

A Reprint from *Tierra Grande*, the Real Estate Center Journal

# NAFTA

## New Routes, New Stops

### Investors Speculate on Future Industrial Sites

By Harold D. Hunt and Mark G. Dotzour

**I**ncreased demand for Texas industrial space is currently being shaped, in part, by several transportation trends. As trade between the United States and Mexico increases, so does the importance of transportation corridors. The potential impact of changes in regulations and routes on Texas real estate markets is growing.

Framers of the North American Free Trade Agreement (NAFTA) envisioned a seamless border between the United States and Mexico. It is not yet a reality.



A host of laws and traditions limit the free and easy transport of goods across the border. For example, under current law, U.S. and Mexican truck drivers cannot operate outside of designated commercial zones within 18 kilometers (about ten miles) of the other country's border.

Also, customs, immigration and safety inspections can be lengthy and tedious. Customs officials at major border facilities report that truck crossings may require anywhere from 20 minutes to eight hours. Furthermore, third-party hauling companies typically will dray (provide intermediate transportation for) tractor trailers across the border, resulting in the need for three tractors for the delivery of goods to the interior of Mexico.

Some are hopeful that these conditions will soon change. NAFTA mandates that truckers from the United States and Mexico have full access to both countries by January 1, 2000. Others believe this provision will not be implemented on schedule. Nevertheless, U.S.-Mexico trade passing through Texas is flourishing. And trade likely will increase even more once full access is a reality. This trade growth creates opportunities and ever-greater demands on the Texas transportation infrastructure. According to the North American Superhighway Coalition (NASCO), more than \$2.8 billion will be required just to upgrade the Texas segment of Interstate 35.

Transportation is a significant part of the cost of U.S.-Mexico trade. As shippers attempt to minimize the expense of transporting U.S.-Mexico trade goods, public and private entities across the state will compete for their industrial space needs. Cargo shipments stop at some point, either for distribution or value-added activities, such as further assembly or processing of the cargo. Thus, predicting the future location of Texas industrial facilities that can capitalize on the growth in cross-border trade has become a serious undertaking.

#### A Million Trade Trucks Annually

I-35 from Laredo to San Antonio is the busiest U.S.-Mexico truck transportation corridor, according to a recent transportation study by John McCray and Robert Harrison, transportation researchers with the University of Texas System. More than one million *trade trucks* per year travel this section of the interstate. Trade trucks, defined as fully loaded 48-foot trailers, account for more than two-thirds of the total truck traffic along this portion of the highway.

Although about one-half of U.S.-Mexico cross-border truck traffic involves transporting products to or from maquiladora plants, final destinations for trucks passing through Laredo are primarily cities well beyond the border, such as Monterrey, Chihuahua and Mexico City.

Mexico officials are encouraging the relocation of maquiladoras into the interior of the country as part of efforts to reduce overall unemployment. Interior Mexican states

generally offer lower labor costs, a larger labor pool and cheaper land than states along the border. (See "Texas Border Bonanza" on the economic impact of maquiladoras.)

**T**he easternmost Mexican border state of Tamaulipas is heavily promoting relocation to the interior through an aggressive road building program from Matamoros to San Luis Potosi. Tamaulipas leaders have spent approximately \$400 million to construct 365 miles of new highway and upgrade 490 miles of existing highway.

The roads are toll free, an attractive feature in a country known for extremely high toll rates. When completed, this roadway improvement program should greatly enhance the flow of goods through the Rio Grande Valley.

Several interior Mexican cities already have benefited from foreign industrial development. For example, General Motors owns and operates an assembly plant in Silao, 450 miles south of Laredo. The Monterrey area, 150 miles south of Laredo, is home to more than 100 maquiladora plants employing 40,000 people.

Volkswagen assembles the new Beetle in Puebla, 100 miles south of Mexico City. Both General Motors and Chrysler assemble cars in the Saltillo area, 175 miles southwest of Laredo. Torreon, a city 300 miles southwest of Laredo, employs approximately 20,000 in more than 60 maquiladoras.

## Mexican Manufacturing and Texas Real Estate

This increased activity by interior Mexican cities raises an important question. If the seamless border existed and shippers were allowed to stop anywhere they choose, where in Texas would they stop? This question has significant implications for many Texas cities, not just those in the border region.

Some transportation experts argue that Texas border cities will decline in importance when trucks can pass through relatively unconstrained, as NAFTA dictates. Others believe that sufficient synergy already is present in many border cities to prevent any serious decline, even if the border fully opens.

Laredo commercial brokers report that large national firms continue to either buy industrial space or lease it under eight-to-ten-year contracts. Thus, it seems industrial users and investors have not lost confidence in the future viability of the border region.

Leaders of many Texas cities would like their community to be one of the preferred destinations and distribution hubs for future U.S.-Mexico cargo shipments. However, the current operating environment still has many unknowns.

Assuming that trucking firms attempt to minimize costs, driving time is a critical factor. The maximum driving time for one driver under U.S. Department of Transportation

(DOT) rules is ten hours. Mexican drivers also must follow U.S. DOT guidelines when, and if, they are allowed to operate in the United States. Furthermore, the ten-hour rule will include drive time in Mexico and while idling at the border waiting to cross.

Based on the U.S. DOT rule, trucking firms originating loads from cities located deep in the interior of Mexico, such as Puebla or Silao, may still find some border cities attractive as initial stopping points. Thus, cities such as San Antonio could be too close for a second Texas stopping point, if the immediate border area remains a viable maquiladora and distribution zone.

Alternatively, truckers coming from southern or central Mexico might stop at intermediate points from the border, such as Monterrey or Saltillo. If this occurs, San Antonio would be a more favorable position for new industrial development. Houston and Corpus Christi also could benefit, especially if the extension of I-69 occurs through east and south Texas, roughly along existing Highway 59.

## Competing Transportation Hubs

While San Antonio promotes itself as an international business and transportation center, Fort Worth's 8,600-acre Alliance Airport has been up and running for several years. This prototype *intermodal* facility provides air, rail and highway accessibility for industrial cargo within one facility. Furthermore, special intermodal facilities can rapidly switch cargo arriving in special containers from rail to truck or vice versa. At some intermodal facilities, containerized products are shifted to ships.

Similar to trucking companies, U.S. and Mexican rail firms have formed partnerships to provide more efficient cross-border rail service. Currently, intermodal service represents approximately 15 to 20 percent of total cargo transportation, according to railroad representatives. The Texas-Mexican Railway is currently spending \$22 million on a new intermodal facility in Laredo.

As the U.S.-Mexico cross-border trade picture becomes clearer, transportation companies will search for the optimum cost-saving alternatives when selecting their stopping points in Texas and Mexico. Location on a NAFTA transportation corridor will not be sufficient to ensure the development of successful industrial space. However, continued trade growth with Mexico should be a net positive for intelligently placed industrial space that meets the needs of value-adding firms. ■

---

Hunt is an assistant research scientist and Dr. Dotzour is chief economist with the Real Estate Center at Texas A&M University.

# Texas Border Bonanza

**T**rade between the United States and Mexico in 1998 totaled \$157 billion, a significant increase from \$80 billion in 1993, the year before NAFTA was implemented. Approximately \$113 billion in goods passed through Texas last year, with six border cities recording annual total trade volumes in excess of \$1 billion.

U.S.-owned maquiladoras are responsible for much of this trade volume. Maquiladoras are manufacturing or assembly plants located in Mexico but owned (as much as 100 percent) by a foreign parent company. The firm imports raw materials or partially assembled products into the Mexican plant and exports the finished products back to the United States — all at reduced tariff rates.

## El Paso-Juarez

Of the six busiest border cities in Texas, the most significant maquiladora activity occurs in the El Paso-Juarez area. According to Solunet, an El Paso firm that tracks maquiladora activity, Juarez is home to more than 350 maquiladora plants employing about 250,000 workers. More than 70,000 people are involved in automobile-related manufacturing and assembly activities alone. The manufacture and assembly of electronic components and appliances employs another 70,000.

## Brownsville-Matamoros

More than 100 maquiladora plants with a total of 60,000 personnel are located directly across the border from Brownsville in the city of Matamoros. Automobile-related manufacturing and assembly is again the major industry, employing more than 20,000 workers. Electronic component and appliance manufacturing and assembly is second in importance with about 17,000 employees.

## McAllen-Reynosa

The city of Reynosa, located across the border from McAllen, supports about 75 maquiladoras employing more than 50,000 people. Again, the assembly and manufacture of automobile-related components is the top employer, with more than 25,000 workers. Electronic and appliance manufacturing and assembly employs about 12,000.

## Laredo-Nuevo Laredo

Nuevo Laredo currently supports more than 45 maquiladora plants employing approximately 20,000 workers. More than 7,500 workers are employed in automobile-related assembly and manufacturing, while about 5,000 assemble or manufacture electronic components and appliances.

## Del Rio-Ciudad Acuna

More than 40 maquiladora plants supporting about 25,000 employees are located in Ciudad Acuna, directly across the border from Del Rio. Automobile-related manufacturing and assembly employs more than 10,000 workers. Data processing activities exceed electronic component assembly, employing 3,100 and 2,700 workers, respectively. The manufacture of medical-related products also is important and employs approximately 1,700.

## Eagle Pass-Piedras Negras

The Mexican city of Piedras Negras, located across from Eagle Pass, is home to more than 35 maquiladoras employing about 15,000 workers. More than 5,600 workers are involved in automobile-related manufacturing and assembly activities, while 3,900 are employed in apparel manufacturing. ■

## REAL ESTATE CENTER

©1999, Real Estate Center. All rights reserved.

**Director**, Dr. R. Malcolm Richards; **Associate Director**, Gary Maler; **Chief Economist**, Dr. Mark G. Dotzour; **Senior Editor**, David S. Jones; **Associate Editor**, Wendell E. Fuqua; **Associate Editor**, Rhonda Snider; **Assistant Editor**, Kammy Baumann; **Art Director**, Robert P. Beals II; **Typography**, Real Estate Center; **Lithography**, Wetmore & Company, Houston.

**Advisory Committee:** Gloria Van Zandt, Arlington, chairman; Joseph A. Adame, Corpus Christi, vice chairman; Celia Goode-Haddock, College Station; Carlos Madrid, Jr., San Antonio; Catherine Miller, Fort Worth; Kay Moore, Big Spring; Angela S. Myres, Houston; Jerry L. Schaffner, Lubbock; John P. Schneider, Jr., Austin; and Jay C. Brummett, Austin, ex-officio representing the Texas Real Estate Commission.

**Tierra Grande** (ISSN 1070-0234), formerly *Real Estate Center Journal*, is published quarterly by the Real Estate Center at Texas A&M University, College Station, Texas 77843-2115.

**Subscriptions** are free to Texas real estate licensees. Other subscribers, \$30 per year, including 12 issues of *Trends*.

**Views expressed** are those of the authors and do not imply endorsement by the Real Estate Center, the Lowry Mays College & Graduate School of Business or Texas A&M University.