

FY 2005 Value Pricing Pilot Program Proposal Summaries

Fiscal year 2005 Value Pricing Pilot Program Grants

| | State | Locality | Project | Grant |
|----|--------------|-----------------|--|--------------|
| 1 | California | Alameda County | I-680 SMART Carpool Lane in Alameda County | \$950,000 |
| 2 | California | San Francisco | Area Road Charging and Parking Pricing | \$1,040,000 |
| 3 | California | San Diego | Violation Enforcement System on I-15 HOT Lanes | \$568,678 |
| 4 | Georgia | Atlanta | I-75 South Feasibility of HOT/Truck-Only Toll (TOT) Implementation | \$242,388 |
| 5 | Virginia | Washington, DC | Regional Network of Value Priced Lanes | \$240,000 |
| 6 | Washington | Seattle | State Route 167 HOT Lane Pilot | \$880,000 |
| 7 | California | Orange County | Implementation of Dynamic Pricing on SR 91 | \$588,000 |
| 8 | Georgia | Savannah | Northwest Truck Tollway | \$472,000 |
| 9 | Texas | Austin | Loop 1 HOT Lane Enforcement and Operations | \$172,000 |
| 10 | Texas | Austin | Deliberative Polling –Loop 1 Corridor | \$160,000 |
| 11 | Texas | San Antonio | IH-10 Value Priced Express Lanes | \$129,600 |
| 12 | Texas | Waco | I-35 Value Priced Express Lanes | \$440,000 |
| 13 | Florida | Lee County | Expansion of Value Pricing to the Sanibel Bridge and Causeway | \$200,000 |
| 14 | Georgia | Atlanta | GA-400 Variable Pricing Institutional Study | \$444,000 |
| 15 | Texas | Austin | Truck Traffic Diversion Using Variable Tolls | \$148,000 |
| 16 | Washington | Seattle | Global Positioning System (GPS) Based Pricing Pilot Program | \$600,000 |
| | | | Total | \$7,274,666 |

PROPOSAL NO. 1: CA – I-680 SMART Carpool Lane in Alameda County (Bay Area)

Grantee: Alameda County Congestion Management Agency (ACCMA)

Project: Southbound I-680 SMART Carpool Lane

Federal Funding Recommended: \$950,000 (full amount requested)

- History: The Alameda County Congestion Management Agency in collaboration with Santa Clara Valley Transportation Authority, Caltrans, and the Metropolitan Transportation Commission completed a pre-project study report in September 2003 that was funded under the Value Pricing Pilot Program in the amount of \$595,250 (transferred from another study that did not proceed). The study examined options for a 14-mile segment along the I-680 corridor extending from Route 84 in Alameda County to Route 237 in Santa Clara County. It was concluded that a high occupancy toll lane is operationally and physically feasible. In 2004, the VPPP awarded this project \$714,000 to produce preliminary engineering documents and obtain environmental clearance.
- The project proposes to improve the utilization the facility through conversion of the southbound HOV lane that opened in 2002, to a combined HOV/HOT facility.
- The current proposal will produce final plans, specifications, and estimates (PS&E). Additionally, ACCMA will substantially overmatch the project and develop the electronic toll system, market research and public outreach, and the monitoring and evaluation plan for the implementation phase of the project. The total cost of this phase of the project is \$2.2 million.
- There is significant evidence of multi-modal, environmental interest group, and business support for the project.
- The project proposes a barrier-free design to improve operational flexibility and application of innovative tolling and enforcement technology. These elements will increase the national knowledge of value pricing applications.

Expected Results/Benefits: This project has obtained necessary approval and support for implementation of a combined HOV/HOT facility on a 14-mile southbound segment of I-680 in Alameda County, CA with innovative design, technology and enforcement elements that will have national transferability.

PROPOSAL NO. 2: CA – Area Road Charging and Parking Pricing (San Francisco)

Grantee: San Francisco County Transportation Authority (SFCTA)

Project: Area Road Charging and Parking Assessment Program

Federal Funding Recommended: \$1,040,000 (full amount requested)

- History: This is a new project. 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. The problem is exacerbated by double parking and people circling to locate parking.
- 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 their city owned garage facilities); and 2) develop a plan to implement area road pricing within 2 years.
- The two activities are envisioned to occur together in order to utilize congestion pricing of parking to educate citizens about congestion pricing in anticipation of the area road pricing pilot. Further, additional work is 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 also proposes to develop necessary before/after studies; model scenarios for use in decision-making; examine financial and economic benefits; and perform other related activities.

Expected Results/Benefits: This proposal will implement the first area-wide parking pricing pilot and lead to the first national implementation of an area-wide pricing pilot.

PROPOSAL NO. 3: CA – Violation Enforcement System on I-15 HOT Lanes (San Diego)

Grantee: San Diego Association of Governments (SANDAG)

Project: San Diego I-15 Value Pricing – Violation Enforcement System Pilot

Federal Funding Recommended: \$568,678 (full amount requested)

- History: The San Diego I-15 corridor is currently undergoing construction to expand the existing 8-mile facility to a 20-mile managed lane facility. I-15 has received funding from the Value Pricing Pilot Program for various studies and implementation efforts.
- In 2004, the VPPP awarded this project partial funding in the amount of \$699,722. SANDAG is requesting the balance of this \$1,268,400 project.
- The proposed project would study and evaluate the various violation enforcement policies, systems and technologies, and then implement a demonstration violation enforcement system (VES) that will field test the effectiveness and reliability of a preferred enforcement technology for permanent application.
- Violation enforcement remains among the top issues facing operational HOT lane projects. This project and the resulting technology has potential for national transferability.

Expected Results/Benefits: This proposal will ultimately lead to implementation of state-of-the-art VES technology on I-15 in San Diego, CA with transferability to other projects nationally. It will also produce a report evaluating the various VES policies, systems, and technologies available for application on operational projects.

PROPOSAL NO. 4: GA – I-75 South Feasibility of HOT/Truck-Only Toll (TOT) Implementation (Atlanta)

Grantee: Georgia State Road and Tollway Authority (SRTA)

Project: I-75 South Feasibility of HOT/TOT Implementation

Federal Funding Recommended: \$242,388 (\$400,000 was requested but this project could not be fully funded due to limited funding availability.)

History: In 2004, \$400,000 was awarded to the I-75 corridor to study incorporating HOV/bus rapid transit (BRT). The proposed project will examine feasibility of truck-only tolls in combination with other strategies on I-75 from I-285 to SR-16 to manage travel and optimize use of the facility.

- The I-75 facility is ranked among Atlanta's top 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.
- The Governor of Georgia has expressed support for this project. The Georgia Department of Transportation, the Georgia Regional Council (GRTA), the Atlanta Regional Commission (ARC), and the Georgia Institute of Technology are co-submitters.

Expected Results/Benefits: This proposal would potentially lead to implementation of value pricing concepts in the I-75 corridor in Atlanta, GA.

PROPOSAL NO. 5: VA – Regional Network of Value Priced Lanes (VA-MD-DC)

Grantee: Virginia Department of Transportation (VDOT) and the National Capital Region Transportation Planning Board

Project: Regional Value Pricing Study

Federal Funding Recommended: \$240,000 (full amount requested)

- History: In FY 2003, VDOT received \$500,741 to study HOT lanes specifically on I-495 and research on an effective public education campaign. VDOT's purpose of that project was to evaluate potential value pricing options that could be used as tools to manage travel demand in the region and reduce the need for vehicle use.
- This proposal differs in that Transportation Planning Board is looking to study a regional network of value priced lanes for Northern Virginia, Suburban Maryland, and the District of Columbia.
- Tasks include reviewing forecast demand, revenue, costs and transit viability and how they would compare across the regional network; examining value pricing for new and existing general purpose lanes, HOV lanes, and the Potomac River Crossings; and analyzing new corridors not included in the Regional Mobility Accessibility Study (RMAS).

Expected Results/Benefits: This study could provide valuable information on obstacles to creating a regional network throughout two states and the District of Columbia. Also, it may provide valuable information on converting existing general purpose lanes to tolled lanes.

PROPOSAL NO. 6: WA – State Route 167 HOT Lane Pilot (Seattle)

Grantee: Washington State Department of Transportation (WSDOT)

Project: State Route 167 High Occupancy Toll (HOT) Lane Pilot

Federal Funding Recommended: \$880,000 (full amount requested)

- History: The Puget Sound Region of Washington State estimates that by 2030, 45% of the core freeway system will be congested. The project would convert the existing HOV lanes on SR 167 within King County/Seattle, Washington to HOT lanes, from I-405 in Renton to Southwest 15th Street in Auburn without expansion of the existing freeway. In FY 2004, the project received funding in the amount of \$1,180,000 (reduced from the \$3,000,000 requested) to evaluate the HOT lane concept.
- This proposal will further advance the design concept through the request for proposals (RFP) and provides funding for public involvement activities.
- Support has been demonstrated for the proposal by local jurisdictions in the study area, modal interests, and the Eastside Transportation Partnership (a coalition of neighborhood organizations).

Expected Results/Benefits: This proposal will ultimately lead to implementation of value pricing concepts on SR 167 in the Puget Sound Region.

PROPOSAL NO. 7: CA –Implementation of Dynamic Pricing on SR 91 (Orange County)

Grantee: Orange County Transportation Authority (OCTA)

Project: SR-91 Performance Monitoring and Pricing Pilot Program (Deployment of Dynamic Pricing)

Federal Funding Recommended: \$588,000 (\$1,190,000 was requested but this project could not be fully funded due to limited funding availability and the high cost of this project.)

- History: 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 would implement dynamic pricing on the SR-91 facility, making it the second 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 are operational simulation to develop the dynamic pricing algorithm including preparation and testing; data collection; microsimulation; 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 increase the limited knowledge base on dynamic pricing applications and provide transferability to other projects nationally.

Expected Results/Benefits: This proposal 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.

PROPOSAL NO. 8: GA – Northwest Truck Tollway (Savannah)

Grantee: Georgia State Road and Tollway Authority

Project: Value Pricing Feasibility Study – Northwest Truck Tollway - Savannah

Federal Funding Recommended: \$472,000 (full amount requested)

- History: 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 is proposed in cooperation with the State Road Tollway Authority, 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 would examine the feasibility of a truck-only toll facility; provide a peer-to-peer exchange; conduct market research on truck-only toll facilities not currently available; develop additional data on truck travel; refine the travel model related to truck travel; examine options for selling additional capacity to other modes (SOV, HOV, Transit, etc.); examine use of revenues; and other activities.
- The Governor of Georgia and the other participating jurisdictions have expressed support for this project. The sponsor has the necessary conditions in place for success related to studying truck tolls (e.g. freight stakeholder involvement).

Expected Results/Benefits: This proposal will expand the knowledge base on truck-only tolls, including market research. It may potentially lead to the implementation of a truck-only toll application in the United States.

PROPOSAL NO. 9: TX – Loop 1 HOT Lane Enforcement and Operations (Austin)

Grantee: Texas Department of Transportation (TxDOT)

Project: Loop 1 HOT Lane Enforcement and Operations (Austin)

Federal Funding Recommended. \$172,000 (full amount requested)

- History: 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 SOVs 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.

Expected Results/Benefits: If this proposal were funded, it could improve the prospects for implementation of a value pricing project in Austin.

PROPOSAL NO. 10: TX - Deliberative Polling in the Loop 1 Corridor (Austin)

Grantee: Texas Department of Transportation (TxDOT)

Project: Deliberative Polling – Gaining Public Acceptance for Value Pricing

Federal Funding Recommended: \$160,000 (full amount requested)

- History: 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 proposal calls for testing the ability of a specific public involvement tool not previously used in transportation planning. The tool is called Deliberative Polling®. It has demonstrated its effectiveness at achieving consensus among very diverse groups using education to inform opposing sides. Those results are then communicated to the general public.
 - Deliberative Polling goes beyond a public meeting or public hearing in that the process actively recruits and compensates participants that are statistically representative of each constituency. In this way the process is not overwhelmed by special interests who are more likely to participate in public meetings and can bias the process.
- Advocacy groups are supportive because they are involved in an advisory role, along with subject experts, from the beginning of the process.

Estimated Results/Benefits: If this proposal were funded, it could potentially lead to implementation of value pricing concepts on Loop 1 in Austin, TX in the long term. The project could also explore the effectiveness of a new method of gathering public input and obtaining public acceptance of pricing.

PROPOSAL NO. 11: TX – IH-10 Value Priced Express Lanes (San Antonio)

Grantee: Texas Department of Transportation (TxDOT)

Project: San Antonio Value Priced Express Lanes on IH-10

Federal Funding Recommended: \$129,600 (full amount requested)

- History: This project will examine the use of value pricing on IH-10 on a 19-mile segment between IH-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.

Expected Results/Benefits: This proposal could potentially lead to implementation of value pricing concepts on IH-10 in San Antonio, TX.

PROPOSAL NO. 12: TX – I-35 Value Priced Express Lanes (Waco)

Grantee: Texas Department of Transportation (TxDOT)

Project: I-35 Corridor – Georgetown to Hillsboro Value Priced Express Managed Lanes

Federal Funding Recommended. \$440,000 (full amount requested).

- History: TxDOT is evaluating managed lane options for the 94-mile portion of I-35 in Bell, Falls, McLennan and Hill Counties. While it is largely rural in nature, the segment is still very congested and there are no alternative parallel routes in the area.
- Trucks are a major component of traffic volumes using the I-35 corridor. I-35 is a major north-south NAFTA Corridor for the central portion of the nation. Even though some elements of NAFTA have not been fully implemented, trucks currently account for 25 to 30 percent of all traffic on this portion of I-35 making truck travel a major factor when considering traffic congestion issues.
- Currently, I-35 is typically comprised of two general-purpose lanes in each direction serving 50,000 to 90,000 vehicles daily, except that the Williamson County segment already has three general purpose lanes in each direction. The concept for the study would be to convert one lane in each direction to a managed lane. This would reduce the need for costly construction, efficiently utilizing existing capacity more efficiently.
- The proposal will also study adding capacity and examine how value pricing can potentially be used as a tool for existing and future management of travel demand in the corridor and how alternative pricing strategies can be utilized. One consideration is to require all vehicles to be equipped with transponders to use the facility from the outset.

Expected Results/Benefits: The proposal would potentially lead to implementation of a managed lanes approach as an alternative to construction in a congested corridor with limited alternatives.

**PROPOSAL NO. 13: FL – Expansion of Value Pricing to the Sanibel Bridge and Causeway
(Lee County)**

Grantee: Lee County Department of Transportation, Florida

Project: Expansion of Value Pricing to the Sanibel Bridge and Causeway

Federal Funding Recommended: \$200,000 (full amount requested)

- History: Currently, Lee County has three active value pricing projects and has been successful in studying and implementing these types of projects since 2000. Lee County has received Value Pricing grant awards amounting to over \$2.3 million since FY 2000.
- This pre-project study includes development and presentation of value pricing plans, focus groups, selection of plans, surveys, plan refinement and analysis, and project implementation decision.
- The proposal would 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.

Expected Results/Benefits: This proposal may increase the knowledge base with regard tolling and enforcement.

PROPOSAL NO. 14: GA – GA-400 Variable Pricing Institutional Study (Atlanta)

Grantee: State Road and Toll Authority (SRTA)

Project: GA-400 Variable Pricing Institutional Study

Federal Funding Recommended: \$444,000 (full amount requested)

- History: This is a new project. The State Road and Toll Authority proposes to 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 proposes to produce reports identifying key issues as well as model documents for other toll authorities considering similar conversions.

Expected Results/Benefits: The study would identify issues facing toll authorities considering changing from a fixed toll to a variable toll policy, as well as develop model documents.

PROPOSAL NO. 15: TX – Truck Traffic Diversion Using Variable Tolls (Austin)

Grantee: Texas Department of Transportation (TxDOT)

Project: Variable Truck Toll Lanes on SH-130

Federal Funding Recommended: \$148,000 (full amount requested)

- History: This is a new project. 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 shift 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 proposal will evaluate value pricing applications for 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 Association (ATA) and has developed a plan to involve the trucking community in the study. Additionally, the study will produce market research related to truck tolling currently unavailable from both international and US trucking interests.

Expected Results/Benefits: This proposal could potentially lead to implementation of value pricing concepts on SH-130 in Texas.

PROPOSAL NO. 16: WA – Global Positioning System (GPS) Based Pricing Pilot (Seattle)

Grantee: Puget Sound Regional Council (PSRC)

Project: A Global Positioning System Based Pricing Pilot Project: Evaluating Traveler Response to Variable Road Pricing Through a Sample of Volunteer Participants

Federal Funding Recommended: \$600,000 (full amount requested)

- History: This project is a continuation of an existing study that has received \$1,880,000 in Value Pricing Pilot Program funds in 2002 for implementation with an overmatch of local funds for a total project cost of \$2.3 million. The pilot is studying an in-vehicle, GPS-based technology for use in value pricing applications. The request is for additional funding to enhance the robustness of the analysis and extend the pilot period.
- The proposal will extend the current study pilot potentially providing additional information about driver behavior.

Expected Results/Benefits: This proposal will potentially lead to implementation of value pricing concepts in the Seattle, WA region and produce innovative off-the-shelf vehicle-based technology for pricing applications nationally. Additionally, as this project moves into the pricing simulation phase, it 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.