

# VALUE PRICING PROJECT QUARTERLY REPORTS

## October - December 2007

<b><i>CONVERTING HOV LANES TO HOT LANES</i></b> _____	<b>4</b>
<b>CALIFORNIA: HOT Lanes on I-15 in San Diego</b> _____	<b>4</b>
<b>CALIFORNIA: I-680 SMART Carpool Lanes in Alameda County</b> _____	<b>5</b>
<b>CALIFORNIA: HOT Lanes on I- 880 in Alameda County</b> _____	<b>6</b>
<b>COLORADO: HOT Lanes on I-25/US 36 in Denver</b> _____	<b>7</b>
<b>FLORIDA: HOT Lanes on I-95 in Miami-Dade County</b> _____	<b>8</b>
<b>MINNESOTA: HOT Lanes on I-394 in Minneapolis</b> _____	<b>9</b>
<b>TEXAS: HOT Lanes on I-10 and US 290 in Houston</b> _____	<b>10</b>
<b>WASHINGTON: HOT Lanes on SR 167 in the Puget Sound Region</b> _____	<b>11</b>
<b><i>CORDON TOLLS</i></b> _____	<b>12</b>
<b>CALIFORNIA: Area Road Charging and Parking Pricing in San Francisco</b> _____	<b>12</b>
<b>FLORIDA: Cordon Pricing in Lee County</b> _____	<b>13</b>
<b><i>FAIR LANES</i></b> _____	<b>14</b>
<b>CALIFORNIA: FAIR Lanes with Dynamic Ridesharing in Alameda County</b> _____	<b>14</b>
<b><i>PRICED NEW LANES</i></b> _____	<b>15</b>
<b>CALIFORNIA: Express Lanes on State Route 91 in Orange County</b> _____	<b>15</b>
<b>CALIFORNIA: I-15 Managed Lanes in San Diego</b> _____	<b>16</b>
<b>CALIFORNIA: Dynamic Pricing on SR 91 in Orange County</b> _____	<b>17</b>
<b>CALIFORNIA: Violation Enforcement System on I-15 Managed Lanes in San Diego</b> _____	<b>18</b>
<b>CALIFORNIA: HOT Lanes on State Route 1 in Santa Cruz County</b> _____	<b>19</b>
<b>COLORADO: Express Toll Lanes on C-470 in Denver</b> _____	<b>20</b>
<b>FLORIDA: Priced Queue Jumps in Lee County</b> _____	<b>21</b>
<b>GEORGIA: Express Toll Lanes on I-75 in Atlanta</b> _____	<b>22</b>
<b>GEORGIA: I-75 South HOT/Truck-Only Toll (TOT) Study in Atlanta</b> _____	<b>23</b>
<b>MARYLAND: Express Toll Lanes on Section 100 of the I-95/JFK Expressway in Baltimore</b> _____	<b>24</b>
<b>MARYLAND: Express Toll Lanes on Section 200 of the I-95/JFK Expressway in Baltimore</b> _____	<b>25</b>
<b>NORTH CAROLINA: HOT Lanes on I-40 in Raleigh/Piedmont Triad</b> _____	<b>26</b>
<b>OREGON: Express Toll Lanes on Highway 217 in Portland</b> _____	<b>27</b>

<b>TEXAS: Value Priced Express Lanes on I-10 in San Antonio</b>	<b>28</b>
<b>TEXAS: HOT Lane Enforcement and Operations on Loop 1 in Austin</b>	<b>29</b>
<b>TEXAS: Express Toll Lanes on the LBJ Freeway in Dallas</b>	<b>30</b>
<b>TEXAS: HOT Lanes on the Katy Freeway in Houston</b>	<b>31</b>
<b>TEXAS: Express Toll Lanes on I-30/Tom Landry in Dallas</b>	<b>32</b>
<b>TEXAS: Express Toll Lanes on I-35 in San Antonio</b>	<b>33</b>
<b><i>PRICING ON TOLL FACILITIES</i></b>	<b>34</b>
<b>CALIFORNIA: Peak Pricing on the San Joaquin Hills Toll Road in Orange County</b>	<b>34</b>
<b>FLORIDA: Pricing on Bridges in Lee County</b>	<b>35</b>
<b>FLORIDA: Value Pricing on the Sanibel Bridge and Causeway in Lee County</b>	<b>36</b>
<b>FLORIDA: Variable Tolls on the Sawgrass Expressway in Broward County</b>	<b>37</b>
<b>FLORIDA: Variable Tolls for Heavy Vehicles in Lee County</b>	<b>38</b>
<b>FLORIDA: Pricing Options on the Florida Turnpike in Miami-Dade County</b>	<b>39</b>
<b>GEORGIA: Variable Pricing Institutional Study for the GA-400 in Atlanta</b>	<b>40</b>
<b>ILLINOIS: Illinois Tollway Value Pricing Pilot Study</b>	<b>41</b>
<b>NEW JERSEY: Variable Tolls on the New Jersey Turnpike</b>	<b>42</b>
<b>NEW JERSEY: Variable Tolls on Port Authority Interstate Crossings</b>	<b>43</b>
<b>NEW JERSEY: Express Bus/HOT Lane Study for the Lincoln Tunnel</b>	<b>44</b>
<b>NEW JERSEY: Upgrade of Electronic Toll Collection Technology in New York</b>	<b>45</b>
<b>PENNSYLVANIA: Variable Tolls on the Pennsylvania Turnpike</b>	<b>46</b>
<b>TEXAS: Truck Traffic Diversion Using Variable Tolls in Austin</b>	<b>47</b>
<b><i>USAGE-BASED VEHICLE CHARGES</i></b>	<b>48</b>
<b>CALIFORNIA: Car Sharing in the City of San Francisco</b>	<b>48</b>
<b>FLORIDA: Dynamically Priced Carsharing in Tampa</b>	<b>49</b>
<b>GEORGIA: Simulation of Pricing on Atlanta’s Interstate System</b>	<b>50</b>
<b>MINNESOTA: Variabilization of Fixed Auto Costs</b>	<b>51</b>
<b>MINNESOTA: Mileage-Based User Fee Regional Outreach Statewide</b>	<b>52</b>
<b>OREGON: Mileage-Based Road User Fee Evaluation</b>	<b>53</b>
<b>WASHINGTON: Global Positioning System (GPS) Based Pricing in the Puget Sound Region</b>	<b>54</b>
<b>WASHINGTON: Pay-As-You-Drive (PAYD) Insurance in Seattle</b>	<b>55</b>
<b><i>“CASH-OUT” STRATEGIES/PARKING PRICING</i></b>	<b>56</b>
<b>CALIFORNIA: Car Share Innovations in the City of San Francisco</b>	<b>56</b>

<b>CALIFORNIA: Smart Parking Initiative in San Diego</b>	<b>57</b>
<b>MINNESOTA: Parking Pricing Demonstration in the Twin Cities Area</b>	<b>58</b>
<b>WASHINGTON: Parking Cash-Out and Pricing in King County</b>	<b>59</b>
<b>WASHINGTON: Cash-Out of Cars in King County</b>	<b>60</b>
<b><i>REGIONAL PRICING INITIATIVES</i></b>	<b>61</b>
<b>CALIFORNIA: Investigation of Pricing Strategies in Santa Clara Valley</b>	<b>61</b>
<b>FLORIDA: Sharing of Technology on Pricing</b>	<b>62</b>
<b>ILLINOIS: Comprehensive Pricing in Northeast Illinois</b>	<b>63</b>
<b>MARYLAND: Feasibility of Value Pricing</b>	<b>64</b>
<b>MINNESOTA: FAST Miles in the Twin Cities</b>	<b>65</b>
<b>MINNESOTA: Project Development Outreach and Education</b>	<b>66</b>
<b>TEXAS: Regional Value Pricing Feasibility Study in Dallas</b>	<b>67</b>
<b>TEXAS: HOT Lane Network Evaluation in Houston</b>	<b>68</b>
<b>VIRGINIA: Regional Network of Value Priced Lanes</b>	<b>69</b>
<b>VIRGINIA: Value Pricing for the Hampton Roads Region</b>	<b>70</b>
<b>WASHINGTON: Tolling Strategies in the Seattle Area</b>	<b>71</b>
<b><i>TRUCK ONLY TOLL FACILITIES</i></b>	<b>72</b>
<b>CALIFORNIA: Analysis of Environmental Effects of PierPASS and Dedicated Truck Lanes in Southern California</b>	<b>72</b>
<b>GEORGIA: Northwest Truck Tollway</b>	<b>73</b>

## **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.

***Evaluation Completed 2002:*** The original study was funded under the Congestion Pricing Pilot Program. Archives of the project reports can be found at:

[www.sandag.org/index.asp?projectid=34&fuseaction=projects.detail](http://www.sandag.org/index.asp?projectid=34&fuseaction=projects.detail)

**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 2007 Update:*** The plans, specifications and estimates (PS&E) for all three bid packages were completed. A vendor outreach meeting will be held on January 8<sup>th</sup> to get input on the clarity of the document. The revised and final document will be issued next spring. Construction of the facility, beginning with the roadway work, is scheduled to begin in late 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. Visit the project website: <http://www.680smartlane.org/>

*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:** During its nineteenth month of operation, 83,022 vehicles paid a toll to travel in the I-25 Express Lanes using their EXpressToll® transponder. A total of \$158,138 in toll revenue was collected, falling slightly below the month's projection of \$161,600. This decrease was likely due to holidays falling on business days. Currently, more than 1,800 toll-paying vehicles are using the lanes in the morning peak period and more than 1,400 toll-paying vehicles are using the lanes in the afternoon peak period. In December 2007, 83,022 vehicles used the tolled express lanes as compared to 52,477 in December 2006 - an increase of approximately 58.2%.

The I-25 HOV/tolled Express Lanes opened in June 2006, marking the first time solo drivers could legally access the existing HOV lanes (along I-25 from US 36 into downtown) by paying a toll. Carpools, buses and motorcycles continue to use the lanes toll-free as long as they are in the lane marked "HOV" when they pass through the toll collection point near 58<sup>th</sup> Avenue. That is the only time there is a designated lane for HOVs and for toll paying vehicles. Toll rates for the I-25 Express Lanes vary by time of day to ensure the lanes remain free-flowing. Toll collection is electronic only, with an EXpressToll® transponder. No cash is accepted. Visit [www.expresstoll.com](http://www.expresstoll.com). The underutilized HOV lanes are now being maximized giving motorists another option to escape traffic congestion. The purpose of the I-25 Express Lanes is not to generate revenue but rather to cover expenses such as maintenance and snow removal that was previously paid for by taxpayers.

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 has been undertaken in phases. In the first phase, the Florida Department of Transportation (FDOT) conducted a preliminary feasibility study. The second phase FDOT conducted an investment-grade traffic and revenue study, market research, outreach efforts, and development of monitoring and evaluation plans. The study evaluated adding a new lane in the median of I-95. 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.

Based upon the second phase, FDOT together with local transit partners proposed a plan to significantly reduce congestion in Miami-Dade and Broward Counties and to provide new and enhanced mobility options for motorists and transit users in the region, FDOT is planning a Pilot Project to provide Managed Lanes on I-95, from I-395 in Miami-Dade County, to I-595 in Broward County. This involves the conversion of the existing High Occupancy Vehicle Lanes (HOV) to limited access managed lanes called the '95 Express'. The 95 Express lanes will provide South Florida motorists and transit users with a viable option for consistent and dependable travel conditions, particularly during peak travel times.

It is anticipated that this pilot will introduce Managed Lanes to commuters on the I-95 corridor while also generating net revenues to help finance the project. Overall, the project would provide potential time savings of up to 25 minutes from I-595 to I-395 (21 miles) during peak travel periods. Modifications to the shoulders on I-95 allow for the provision of two managed lanes in each direction both north and south of the Golden Glades Interchange that will be separated from the general travel lanes via tubular delineators, or plastic tubes. An estimated time savings of 50% is anticipated for express bus service that currently operates in this section of the corridor.

The 95 Express lanes will have variable congestion pricing, or tolls, that fluctuate with increased congestion so that an operating speed of 50 MPH can be maintained. Transit (buses) and registered high occupancy vehicles with three or more people (HOV-3) could use the 95 Express lanes at no cost. Additionally, all other vehicles will be allowed to enter the 95 Express lanes by paying a toll with the use of SunPass. In addition to toll revenue supporting the cost of the project, FDOT is proposing to allocate a portion of the tolls to support the operation of Bus Rapid Transit on the corridor.

***Implementation Funds Awarded:*** 2004

***Project Study Completed:*** 2007

***Project Complete:*** The 95 Express received \$62.9 million in funding from the USDOT as part of the Urban Partnership Agreement to fight grid lock. To see a description of the project go to <http://www.95express.com/>.

**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 two years of operation indicates the following:

Toll trips per week (avg.):	17,479
Revenue per week (avg.):	\$20,333
Toll per trip (avg.):	\$1.17

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

***Project Implemented: 2005***

***Additional Pre-Implementation Funds Awarded: June 2005***

***Anticipated Study Completion Date: 2007***

***October – December 2007 Update:*** Phase II planning for I-394 MnPASS is underway. Planning includes facility design concepts, land use and urban design analysis, transit advantages, telecommuting, and outreach and education. The Team conducted preliminary analysis of park-and-ride facility utilization and an assessment of future service needs. SRF Consulting was hired to conduct preliminary design and engineering for lane and interchange improvements in the corridor. Ultimate design options have been completed and cost estimates developed. The Team has asked for an evaluation of lower cost design options and a benefit cost sensitivity analysis. The Center for Changing Landscapes at the University of Minnesota is conducting community land use and urban design analysis, working closely with the communities in the corridor to develop a vision for transit compatible land use. URS completed an evaluation of transit service characteristics in the corridor and conceptual development of on-line station options. An alternative frontage road concept has been developed which will enhance off-peak service in the corridor. The corridor advisory committee and several technical committees are being managed by the Humphrey Institute and are meeting regularly to help guide the design, land use and transit advantages work. Along with this, the Humphrey Institute is also developing a telecommuting plan for the corridor.

**For More Information Contact:** Kenneth R. Buckeye, Program Manager Value Pricing (651) 366-3737, 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.

*Evaluation Funds Awarded:* September 2000

*Project Status:* The final report has been completed and is under review. 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 2007 Update:** Washington State DOT sponsored a peer review of the SR 167 HOT lanes inviting in experts from California, Colorado, and Minnesota to evaluate the project. This group found that “WSDOT was 95% there” and ready to open as scheduled. Construction continued on the civil components of this project as well as integration work to modify the existing WSDOT tolling back office facility. Design of the tolling system progressed with approval of the system design.

During the November elections in Washington State, a citizen sponsored initiative was passed that currently appears to impact the toll setting process for the project. The project was on target to have tolls set by March, just prior to opening, but depending on how the state legislature handles the new requirement that they set the toll rates, the project may be delayed until Summer, 2008.

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 road 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:*** 2008

***October – December 2007 Update:*** The Team launched the first round of public meetings in October 2007. Public input will be combined with feedback from the study's four advisory committees as the Study team further develops and evaluates the initial congestion pricing scenarios. Development of the regional road pricing model (RPM-9) is also progressing. Phase 2 of RPM-9, expansion of San Francisco's activity-based model to the 9-county Bay Area, has been used for analysis of preliminary scenarios. Already underway, the third and final phase of the RPM-9 model will incorporate more extensive peak-spreading, recalibration to stated preference surveys, and distributed values of time. Phase 3 will conclude in the spring in order to inform final recommendations for the study. The Team has also met with regional partner agencies to document existing transit services and regional electronic payment systems. Work on economic and financial models is also underway.

Working with local and regional partners, the Team is now focusing on design and analysis of initial mobility packages that include both congestion pricing scenarios and the associated improvements needed to enhance options for all travelers. Evaluation of initial alternatives—from potential system performance to economic impacts—will be shared at additional public workshops early this spring. Analysis and evaluation of congestion pricing will be coordinated with many local and regional efforts, including the San Francisco Bay Area's Urban Partnership program.

**For more information contact:** Zabe Bent, Senior Transportation Planner, San Francisco County Transportation Authority; email: [elizabeth.bent@sfcta.org](mailto:elizabeth.bent@sfcta.org) or visit the study website at [www.sfmobility.org](http://www.sfmobility.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.

*Feasibility Funds Awarded:* 2001

*Pre-Implementation Funds Awarded:* 2002

*Project Cancelled:* 2003

## **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 be 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 July 2007, tolls on the express lanes vary between \$1.20 and \$9.50, 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 176,000 transponders in circulation at the end of fiscal year ‘07. During the fiscal year ending June 30, 2007, the facility served over 14.6 million vehicles, averaging almost 40,000 vehicles per day, with approximately \$40.6 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=34&fuseaction=projects.detail](http://www.sandag.org/index.asp?projectid=34&fuseaction=projects.detail) .

***October – December 2007 Update:*** A contract was signed in October 2007 with traffic systems integration firm TransCore, L.P., to complete design, build, operate and maintain a new state-of-the-art toll collection and violation enforcement system for the I-15 Managed Lanes. Project details are available at [www.sandag.org/index.asp?rfpid=127&fuseaction=rfps.detail](http://www.sandag.org/index.asp?rfpid=127&fuseaction=rfps.detail) and at [www.keepsandiegomoving.com/i-15.html](http://www.keepsandiegomoving.com/i-15.html). This period TransCore and SANDAG finalized the system requirements and initiated work on the installation plans and software development tasks for the lane and back-office. SANDAG’s consultant, HNTB, and Caltrans continued work on the development of the *Traffic Incident Management Field Manual* this period.

**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

*September – December 2007 Update:* Orange County Transportation Authority staff is developing a strategy that would best utilize the FHWA funds appropriated for the Value Pricing Pilot Program. The project is in the initial stage of task 2 - Operational Simulation and Dynamic Pricing Algorithm Test and Evaluation. Staff is currently developing a technical and financial scope for this task. Travel time data collection and the preparation of a micro-simulation of the SR-91 corridor are two of the elements for this task. Staff will develop a strategy/outline for the scope and will present it to the OCTA Board of Directors for their feedback. Once staff has received comments from the Board, staff will begin to define the scope for Task 2.

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*

*Implementation Funds Awarded: 2006*

*Anticipated Completion Date: 2009*

*October – December 2007 Update:* SANDAG’s outreach consultant finished the analysis of telephone and intercept surveys that were conducted last quarter and a final outreach report is expected in early 2008. This report will consolidate the results of the violation enforcement study focus groups, stakeholder interviews, and surveys into a single volume. Following selection of research partners at the University of California, Berkeley, a proposal to fund the monitoring and evaluation of SANDAG’s planned vehicle occupancy verification testing project was accepted by Caltrans and additional funding is anticipated next year. This supplemental grant will pay for additional monitoring and research by the Partners for Advanced Transit and Highways (PATH) and California Center for Innovative Transportation (CCIT) programs and is in addition to the baseline scope of work carried out by SANDAG and funded by the Value Pricing Pilot Program grants. This period SANDAG also developed a Draft Concept of Operations for the Vehicle Occupancy Verification project and initiated work on a Request for Information (RFI) document that will be advertised in transportation trade journals and publications early next year.

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, and 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 that would manage volumes in the Express Lanes by charging a variable toll to ensure reliable, free-flowing traffic conditions.

*Feasibility Funds Awarded: September 2001*

*Study Completed:* The C-470 Express Lanes Feasibility Study Final Report is available. Go to [www.c470.info](http://www.c470.info) for updated information.

*Project Status:* The environmental assessment is on hold due to local government opposition.

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 2007 Update:*** The thirty percent design plans were submitted. They are still under review along with the bridge development reports, pavement design and typical section packages. The design of the queue jump project has been closely coordinated with an ongoing Project Development and Environment (PD&E) study on this segment of Colonial Blvd. Public comment received at a recent public workshop for the PD&E study dictated some design changes to ensure the projects are compatible. These changes are being incorporated into the plans; the most significant change being that the bridge will be on structure rather than retaining wall and will be reflected in the 60% plan submittal which will be submitted next quarter.

A time extension has been requested and approved by FDOT for one year.

**For More Information Contact:** Sarah Clarke, Lee County Department of Transportation; Phone (239) 533-8718; [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.georgiatolls.com](http://www.georgiatolls.com). Managed lanes with pricing will definitely be implemented on I-75 through Atlanta. The project is currently projected to take place in 5-7 years because new lanes must be built to permit the priced lanes.

For More Information Contact: Patrick Vu, Senior Transportation Consultant, State Road and Tollway Authority, 404-893-6130, [patrickvu@georgiatolls.com](mailto:patrickvu@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 Awarded:* January 2006

*October – December 2007 Update:* The study team analyzed eight pricing scenarios involving High Occupancy Toll (HOT) lanes, Express Toll lanes for autos, Truck Only Toll (TOT) lanes, and combinations of HOT and TOT lanes. Of these pricing scenarios, the Express Toll lanes for autos, Alternative A-3, has been identified as the most cost effective use of public funds when examining demand and performance, as well as being the most operationally feasible. A Traffic and Operations Analysis has also been completed to provide baseline operational information.

The study team held a steering committee meeting in Henry County on November 15, 2007 to present results from these analyses. The next steps for the study team are to complete the Future Year Operational Analysis and perform tests for sensitivity to willingness-to-pay for Express Toll lanes.

The study website was officially launched in July. Go to [http://srta-valuepricing.net/i75\\_south/i75\\_south.htm](http://srta-valuepricing.net/i75_south/i75_south.htm) for more details on the I-75 South managed lanes pricing study.

For More Information Contact: Patrick Vu, Senior Transportation Consultant, State Road and Tollway Authority, 404-893-6130, [patrickvu@georgiatolls.com](mailto:patrickvu@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 began in the Fall of 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. The report was finalized.

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 studies were completed using Value Pricing funds. Study findings are available at <http://www.metro-region.org/article.cfm?articleid=3518> . Tolled and non-tolled alternatives presented following a corridor refinement study were approved by the Joint Policy Advisory Committee on Transportation and the Metro Council. The agency currently plans to conduct a NEPA process on both alternatives when funding is available.

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

*July - September 2007 Update:* No update was provided. However, during the previous quarter TxDOT finalized a scope of work for the project and selected TTI to conduct the study.

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 2007 Update:* Work on the level one traffic and revenue study neared completion (the final draft submission is expected in January 2008), final travel demand and CORSIM modeling progressed, while work on the environmental and engineering aspects of the project continued.

In late December, due to the funding issues in Texas, work on the project slowed considerably. However, TxDOT is working on partnering with the local regional mobility authority to continue project development. More should be known in the first quarter of 2008.

Project information can be found at [www.MoPac1.org](http://www.MoPac1.org)

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). The West Section is being actively implemented as a “Comprehensive Development Agreement” (CDA) geared toward a concession approach and the East Section is being deferred until seed funds become available.

**Project Status:** This project did not receive any direct Value Pricing Pilot (VPP) program funds; however TxDOT is currently seeking tolling authority through the **Express Lane Demonstration (ELD)** program. This application was submitted to FHWA on September 18, 2007 and will retain the overlapping and companion features of the Value Pricing Pilot (VPP) program for implementation.

TxDOT has completed most of the due diligence by having secured additional financial support from the stakeholders within the region, Value Engineered the project to help reduce anticipated cost, adding additional priced segments, and finalized the contractual terms of the CDA. The remaining due diligence effort is the re-evaluation of the existing FONSI to incorporate the new changes, which is anticipated to be complete late this year. 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.com>

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. A final request for proposals was issued on September 18, 2007 with proposals due at the end of April, 2008. The base initial project is 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. Additional project information can be found at the project web site: <http://www.635project.com>.

**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 2007 Update:*** Construction continues and toll operations are slated to begin in the late Summer or early Fall of 2008.

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 previously 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 2007 Update:* TxDOT continued on the initiated work effort based on consent from FHWA on the operation scope to proceed. TxDOT has an ongoing construction project to build/extend this operating project in preparation for the upcoming VPP specific activities. To find out additional information about this project, go to:  
([www.keepitmovingdallas.com](http://www.keepitmovingdallas.com))

### ***Progress on planned activities:***

1. The VPP project is moving forward with data collection and other activities to measure, monitor, and evaluate the project. The Managed HOV Lane has been open four months.
2. A draft traffic and revenue study has been completed and will be a reference document.
3. A resolution on many signing issues has resulted in the draft completion of a signing schematic to address signing needs for this project. The schematic will address signing for any banners, symbols, supplemental signing, and the large overhead signs for destination, tolling information and operational needs.
4. The future dual lane declaration gantry concept was field at Texas A&M on October 17, 2007 and will be highlighted at a TRB poster session on Monday January 14, 2007 at Poster Session #251 (Design and Operation of I-30 Tom Landry Managed-Lane Value Pricing Project in Dallas, Texas (P08-0719) by Christopher M. Poe – TTI).
5. A draft tolling methodology that includes dynamic pricing has been developed for the technical team to refine. This is being compared with other known approaches around the country for integration with the projects ITS data delivery ability.

### ***Activities planned for the next two quarters include:***

1. Monitor the operating HOV project and measure the traffic volumes.
2. Attend the joint development meetings for this project as it includes Local, Regional, State, and Federal partners for the project. Participate accordingly.
3. Continue development of the tolling methodology for dynamic pricing.

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 road will probably be tolled in some form once it is completed and responsibility for the project has been turned over to the Regional Mobility Authority, the local tolling agency. Selection of an alternative is not anticipated for at least 5 years because the political climate in the area is unfavorable toward tolling and the project involves a large portion of elevated roadway adding considerable expense.

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 March 2007, fiscal year-to-date toll revenue growth increased over 8.6% from last year while traffic was up 1.2%.

**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 2007 Update:* Wilbur Smith Associates was selected as the consultant for this project. A "not to exceed" contract was approved by the Board of County Commissioners. A kick-off meeting was held with all project partners and several alternatives were discussed. After presenting concepts to the Sanibel City Council comments were received regarding seasonality of the study and it was decided to postpone public involvement until the 1<sup>st</sup> of 2008, which will still allow enough time to finish the study within the approved time frame. Focus group meetings have been scheduled on and off the island for the end of January.

For More Information Contact: Eileen Price at Lee County Department of Transportation; Phone (239) 533-8507; [EPrice@leegov.com](mailto:EPrice@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> There are no plans to implement the variable toll project at this time on the Sawgrass Expressway. No final decision has been reached on variable pricing, but the agency believes variable tolls will be implemented at a future time. The main issue preventing variable tolling is the lack of collection facilities. The current system utilizes cash and electronic methods and a variable system would require a transfer to all electronic collections. Although a modernization of collection facilities system-wide is planned, there are no plans to eliminate cash from the Sawgrass Expressway. As of June 2007, the first entirely electronic toll plaza in the Turnpike system is set to open in 2016 on Highway 589.

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

For More Information Contact: Randy Fox, AICP – Turnpike Planning Manager, Phone (407) 264-3041, 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. An electronic copy is not available at this time. There are currently no plans to implement value pricing on the Homestead Extension of the Florida Turnpike (HEFT). Like the Sawgrass Expressway project, the elimination of cash payments for tolls is the largest obstacle being faced. The installation of automated toll collection systems is not currently planned, but may be considered in the future as technology advances.

For More Information Contact: Randy Fox, AICP – Turnpike Planning Manager, Phone (407) 264-3041, E-mail: [Randy.Fox@dot.state.fl.us](mailto:Randy.Fox@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 2007 Update:*** The study team has completed traffic queuing analysis at the toll plaza to determine the level of bottlenecking that occurs during the peak periods at the toll plaza. Market surveys have also been distributed to GA 400 customers (both cash and Cruise Card customers) to ascertain how variable pricing might impact travel behavior. Currently, the steering and stakeholder committees' member lists are being developed. January 4, 2008 was the first steering/stakeholder committee meetings.

For More Information Contact: Patrick Vu, Senior Transportation Consultant, State Road and Tollway Authority, 404-893-6130, [patrickvu@georgiatolls.com](mailto:patrickvu@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 were conducted using a data set collected for another purpose for the PANYNJ. It indicated that among E-ZPass users who were aware of the off-peak discount program, 16% had changed their travel schedules to enjoy the off-peak discounts. This represented 7.68% of the E-ZPass users and 5.33% of the total number of users. The data also suggested that carriers were 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.

**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 to assess the feasibility of pricing a new managed lane 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 vehicles in the regular travel lanes. Since the XBL has reached its capacity, the PANYNJ is assessing the physical and operational feasibility of adding a second priority bus lane to the corridor.

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: 2008***

***October – December 2007 Update:*** A stated-preference survey of auto drivers, truckers and bus riders has been completed with a response rate well beyond what was required to meet the statistical requirements for the research. The project team has processed the responses and is in the final stages of developing a report on the results, which will be available during the First Quarter of 2008. The stated-preference surveys are being used to understand motorists' value of time, a critical factor in the development of the predictive behavioral travel choice model, which is under underway. The testing of a travel choice behavior model format was initiated. This model will interface with the Port Authority's VISSIM micro-traffic simulation model for the corridor, which has been refined and calibrated using traffic data collected earlier in this project. Regional coordination activities have included acquisition of other data and surveys (e.g., the PANYNJ's auto O&D survey), and other regional models (i.e., NYMTC's Best Practices Model). The PANYNJ has shared refinements to its conceptual planning for a new managed lane, which includes new physical access options to ease traffic flow into the managed lane from the major NJ highways.

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**

The Port Authority of NY & NJ's (PANYNJ) implemented time-of-day pricing in March 2001 at the six tunnels and bridges that connect New Jersey and New York City. The PANYNJ program was evaluated with Value Pricing funds received by NJDOT, which found that the discounted E-ZPass<sup>sm</sup> electronic transactions on weekday and weekend off-peak hours 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 system; assess the operational challenges and financial risks of implementing such a system; and possibly 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 2007 Update:*** Planning for the overall toll system replacement project was formally authorized by the PANYNJ Board on June 26, 2007. Two distinct procurement efforts are underway for professional, technical and advisory services: (1) a business and market assessment study, intended to forecast potential conversion of existing cash customers to electronic E-ZPass payments and evaluate the financial and business risks of the business model; and (2) technical services for the procurement and specification and implementation of an All-Electronic Tolling system. In addition, work has commenced on preliminary design and engineering analyses to determine project schedule and cost estimates for project implementation. There will also be an effort to structure outreach, communication and legislative support services, designed to identify the processes and measures required to adequately ensure collection of video tolls. The project team will be working with FHWA New Jersey regional office to establish the federally funded tasks of the non-engineering 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) . Despite the prediction of favorable results the turnpike decided not to adopt variable tolls.

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

### **TEXAS: Truck Traffic Diversion Using Variable Tolls in Austin**

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

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

***Pre-Implementation Study Awarded:*** January 2006

***Anticipated Completion Date:*** 2008

***October – December 2007 Update:*** The research team continued to focus on developing the survey of trucking firms / drivers. This included test surveys conducted at a weigh station on I-35. This test survey provided valuable insight and has led to some modifications to the format of the survey. Researchers also developed 50 different versions of the survey (in both English and Spanish) so that printed versions with different stated preference questions could be administered at toll plazas and weigh stations. A technical memorandum on the results from interviews with trucking firms was completed.

**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)



### **FLORIDA: Dynamically Priced Carsharing in Tampa**

Carsharing encourages participants to reduce car ownership and save on related fixed costs in exchange for accepting relatively high per-use carsharing costs, which in turn encourages less driving. Carsharing is a growing phenomenon in university settings, with 20 new programs started within the last two years, and a total of 40 universities offering car sharing in partnership with Zipcar, a carsharing company. This project will test “congestion pricing” for carsharing vehicle usage, with differential pricing based upon both time-of-day/day of week and vehicle demand. Such pricing will be coupled with ridesharing promotions and incentives at the university, providing users more options besides driving a carsharing vehicle alone (e.g., finding a ride from someone who owns their own vehicle, sharing a carsharing vehicle, etc.) when congestion pricing for carsharing begins.

Research related to the project will be conducted by the Center for Urban Transportation Research (CUTR) at the University of South Florida (USF). The project will utilize TRAC-IT, an innovative tool recently developed by CUTR. TRAC-IT uses global positioning system (GPS) based cell phone technology to track participant time of travel, route, speed, mode, vehicle occupancy, and trip purpose (by prompting the user in real time). Assuming the cooperation of others (e.g., 511), it also may enable other information to be sent to users, such as on traffic conditions, proximity to transit vehicles, and prices for the carsharing use. This will be the first test of combining congestion pricing with carsharing. It will encourage travel shifts away from peak periods while increasing overall utilization of car-sharing.

*Feasibility Funds Awarded:* 2007

*Anticipated Completion Date:* 2010

***October – December 2007 Update:*** This project was awarded funds in April 2007. The project scope has been revised and the cooperative agreement has been finalized between FHWA and FDOT District VII. The contract between FDOT District VII and the University of South Florida is pending.

For information contact: Julie Bond, CUTR; phone: (813) 974-9799; email: [bond@cutr.usf.edu](mailto:bond@cutr.usf.edu)

## **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

***October - December 2008 Update:*** Continued delays in deployment were experienced due to subcontractor delivery of defective software last quarter. The software problems could not be resolved by the subcontractor because they no longer had access to necessary in-house programming skills (they released their subcontractor). Software code elements were transmitted to Georgia Tech by the subcontractor and code issues were resolved by Georgia Tech programmers over a three month period. Given the ongoing delays, we were required to release the Phase II candidates from the study and we began recovering their equipment. All hardware upgrades were completed this quarter, so there will now be no need for a rotating deployment schedule. The recruitment of new participants for Phase III will commence in February 2008 (the recruitment bid has been received and is moving through the approval process). Recruitment will begin as soon as the minor amendments to human subject document dates are approved by the committee. Pricing should begin in March/April. Online electronic travel diaries are ready to implement and preliminary scheduling of post-study focus groups has been handled.

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 submitted its 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 2006, 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**

This project is an effort to provide important input and enhance the national projects examining replacement for the motor fuel tax. What is lacking in these other national studies is an effort to understand public attitudes and to increase public awareness about the motor fuel tax challenge. With that in mind, we propose to do an assessment of public understanding of mileage-based road user charges through market research, outreach and education. Subsequently, this project will provide direct input into ongoing work looking at the motor fuel tax replacement and how the need for a new or replacement tax might be communicated.

A baseline survey of experts regarding public understanding of existing transportation funding systems and issues will be conducted. Subsequently, through focus groups and general surveys we will “drill down” into the public attitudes as to the root causes of attitudes, regional differences, and provide insight into ways in which solutions might be framed. These messages will then be tested to develop a communications strategy that could be employed to market mileage-based fees and messages.

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

***October – December 2007 Update:*** The project team and consultant completed reports on the expert on-line discussion and focus groups. Experts concluded that a mileage based user fee is a solution that will likely not be feasible for at least 10 years. If or when it is tested or implemented, it is imperative to clearly identify the objectives of the fee as a first step for determining structure/design of the concept and how to communicate to consumers. The adequacy of funding is a political issue and dependent on politicians’ willingness to increase the fuel tax. Experts proposed that the strategy be used to supplement, rather than replace, the current motor fuel tax.

Focus groups revealed that the majority of the Minnesota public doesn’t fully grasp the amount of tax dollars they spend per year on the transportation system, nor do they easily recognize the sources through which these monies come. Drivers may be more accepting of a change in the funding method, whether simply an increase in the existing tax or a switch to a mileage-based user fee, if the reason for the change is clearly explained. They saw the general idea of a mileage-based user fee as a fair and reasonable way to tax, just as taxes for electricity and water. Mixed feelings existed, however, as to the need for more money for transportation in general, with a small portion convinced funds were adequate but mismanaged. While varying the fee based on size and weight of the vehicle was seen as logical, some thought it would unfairly penalize those who have chosen to drive fuel efficient or hybrid vehicles. The congestion pricing model was seen as less fair as it negatively impacts those drivers who need to travel for work during standard “rush hours.” There is an attitude that raising the motor fuel tax is the only/best/long term solution for transportation. Planning for the subsequent phase of work, customer surveys and / or further focus group work is now underway.

For More Information Contact: Kenneth R. Buckeye, Program Manager Value Pricing (651) 366-3737, 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 2007 Update:** The Oregon Department of Transportation released the final report for the Road User Fee Pilot Program on November 20, 2007. The report can be obtained at [http://www.oregon.gov/ODOT/HWY/RUFPP/docs/RUFPP\\_finalreport.pdf](http://www.oregon.gov/ODOT/HWY/RUFPP/docs/RUFPP_finalreport.pdf).

For More Information Contact: Mr. James M. Whitty, at (503) 986-4284, [jjm.whitty@odot.state.us](mailto:jjm.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 - November 2007 Update:** The team completed the operational portion of the project in the Spring of 2006. During the Summer and Fall of 2007 the study team assembled all the behavioral data into analytical data sets, estimated behavioral models and replicated the behavioral findings in the region’s travel demand model. In June, the project team also hosted a conference titled “Future of Transportation Finance: Lessons from Road Charging Experiments”.

The workshop agenda can be found at

[http://www.prrbiz.com/psrc/PSRCWorkshop\\_Agenda\\_v1.pdf](http://www.prrbiz.com/psrc/PSRCWorkshop_Agenda_v1.pdf)

The primary aims of the Traffic Choices Study were to (1) accurately describe the behavioral response to the congestion pricing of roadways, (2) better understand issues of policy related to the implementation of road pricing, and (3) test an integrated system of technical solutions to the problem of tolling a large network of roads without deploying substantial physical hardware on the roadside. The study has met these goals, and primary conclusions from the study include:

1. Observed response of drivers to tolls suggests there is a practical opportunity to significantly reduce traffic congestion and raise revenues for investment.
2. The core technology for satellite-based (and whole road network) toll systems is mature.
3. Any charging system must be technically verifiable and legally enforceable, within bounds of what is politically acceptable. Not all aspects of the charging system have been fully demonstrated.
4. A large-scale U.S. deployment of a GPS-based road pricing depends on a viable business model and public acceptance of underlying concepts.

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).

## **WASHINGTON: Pay-As-You-Drive (PAYD) Insurance in Seattle**

Proposals for an insurance company partner and selected Unigard from four applications. Unigard Insurance Group is headquartered in Bellevue, Washington and offers car insurance in seven states. Washington State and King County, Washington also set aside some of their own funds to support a pilot project, and together with Unigard, are offering total matching funds of \$4,506,000. This pilot will install the field-tested Intelligent Mechatronic Systems' iPAID global positioning system (GPS) mileage recording devices on a sample of approximately 5,000 vehicles, collect baseline data needed to model the options for a PAYD premium structure, select the best premium structure, and roll out and test it in the State of Washington. The study has both a pre-implementation and implementation phase.

The Study Design and Path are being modified. This proposal will lead to the implementation of PAYD insurance in Washington State at an early date. Unigard will utilize both vehicle history data that provides odometer information and iPAID technology to verify odometer readings and examine driving behaviors from a data base of current insurance holders. The company will also recruit new participants to the PAYD pilot. Using the larger data base, they will identify the potential markets for mileage based insurance and, if feasible, implement the product at an earlier stage than originally planned. The use of technology will allow calibration with odometer readings and estimates of driving behaviors by different markets i.e. age, education, time of driving, land uses. It will also look at marketability of PAYD to various populations i.e. suburban, urban and rural.

Throughout the study, a sample of vehicles will be measured using the iPAID technology to verify odometer readings, assessing the miles driven and measuring driving behavior such as braking and acceleration patterns. The actual mileage based insurance product will be examined in a pre- post- study. The PAYD pilot anticipates installing 1,000 iPAID machines in participant vehicles.

Participants will be surveyed for commute behavior, customer satisfaction, changes in travel modes and travel behavior, use of transit or HOV modes, and intentions to continue with their current insurance policy. Participants will receive discounts for participating in the PAYD pilot. The PAYD pilot will also examine pricing and billing models.. PAYD insurance enables substantial consumer savings and has been estimated to lead to between a 9 to 20 percent reduction in driving, with commensurate congestion reduction and air quality benefits. The PAYD pilot will also develop estimates of emissions reductions.

***Pre-Implementation Funds Awarded: 2007***

***Anticipated Completion Date: 2010***

***October – December 2007 Update:*** This project was awarded funds in April 2007.

**For More Information Contact:** Bob Flor, King County; (206) 684-1611; email [bob.flor@metrokc.gov](mailto:bob.flor@metrokc.gov)

## **“CASH-OUT” STRATEGIES/PARKING PRICING**

### **CALIFORNIA: Car Share Innovations in the City of San Francisco**

This project includes two distinct program elements: “Unbundling Housing from Parking,” where car-sharing vehicles will be placed in new housing developments allowing such developments to provide less parking and include more housing units, thus reducing housing costs; and a pre-implementation “Integrated Car Sharing/Car Pooling System,” where technologies will be explored to facilitate ridesharing among car-sharing participants, enabling them to reduce costs by sharing rides while car-sharing. The project may lead to changes in local zoning codes to allow matter-of-right housing development with the amount of parking provided by developers determined by market conditions rather than minimum government mandates. The “Integrated Car Sharing/Car Pooling System” project may lead to more efficient use of car-sharing vehicles, thereby making car-sharing more cost competitive with car ownership for more people. This project has the potential to encourage these additional people to give up their cars and eliminate fixed car ownership costs in exchange for accepting relatively high per-use car-sharing costs, and thus in turn to drive less.

*Pre-Implementation Funds Awarded: 2007*

*Anticipated Completion Date: 2010*

*July - September 2007 Update:* This project was awarded funds in April 2007.

**For More Information Contact:** Rick Hutchinson, City Carshare, phone: (415) 995-8588, x314; email: [rick@citycarshare.org](mailto:rick@citycarshare.org) .



### **CALIFORNIA: Smart Parking Initiative in San Diego**

This new project that will build on the success of the priced smart parking system tested at the Bay Area Rapid Transit (BART) system's Rockridge station. The team will test various parking management strategies, including real-time advanced traveler information about parking availability at stations throughout the system with integrated reservations capabilities, variable pricing based upon time of day and demand, and a unique credit-based pricing system (or transit fare discounts) that will reward station access by transit and carpool. Park-and-ride carpoolers will, in addition to sharing parking expenses among themselves and receiving additional financial rewards, be able to reserve priority parking spaces nearest the station platforms. Pricing will be used to achieve a targeted parking usage rate (e.g., 95% of capacity) at each station and to encourage station access by carpool and transit modes. Up to three sites will be selected to deploy a corridor-scale smart parking pricing pilot project. All system design elements for such a deployment will be finalized as part of this project.

*Pre-Implementation Funds Awarded: 2006*  
*Anticipated Completion Date: 2010*

**October – December 2007 Update:** The consultant team proceeded with the installation of the parking system technologies and initiated the feasibility/data collection phase along three Coaster Stations, the Carlsbad Poinsettia, Encinitas, and Carlsbad Village stations. Data collection efforts will be supplemented with user assessment information to be completed through focus group analysis and surveys anticipated for next quarter. These efforts are focused for getting a better understanding of existing parking demand characteristics, parking operations, and system user profiles. Additional efforts planned next quarter include, expanding the data collection/smart parking technology installation efforts to include the Carlsbad Village, Oceanside, and Solana Beach stations and to complete the data collection analysis.

For More Information Contact: Alex Estrella, San Diego Association of Governments; Phone (619) 699-1928, e-mail [aes@sandag.org](mailto:aes@sandag.org)

### **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 2007 Update:* The project team has established a task force of state and local leaders and representatives of key policy and advocacy groups and parking experts to examine the benefits and barriers to implementing innovative parking pricing strategies and to recommend specific projects which could be implemented in the short-run. Background research was begun to examine the current state of parking in select locations in the Twin Cities. Outreach and education activities planned include public roundtables, meetings with city councils and key local government staff, community meetings and focus groups, as well as communications and media outreach. The team is identifying specific parking pricing demonstration projects including local government partners. The task force will meet on a monthly basis to advise the project team and researchers conducting the analysis and to explore opportunities for implementation of a demonstration.

For More Information Contact: Kenneth R. Buckeye, Program Manager Value Pricing (651) 366-3737, 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 on the FHWA Highway Community Exchange Website at:

<http://knowledge.fhwa.dot.gov/cops/hcx.nsf/384aefcefc48229e85256a71004b24e0/a19c77018189d09f85256dba0063d8f4?OpenDocument> . There is currently a cash-out program marketed to employers in place in King County.

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.

A website describing the program as it is currently available to residents exists at: <http://www.seattle.gov/waytogo/onelesscar.htm>. The final report and replicability package for the demonstration project are also available at: <http://www.seattle.gov/waytogo/waytogo.htm>.

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**

### **CALIFORNIA: Investigation of Pricing Strategies in Santa Clara Valley**

The study will provide an assessment of: (1) institutional, design and operational issues related to replacing general purpose freeway mainline and auxiliary lanes with priced managed lanes, and (2) benefits and costs associated with such replacements. It will also assess the benefits and costs of creating a system that integrates priced, managed lanes, freeway operations, and new transit services. Additionally, it will investigate the implementation of a credit-based congestion pricing approach involving both managed lanes and transit, and determine near-term implementation feasibility. The study will contribute to the development of a comprehensive multi-modal value pricing program that includes alternative transportation options.

*Feasibility Funds Awarded:* 2007

*Anticipated Completion Date:* 2010

*July - September 2007 Update:* The project was awarded funds in April 2007.

For More Information Contact: Casey Emoto, Senior Transportation Engineer; phone: (408) 321-5564; email: [casey.emoto@vta.org](mailto:casey.emoto@vta.org)

### **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>

### **ILLINOIS: Comprehensive Pricing in Northeast Illinois**

In FY 2003, the VPP program awarded funds to study the feasibility of variable tolls on tollways operated by the Illinois State Toll and Highway Authority. The Authority implemented variable tolls for trucks in January 2005. The new project will evaluate the feasibility of reducing bottlenecks through a system of priced queue jumps and will assess resulting changes in travel times and delays on the region's expressways. The study will also assess the feasibility of better utilizing electronic toll collection and variable pricing mechanisms to reduce traffic congestion and access the potential of implementing pricing to increase the use of alternate travel modes and enhance the capacity on the region's expressway system. This project could lead to the demonstration of innovative pricing mechanisms to reduce congestion, improve goods movement, and increase the use of alternative transportation modes.

*Feasibility Funds Awarded:* 2007

*Anticipated Completion Date:* 2010

***October - December 2007 Update:*** In the prior quarter (July – September 2007), the IL Tollway selected Wilbur Smith Associates to work on the new Value Pricing project. The IL Tollway Board approved the Wilbur Smith contract at its October board meeting. The contract documents were completed in November and the notice to proceed was issued on December 5th. IL Tollway staff had several meetings with the Metropolitan Planning Council and Wilbur Smith Associates the third week in December. At those meetings, staff agreed to the scope, schedule and staffing plan for the upcoming quarter (January – March 2008).

For Information Contact: Mary Wells, Illinois State Toll Highway Authority, (630) 241-6800 ext. 3902, email: [mwells@getipass.com](mailto:mwells@getipass.com)

## **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 2007 Update:** In 2007, the Maryland State Highway Administration (SHA) continued the feasibility study assessing managed lanes on I-270 from the I-270/I-370 interchange in Gaithersburg to I-495 (Capital Beltway), and along I-495 to State Route 193 in Virginia (first interchange west of the Potomac River). The study limits connect the Intercounty Connector, a planned toll-lane facility between I-95 and I-270, with Virginia's I-495 HOT Lanes project. The project team is preparing a draft feasibility report describing the operations, costs and impacts of five alternatives with varying cross sections to fit within the existing highway corridor. The SHA expects to receive and review the draft feasibility report in early 2008.

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 2007 Update:*** The project team prepared to solicit proposals from private sector and academic partners to execute the first phase of this project. A task force of national, state and local leaders will be assembled, with representatives from the VII (Vehicle Infrastructure Integration as per the ITS Joint Program Office initiative) coalition. In addition, a panel of pricing experts and local officials will be established to examine the benefits and barriers to implementing FAST Miles. The anticipated start date is spring 2008.

For More Information Contact: Kenneth R. Buckeye, Program Manager Value Pricing (651) 366-3737, 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 serv, 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 were 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 2007 Update:*** During this period, researchers continued work on several tasks. An enforcement summary for US-59 South was compiled in schematic form that provides a comprehensive assessment of field conditions, such as logical HOV verification areas, officer enforcement points, ramp volumes, photos, and general observations noted during field reconnaissance with METRO police. Researchers conducted site inspections of all current HOV system access points to inventory current traffic control devices. Work on how the HOT Network will be handled from the back office began during this quarter. This included:

- reviewing the documentation of the operation of the back office for the QuickRide program,
- identifying strengths and weaknesses and consideration of what/if operations can be transferable to HOT lane operations,
- gathering copies of standard operating procedures for back office administration from other HOT lane operators.

For More Information Contact: David E. Fink, Texas Department of Transportation, 6922 Old Katy Rd., Houston, TX 77024; Phone (713) 881-3063, email [dfink1@houstontranstar.org](mailto:dfink1@houstontranstar.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.

***Pre-Implementation Funds Awarded:*** January 2005

***Anticipated Completion Date:*** September 2008

***October – December 2007 Update:*** The project team continued work on the regional value pricing study scenario analysis. The team also prepared an initial draft final report for the regional value pricing study which was presented at a meeting of the TPB's Task Force on Value Pricing on December 5, 2007. The draft final report will be presented to the task force on January 30 and to the TPB in February. The final report will be submitted February 28, 2008.

For More Information, Contact: Michael Eichler ([meichler@mwkog.com](mailto:meichler@mwkog.com)), National Capital Region Transportation Planning Board, (202) 962-3763.

## **VIRGINIA: Value Pricing for the Hampton Roads Region**

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.

The original contract scope was amended to direct 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 is to prepare the citizens of Hampton Roads for the possibility of tolls being implemented within the region in the next 3-6 years. VDOT secured 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.

***Pre-Implementation Funds Awarded: 2003***

***Anticipated Completion Date: 2007***

***October - December 2007 Update:*** VDOT is developing a communication and public outreach campaign on variable pricing and electronic tolling that can be implemented in conjunction with any toll or pricing project within the Commonwealth, and will be piloted in Hampton Roads. VDOT has contracted with Pulsar Advertising to develop two DVDs that show the past, present and future of tolling in Virginia, which should be available for viewing at TRB. One will be short – about 4 minutes to be used at executive briefings, and the second will be about 15 minutes and used for general public. The longer version will include “man on the street interviews” and more detailed information. The DVD will contain old footage of toll booths, footage of existing tolls where there are coin and open road tolling for E-ZPass holders, and a simulation of tolling with every lane electronic, open road tolling. Other public outreach efforts under development include a webpage on electronic tolling; brochures for public distribution; PowerPoint templates; a display booth to be used at the 2008 General Assembly and ITSVA reception; and press packets. All of this information will be developed with applicability to Hampton Roads and will be legacy materials for other tolling initiatives within the Commonwealth. Last, VDOT is working with SIR to develop a telephone survey for residents of Hampton Roads to assess their knowledge of electronic tolling, variable pricing and use of a transponder. Draft questions have been developed and the survey will be conducted in late January, 2008 with results available in late March.

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:*** January 2006

***Anticipated Completion Date:*** September 2009

***October - December 2007 Update:*** In the fourth quarter WSDOT proceeded with regional dialogue and facilitation of strategic planning for tolling in the Central Puget Sound region. The project has engaged in public outreach and analysis of public opinion by way of focus groups and review of poll results.

Eight focus groups were conducted in coordination with the Puget Sound Regional Council (PSRC) and King County during November and early December. The focus groups were held in four different locations, representing North King County, South King County, East King County and Seattle. There were two focus groups comprised of low income participants, one each in North and South King County. The other focus groups were recruited to reflect the overall demographics of their particular area. The purpose of these focus groups was to gauge public understanding and awareness of tolling as a means of managing traffic as well as to identify what information might influence people to support or oppose tolling proposals. The findings and preliminary report from these focus groups should be available in January 2008.

The project is continuing to develop work programs that advance regional strategic planning and other communications efforts that will commence in early 2008.

For More Information Contact: Charles Prestrud, Urban Planning Office, Washington State DOT; phone (206) 464-1271, email; [PrestrC@wsdot.wa.gov](mailto:PrestrC@wsdot.wa.gov)

## **TRUCK ONLY TOLL FACILITIES**

### **CALIFORNIA: Analysis of Environmental Effects of PierPASS and Dedicated Truck Lanes in Southern California**

This project will build off of existing analysis on the congestion reducing benefits of PierPASS by conducting a separate environmental analysis of the program. PierPASS provides off-peak truck discounts from the normal charges for accessing the Ports of Los Angeles and Long Beach. The benefits of Pier Pass in reducing peak-period truck congestion are well documented. For example, a study of the first three months of operation showed a 30% shift of truck traffic from inside to outside the peak period or more than half a million daily truck diversions from peak daytime traffic. To date, comprehensive environmental assessments of freight pricing projects in Southern California have not been conducted. This project will look specifically at fleet composition and trucking movements, gather new data, and apply it to advanced emissions models in order to assess environmental effects. Study results will provide a comprehensive understanding of the environmental benefits of this project.

Feasibility Funds Awarded: 2006

Anticipated Completion Date: 2010

*October - December 2007 Update:* The project was awarded funds in April 2007.

For More Information Contact: Matthew Barth, Center for Environmental Research and Technology, phone (951) 781-5782, email: [barth@ee.ucr.edu](mailto:barth@ee.ucr.edu)



### **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 2007 Update:*** The project team completed the toll-free runs using the previously customized model to ensure that the truck and auto volumes matched with counts on SR21 and in the study area. The toll structure has also been decided and will be tested for the development of a template for the model runs for each of the alternatives. The final alignment for the corridor for the portions that extend north to I-95 and I-516 is currently underway. This alignment will assist in design cost estimates. A Savannah Advisory Committee Meeting was held on November 8, 2007. The project team discussed the travel time data, model customization and toll-free runs, and the stated preference surveys.

For More Information Contact: Patrick Vu, Senior Transportation Consultant, State Road and Tollway Authority, 404-893-6130, [patrickvu@georgiatolls.com](mailto:patrickvu@georgiatolls.com)