

**REPORT ON THE
VALUE PRICING PILOT PROGRAM
THROUGH APRIL 2010**

MAY 2010

**U.S. Department of Transportation
Federal Highway Administration**

Introduction

This 2010 Report to Congress on the Value Pricing Pilot Program (VPPP) updates activities that were extensively reported on previously in the “Report to Congress on the Value Pricing Pilot Program through May 2009.” This report will highlight projects that have been implemented or significantly advanced since May 2009. The key lessons learned will be featured as part of the highlighted projects.

The U.S. Congress established the Congestion Pricing Pilot Program in 1991. It was subsequently renamed the Value Pricing Pilot Program (VPPP) under Section 1216 (a) of the Transportation Equity Act for the 21st Century (TEA-21) in 1998, and continued under Section 1604(a) of the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The Secretary of Transportation is to monitor the pilot projects for at least 10 years and report to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives every 2 years on the effects of the pilot programs. Specifically, “the Secretary shall report the effects value pricing programs are having on driver behavior, traffic volume, transit ridership, air quality, and availability of funds for transportation programs.”

A maximum of \$12 million is authorized to be made available each fiscal year to carry out the VPPP. Of this \$12 million, \$3 million per fiscal year must be set aside for value pricing pilot projects that do not involve highway tolls. The Federal share payable under the program is 80 percent of the cost of the project. Funds allocated by the Secretary to a State under this section shall remain available for obligation by the State for a period of 3 years after the last day of the fiscal year for which funds are authorized. If, on September 30 of any year, the amount of funds made available for the VPPP but not allocated exceeds \$8 million, the excess amount will, to comply with the statutory requirements of the VPPP, be apportioned to all States as Surface Transportation Program funds.

According to the statutory requirements of the VPPP, FHWA may enter into cooperative agreements with up to 15 State or local governments or other public authorities to establish, maintain, and monitor value pricing pilot programs. Currently, there are 14 State-led programs and 1 city-led program participating in the VPPP: California, Colorado, Florida, Georgia, Illinois, Maryland, Minnesota, New Jersey, New York City, New York State, North Carolina, Oregon, Texas, Virginia, and Washington State.

Background

Value pricing of highways, also known as congestion pricing or peak-period pricing, entails fees or tolls for road use that vary by level of vehicle demand on the facility, as well as conversion of fixed charges for vehicle use (such as insurance or parking charges) to charges that vary with the amount, location and time of use. Charges that vary with the level of vehicle demand provide incentives to shift some trips to off-peak times, less-congested routes or alternative modes, or to

cause some lower-valued trips to be combined with other trips or be eliminated. Value pricing encompasses a variety of strategies to manage congestion on highways and surface streets, including both tolling of highway facilities and other strategies not involving tolls. There are five broad types of pricing strategies that have been implemented or are under consideration in the United States:

- Priced Lanes – “Partial facility” pricing involving one or more lanes on a freeway facility.
- Priced Highways – “Full facility” pricing of all lanes on a roadway facility.
- Priced Zones – Area or cordon pricing.
- Priced Road Networks – “Network” pricing of some or all lanes of a roadway network in an area or region.
- Road Pricing Without Tolls – including usage based vehicle charges and market pricing of employer provided parking spaces.

Value pricing has three main objectives. First, it seeks to balance demand with available capacity (i.e., “supply of road space”). Second, it seeks to improve operation of the highway system. Third, it seeks to fairly allocate the costs associated with operating, maintaining and expanding the transportation system to meet growing travel demand. Although drivers unfamiliar with the concept initially have questions and concerns, surveys show that drivers more experienced with congestion pricing support it because it offers them a reliable trip time, which is very valuable especially when they have to be somewhere on time. Transit and ridesharing advocates appreciate the ability of congestion pricing to generate both funding and incentives to make transit and ridesharing more attractive.

In 2006 - 2008, the VPPP partnered with the Department’s Urban Partnership (UP) and Congestion Reduction Demonstration (CRD) programs in order to encourage broader applications of congestion pricing. These programs will be helpful in demonstrating innovative technical and policy approaches to facilitate and accelerate HOV to HOT conversions as well as other forms of congestion pricing. The Department is conducting a major evaluation effort involving all funded UP and CRD projects, and early results from this effort will be available in an annual document in late 2010.

This Report to Congress includes projects that have advanced under the VPPP. Some of the significant projects featured have received support from the UP initiatives. With the current extension of SAFETEA-LU through the end of fiscal year 2010, the VPPP continues to be available to States as a way to gain tolling authority to variably price facilities and services. The FHWA continues to promote its application and use.

Program Activity Since May 2009

The previous Report to Congress transmitted on February 26, 2010 covered the period prior to May 2009. Since May 2009, California, Minnesota, New York and Washington State were awarded \$6 million in VPPP funds to implement and/or study congestion mitigation strategies. In the San Francisco Bay area, roadway pricing will be implemented on the SR 237 Express

Connectors to relieve bottlenecks at a key gateway into Silicon Valley. Minnesota's Twin Cities will undertake a pre-implementation study for a Priced Managed Lane on I-94 and a feasibility study for Pricing Innovative Lane Additions on Trunk Highway 77. The State of Washington will use VPPP funds to study potential design and operational challenges related to implementing a network of dynamically priced lanes in the Puget Sound region. New York will advance a truck pricing system to reduce traffic at the I-90/I-290 interchange east of Buffalo where commercial trucks account for one in four vehicles.

This report highlights program activities that have reached major milestones. Projects are presented in the two principal categories of projects under the VPPP – projects involving highway tolls and projects not involving highway tolls (non-toll projects). The report first presents four projects involving highways tolls – two that were granted tolling authority and two UP projects that initiated new pricing operations. These are followed by an update on non-toll project activities.

Projects Involving Highway Tolls

Projects Granted Tolling Authority Since May 2009

I-15 in Riverside County, CA. The Riverside County Transportation Commission (RCTC) and Caltrans plan to construct and operate four Express lanes in the median of 54 miles of I-15 through Riverside County, California, from the San Bernardino County line to the San Diego County line. The project includes direct connectors from the I-15 priced lanes to priced lanes on State Route 91 (SR-91) that are currently in the environmental study process. The project would also provide a significant link connecting existing toll facilities within Southern California. Existing facilities in adjacent Orange and San Diego Counties include the I-15 Managed Lanes, 91 Express Lanes and the Orange County Toll Roads (SR-73/133/241/261). The project will significantly improve traffic capacity in the Southern California region and become part of a regional network of tolled facilities.

Mid-Town Tunnel in Hampton, VA. The FHWA previously provided value pricing funding to the Virginia Department of Transportation (VDOT) in March 2005 to conduct a pre-implementation study for this project. An agreement was signed between FHWA and VDOT to enable VDOT to proceed to the implementation phase by pricing facilities. The agreement will allow the VDOT to operate a value pricing project in the cities of Portsmouth and Norfolk, Virginia, involving the construction of a new two-lane tunnel under the Elizabeth River parallel to the existing Midtown Tunnel, the extension of the Martin Luther King Freeway, and upgrades to the existing Downtown Tunnel. The objective of the pricing project is to improve traffic flow as well as to reduce congestion in the Hampton Roads region, while generating revenue to pay for the new tunnel. Virginia will price water crossings in the entire corridor using variable pricing strategies and open road toll collection technologies.

UP Projects Implemented Since May 2009

Early phases of the two UP projects described below were recently completed. However, it is still too early in the implementation process to report on the effects value pricing projects are having on driver behavior, traffic volume, transit ridership, air quality, and availability of funds for transportation programs. Below is a brief summary of the projects and what is known about facility performance to date.

HOT Lanes on I-95 in Miami. This Miami UP project, also known as the “95 Express,” is using a phased approach to convert a single HOV lane in each direction into dual HOT lanes on 21 miles of I-95 from Fort Lauderdale to downtown Miami. The project is being implemented under two construction contracts in three phases. Under Phase 1A, the northbound direction of the southern segment of the HOT lane project (from downtown Miami to Golden Glades) was opened to traffic in early December 2008. Under Phase 1B, the southbound direction of the same segment was opened to traffic in early January 2010. Under Phase 2, the northern segment from Golden Glades to I-595 will be constructed. It is scheduled to be open to traffic in 2012. In cases of severe congestion, tolls in the express lanes can now reach \$7.25. The minimum toll is \$0.25, and is charged during off-peak times when the facility is not subjected to high demand. The 95 Express project uses several traffic management techniques to reduce congestion and provide commuters with more reliable travel options on the highway. It combines tolling, transit, technology and telecommuting components together to effectively reduce congestion and improve the reliability of travel on I-95, particularly during the weekday rush-hour periods.

Early reports indicate that, since its opening, the 95 Express facility has had a dramatic positive effect on travel in South Florida. As noted in the previous VPPP report to Congress, there were significant travel time improvements for those travelling northbound on the facility. Since toll operations began on the southbound segment on January 15, 2010, the southbound Express lanes have generated about \$220,000 in monthly toll revenue as of the time of writing (April 2010). The cost of the average weekday trip during the peak period was \$1.40 while the highest toll charged reached \$2.50. The average off-peak toll was \$0.62. The facility operated at a speed 11 mph above that prevailing in the general purpose lanes during the peak period (6 a.m. to 9 a.m. southbound) and operated at over 45 mph 99.5 percent of the time.

HOT Lanes on I-35W in Minneapolis/ St. Paul, MN. The existing High Occupancy Vehicle (HOV) lanes on I-35W from Burnsville Parkway to I-494 were extended, converted to HOT lanes and opened to travelers with MnPass transponders in September 2009. The dynamically-priced HOT lanes are in operation from 6 a.m. to 10 a.m. in the northbound direction and from 2 p.m. to 7 p.m. in the southbound direction. Carpools with two or more people, vanpools, buses, and motorcycles continue to use the lanes for free. The lanes are open to all traffic at other times. New HOT lanes are being added on I-35W from I-494 to 46th Street as part of improvements to the Crosstown Commons section, which will be completed by October 2010.

MnDOT has the distinction of being the first agency in the U.S. to operate a priced dynamic shoulder lane (PDSL). The PDSL opened to travelers on September 28, 2009, and operates northbound on I-35W from 46th Street to downtown Minneapolis from 6 a.m. to 10 a.m. and

from 2 p.m. to 7 p.m. The lane is open to the same user groups as the HOT lanes. The PDSL reverts to a shoulder at other times. In addition, the urban partners initiated several transit related improvements as complementary congestion reduction strategies.

A total of six new or expanded park-and-ride facilities were constructed. The six park-and-ride facilities include 2,780 new parking spaces. New routes and expanded service on existing routes were implemented from the park-and-ride lots. A total of 27 new buses were purchased and are in operation on the new and expanded express bus services from the I-35N park-and-ride lots. Double contraflow bus lanes were constructed on Marquette and 2nd Avenues in Minneapolis to replace existing single contraflow lanes on each avenue. A lane guidance system for shoulder-running buses was deployed on Cedar Avenue. The system includes lateral-guidance assistance, collision avoidance, and Automatic Vehicle Location system technologies. The project is operating successfully, and drivers appear to understand messages that inform them as to when the shoulder is open as a travel lane or closed. In March 2010 there were 7,954 MnPASS users on I-35W, both northbound and southbound and during the first full week of operation the corridor generated \$6,200 in revenue. Northbound I-35W included 901 PDSL users. There are now 4,155 active MnPASS accounts and 4,722 transponders associated with travelers in the corridor. (The rest of the MnPASS users also use the I-394 HOT lanes in Minneapolis that have been operating successfully for several years). Due to the early stage of operation, there is not enough data to draw any conclusions with regard to violation rates and crashes we expect such data to be available within the next year.

Projects Not Involving Tolls

In recent years, the majority of the non-toll pricing VPPP funds have gone to support parking pricing. This includes outreach and demonstration projects in the Twin Cities, Minnesota, a smart parking field test at San Diego regional commuter rail stations, and support for the San Francisco parking (SF Park) technology deployment and variable pricing implementation under the UP demonstration program.

Two car-sharing projects have recently been funded. One project with San Francisco City CarShare has two distinct elements: (1) unbundling housing from parking, where carsharing vehicles are being placed in new housing developments in exchange for reducing or eliminating parking requirements, and (2) an exploration of technologies to facilitate ridesharing among carsharing participants. The second carsharing project is with the University of South Florida and Zipcar and is testing “congestion pricing” for carsharing vehicle usage, with differential pricing based upon both roadway congestion and vehicle demand.

The VPPP is supporting one pay-as-you-drive insurance pilot with Unigard Insurance in King County, Washington. A MnDOT project is conducting outreach to build public acceptance for fuel tax alternatives, such as mileage-based fees to use roadways.

Finally, an analysis is being conducted of the environmental effects of PierPASS, a program that provides off-peak discounts from the normal charges for trucks accessing the Ports of Los Angeles and Long Beach.

While all of these recently-funded non-toll pricing projects offer much promise in advancing program objectives, none (except for PierPass) are sufficiently far along so as to enable an assessment of their effects, although the likely effects of a number of the projects had been projected prior to their being funded. For example, the SF Park UP project noted above is designed to eliminate a problem identified in a 1997 San Francisco study that showed an average search time for on-street parking of 6.5 minutes, delaying all traffic. Implementation of market-rate on-street parking pricing is anticipated to begin in October or November of 2010. It will implement variable parking pricing at a level that ensures a few open spaces, assisting drivers with advanced guidance systems, and offering multiple payment options for both on- and off street parking. The project includes about 6,000 on-street spaces and 14 city-controlled off street parking facilities. It will eliminate the incentive for motorists to cruise for free or under priced parking, and the related delay that this brings to all traffic, including buses, would be eliminated.

Looking Forward

The FHWA has planned several outreach efforts to advance understanding, acceptance and implementation of congestion pricing in the U.S. In June 2010, a National Road Pricing Conference will be held to bring together transportation policy makers and practitioners from around the country who are interested in pursuing road pricing projects in their communities. One of the key discussion topics will focus on innovative pricing applications and the near term opportunities for road pricing in the United States. The Conference will be followed, at a later date, by two locality-specific workshops that are designed to explain the nature, scope, benefits, challenges, and opportunities for congestion pricing.

A few major metropolitan planning organizations (MPOs) have begun to integrate road pricing strategies into the metropolitan planning process. The FHWA is sponsoring research to develop lessons learned from these efforts and to better understand the role that long-range planning has played at selected MPOs in the emergence and development of road pricing plans and projects.

In the fall of 2010, the FHWA will sponsor a series of four workshops for MPOs to promote the incorporation of pricing into their Long Range Transportation Plans. The workshops are intended to provide assistance to MPOs in considering how road pricing strategies can help to advance livability goals; address funding, financing and procurement needs; and address performance goals relating to mobility, and economic and environmental sustainability. The workshops will help MPOs address technical, institutional, political, and public acceptance and involvement issues that they generally encounter with regard to considering more far-reaching (but also more effective) road pricing approaches. The FHWA will continue its efforts to enhance support of MPOs as they seek to address such issues.

In addition to the above, to help communicate and advance pricing, FHWA continues to develop primers, brochures, one-page briefs, videos, and Web-based information. Additionally, FHWA's efforts include:

- Workshops and conferences in collaboration with the Transportation Research Board (TRB) and academic institutions.

- Bi-monthly Webinars co-sponsored through the National Transportation Operations Coalition.
- Webinars on specific topics, including a Webinar series for transportation professionals on conducting outreach to elected officials and transportation leaders, and to the general public during the planning, implementation and operation of pricing projects.
- Webinars and conference presentations on findings from an International Scan on Road Pricing sponsored by FHWA, TRB and the American Association of State Highway and Transportation Officials, to encourage U.S. localities to consider more far-reaching road pricing approaches.

In an effort to encourage further innovations, FHWA intends to publish a solicitation for VPPP grant proposals in the fall of 2010

Closing

The U.S. Department of Transportation (DOT) has focused extensively on addressing traffic congestion problems throughout the Nation. The DOT will continue to provide information, guidance, and coordinated and comprehensive pricing programs to the States and an increasing number of other stakeholders.