

Draft Final Report

Comprehensive Traffic and Revenue Study

PROPOSED LBJ MANAGED LANES



ENGINEERS
PLANNERS
ECONOMISTS
Wilbur Smith Associates

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Prepared For



Texas Department of Transportation

By



August 2005



August 17, 2005

Mr. Matthew E. MacGregor, P.E.
LBJ Project Manager
Texas Department of Transportation
4777 East Highway 80
Mesquite, TX 75150-6643

Re: Proposed LBJ Managed Lanes Comprehensive Traffic and Toll Revenue Study

Dear Mr. MacGregor:

Wilbur Smith Associates (WSA) is pleased to submit this draft final report summarizing the results of the proposed LBJ Managed Lanes Comprehensive Traffic and Toll Revenue Study. This report focuses on preferred Alternatives 2 and 6 as selected by the Texas Department of Transportation (TXDOT). The work program evaluated these two preferred project configurations under two unique operating scenarios, All Pay and HOV 3 + Free.

The study work tasks included the conduct of travel pattern and trip characteristic surveys, a series of traffic assignments and toll sensitivity tests resulting in the development of optimum per mile toll rates. Optimum per mile toll rates were developed for six unique time periods under the two preferred project alternatives culminating in the development of long-term traffic and toll revenue estimates for the proposed LBJ Managed Lanes.

The traffic and revenue estimate process involved three levels of analysis including global demand estimates, travel time simulation modeling and a market share micro-model. The toll sensitivity analysis was also utilized to determine when revenue potential would be optimized while still providing free-flow operating conditions along the entire length of the proposed LBJ Managed Lanes. The overall study analysis was conducted at a sufficient level of detail to be used in support of possible project financing.

The overall work program also included the conduct of stated preference surveys as well as an in-depth independent economic growth assessment. The results of these two key work tasks were provided to TXDOT under separate cover.

Our Project Director, Mr. Robert J. Torello, and our Senior Modeler Ms. Cissy Szeto as well as other key WSA staff involved in this study, express their sincere appreciation for the valuable cooperation and assistance provided by TXDOT staff and numerous others contacted during the course of the Study. We sincerely appreciate the opportunity to have participated in this innovative and important project.

Respectfully submitted,

WILBUR SMITH ASSOCIATES

Edward J. Regan, III
Senior Vice President

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