

***Anticipated Completion Date:*** September 2007

***October – December 2006 Update:*** The study team determined the criteria for selecting high-performance corridors to be included in the phase one regional network and developed a draft of the Task 1 report.

**For More Information, Contact:** Michael Eichler ([meichler@mac.com](mailto:meichler@mac.com)), National Capital Region Transportation Planning Board, (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***

***October – December 2006 Update:*** The original contract scope was amended to directed efforts specifically toward the Hampton Roads area. The VDOT Transportation and Mobility Planning Division (TMPD), Hampton Roads District, FHWA, and the Hampton Roads Planning District Commission (HRPDC) continue meeting to discuss and coordinate next steps. The goal of the study is to prepare the citizens of Hampton Roads for the possibility of tolls being implemented on two tunnels in the region within the next 3-6 years. VDOT solicited proposals to obtain a consultant to assess public awareness of congestion pricing and electronic tolling technologies. One of the goals is to assess how public perceptions and the potential level of support before and after conducting outreach and education related to potential tolling strategies.

Electronic surveys were conducted with 600 participants in November/December to assess stakeholder knowledge and to design the focus group discussion. One-on-one interviews combined with a focus group will be conducted with a cross section of the population including tunnel/bridge users, employers and the trucking industry. Following these interviews and focus group meetings, a quantitative 1,200 participant telephone survey was implemented to determine awareness of electronic tolling technology. Very preliminary findings should be ready for presentation at the Transportation Research Board Congestion Pricing Committee meeting in January 2007. Activities have also been initiated toward developing a communications plan from the findings of the public research and establishing a one-stop-shop website coordinated with VDOT and the HRPDC to provide information to the public. VDOT is also establishing an in-house multi-disciplinary team to determine a chain of control and responsibility for VP efforts from inception through implementation and maintenance. The first meeting was held in December.

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

**October - December 2006 Update:** Phase one of the project began and it is expected to continue until around March 2007. The first phase will explore existing communications materials, conduct project specific technical analysis related to pricing, and develop effective communications materials to advance public awareness and acceptance of pricing from a user’s perspective.

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## **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

***October - December 2006 Update:*** In November 2006, SRTA negotiated and executed a contract with the Cambridge Systematics team. Foundational work has begun, including collection of truck-related data and design of the stated preference survey instrument. A newly updated travel demand model will be used for the study of the proposed Savannah Northwest Toll Expressway and testing has begun to determine the optimal alignment of the facility based on origin-destination and land use data recently collected for the Georgia Department of Transportation's Statewide Truck Lanes Study.

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