

**SAN ANTONIO IH 10 E AND IH 10 W CORRIDORS:
VALUE PRICED EXPRESS LANES**
FHWA Value Pricing Pilot Program
Detailed Proposal

Submitted by: Texas Department of Transportation
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Introduction

This value pricing proposal to evaluate a priced express lane concept for I-10 E and I-10 W in San Antonio has been developed in accordance with the application guidelines for the Value Pricing Pilot Program authorized by Section 1216 (a) of the Transportation Equity Act for the 21st Century (TEA-21) in the Federal Register Document from May 7, 2001, Volume 66, Number 88, Page 23077 - 23081. Included in this proposal are estimated expenses for each of the anticipated tasks. Note that these are cost estimates and may need to be refined. This plan outlines the pre-project activities necessary prior to project implementation.

1. CONGESTION PROBLEM TO BE ADDRESSED

The San Antonio-Bexar County Metropolitan Planning Organization (MPO) estimates that population will grow in the San Antonio region from 1.42 million in 2000 to 2.39 million in 2030, a 68% increase. Related traffic congestion will continue to increase particularly outside of Loop 410 towards the county line, and in downtown San Antonio as employment opportunities increase in these areas. In addition, traffic flow between Texas and Mexico increased 42% between 1995 and 1997 and growth is expected to continue. Truck travel on IH35 north of Loop 410 is over 80% higher than the next heaviest-traveled highway in the San Antonio area. This makes truck travel a major factor when considering traffic congestion issues, particularly in the northern part of San Antonio/Bexar County area. San Antonio currently just passes the current federal air quality standards. Estimates by the Alamo Area Council of Governments indicate that emissions from transportation sources are presently increasing at approximately 5% per year.

A \$10 billion investment in transportation infrastructure from Federal, State, and local transportation funds to be spent over the next 25 years is not expected to keep up with the expected increasing congestion levels from 2000 to 2030. To this end, the MPO's Congestion Management System has as its goals to increase the efficiency of the existing transportation system and decrease traffic congestion through coordination of traffic

operations, to develop strategies to reduce travel demand at both regional and corridor levels, and to enhance air quality by improving the opportunities for alternative means of transportation.

Currently, the 19-mile segment of IH 10 W between Loop 1604 and SH 46 (Boerne, Texas) is typically comprised of two general-purpose lanes in each direction, serving as much as 80,000 vehicles per day. Traffic volumes are estimated to reach 200,000 by 2030. On the other side of the city, the 30-mile segment of IH 10 E between Loop 1604 and the future SH 130 (Seguin, Texas) also has two general purpose lanes per direction, serving as much as 65,000 vehicles per day. Traffic volumes for 2030 are estimated at 130,000 vehicles per day. The value pricing strategies that will be examined as part of this grant have the potential to achieve these demand management objectives.

2. PROPOSED PROGRAM DESCRIPTION

The Metropolitan Transportation Plan includes increasing the number of general purpose lanes to three in each direction on both the IH 10 W and IH 10 E corridors. The objective of this value pricing study is to evaluate the potential operating strategies that can evolve over time for possible future express lanes using value pricing.

The study for the IH 10 express lanes will examine how value pricing can potentially be used as a tool for evolving management of travel demand in the corridor and how alternative pricing scenarios can be utilized to allow priority user groups into the express lanes at different stages over the life of the facility.

Specific Goals for Pre-Project Study:

- To examine the use of value pricing on the IH 10 E and IH 10 W Corridors express lanes, both from demand management and public acceptability perspectives.
- To examine how value pricing is integrated with financial and person-movement goals for the project
- To establish a baseline of travel characteristics in the corridor to compare and evaluate changes over time

The tasks conducted under this interagency agreement will be performed using results from TxDOT Research Project 0-4160, "Operating Freeways with Managed Lanes," the value pricing study for IH-35 in San Antonio, and implementation work underway for the Value Pricing Pilot Program project for the Katy HOV lane (I-10) and Northwest HOV lane (US 290) in Houston, and other applicable research.

3. SOCIAL AND ECONOMIC EFFECTS

The social and economic effects of the pricing program are unknown at this time. However, the addition of free lanes in the IH 10 corridor means the project as a whole does not negatively impact any disadvantaged groups.

4. ROLE OF ALTERNATIVE TRANSPORTATION MODES

The role of alternative transportation modes is unknown at this time. Transit route service is currently available on IH 10 W between Loop 1604 and downtown San Antonio.

5. TIMELINE

Pre-Project Study – September 2005 through August 2006

Implementation – Results of the pre-project study to be incorporated into future feasibility studies for the corridor.

6. DETAILED PROJECT TASKS

Task 1. Establish Project Committee

Estimated cost: \$2,000

Facilitate formation of a committee comprised of other agency staff, such as MPO, transit authority, and regional mobility authority staff, and key stakeholders, such as business leaders, neighborhood representatives, and other community stakeholders, to provide input as the project progresses. Conduct pre-project meeting to review scope of project and receive feedback. Conduct progress meetings as necessary to inform committee and seek input.

Task 2. Baseline Data Collection

Estimated cost: \$30,000

Conduct pre-project data collection including Average Vehicle Occupancy (AVO), transit use, Average Annual Daily Traffic (AADT) and traffic patterns, congestion and delay. The data collected in this task will be used to evaluate the ultimate implementation project.

Task 3. Evaluate Public Acceptability and Price Elasticity

Estimated cost: \$100,000

Evaluate public acceptability of potential pricing strategies through surveys of potential users. Determine user perceptions and potential use of the managed express lanes. Identify gaps in education and understanding. Conduct focus groups as a mechanism for developing a phone survey. Conduct phone survey in the corridor to assess public perceptions and acceptability. Develop a price-demand curve using information obtained in the surveys to be utilized in future modeling in the corridor, both travel demand and operational modeling.

Task 4. Identify and Evaluate Revenue Impacts Estimated cost: \$30,000
Evaluate the potential impact that HOV preference and the use of value pricing may have on the financial viability of the project. Review of the role of free bus transit and carpools in achieving project objectives.

7. EVALUATION

The data collected in Task 1 will be used to evaluate the ultimate implementation project. Furthermore, this corridor is equipped with ITS infrastructure through TransGuide, which offers a system for readily collecting some of the data needed to evaluate implementation.

8. FINANCIAL PLAN

The financial and revenue plan will be determined following the pre-project study, since the operating and pricing strategy is unknown at this time.

9. PLANS FOR INVOLVING KEY AFFECTED PARTIES

A steering committee will be formed to guide this specific project as it progresses. The committee will include area transportation agency staff as well as community representatives.

10. LEGAL AND ADMINISTRATIVE REQUIREMENTS

The Texas Legislature passed SB 370 during the 75th Legislative session that gave legal authority for TxDOT, Toll Authorities, Transit Agencies, and the private sector to participate in congestion pricing. TxDOT is an active participant in the San Antonio-Bexar County MPO, as well as a recipient of both FHWA and FTA funds. As such, TxDOT has in place appropriate mechanisms to ensure that all federal and state requirements are met.