

# State Highway 16 Project

## First Round of Public Meetings Held

The Texas Department of Transportation (TxDOT) hosted its first round of public meetings in October 2000 as part of the State Highway 16 (SH 16) and Farm-to-Market 649 (FM 649) Feasibility Study. The purpose of the study is to determine the feasibility of upgrading SH 16 from Poteet to Zapata and FM 649 from Randado to Roma.

Public meetings were held in Roma, Freer, and Jourdanton. The study team also met with interested public officials and citizens in informal meetings in Roma and Zapata. These meetings gave those attending the opportunity to meet TxDOT officials who oversee the study and the consulting team hired to perform it.

At the meetings, Pat Owens, P.E., and Terry Watson, P.E., both of Kimley-Horn & Associates, explained the purpose of the study and the work that is to be performed. Following these presentations, the

public was encouraged to ask questions and make comments about existing conditions and needed improvements.

This is the second in a series of four newsletters to be distributed during the feasibility study. This newsletter and the first newsletter may be accessed on the TxDOT website, [www.dot.state.tx.us](http://www.dot.state.tx.us) in the section on Major Investment Studies.

A second round of meetings is planned for the late spring of 2001. For additional information on these meetings or to be added to the mailing list, contact: SH 16 Study, Olivari & Associates, Inc., 719 South Shoreline Blvd., Suite 200, Corpus Christi, Texas, 78401, or call toll-free 800-945-2156.

The SH 16 Feasibility Study began in the fall of 2000 and is scheduled to be completed in September 2001.

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### Public Meetings

The meetings were well attended, and there was considerable discussion. Minutes were kept, and all comments will be considered by the study team. Below is a short summary of each meeting.

#### ROMA

Public officials and citizens cited a range of reasons to improve both SH 16 and FM 649. Many voiced strong support for improving both roadways.

Questions were asked about the time frame for completion of the study and any construction and about how other TxDOT projects and various proposed new international bridges related to these roadways. There was discussion of related improvement plans and needs in Mexico. Public officials and citizens from Mexico also attended this meeting.



Roma Community Center  
October 17, 2000

#### FREER

Citizens raised concerns about increased truck traffic and accidents along SH 16. It was noted that there are



Freer Community Center  
October 18, 2000

two new buildings on SH 16. There are already schools along SH 16 and a possibility that a new one will be built in Freer. The need to coordinate SH 16 planning with local plans was discussed. There was a concern about any relief route around Freer or the city limits. The possibility of rest stops or roadside parks was raised.

#### JOURDANTON

The marked increase in truck traffic on SH 16 as well as the increase in traffic accidents was noted. Some public officials and citizens expressed concerns that improvements to SH 16 would divert additional traffic to the roadway. Individuals from the Jourdanton area expressed concerns about any relief route that would go around their community and various right of way issues. A number of Tilden residents and officials commented that they would prefer a relief route because of the lack of right of way and the affect of increased traffic on the community. There was general discussion on the timing of the study and any construction as well as Mexico truck traffic.



Atascosa County Courthouse  
October 19, 2000

For information on other informal meetings, please see page two of this newsletter.

# Existing Conditions Report

One of the first tasks of this feasibility study was to determine the existing conditions of the roadway and any presently planned improvements within the study area. The study team has completed that task and has compiled the information in a report for TxDOT. Engineering, transportation, economic, environmental, and social information specific to the study was gathered from documents, field reconnaissance, and local meetings. The results of the report are summarized below.

The section of SH 16 that is the subject of this study is approximately 175 miles in length and stretches from Poteet to Zapata, spanning five South Texas counties. It is a two-lane facility with shoulders throughout the study area except when the roadway passes through certain cities or towns.

Several special features or structures are encountered along SH 16. Overhead and buried utilities occupy the edges of the right of way on one or both sides of the roadway almost the entire length of the study area. These utilities include overhead power lines, copper telephone cabling, and fiber optic trunk lines. Natural gas and oil pipelines cross under the roadway at a number of locations.

Other significant features adjacent to the roadway

include two cemeteries, a county courthouse, four schools, one historical marker, several electrical substations and natural gas valve stations, a sand/gravel quarry, and an immigration control point.

FM 649 is approximately 50 miles in length and stretches from Randado to Roma, spanning two South Texas counties. Like SH 16, FM 649 is a two-lane facility; however, it has no shoulders. Utilities skirt the right of way on one or both sides of the roadway almost the entire length of the road. A telephone substation and cemetery are adjacent to the roadway.

TxDOT has already scheduled some improvements along the SH 16 corridor. These improvements are measures that go beyond annual maintenance provisions. They either extend the service, add capacity, or improve the safety of the current facility. These scheduled improvements are summarized in the chart below.

The existing conditions report is a snapshot to illustrate the current state of SH 16 and FM 649. Historical data and field reconnaissance are used to document trends and to make comparisons. The information presented in this report was analyzed and used to determine the conceptual alternatives.

## Scheduled Improvements for SH 16

Roadway	County	Location	Improvement	Date
SH 16	McMullen	From SH 72 to Fowlerton Road	Mill, Seal Overlay	January 2001
SH 16	Atascosa	From FM 476 (W) to Loop 282	Widen narrow pavement and shoulders	September 2001
SH 16	Atascosa	From SH 173 to SH 97	Widen narrow pavement and shoulders	September 2002
SH 16	Jim Hogg	From SH 359 (Vigie) to SH 359 (Galibrath)	Intersection improvements; corner clips at SH 359; restriping of SH 16 to 4 lanes	No date set

Source: Transportation Improvement Plan 2000, Texas Department of Transportation

### Other Meetings *continued from page 1*

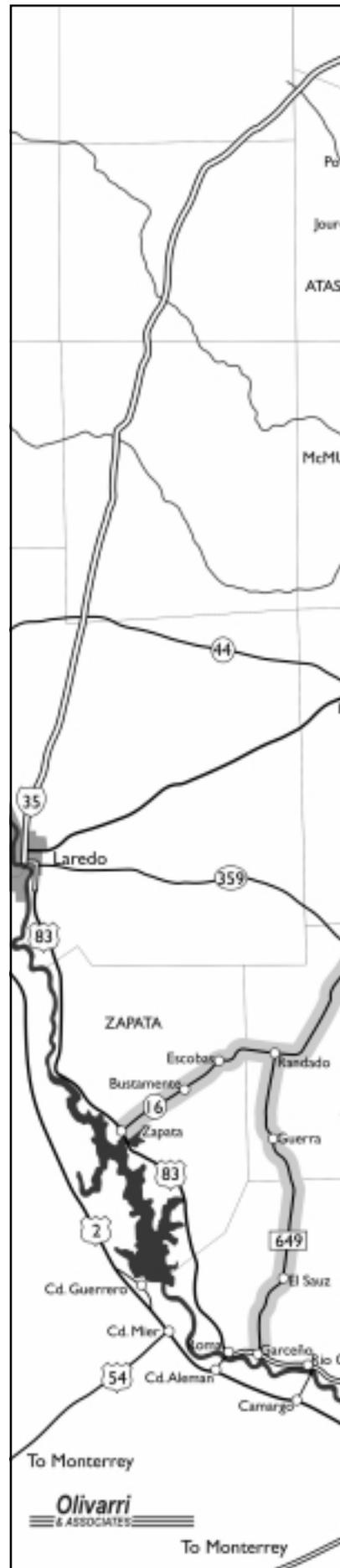
In October 2000, informal meetings were held with the Highway 16 Coalition and public officials and residents of Zapata.

#### HIGHWAY 16 COALITION

Attendees at the Highway 16 Coalition meeting discussed the increase in traffic along SH 16 and FM 649 and the economic importance of the project. Jim Hogg County Judge Agapito Molina noted the Coalition's work with the Governors of the states of Tamaulipas and Nuevo Leon, Mexico regarding Mexico roadway improvements.

#### ZAPATA CHAMBER OF COMMERCE

The Zapata Chamber of Commerce hosted an informal meeting with the study team. Residents discussed the school on SH 16; plans for a new high school on SH 16; the traffic impact of a planned international bridge on the south side of Laredo; increased Winter Texan tourism; increased traffic from the oil and gas industry; a new jail on US 83; and increased recreational vehicles using SH 16. The citizens and public officials who attended the meeting noted their strong support for expansion and improvements to SH 16.



Map of Study Area

# Conceptual Alternatives Report



Three conceptual proposed improvement alternatives have been identified and will be evaluated for feasibility as compared to a "no build" alternative. These alternatives are defined with sufficient detail to allow for a reasonable estimation of their implementation costs. The engineering data, cost data, and traffic projections developed for each conceptual alternative will be used to perform the benefit-cost analysis.

TxDOT has established both rural and urban design criteria for roadway improvement projects throughout the state. These design criteria standards outline the physical and operational requirements of roadways. Some of these criteria include minimum and maximum requirements for design speed, as well as the number and width of travel lanes, shoulders, grades, and other properties which may vary depending on the roadway classification of the highway being considered.

These design criteria were used in this study to establish typical roadway cross sections and provide a basis for conceptual design for geometric improvements under each alternative. The probable costs for construction can be estimated using these typical sections and conceptual designs.

**It is important to note that these conceptual alternatives are intended only to convey design concepts for the SH 16 and FM 649 corridors and do not reflect the actual project limits or design that may eventually be implemented.**

These alternatives are designed for use only in the benefit-cost analysis.

This study has defined four improvement alternatives. The first is a base, or "no build," alternative, which is the alternative against which the additional costs and benefits of each of the three other alternatives are measured. The other three alternatives include a full four-lane upgrade of SH 16 only, a full four-lane upgrade to both SH 16 and FM 649, and corridor enhancements to both SH 16 and FM 649. These alternatives are described in the table below.

These four alternatives will be evaluated and used to perform a benefit-cost analysis, which is calculated by comparing the benefits of a project to its costs. The benefits of a roadway including accident savings, delay savings, and reduced vehicle operating costs, are compared to costs associated with the proposed improvements, such as construction and maintenance. If the benefit-cost ratio shows that there is greater savings to users for every dollar spent on building the roadway, it is considered "feasible." As an example, if the results show a four-lane highway is not feasible, then various levels of improvements could still be recommended.

The Feasibility Study is the first step required by State and Federal regulations to obtain funding for such proposed projects. It does not guarantee that funding will be available for all or any of the proposed improvements.

Conceptual Alternatives	
Alternative	Description
Base, "No Build"	This alternative includes maintaining the corridor at its current lane capacity with no major improvements to pavement conditions or adjustments. It is the alternative against which the additional costs and benefits of each of the three other alternatives are measured.
SH 16 Four-Lane	This alternative includes a complete upgrade of the existing SH 16 roadway from Poteet to Zapata into full four-lane capacity. For the purpose of estimating cost, relief routes were included near the cities of Jourdanton, Tilden, Freer, and Hebronville to avoid right of way and community impacts in those areas.
Full Four-Lane	This alternative includes the full four-lane upgrade of SH 16 as well as a complete four-lane upgrade of FM 649 from Randado to Roma. Several segments of FM 649 should be restructured to improve horizontal and vertical geometry, add shoulders, and widen or replace bridges. Any existing at-grade railroad crossings along the corridor will also be upgraded to increase safety and decrease travel time.
Corridor Enhancements	This alternative includes a program of targeted improvements for both SH 16 and FM 649, including upgrading shoulders to standard widths, improvements to existing horizontal and vertical geometry, and widening to four-lane capacity in selected locations.

## Frequently Asked Questions

### *What is a feasibility study?*

A feasibility study is the first step in the process of developing roadway improvements. It determines the need for improvements, the types of improvements, and a general implementation plan. Feasibility studies generally take one year to complete.

### *What happens after a feasibility study is complete?*

This depends on the results of the feasibility study. If the study determines the need for new roadway corridors, such as relief routes around communities, then route studies must be performed to determine the actual locations and types of improvements. A full environmental assessment and detailed cost study may be necessary.

If the study does not determine a need for new roadway corridors, or once the route studies are complete, then preliminary and final schematics must be produced. These further refine improvement plans and right of way needs. TxDOT, often in cooperation with local governments, then acquires the needed right of way for the planned improvements.

Preliminary and final construction documents are prepared, bids for the work are submitted, and a contract is awarded. Construction follows, in accordance with approved plans and specifications. In costly projects like the development of major highways, improvements are often phased over time as funding becomes available.

### *How long does it take for projects like this to be completed?*

Each step in the process can take from 6 to 18 months to complete. Major improvement projects often require 10 years or more to complete.

Funding availability for right of way acquisition and actual construction has a major affect on the completion of a project.

### *How is this study funded?*

This study is being performed as a direct result of the Transportation Equity Act for the 21<sup>st</sup> Century (TEA 21), which was enacted in June 1998. The bill provides funding for the Federal surface transportation programs for highways, highway safety, and transit for the six-year period 1998-2003. As a result of TEA 21, the Texas Department of Transportation will receive additional funds for Texas roadways. Demand for roadway funding, however, far exceeds the available funds.

Local and congressional efforts led to this feasibility study being included in TEA 21. The Texas Department of Transportation is responsible for the study and is committing additional state resources to this effort.

### *How can I get more information on this study?*

Additional information is available at the TxDOT website, [www.dot.state.tx.us](http://www.dot.state.tx.us) in the section on Major Investment Studies, or by contacting Olivarri & Associates, Inc. at 800-945-2156.