

International Trade Corridor Plan

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TEXAS INTERNATIONAL TRADE CORRIDOR PLAN

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Contents

List of Figures	ii
List of Tables	iii
Executive Summary	iv
Trade by Truck.....	v
Trade by Rail	vi
I. Introduction	1
Background.....	1
What has changed?	1
Outline of the <i>2010 ITCP</i>	3
II. Texas International Transportation Infrastructure	4
Texas Roads.....	4
Texas Commercial Border Crossings	4
Texas Railroads.....	5
Texas Seaports.....	6
Texas Pipelines.....	7
III. International Trade—U.S. and Texas	8
U.S. International Trade.....	8
Texas International Trade	10
Texas Trade with Mexico	11
Mexico’s Industry—Its Impact on Texas Trade	13
Texas International Trade by Transportation Mode	14
IV. Texas International Trade Corridors	23
Texas International Trade Corridor Ranking	23
Major Texas Highways.....	26
V. Border Trade Advisory Committee (BTAC)	28
BTAC Status	29
VI. Concluding Remarks	30
Appendix: International Trade Value by All Transportation Modes	32

List of Figures

Figure 1. Economic Outlook	2
Figure 2. Texas' Commercial Border Crossings in 2010	4
Figure 3. Texas Railroads	5
Figure 4. Texas Deep Draft Ports.....	6
Figure 5. Texas Pipelines—Crude and Natural Gas.....	7
Figure 6. U.S. Imports and Exports from 1999 to 2009	8
Figure 7. U.S. Exports to Major Trading Partners	9
Figure 8. U.S. Imports from Major Trading Partners.....	9
Figure 9. 2009 U.S. International Trade and Exports by State (\$ Billions)	10
Figure 10. 2009 Texas Imports and Exports (\$ Billions).....	11
Figure 11. Total Texas-Mexico Trade.....	12
Figure 12. Percentage of the Total U.S.-Mexico Trade that Occurs through Texas	12
Figure 13. Percentage Change in the Mexican Manufacturing Production (1994-2010).....	13
Figure 14. Texas-Only Trade with Mexico (originating in Texas only)	14
Figure 15. Total Texas-Mexico Surface Trade and Main Ports of Entry	15
Figure 16. U.S. Border Crossings, Trucks Entering through Texas.....	16
Figure 17. Total Texas Exports to Mexico—Value by Trucks.....	17
Figure 18. Texas Imports from Mexico—Value by Trucks.....	17
Figure 19. Texas-Mexico Northbound Rail Traffic (2003-2009).....	18
Figure 20. Texas Exports to Mexico—Value by Rail	20
Figure 21. Texas Imports from Mexico—Value by Rail	20
Figure 22. Texas-Mexico Trade by Pipeline	22
Figure 23. Projected International Trade by Trucks (2020) (Imports and Exports).....	24
Figure 24. Projected International Trade by Rail (2020) (Imports and Exports)	26
Figure 25. Texas-Mexico Trade by Truck, Rail and Pipeline	30
Figure A1. Total Texas Exports to Mexico (originating and in transit through Texas) All Land Modes.....	35
Figure A2. Total Texas Imports from Mexico (originating and in transit through Texas) All Land Modes.....	35
Figure A3. Texas-Only Exports to Mexico (originating in Texas only) All Land Modes.....	36
Figure A4. Texas-Only Imports from Mexico (terminating in Texas only) All Land Modes.....	36

List of Tables

Table 1. U.S. International Surface Trade by Value and Weight Net Change 2007-2009.....	15
Table 2. Top 10 U.S. Ports by Waterborne Tonnage, Imports and Exports (2006-2008).....	21
Table 3. Texas Ports Foreign Trade (2008)	21
Table 4. U.S. Seaborne Trade by Region 2008–2009 (Metric tons in thousands)	22
Table 5. Texas International Trade Corridors by Trucks (Imports/Exports, Millions)	23
Table 6. Texas International Trade Corridors by Rail (Imports and Exports in Millions)	25
Table 7. Strategies Formulated to Address the BTAC Goals	25
Table A1. 2009 International Trade by All Modes for Each Texas Port of Entry.....	32
Table A2. 2009 International Trade by Truck Only for Each Texas Port of Entry	33
Table A3. 2009 International Trade by Rail Only for Each Texas Port of Entry.....	34

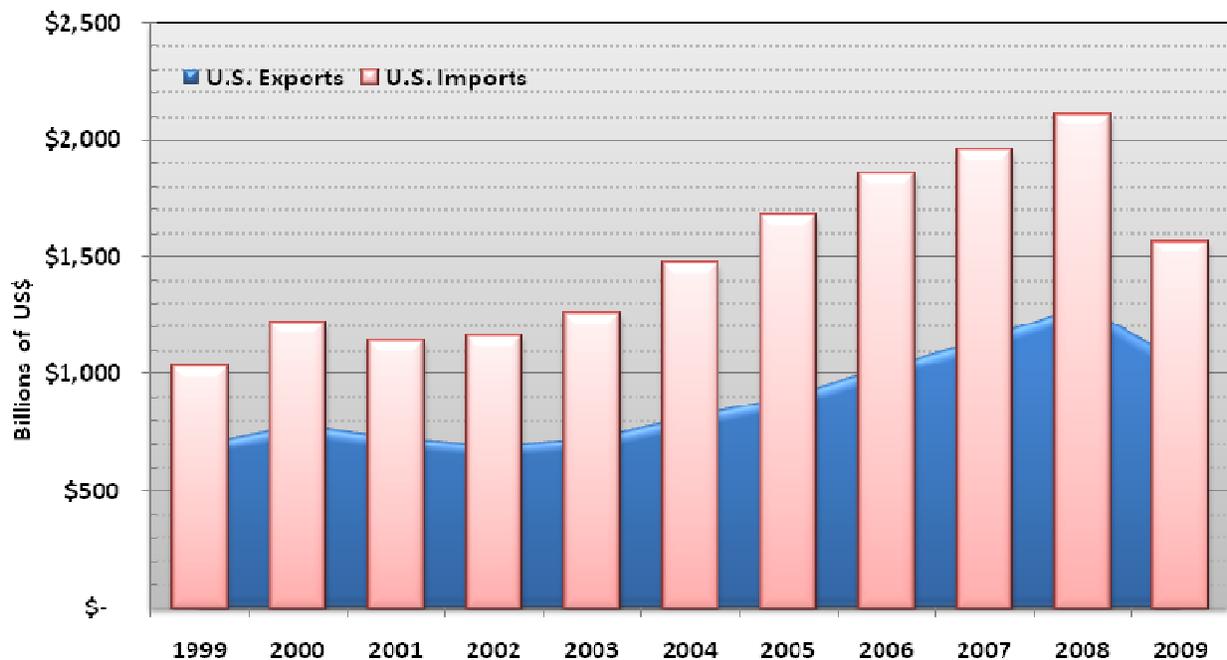
Executive Summary

The Texas Transportation Code, Section 201.6011, requires the Texas Department of Transportation (TxDOT) to update the **International Trade Corridor Plan (ITCP)** biennially and report on its implementation to the presiding officer of each house of the Texas Legislature in each even-numbered year.¹

The 2010 ITCP serves as an update to the 2008 version. Previous versions can be found at the TxDOT Library page of the *Transportation Planning Publications* web site: http://www.txdot.gov/txdot_library/publications/transportation_planning.htm.

The most important change since the last version of the International Trade Corridor Plan has been the downturn in the economy generated by the financial crisis that started in 2007, and severely impacted international trade and commercial traffic around the world.

Between 2008 and 2009,
U.S. exports fell 22% and imports fell a dramatic 35%.



Source: Developed by TTI with data from the International Trade Administration, U.S. Department of Commerce.

U.S. Imports and Exports from 1999 to 2009

¹ Senate Bill No. 183, 79th Regular Session, 2005

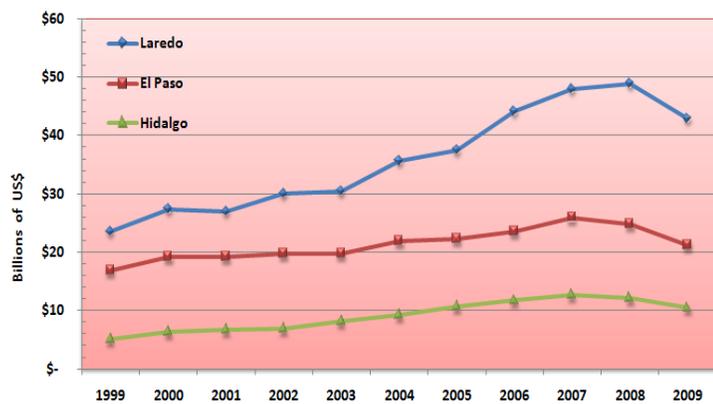
Mexico remains Texas' largest trading partner and accounts for a large portion of its international commerce. In 2009, the U.S.-Mexico total trade was \$306 billion (exports and imports), and the overall Texas-Mexico trade accounted for \$208 billion with the following breakdown: \$93 billion of exports and \$115 billion of imports.² Since many U.S. companies outsource to Mexico, impact of the collapse of Mexico's manufacturing industry on the levels of trade with the U.S. and Texas was very significant.

Primarily, U.S. imports by all modes of transportation were severely impacted by the financial crisis; exports to a lesser extent.

Trade by Truck

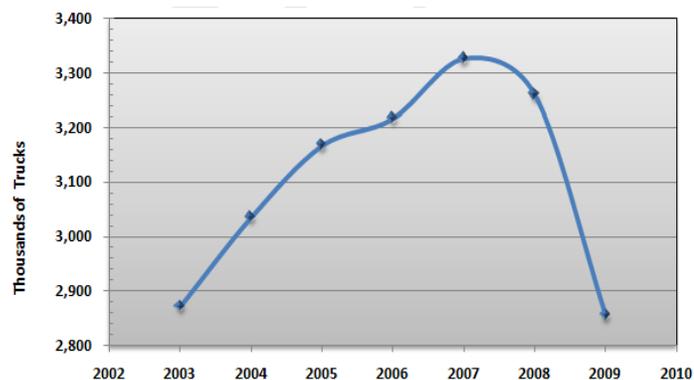
International truck traffic from Mexico into Texas:

- Increased steadily between 2003 and 2007, with an average annual growth rate of 3.8 percent.
- Dropped more than 14 percent between 2007 and 2009³.
- This trend seems to continue, as 2010 monthly crossing volumes remains unchanged from 2009.
- In 2009, 2,854,881 trucks entered Texas from Mexico.
- Approximately 95 percent of all northbound truck crossings are concentrated at five ports of entry:
 1. Laredo
 2. El Paso
 3. Hidalgo
 4. Brownsville
 5. Eagle Pass



Source: Developed by TTI with data from the US DOT, Bureau of Transportation Statistics (BTS).

Texas Imports from Mexico—Value by Truck



Source: Developed by TTI with data from the US DOT, Bureau of Transportation Statistics (BTS)

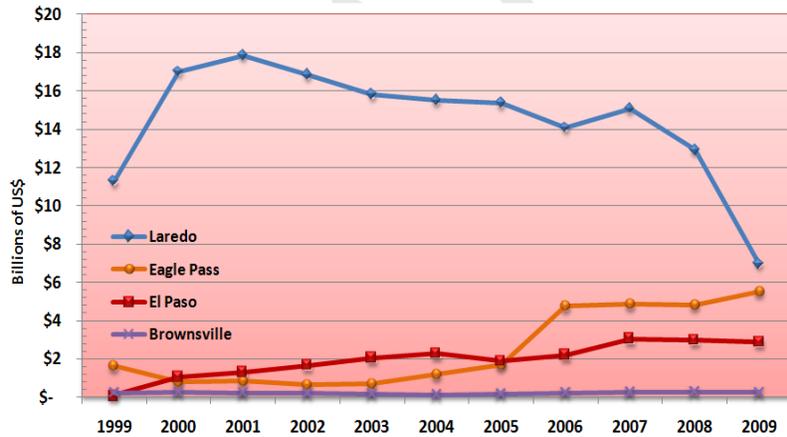
Texas Imports from Mexico by Number of Trucks

² U.S. Department of Transportation (U.S. DOT), Research and Innovative Technology Administration, Bureau of Transportation Statistics (BTS), Transborder Freight Data: http://www.bts.gov/programs/international/transborder/TBDR_QA.html

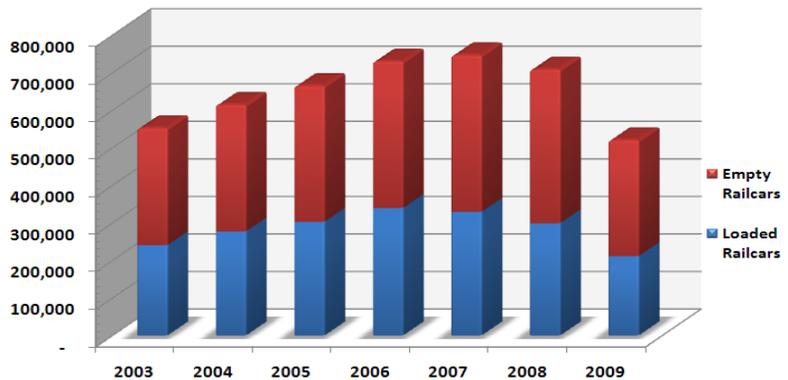
³ U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics. Latest Available Data: December 2009, consulted on October 10, 2010: http://www.bts.gov/programs/international/border_crossing_entry_data/

Trade by Rail

- Trade by rail was the most affected by the financial crisis of 2007.
- The overall Texas-Mexico trade by rail decreased 40 percent from 2008 to 2009 measured by value.
- Exports by rail were the most affected decreasing 46 percent.
- Imports fell 35 percent for the same period.
- 519,133 railcars entered Texas from Mexico (empty and loaded).
- Approximately 99 percent of all rail crossings are concentrated at four ports of entry:
 1. Laredo
 2. El Paso
 3. Eagle Pass
 4. Brownsville

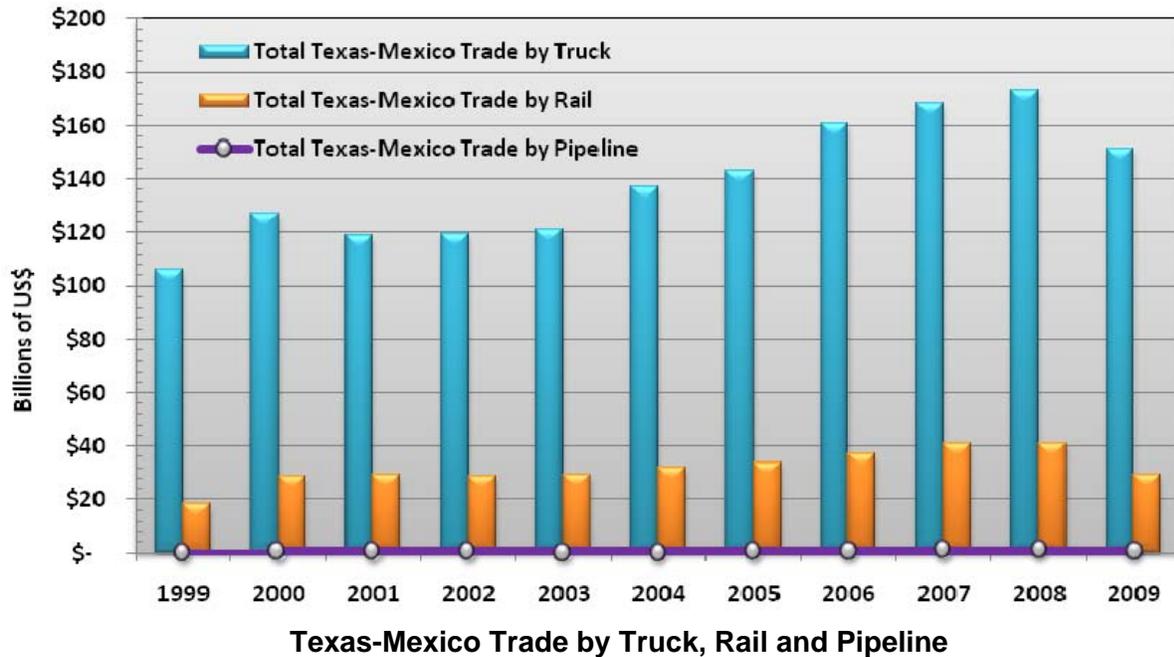


Source: Developed by TTI with data from the US DOT, Bureau of Transportation Statistics (BTS).
Texas Imports from Mexico—Value by Rail



Source: Developed by TTI with data from the US DOT, Bureau of Transportation Statistics (BTS).
Texas Imports from Mexico by Number of Railcars

Texas continues to be an important player in U.S. international trade, serving as the main gateway for trade with Mexico. Truck continues to be the dominant mode for trade between the U.S. and Mexico. Texas is turning into an important link for trade with Asia through its seaports and through Mexico.



The following trends will impact the Texas' transportation system serving international trade:

- The downturn of the economy has changed traffic flows from China into the U.S. China's increased internal consumption and higher supply chain costs, due to increased fuel prices, will eventually decrease the amount of U.S. trade with China.
- Some firms that in the past moved to Asia have been coming back to North America—establishing manufacturing plants closer to the consumption points or “nearshoring.” Some of these manufacturing centers are located along the Mexico-Texas border.
- The expansion of the Panama Canal will provide U.S. ports along the East Coast and the Gulf of Mexico with direct all-ocean service from Asia. This may reduce the amount of traffic that travels by land modes between the U.S. West Coast and East Coast, passing through Texas.

Reduction in trade flows to and from Texas, due to the financial crisis, has brought trade and commercial traffic volumes to 2006 levels. The economic slowdown generated by the financial crisis provides an excellent opportunity for Texas to plan for new trade flow

patterns that will spur the expansion period of the next economic cycle and have Texas infrastructure ready for potentially much higher traffic volumes.

Usually expansion periods following a financial crisis of such magnitude achieve significantly higher levels of trade than the pre-crisis levels; hence, one can expect much higher levels of traffic volumes.

I. Introduction

Background

The Texas Transportation Code, Section 201.6011, requires the Texas Department of Transportation (TxDOT) to update the **International Trade Corridor Plan (ITCP)** biennially and report on its implementation to the presiding officer of each house of the legislature in each even-numbered year.⁴

The 2010 ITCP serves as an update to the 2008 version. Previous versions of the ITCP and the Border Trade Advisory Committee Report (BTAC), in addition to their pertinent updates, can be found at the TxDOT Library page in the *Transportation Planning Publications* web site:

http://www.txdot.gov/txdot_library/publications/transportation_planning.htm.

What has changed?

Since the last version of the ITCP, the most important change has been the financial crisis that started in 2007. The downturn in the economy severely impacted international trade around the world. Between 2008 and 2009, U.S. exports fell 22 percent and imports fell a dramatic 35 percent. Canada and Mexico are the main trading partners for U.S. exports; nonetheless, China's emergent consumer class is becoming a more prominent market for U.S. exports recently, surpassing Japan. China has moved up as the main importer to the U.S. following Canada and Mexico.

The U.S. economy is recovering; however, in the third quarter of 2010 the recovery is taking place at a slow pace. According to the *October 2010 World Economic Outlook* (WEO) from the International Monetary Fund (IMF), economic growth was 1.7 percent in the second quarter (annualized rate), slower than the 3.7 percent growth rate posted in the first quarter; several indicators suggest a weak recovery in coming quarters.⁵

According to the *October 2010 Dallas Beige Book* from the Federal Reserve Bank, economic growth in the Eleventh District, which includes Texas, occurred at a subdued pace between August and October 2010 :

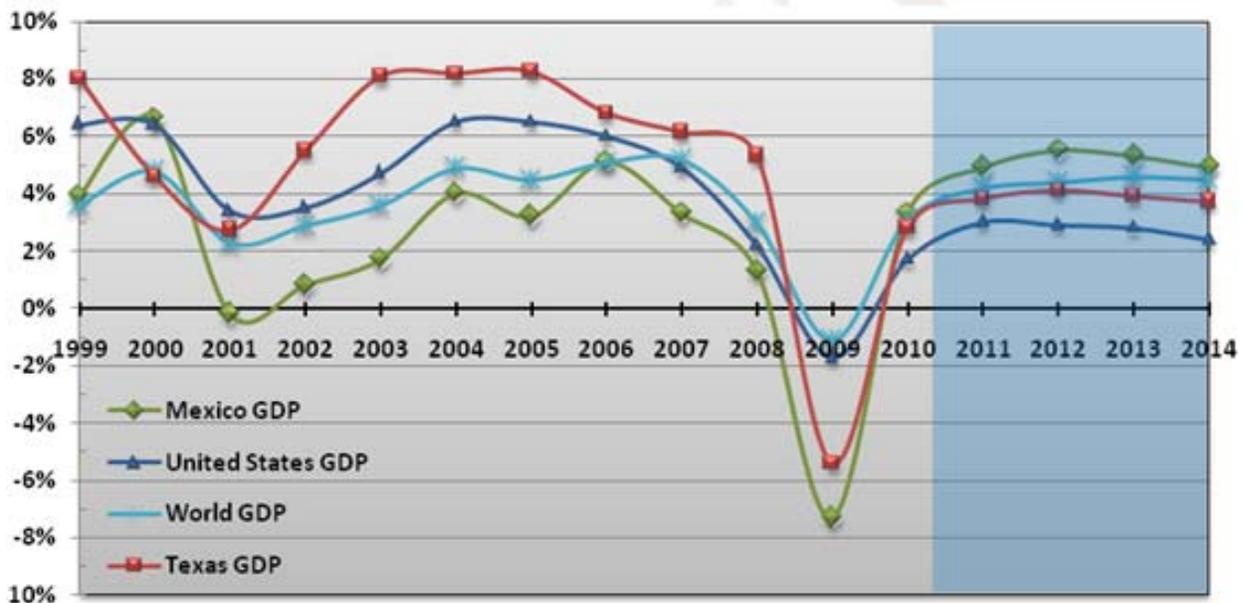
“Transportation services demand was positive, but the pace was somewhat slower over the past six weeks. Contacts said intermodal cargo volumes increased minimally, but that the increases were broad-based across industries. Railroad contacts noted moderate gains in volumes overall, although shipments of grain, non-metallic minerals, chemicals and petroleum products increased at a

⁴ Senate Bill No. 183, 79th Regular Session, 2005

⁵ World Economic Outlook, Recovery, Risk, and Rebalancing, October 2010. 2010 International Monetary Fund: <http://www.imf.org/external/pubs/ft/weo/2010/02/index.htm>

strong pace. International container trade volumes flattened over the past month, but are up from a year ago. Firms that ship small parcel goods said volumes dipped in September after several months of positive growth.”⁶

The World Gross Domestic Product (GDP), including the GDP from U.S. and Mexico, is close to its levels of output before the financial crisis of 2007. According to the WEO from the IMF, the U.S. recovery will be moderate in spite of its deficit and global uncertainty. Latin America, including Mexico, is sustaining its growth momentum (Figure 1). Asia keeps steadily advancing. In terms of transportation, this means that more imports are expected from Mexico, and exports to China will grow in the long run; imports from China will continue.⁷



Source: Developed by TTI with data from the IMF and Banxico

Figure 1. Economic Outlook

Even though the economy of Texas showed more resiliency than the rest of the U.S., the impact of the financial crisis on Texas trade was also significant, particularly due to the reduction in trade with Mexico through the land ports of entry (POEs).

Some manufacturing is coming back to Mexico after leaving to China. High oil prices that increased supply chain costs have made some companies rethink sourcing strategies with “near-shoring” strategies. World trade figures show strong growth in early 2010. However, these figures could be inflated by a very low base of comparison in 2009. A new element of the recovery is that international trade patterns are changing globally, and this could impact the transportation system in Texas. It is too early to

⁶ Dallas Beige Book, Federal Reserve Bank of Dallas, October 20, 2010: <http://www.dallasfed.org/research/beige/2010/bb101020.html>

⁷ World Economic Outlook, Recovery, Risk, and Rebalancing, October 2010. 2010 International Monetary Fund: <http://www.imf.org/external/pubs/ft/weo/2010/02/index.htm>

determine the speed of the recovery and what will be the final structure of the new trade patterns. Once the establishment of the manufacturing base that will spur the expansion period of the next economic cycle takes place, the picture of the new trade patterns will become more apparent.

Another important element that will influence new trading patterns is the expansion of the Panama Canal. This \$5.2 billion expansion is expected to start operations in 2014, and will allow super-sized vessels to come through the canal and serve the U.S. East Coast and Gulf of Mexico ports.

The Port of Houston is one of the first North American ports between the Panama Canal and U.S. customers. The expansion of the Panama Canal will alter trade patterns that currently use ports like Los Angeles and Long Beach. Transpacific trade between Asia and the U.S. East Coast accounts for more than half of canal traffic. By 2020, Post-Panamax ships (vessels larger than the current Panama Canal locks) are projected to comprise 30 percent of the global fleet.

The fastest-growing market for Houston regional ports is East Asia, with total tonnage increasing more than 30 percent in the last three years. It is anticipated that growth will continue with the expansion of the Canal. Houston is the logical gateway into the middle of the country and the northern Mexico market⁸.

Outline of the 2010 ITCP

The 2010 ITCP is structured in five main sections:

- I. **Introduction.** The first section contains a summary of events at the international and national levels that could impact trade in Texas.
- II. **Texas International Transportation Infrastructure.** This section includes a description of the international transportation infrastructure in Texas: highways, railroads, seaports and pipelines.
- III. **International Trade—U.S. and Texas.** This section contains trade statistics that highlight changes in the recent years, and aims to provide a picture of the impact of the financial crisis on the levels of trade and in the levels of commercial traffic by relevant modes.
- IV. **Texas International Trade Corridors.** International trade corridors in Texas are presented in Section IV with the forecasted volumes.
- V. **Border Trade Advisory Committee (BTAC).** Provides an update on the efforts multiple organizations have taken to meet the BTAC goals developed in 2006.
- VI. **Concluding Remarks.** This section includes conclusions of the 2010 update of the ITCP.

⁸ 2009 Sustainability Report, Port of Houston authority: http://www.portofhouston.com/pdf/AR09/PHA_Sustainability_Report_09.pdf

II. Texas International Transportation Infrastructure

Texas international trade relies on the network of transportation systems within the state. Texas has vast networks of roads, border crossings, railroads, seaports, and pipelines. Texas' most important trading partner, Mexico, is currently undergoing a major infrastructure renovation that will improve connectivity between Mexico and Texas.

Texas Roads

Texas has an extensive road system with 80,066 centerline miles maintained by the Texas Department of Transportation (TxDOT)⁹. It includes 16,353 state highway miles, 12,105 U.S. highway miles, and 3,233 miles of interstate highways.

Texas Commercial Border Crossings

There are 13 operating international commercial ports of entry in Texas. In Texas, all international crossings with Mexico are bridges that cross the Rio Grande River (Figure 2). For more information on the characteristics of each bridge, such as the number of commercial vehicle lanes per bridge, refer to:

ftp://ftp.dot.state.tx.us/pub/txdot-info/iro/2010_international_bridges.pdf



Source: Texas Transportation Institute 2010

Figure 2. Texas' Commercial Border Crossings in 2010

⁹ Texas Department of Transportation

The World Trade Bridge in Laredo handles the largest amount of commercial traffic between Mexico and the U.S., followed by the two international bridges in El Paso. Commercial traffic at the Pharr-Reynosa International Bridge is on the rise.

Texas Railroads

There are 44 freight railroads and 10,743 miles of operated rail lines in Texas.¹⁰ The major railroad companies include BNSF, Kansas City Southern Railway (KCS), and Union Pacific Railroad (UP). Figure 3 shows the rail system serving Texas, including Class I railroads and short lines.

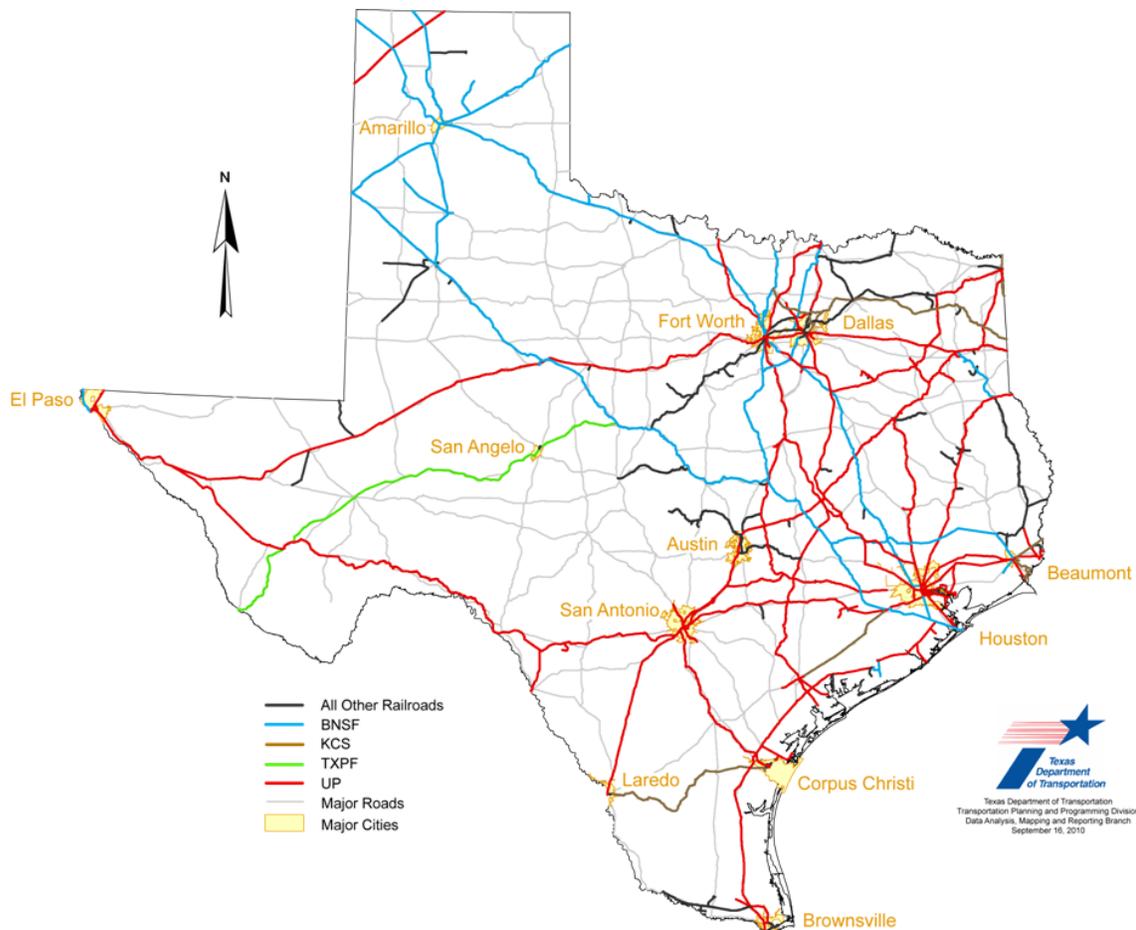


Figure 3. Texas Railroads

The Kansas City Southern Railway developed a new intermodal logistics park near Rosenberg. This terminal will provide rail service, carload and intermodal, along KCS's international intermodal corridor between Houston and the Port of Lazaro Cardenas in Mexico. The terminal is currently handling container traffic from/to Lazaro Cardenas and finished vehicles for Nissan from Aguascalientes in Mexico.

¹⁰ Texas Department of Transportation: http://www.dot.state.tx.us/publications/transportation_planning/FinalRail.pdf

Texas Seaports

Texas' deep draft ports are Orange, Beaumont, Port Arthur, Sabine Pass, Houston, Galveston, Texas City, Freeport, Port Lavaca-Point Comfort, Corpus Christi, Port Isabel and Brownsville. Figure 4 shows the locations of these ports.



Figure 4. Texas Deep Draft Ports

In 2007, the Port of Houston opened the Bayport Container Terminal. Phase 1 of the construction allowed the port to handle an additional 360,000 TEUs (Twenty Foot Equivalent Units) per year. With the new terminal, the Port of Houston will be able to receive large vessels crossing through the expanded Panama Canal. The Port Authority is planning a \$350 million investment between 2010 and 2011, the majority of which is dedicated to expanding the Bayport container terminal. The development of new container yard acreage has begun, and orders have been placed for new ship-to-shore and rubber-tired gantry cranes.¹¹

¹¹ 2009 Sustainability Report, Port of Houston authority: http://www.portofhouston.com/pdf/AR09/PHA_Sustainability_Report_09.pdf

Texas Pipelines

While pipelines carry some international trade, they are operated by the private industry. The Bureau of Transportation Statistics reports the value of commodities moved through Texas gateways via pipelines. Figure 5 presents the crude oil and natural gas pipeline networks in Texas.

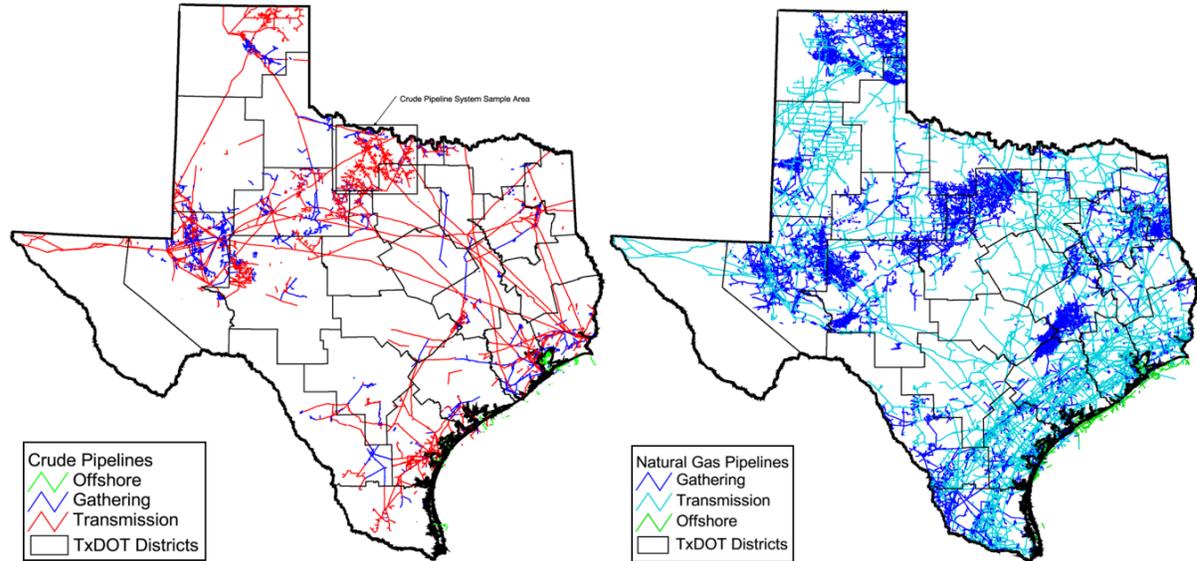


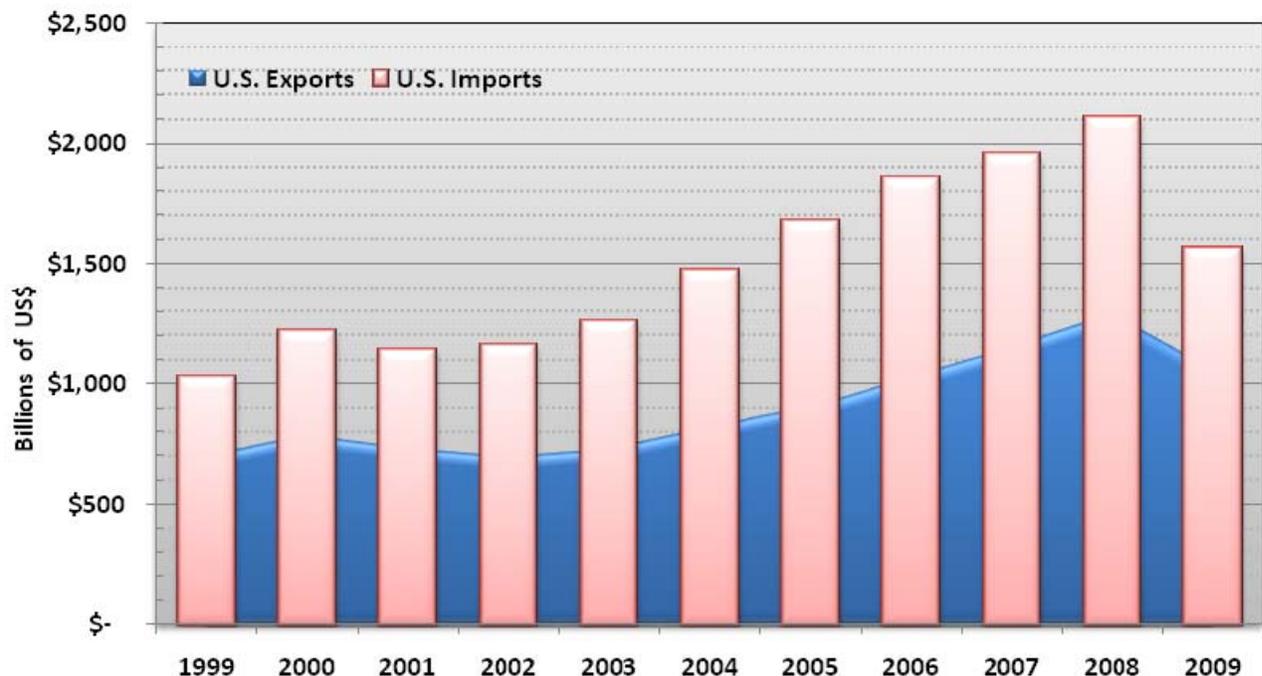
Figure 5. Texas Pipelines—Crude and Natural Gas

III. International Trade—U.S. and Texas

The financial crisis that started in 2007 resulted in the collapse of large financial institutions, as well as downturns in stock markets, industrial manufacturing and levels of trade around the world. As credit tightened worldwide, a high percentage of the world's economies—including the U.S. and its main trading partners—went through a severe recession; Mexico was no exception. This had a significant impact on the U.S. and Texas freight transportation systems.

U.S. International Trade

Before the financial crisis, global trade volumes kept growing considerably. Supply chain efficiencies and the consolidation of the previous boom of free trade agreements, such as the North American Free Trade Agreement (NAFTA), were largely responsible for the rise in international trade volumes. The U.S. was a driving force in this growth, with nearly \$1.3 trillion in exports and more than \$2.1 trillion in imports in 2008. However, the financial crisis severely impacted international trade. Between 2008 and 2009, U.S. exports fell 22 percent to \$1.06 trillion and imports fell a dramatic 35 percent to \$1.56 trillion in trade (Figure 6)¹². Even though recovery efforts are underway, this slowdown seems likely to continue at least until the third quarter of 2010.



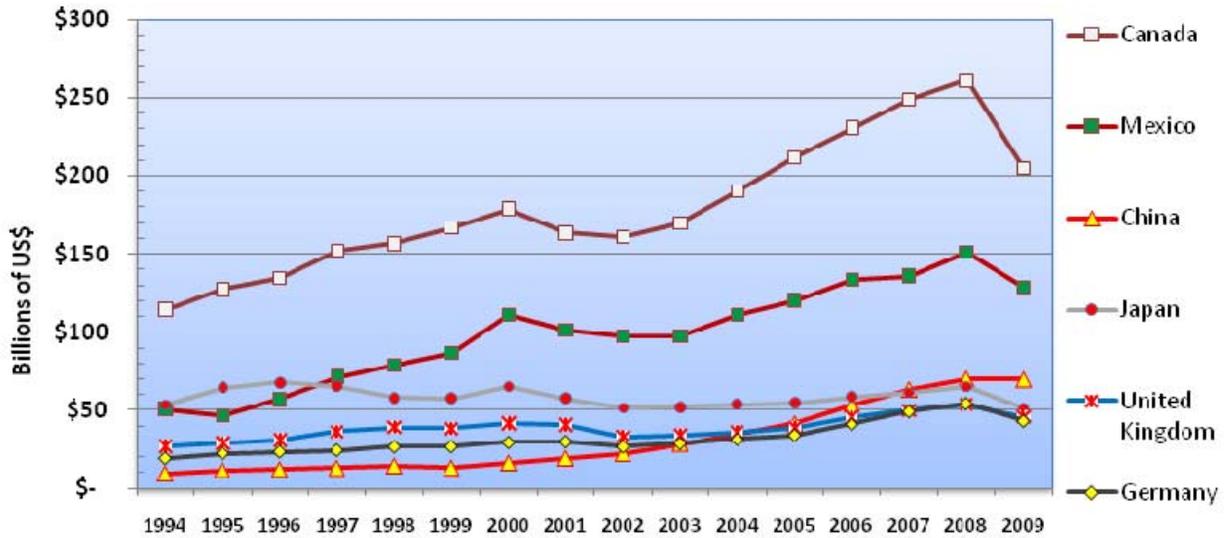
Source: Developed by TTI with data from the International Trade Administration, U.S. Department of Commerce.

Figure 6. U.S. Imports and Exports from 1999 to 2009

¹² International Trade Administration, U.S. Department of Commerce: <http://tse.export.gov/>

U.S. Main Trading Partners

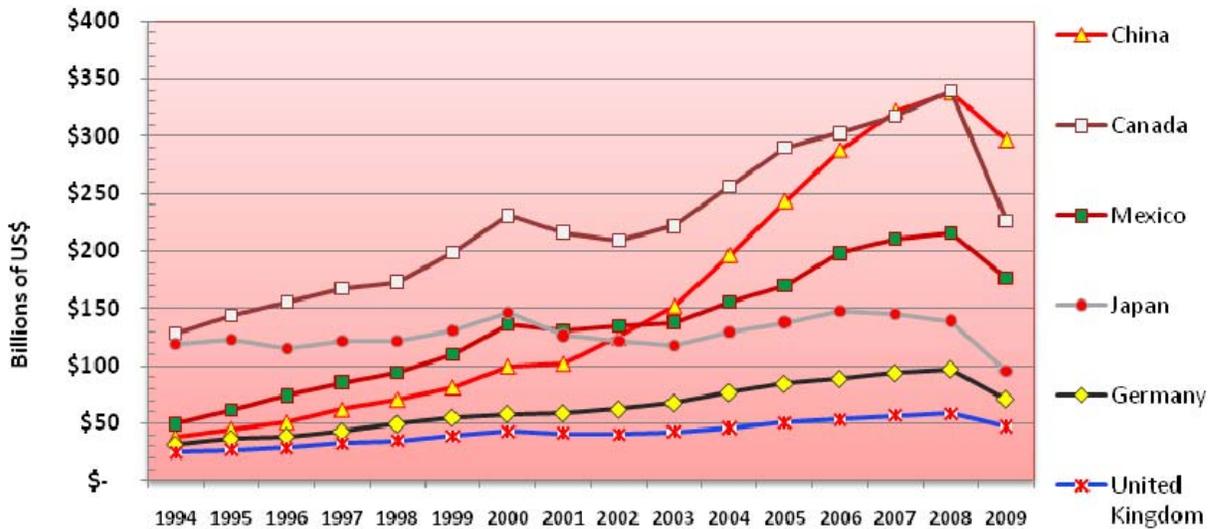
After the implementation of NAFTA in 1994, Canada and Mexico strengthened their positions as the main partners for U.S. exports; Japan decreased to third place and remained there until 2007. Nonetheless, China's new consumer class is becoming a more prominent stakeholder for U.S. exports, surpassing Japan after 2007. U.S. exports to China proved more resilient to the recession, as they continued its growth at a slower pace (Figure 7).



Source: Developed by TTI with data from the International Trade Administration, U.S. Department of Commerce.

Figure 7. U.S. Exports to Major Trading Partners

U.S. import trends changed after 2001, when China started gaining momentum as the preferred outsourcing base. In 2007, China became the main importer to the U.S. Even with the impact of the crisis, imports from China remained significantly higher than those from Canada and Mexico until the third quarter of 2010 (Figure 8).



Source: Developed by TTI with data from the International Trade Administration, U.S. Department of Commerce.

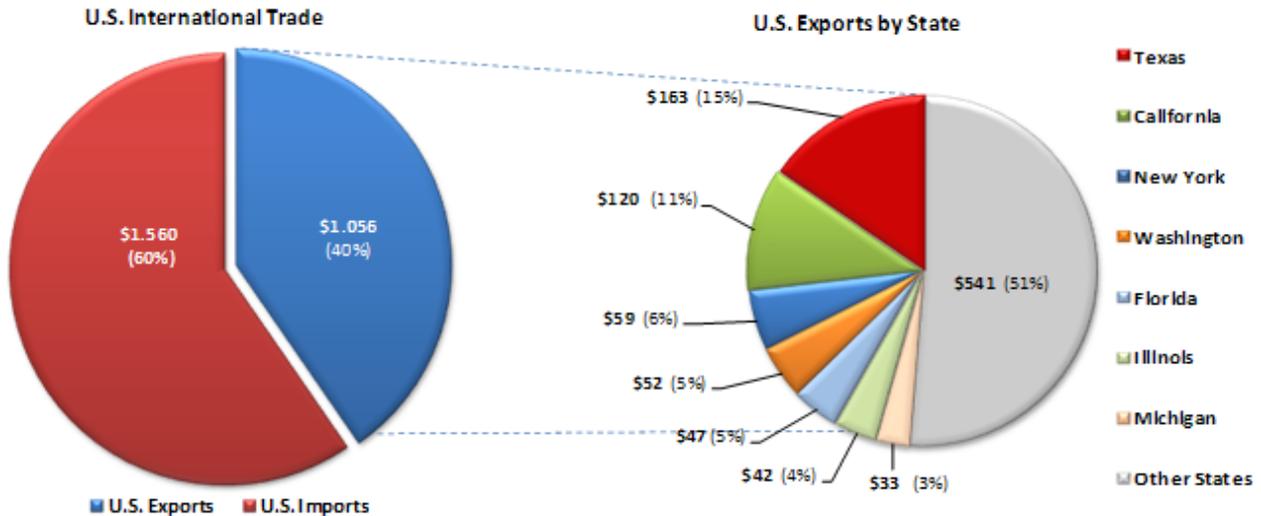
Figure 8. U.S. Imports from Major Trading Partners

Oil trade plays a significant role in the U.S. trade with Canada and Mexico. In 2009, 23 percent of Canada’s exports to the U.S. were oil, and Mexico’s oil exports to the U.S. were 13 percent. Oil imports to the U.S. are carried by ocean vessels and usually oil is refined at the port; therefore, oil imports do not affect the land transportation system.

Texas International Trade

In 2009, Texas ranked as the main stakeholder in U.S. international trade by value. Other states that are important players include California, New York, Washington, Florida, Illinois, Michigan and, finally, the rest of the U.S. (grouped as other states).

In 2009, Texas exported \$163 billion to the world, accounting for 15 percent of total U.S. exports (Figure 9)¹³. In the same year, Texas imports made up \$236 billion, accounting for 15 percent of the \$1.56 trillion of U.S. imports¹⁴ (imports by state not illustrated in Figure 9).



Source: Developed by TTI with data from the U.S. Department of Commerce and the U.S. Census Bureau.

Figure 9. 2009 U.S. International Trade and Exports by State (\$ Billions)

Texas’ Main Trading Partners

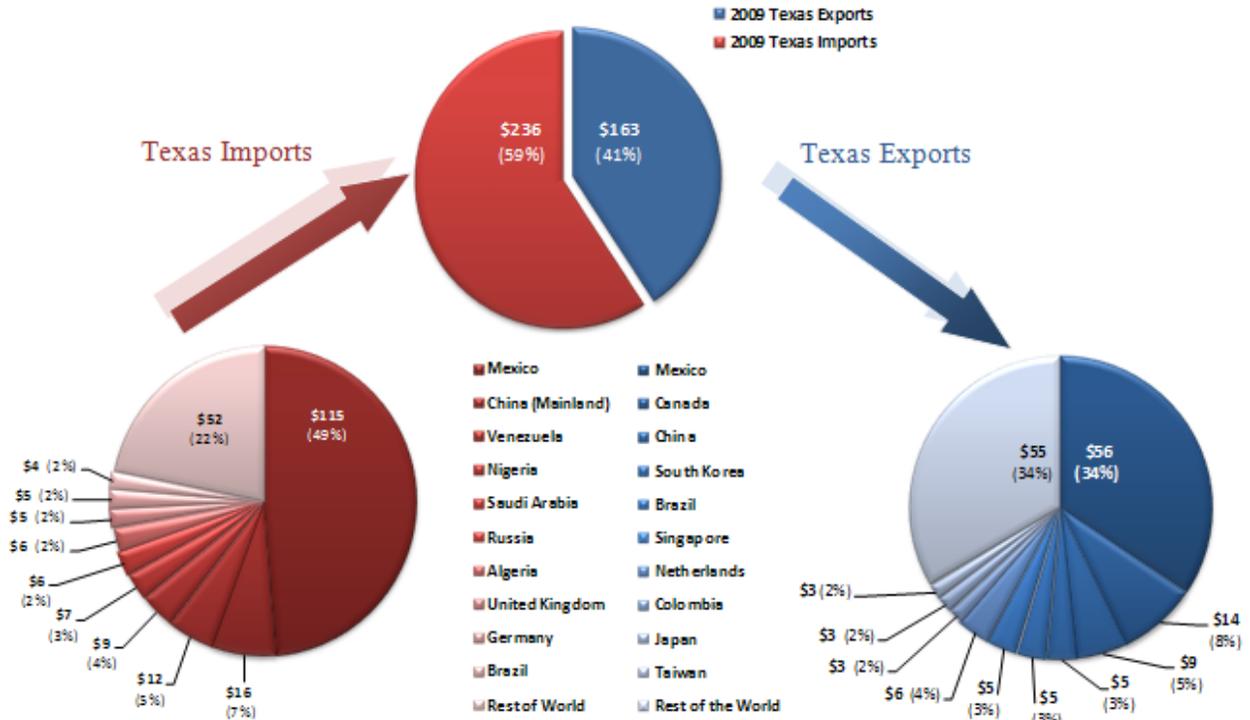
Texas’ trading partners include over 30 different countries. In 2009, Texas’ top-three export destinations were Mexico, Canada and China, which together accounted for over 48 percent of total Texas exports¹⁵. Texas top-three import origins were Mexico, China and Venezuela, accounting for 61 percent of total Texas imports in 2009 (Figure 10)¹⁶.

¹³ International Trade Administration, U.S. Department of Commerce: <http://tse.export.gov/>

¹⁴ U.S. Census Bureau, Foreign Trade Division, State Imports for Texas: <http://www.census.gov/foreign-trade/statistics/state/data/imports/tx.html>

¹⁵ International Trade Administration, U.S. Department of Commerce: <http://tse.export.gov/>

¹⁶ U.S. Census Bureau, Foreign Trade Division: <http://www.census.gov/foreign-trade/reference/products/catalog/port.html>



Source: Developed by TTI with data from the U.S. Department of Commerce, the U.S. Census Bureau, and U.S. DOT.

Figure 10. 2009 Texas Imports and Exports (\$ Billions)

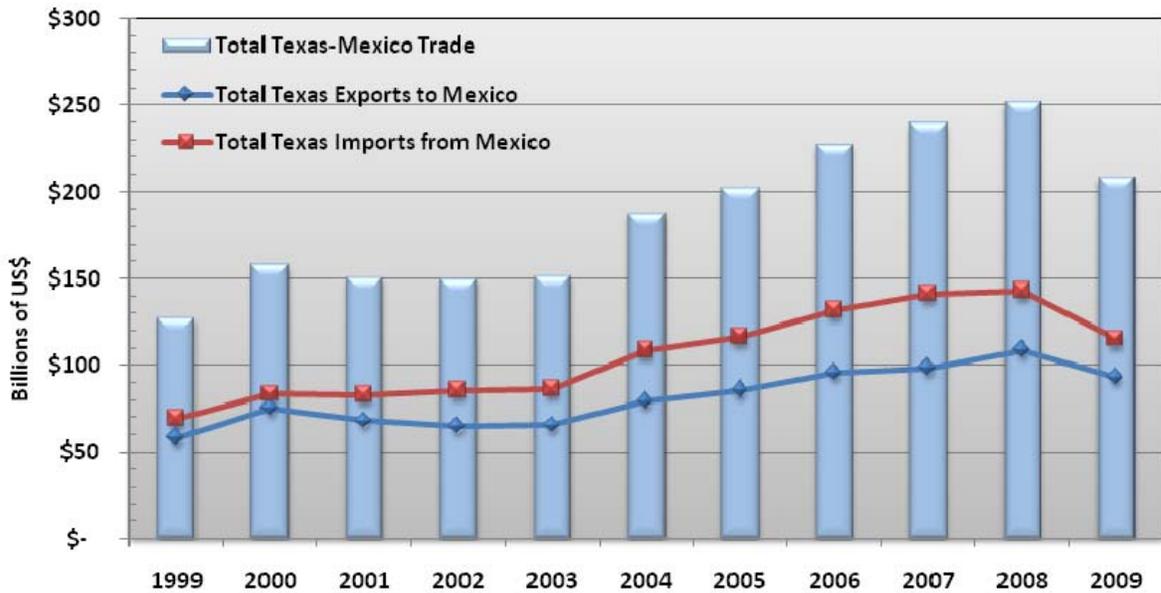
Texas Trade with Mexico

With a 1,255-mile border with Mexico that includes 13 commercial land ports of entry and 16 water ports along the Gulf of Mexico, Texas plays a critical part in U.S. international trade, particularly with Mexico. Mexico remains Texas’ largest trading partner and accounts for a large portion of its international commerce.

In 2009, the U.S.-Mexico total trade was \$306 billion (exports and imports). The Texas-Mexico trade accounted for \$113 billion, or 37 percent of the total U.S. trade with Mexico; this includes only trade that originated or terminated in Texas. U.S.-Mexico trade that cross through Texas, but was not originated or terminated in Texas accounted for \$95 billion.

The 2009 Total Texas-Mexico trade (originating and in transit) accounted for \$208 billion with the following breakdown: \$93 billion of exports and \$115 billion of imports (Figure11).¹⁷

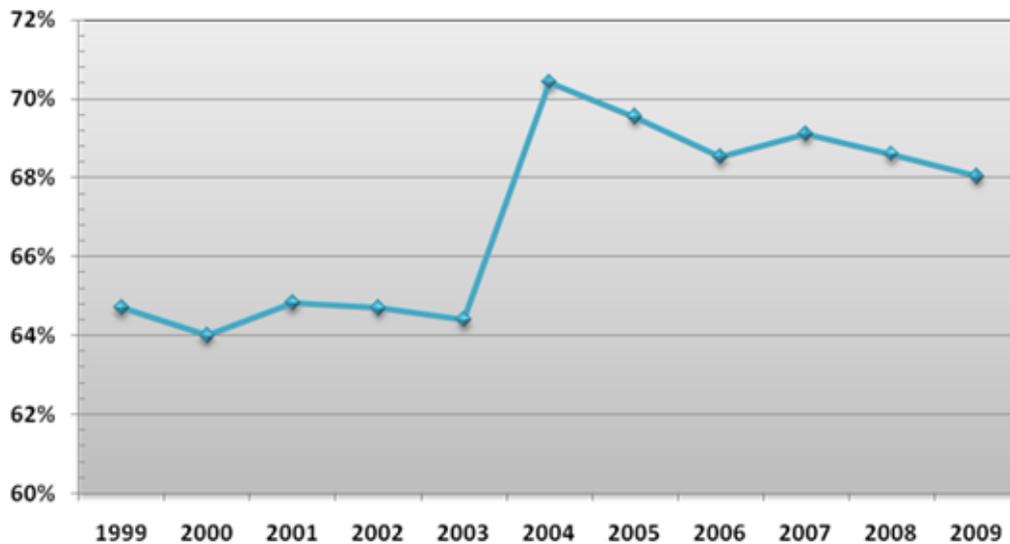
¹⁷ U.S. Department of Transportation (U.S. DOT), Research and Innovative Technology Administration, Bureau of Transportation Statistics (BTS), Transborder Freight Data: http://www.bts.gov/programs/international/transborder/TBDR_QA.html



Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).

Figure 11. Total Texas-Mexico Trade

Historically, the total U.S.-Mexico trade through Texas has ranged between 64 percent and 70 percent (Figure 12). This denotes the importance of Texas—and its transportation infrastructure—in the overall U.S.-Mexico trade¹⁸.



Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).

Figure 12. Percentage of the Total U.S.-Mexico Trade that Occurs through Texas

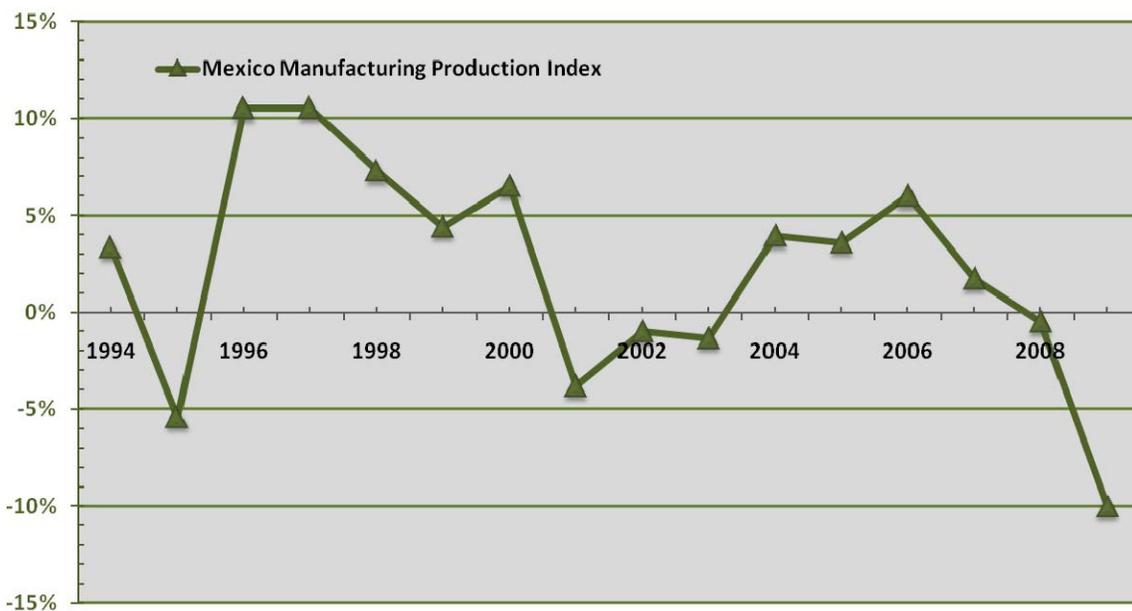
The top commodities traded between Texas and Mexico were: computer and electronics, chemicals, machinery and mechanical appliances, mineral fuels (i.e., coal, petroleum and natural gas) and transportation equipment.

¹⁸ Percentage estimated by dividing the annual value of total U.S.-Mexico trade by the Texas-Mexico trade.

Mexico's Industry—Its Impact on Texas Trade

Many U.S. companies outsource to Mexico. After growth during five consecutive years (2001-2006), the Mexican economy started to slow down in 2007. Manufacturing industrial production fell 1 percent between 2007 and 2008, and a staggering 10 percent between 2008 and 2009. Automakers in the U.S. were experiencing trouble, and this was reflected in a large fallback in the production of motor vehicles and parts in Mexico (Figure 13).

From 2007 to 2009, U.S.-Mexico trade decreased 14 percent from \$347 billion to \$306 billion. Texas-Mexico trade (Texas only) decreased 3 percent from \$116 billion to \$113 billion in the same timeframe—showing more resilience to the financial crisis. The 2009 Texas exports to Mexico decreased 6 percent, and Texas imports from Mexico were 23 percent less than in 2007 (Figure 14).¹⁹ This information shows that Texas-Mexico trade lags production in Mexico by approximately one year^{20 21 22}.



Source: Developed by TTI with data from Banxico

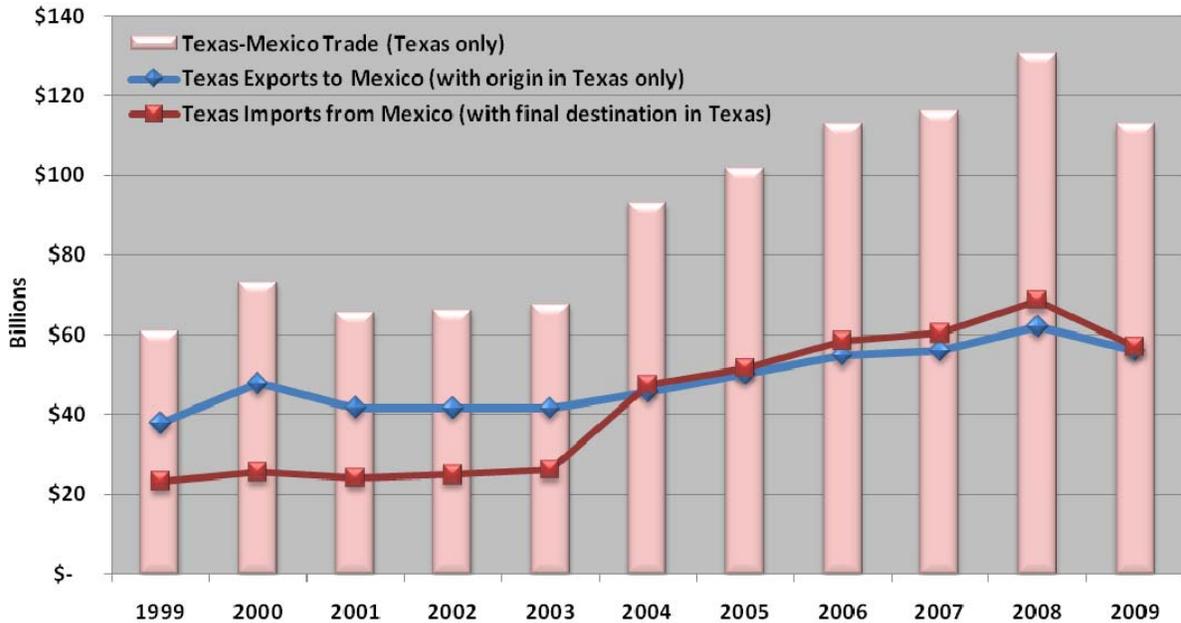
Figure 13. Percentage Change in the Mexican Manufacturing Production (1994-2010)

¹⁹ U.S. Department of Transportation Research and Innovative Technology Administration, Bureau of Transportation Statistics, Transborder Freight Data: http://www.bts.gov/programs/international/transborder/TBDR_QA.html.

²⁰ Texas-Mexico trade data available from Apr-1994 to Jul-2010—including 1994 and 2010 as partial years.

²¹ Banxico, Manufacturing Production Index 1993-2009, consulted on October 2, 2010: <http://www.banxico.org.mx/politica-monetaria-e-inflacion/estadisticas/otros-indicadores/produccion.html>.

²² U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Transborder Freight Data: http://www.bts.gov/programs/international/transborder/TBDR_QA.html.



Source: Developed by TTI with data from the U.S. Department of Commerce, Census Bureau, and the U.S.DOT

Figure 14. Texas-Only Trade with Mexico (originating in Texas only)

Texas International Trade by Transportation Mode

Surface Trade

Texas plays an important role as a gateway for international trade, both entering and exiting the U.S. In 2009, of the top 25 U.S. freight gateways, four of them are located in Texas: Laredo (6th), Houston (7th), El Paso (14th) and Dallas/Fort-Worth (17th); ranked by value of shipments for all modes of transportation²³.

Laredo is the port of entry with highest value of trade followed by El Paso (Table 1)²⁴. Laredo is the largest land port of entry and it experienced the highest net change in total trade in 2009, either measured by value (-16 percent) or by weight (-32 percent).

²³ U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics: http://www.bts.gov/publications/pocket_guide_to_transportation/2008/html/table_05_08.html

²⁴ U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics: http://www.bts.gov/programs/international/transborder/TBDR_QA.html

Table 1. U.S. International Surface Trade by Value and Weight — Net Change 2007-2009

International Trade Value: Imports and Exports (Millions \$)				International Trade Weight: Imports Only (Tons)			
Port of entry	2007	2009	Net change	Port of entry	2007	2009	Net change
Laredo	\$ 110,540	\$ 95,582	-16%	Laredo	16,605,319	11,814,951	-41%
El Paso	\$ 49,151	\$ 42,358	-16%	Hidalgo	4,698,477	3,658,749	-28%
Hidalgo	\$ 21,873	\$ 19,154	-14%	El Paso	5,119,950	3,473,680	-47%
Eagle Pass	\$ 12,026	\$ 12,482	4%	Eagle Pass	2,573,398	2,970,543	13%
Brownsville	\$ 13,270	\$ 9,795	-35%	Brownsville	1,733,232	1,304,165	-33%
Del Rio	\$ 3,220	\$ 2,284	-41%	Rio Grande City	336,905	218,858	-54%
Progreso	\$ 286	\$ 286	0%	Progreso	133,203	210,521	37%
Presidio	\$ 443	\$ 268	-65%	Del Rio	240,975	192,707	-25%
Rio Grande City	\$ 313	\$ 268	-17%	Presidio	74,762	49,746	-50%
Total	\$ 210,836	\$ 182,477	-16%	Total	31,441,459	23,893,920	-32%

Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).

The impact of the financial crisis of 2007 in the levels of U.S.-Mexico surface trade was significant. After growth during five consecutive years, the total Texas-Mexico surface trade started to slow down in late 2007. The top ports for surface trade in Texas are Laredo, El Paso and Hidalgo, respectively. However, the slowdown in the total Texas-Mexico surface trade was higher in Laredo, as compared with the other two POEs (Figure 15). Surface trade decreases through the rest of the ports were not significant.

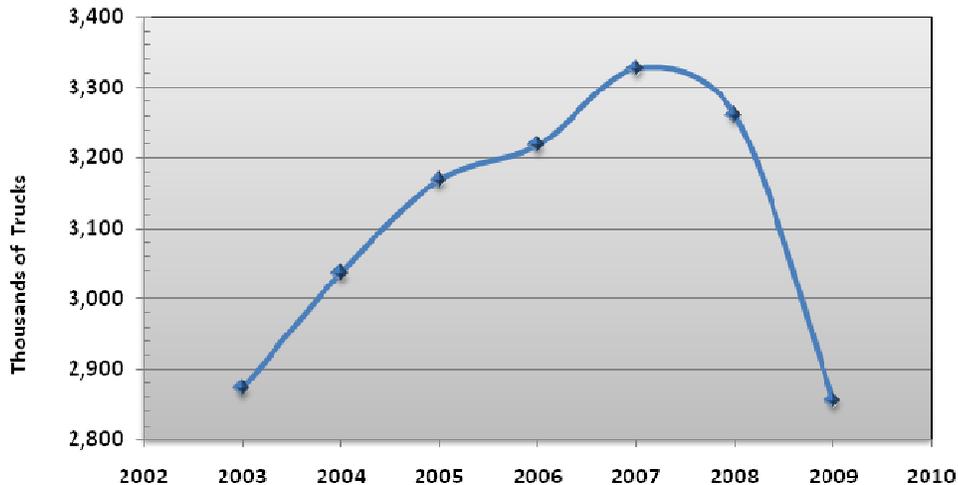


Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).

Figure 15. Total Texas-Mexico Surface Trade and Main Ports of Entry

Texas-Mexico Truck Trade

International truck traffic from Mexico into Texas increased steadily between 2003 and 2007, with an average annual growth rate of 3.8 percent; however, international truck traffic dropped more than 14 percent between 2007 and 2009 (Figure 16)²⁵. This trend seems to continue, as 2010 monthly crossing volumes remain unchanged from 2009.



Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).

Figure 16. U.S. Border Crossings, Trucks Entering through Texas

In 2009, 2,854,881 trucks entered Texas from Mexico. Approximately 95 percent of all northbound trucks crossings are concentrated at five ports of entry:

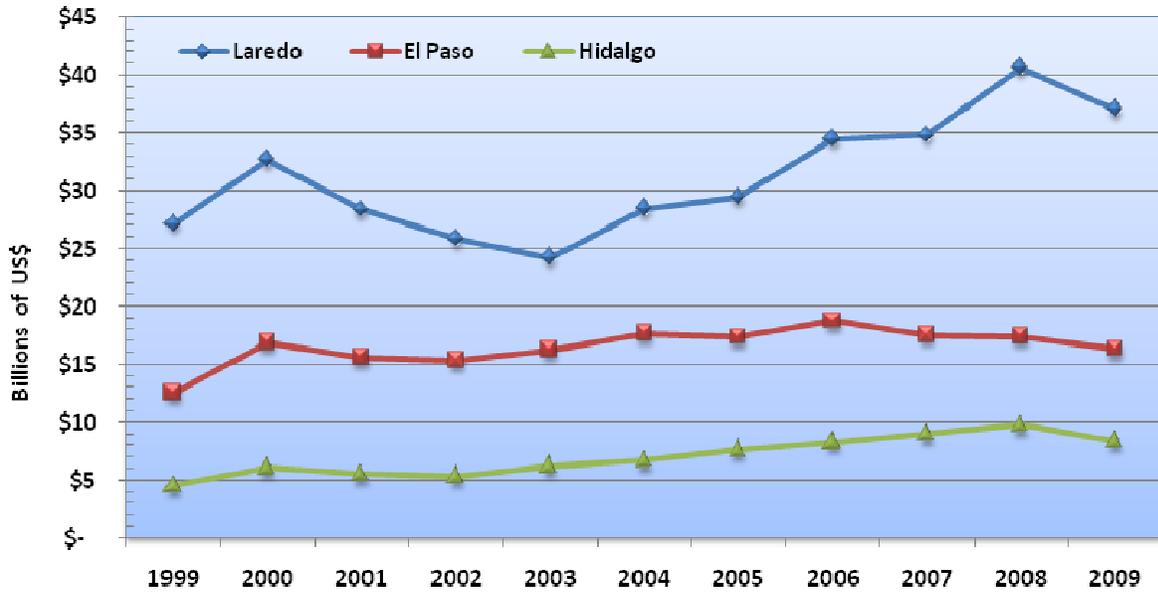
1. Laredo
2. El Paso
3. Hidalgo
4. Brownsville
5. Eagle Pass

Laredo is by far the largest port of entry for trucks, with two commercial border crossings in the region (World Trade Bridge and Colombia), carrying 48 percent of the northbound trucks in Texas during 2009 with an average annual growth of 3.8 percent since 2003. El Paso is the second largest truck port of entry in Texas, with two commercial border crossings (Zaragoza and Bridge of the Americas), handling 20 percent of northbound traffic with an average annual growth rate of 4 percent since 2003. The third largest truck port of entry in Texas is Hidalgo, handling approximately 15 percent of the total number of trucks entering from Mexico.

In 2009, from the total \$96 billion of surface trade through Laredo, \$80 billion was traded by truck. Tonnage-wise, Laredo handled 9.6 million tons of the total 12 million imported by truck. The compounded annual growth rate (CAGR) of truck-trade between 1999 and 2008 at Laredo was 4.6 percent for exports and 8.5 percent for imports. However, between 2008 and 2009, exports dropped 10 percent and imports 14 percent (blue lines in Figure 17 and 18).

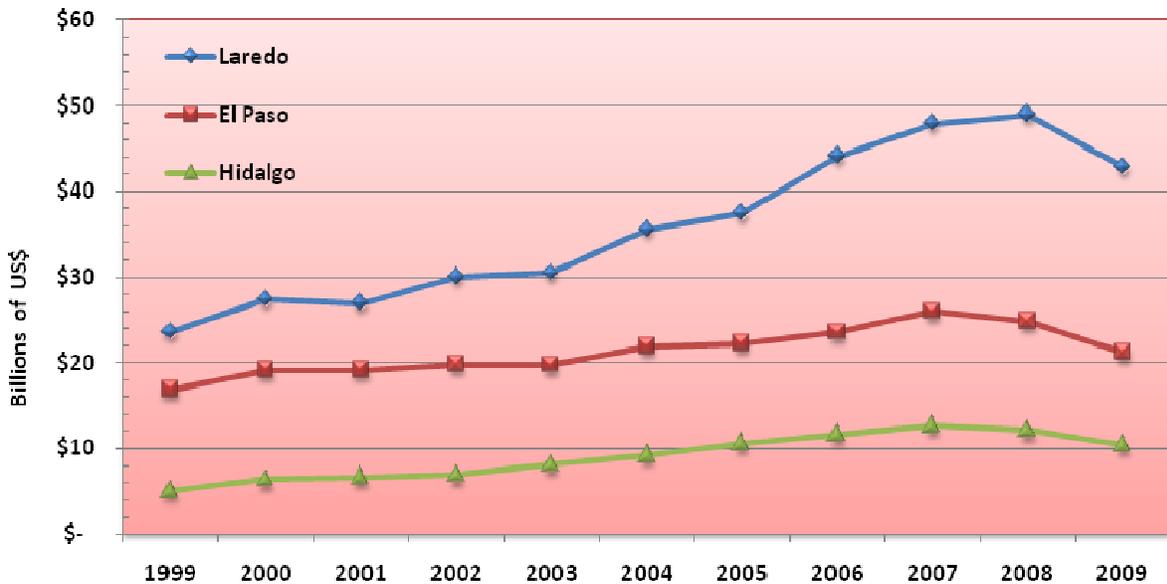
²⁵ U.S. DOT, Research and Innovative Technology Administration, BTS. Latest Available Data: December 2009, consulted on October 10, 2010: http://www.bts.gov/programs/international/border_crossing_entry_data/

From the total \$42 billion of surface trade through El Paso in 2009, \$38 billion was traded by truck, composed of \$16 billion of exports and \$21 billion of imports. El Paso imports by truck carried 2.1 million tons. The 1999-2008 CAGR for trucks was 3.8 percent for exports and 4.4 percent for imports through El Paso. The decline between 2008 and 2009 was 7 percent for exports and 17 percent for imports (red lines). Truck-trade at Hidalgo followed very similar patterns as El Paso.



Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).

Figure 17. Total Texas Exports to Mexico—Value by Trucks

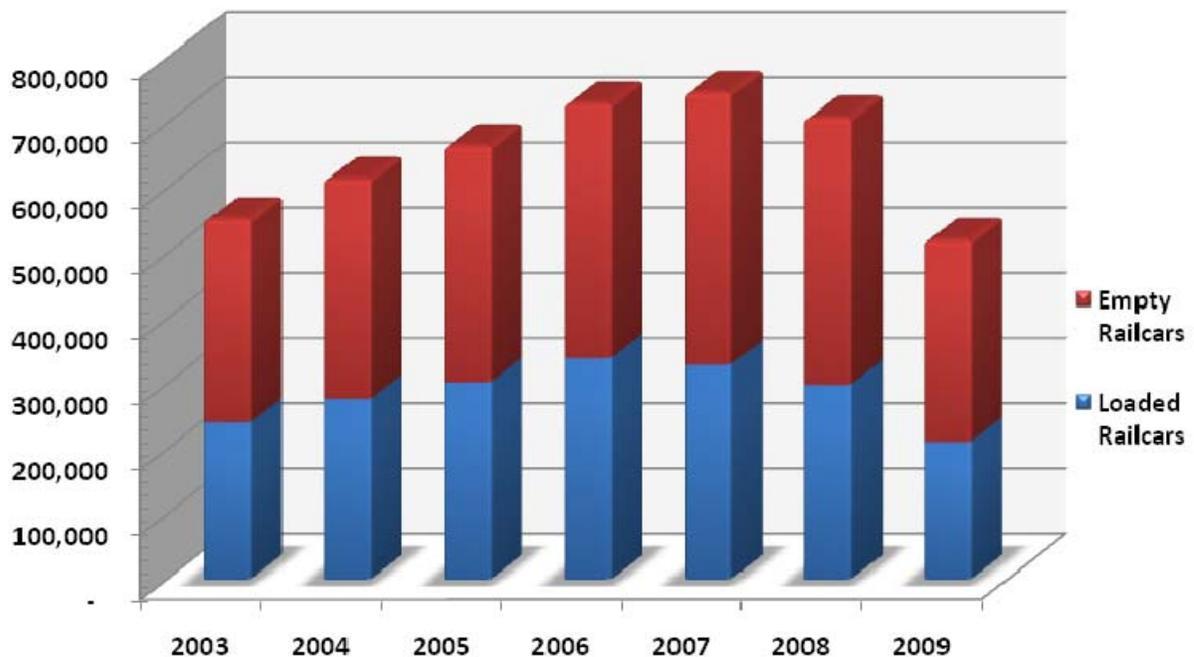


Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).

Figure 18. Texas Imports from Mexico—Value by Trucks

Texas-Mexico Rail Trade

The Mexican railway privatization led to increased efficiencies in rail movement between the U.S. and Mexico from 1999 to 2008²⁶. Texas-Mexico trade by rail experienced continuous growth with a CAGR of 9.3 percent (1999-2008) measured by value, and of 10 percent (2003-2007) measured by railcars (Figure 19)²⁷. However, trade by rail was the most affected by the financial crisis of 2007. The overall Texas-Mexico trade by rail decreased 40 percent from 2008 to 2009 measured by value; exports by rail were the most affected, decreasing 46 percent; imports fell 35 percent for the same period.



Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).

Figure 19. Texas-Mexico Northbound Rail Traffic (2003-2009)

In 2009, 519,133 railcars entered Texas from Mexico (empty and loaded). Approximately 99 percent of all rail crossings are concentrated at four ports of entry:

1. Laredo
2. El Paso
3. Eagle Pass
4. Brownsville

²⁶ Kansas City Southern took control over the TFM in 2005. Now provides service under one single company for traffic between Mexico and the U.S. through Laredo, linking the Mexican railroad with the Texas Mexican Railway Company and the Kansas City Southern network in the U.S.

²⁷ U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Border Crossing/Entry Data; based on data from U.S. Department of Homeland Security, Customs and Border Protection, OMR database: http://www.bts.gov/programs/international/border_crossing_entry_data/

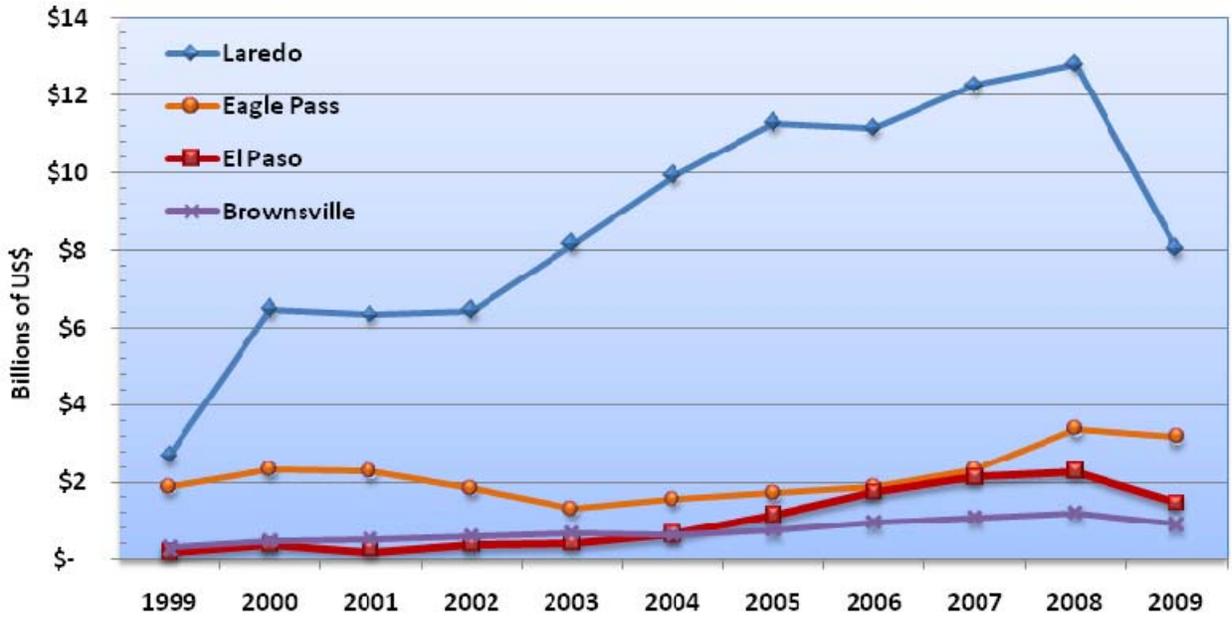
Laredo is the largest rail port of entry, handling 52 percent of the total railcars entering Texas from Mexico: 271,000 containers (45 percent loaded and 55 percent empty). Eagle Pass has recently become the second largest railcar port of entry, with 27 percent of the northbound traffic: 142,000 containers (39 percent loaded and 61 percent empty). El Paso dropped behind Eagle Pass from its historically second place, handling now only 14 percent of northbound rail traffic: 72,353 containers (also 39 percent loaded and 61 percent empty). Brownsville is the POE with the lowest rail volume, handling only 7 percent of the railcars.²⁸

From the total \$96 billion of surface trade through Laredo in 2009, \$15 billion was rail traffic, and from the 12 million tons imported by land, 2.2 million tons were imported by rail. Rail exports through Laredo reflected a solid growth between 1999 and 2008, with a CAGR of 19 percent for exports. Imports had a completely different trend, with a CAGR of only 1.5 percent in the same time period. Imports through Laredo grew until 2002 and then started a long downward trend that culminated with the 2007 financial crisis. Between 2008 and 2009, exports by rail dropped 59 percent and imports dropped 85 percent (blue lines in Figure 20 and Figure 21, respectively).

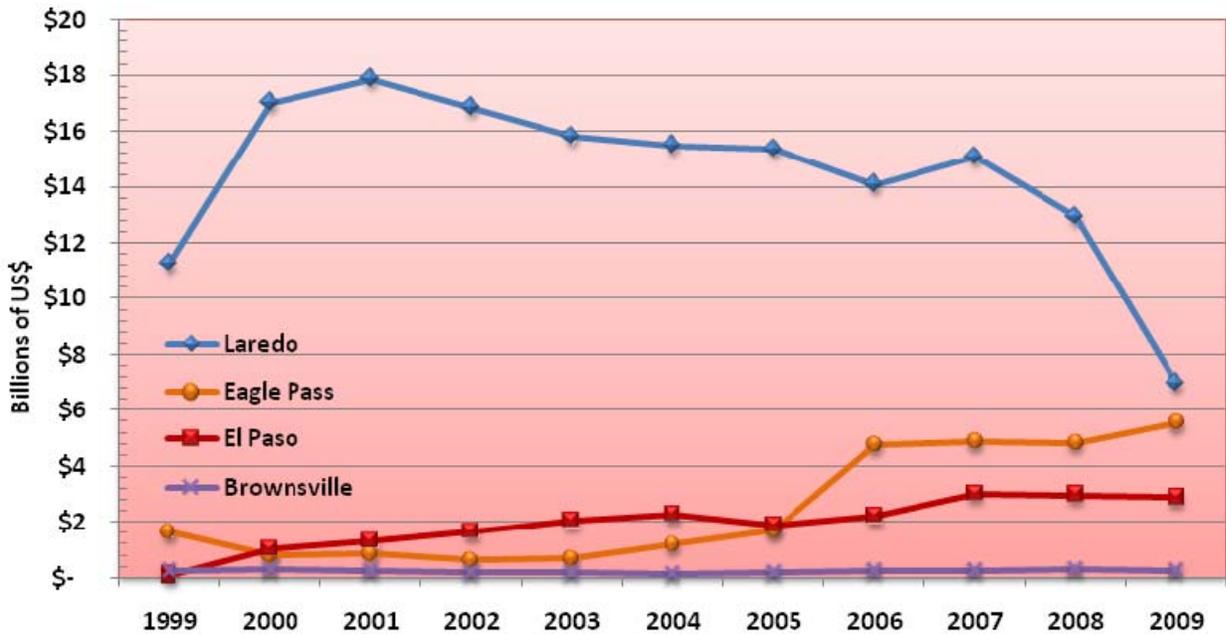
In the most recent years, Eagle Pass has gained significance in the level of trade by rail. Traffic by rail only declined 7 percent for exports (orange line in Figure 20) and even had an increase of 13 percent for imports (Figure 21).

From the total \$42 billion of surface trade through El Paso in 2009, \$4.3 billion was traded by rail: \$1.4 billion of exports and \$2.9 billion of imports. El Paso imported 1.4 million tons by rail. The 1999-2008 CAGR for rail traffic in El Paso was 31 percent for exports and 47 percent for imports; however, from 2008 to 2009 exports by rail dropped 57 percent. Imports only dropped 4 percent (red line).

²⁸ U.S. Department of Transportation, Research and Innovative Technology Administration, Bureau of Transportation Statistics, Border Crossing/Entry Data; based on data from U.S. Department of Homeland Security, Customs and Border Protection, OMR database: http://www.bts.gov/programs/international/border_crossing_entry_data/



Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).
Figure 20. Texas Exports to Mexico—Value by Rail



Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).
Figure 21. Texas Imports from Mexico—Value by Rail

Trade by Seaports

Texas is home to several of the largest seaports in the U.S. measured by tonnage. Four of the top ten U.S. ports are in Texas (Table 2); these include Houston, Beaumont, Corpus Christi and Texas City. Relevant changes for the 2008 ranking include: the Port of Corpus Christi surpassed Los Angeles and Beaumont dropped to 7th place.

Table 2. Top 10 U.S. Ports by Waterborne Tonnage, Imports and Exports (2006-2008)²⁹

Rank	Port Name	2006 Foreign Tonnage	2008 Foreign Tonnage	Net change
1	Houston, TX	152,877,416	146,399,626	-4%
2	South Louisiana, LA	106,711,736	111,437,304	4%
3	New York, NY and NJ	91,351,981	91,101,369	0%
4	Long Beach, CA	71,559,140	67,271,019	-6%
5	Corpus Christi, TX	53,757,643	55,355,211	3%
6	Los Angeles, CA	57,032,289	52,913,289	-8%
7	Beaumont, TX	57,316,078	46,795,624	-22%
8	Texas City, TX	35,788,087	38,710,435	8%
9	Mobile, AL	34,337,030	38,111,420	10%
10	Norfolk Harbor, VA	25,875,701	36,886,374	30%

Source: Developed by TTI with data from the U.S. Army Corps of Engineers, Waterborne Commerce Statistics.

In 2008, Houston was the top-ranked port in the U.S. by import and export tonnage; from its 146.3 million tons traded with foreign partners, 92 million tons were imports and 54 million were exports (Table 3). The Port of Corpus Christi traded 55.3 million tons internationally in 2008, 43.3 million tons being imports. This was approximately the same number of tons handled in 2006; however, due to the downturn in the levels of trade in other ports, this port has gained more significance in Texas and the U.S. In 2008, the Port of Beaumont moved 46.8 million tons, continuing its downtrend from the 57.3 million tons handled in 2006, and the 60.5 million handled in 2005.

Table 3. Texas Ports Foreign Trade (2008)

Rank	Port Name	Imports (tons)	Exports (tons)	Total
1	Houston, TX	92,018,956	54,380,670	212,207,921
2	South Louisiana, LA	47,269,743	64,167,561	223,987,363
3	New York, NY and NJ	71,460,174	19,641,195	153,480,226
4	Long Beach, CA	45,186,084	22,084,935	80,205,281
5	Corpus Christi, TX	43,373,738	11,981,473	76,786,173
6	Los Angeles, CA	32,732,756	20,180,533	59,788,339
7	Beaumont, TX	41,167,853	5,627,771	69,483,539
8	Texas City, TX	33,926,630	4,783,805	52,606,030
9	Mobile, AL	23,806,279	14,305,141	67,635,501
10	Norfolk Harbor, VA	9,576,840	27,309,534	44,593,115

Source: Developed by TTI with data from the U.S. Army Corps of Engineers, Waterborne Commerce Statistics.

²⁹ U.S. Army Corps of Engineers, Waterborne Commerce Statistics, 2008 Waterborne Tonnage for Principal U.S. Ports: <http://www.ndc.iwr.usace.army.mil/wcsc/wcsc.htm>

The U.S. seaborne total trade with the world decreased 13 percent between 2008 and 2009. Asia is the trading region most significant to the U.S., with China as the top trader; seaborne trade with China is predominantly imports (Table 4).

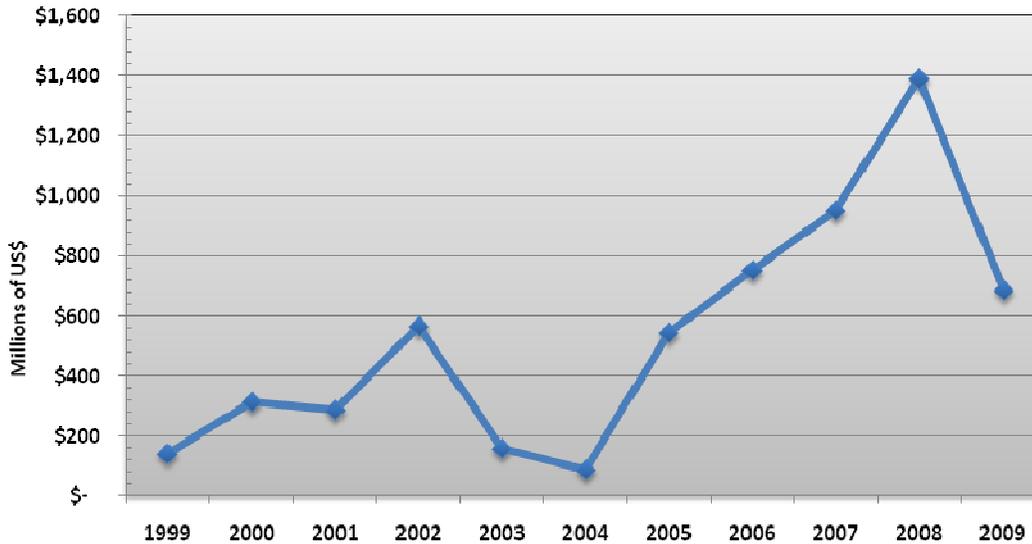
Table 4. U.S. Seaborne Trade by Region 2008–2009 (Metric tons in thousands)

Region/Country	Exports			Imports			Total Trade		
	2008	2009	Change	2008	2009	Change	2008	2009	Change
U.S. Global Total	485,822	451,822	-7%	891,894	749,716	-16%	1,377,716	1,201,538	-13%
By Region									
Asia	172,477	189,198	10%	121,861	92,091	-24%	294,338	281,289	-4%
South America	52,306	47,366	-9%	181,985	161,330	-11%	234,291	208,696	-11%
North America	63,726	46,534	-27%	147,162	125,237	-15%	210,888	171,771	-19%
Africa	25,468	23,505	-8%	140,955	124,285	-12%	166,423	147,790	-11%
Europe	96,632	77,660	-20%	70,689	63,791	-10%	167,321	141,452	-16%
European Union	89,147	72,621	-19%	70,561	56,403	-20%	159,708	129,024	-19%
Near East	28,399	23,543	-17%	125,342	94,605	-25%	153,741	118,148	-23%
By Country									
China	46,827	65,610	40%	64,050	45,806	-29%	110,877	111,416	1%
Mexico	23,999	25,033	4%	82,697	70,212	-15%	106,696	95,245	-11%
Venezuela	6,846	5,871	-14%	79,326	70,928	-11%	86,172	76,798	-11%
Canada	39,727	21,501	-46%	64,463	55,023	-15%	104,190	76,524	-27%
Saudi Arabia	3,082	2,587	-16%	76,082	52,659	-31%	79,164	55,246	-30%

Source: Developed by TTI with data from the American Association of Port Authorities (AAPA)

Trade by Pipeline

While pipelines carry some international trade, they are part of private industry. The available value of commodities moved through Texas gateways via pipelines also reported a significant drop in 2009 (Figure 22).



Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).

Figure 22. Texas-Mexico Trade by Pipeline

IV. Texas International Trade Corridors

As described in the previous sections, in the last two years there has been no major change in infrastructure or traffic patterns that would imply a significant modification in Texas' freight corridors. The traffic forecasting methodology that was used in the previous ITCP versions to predict future freight flows relied on the Federal Highway Administration (FHWA) Freight Analysis Framework (FAF). When the 2010 ITCP update was developed, FAF still had the 2007 flows. Based on these two important aspects—no changes in structure and no forecasting information available—this section presents the same international trade corridors as in the previous ITCP.

Texas International Trade Corridor Ranking

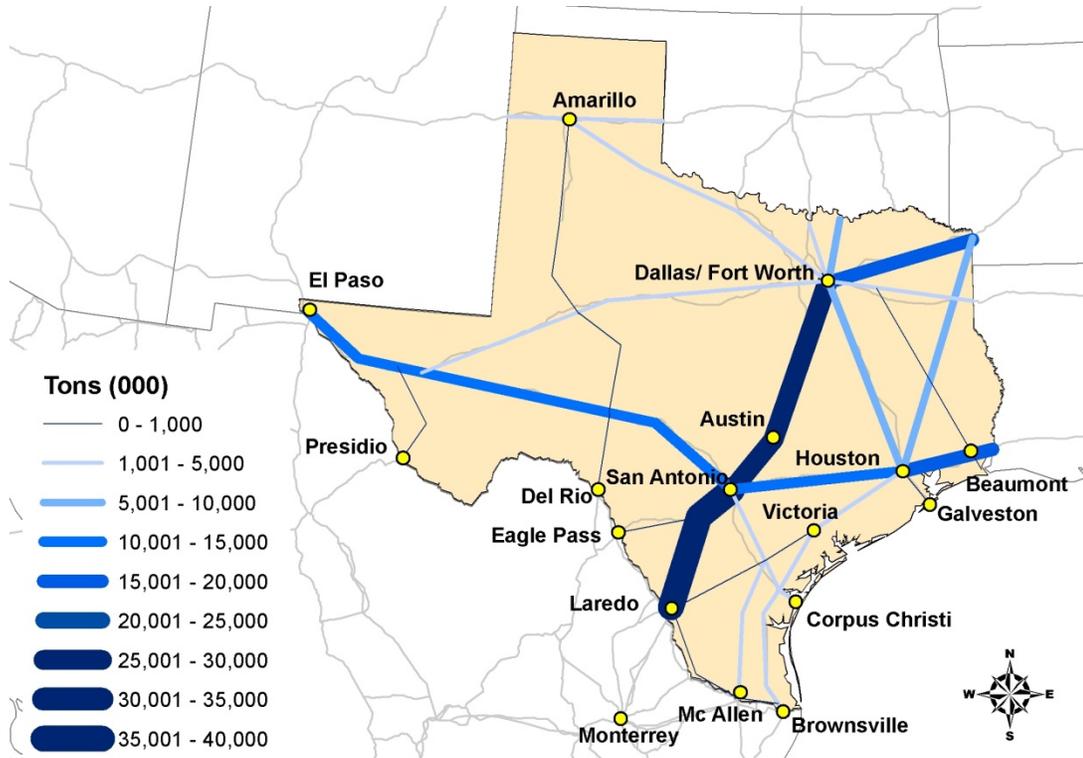
Table 5 lists the Texas international trade corridors by volume moved through each corridor by truck (2002) and projections for 2020. These commodity flows are calculated using the Federal Highway Administration's first and second edition of the FAF. Ton-miles for 2002 and projections for 2020 are shown.

Table 5. Texas International Trade Corridors by Trucks (Imports/Exports, Millions)

Corridor	2002		2020	
	Tons	Ton-Miles	Tons	Ton-Miles
I-35 Laredo & San Antonio	21.97	3,428	38.35	5,983
I-35 San Antonio & Dallas	15.50	4,247	27.01	7,402
I-10 Houston & Louisiana	9.71	1,068	16.36	1,799
I-30 Dallas & Arkansas	9.15	1,783	15.83	3,086
I-10 San Antonio & Houston	7.00	1,379	11.77	2,319
I-10 El Paso & San Antonio	5.79	3,184	10.12	5,564
I-45 Houston & Dallas	3.52	842	5.94	1,420
US 59 Houston & Arkansas	3.36	995	5.71	1,689
US 75 Dallas & Oklahoma	3.23	262	5.70	462
US 59 US 77 & Houston	2.82	360	4.83	618
US 77 I-37 & Victoria	2.80	241	4.80	412
US 77 Brownsville & I-37	2.80	422	4.80	724
I-35 Dallas & Oklahoma	1.98	158	3.48	278
US 281 Texas Valley & I-37	1.70	277	2.97	484
I-37 Corpus Christi & San Antonio	1.68	246	2.94	429
I-20 El Paso & Dallas on to Louisiana	1.60	1,019	2.73	1,742
I-40 Amarillo & Texas Panhandle	1.06	195	1.89	349
US 287 Dallas & Amarillo	0.90	180	1.49	298
Ports to Plains I-27/US 87/I-10, Amarillo & North	0.52	196	0.97	366
US 69 Beaumont & US 75	0.40	74	0.67	124
US 83 Laredo & Texas Valley	0.02	4	0.03	6

Source: Developed by TTI with data from the FHWA, Framework for Freight Analysis (FAF).

Figure 23 shows truck shipments by weight for the forecasted year 2020.



Source: Developed by TTI with data from the FHWA, Framework for Freight Analysis (FAF).

Figure 23. Projected International Trade by Trucks (2020) (Imports and Exports)

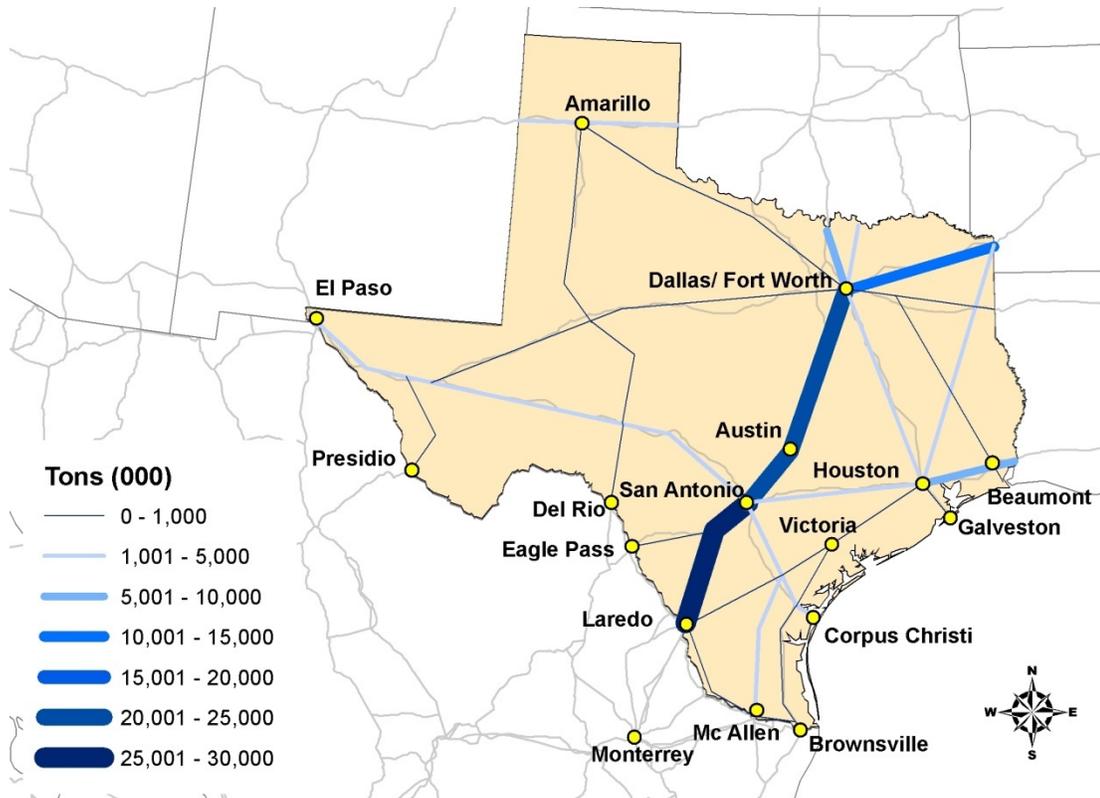
Table 6 shows international trade moved through the corridors by rail. Similarly, the weight and ton-miles projected for the year 2020 are shown.

Table 6. Texas International Trade Corridors by Rail (Imports and Exports in Millions)

Corridor	2002		2020	
	Tons	Ton-Miles	Tons	Ton-Miles
I-35 Laredo & San Antonio	14.02	2,187	25.18	3,929
I-35 San Antonio & Dallas	11.65	3,191	21.30	5,835
I-30 Dallas & Arkansas	6.08	1,185	10.70	2,086
I-35 Dallas & Oklahoma	3.18	254	6.29	503
I-10 Houston & Louisiana	3.07	338	5.18	570
US 75 Dallas & Oklahoma	2.24	182	4.13	334
I-10 San Antonio & Houston	2.02	398	3.37	665
US 59 Houston & Arkansas	1.98	587	3.09	915
I-45 Houston & Dallas	1.72	412	3.32	794
I-40 Amarillo & TX Panhandle	0.98	181	1.85	343
I-10 El Paso & San Antonio	0.96	529	1.61	887
US 281 Texas Valley & I-37	0.94	154	1.84	301
I-37 Corpus Christi & San Antonio	0.94	137	1.84	268
US 59 US 77 & Houston	0.55	71	0.91	117
US 77 I-37 & Victoria	0.55	47	0.91	78
US 77 Brownsville & I-37	0.55	83	0.91	137
Ports to Plains I-27/US 87/I-10, Amarillo & North	0.28	107	0.49	184
I-20 El Paso & Dallas to Louisiana	0.27	171	0.47	298
US 69 Beaumont & US 75	0.23	43	0.39	71
US 287 Dallas & Amarillo	0.18	36	0.29	58
US 83 Laredo & Texas Valley	0.00	1	0.01	1

Source: Developed by TTI with data from the FHWA, Framework for Freight Analysis (FAF).

Figure 24 shows projected rail shipments by weight for the year 2020.



Source: Developed by TTI with data from the FHWA, Framework for Freight Analysis (FAF).

Figure 24. Projected International Trade by Rail (2020) (Imports and Exports)

Major Texas Highways

I-35

More international trade moves through the I-35 corridor, via both rail and truck, than any other corridor in Texas. The I-35 corridor links Laredo, the largest Texas port of entry, to San Antonio, Austin, Dallas and north to Canada. The Union Pacific Railroad runs parallel to the Texas portion of I-35. Trade flows between Laredo and Dallas are expected to grow 77 percent between 2002 and 2020 for all modes. With this corridor’s heavy use and continued growth, congestion can be expected to worsen if steps are not taken to address the transportation need.

I-10

The I-10 corridor connects El Paso, San Antonio, Houston and Beaumont. Of the total 73.6 million tons shipped by all modes for the Houston-Louisiana corridor, 51.4 million tons were shipped by pipelines. The remaining corridor segments of I-10 have trucks carrying more weight and dollars of goods than any other mode. Some shipments travel from Laredo along I-35 to San Antonio and then proceed to I-10 and travel east or west depending on their destinations.

I-45

The I-45 corridor connects the Port of Galveston to Houston and continues to Dallas. Much of the freight in this corridor is moved via pipelines that run parallel to I-45 from Houston to Dallas. The Port of Houston provides the majority of trade that is shipped via I-45. The I-45 corridor is expected to grow 37 percent from 2002 to 2020, which is much slower than the 67 percent Texas average for international trade corridors.

Other Corridors

The remaining corridors account for 20 percent of the weight and 29 percent of the value of international goods shipped through Texas by all modes. New industrial developments or major infrastructure changes, such as I-69, might affect future international trade movements through these corridors.

V. Border Trade Advisory Committee (BTAC)

Transportation Code 201.114 established the Border Trade Advisory Committee (BTAC), with a charge to define and develop a strategy and make recommendations to the Commission and governor for addressing the highest priority border trade transportation challenges. The first BTAC report dated November 16, 2006 documents the BTAC goals that include:

- 1) Promoting the development of ample and expandable trade transportation corridors,
- 2) Developing coordination mechanisms to foster trade between Mexico and Texas,
- 3) Leveraging safety and security measures to enhance trade efficiencies, and
- 4) Demonstrating the economic benefits of international trade at the national, state, and local levels.

The strategies the BTAC formulated to address these goals are outlined in Table 7.

Table 7. Strategies formulated to address the BTAC goals.

BTAC Goal	Strategy
1) Trade Transportation Corridors	<ul style="list-style-type: none"> • Support major trade corridors • Develop policies to facilitate trade at both state and federal levels
2) Coordination with Mexico	<ul style="list-style-type: none"> • Coordinate with Mexico to ensure proper planning of trade corridors • Promote more efficient international border crossings • Promote cooperation with and understanding of U.S. policies
3) Safety and Security Measures	<ul style="list-style-type: none"> • Promote efficiencies at international border crossings • Develop international border crossings that take advantage of the latest technologies and procedures • Review the Presidential Permit policy to facilitate international bridge construction • Provide a balance between required inspections and efficient trade flow
4) Economic Benefits of International Trade	<ul style="list-style-type: none"> • Identify national, statewide and international benefits of trade

It is important to note that international trade must function within the parameters set at both the Federal and State levels. These two levels, while separate, are not totally independent. While some of the strategies developed by the BTAC are designed to be carried out at the state level, some of the issues that the strategies address are beyond the control of the State of Texas and are the responsibility of various Federal agencies. The BTAC report describes each specific proposal, along with its implementation actions, measures of success, and responsible party(ies).

BTAC Status

Each BTAC member representing a governing body, and other agencies along the border, was asked to update the Office of the Secretary of State and the Texas Department of Transportation (TxDOT) on the efforts their organization has taken to meet the goals developed in 2006. These efforts have been compiled and analyzed, and are reported in the BTAC November 2010 status report—summarized as follows:

The majority of responding members' efforts focused on U.S.-Mexico border crossing issues. Most respondents heavily emphasized supporting the construction of new international bridges, coordinating with Mexican transportation officials, and facilitating transportation studies at larger border crossings including, but not limited to:

- Proposing the expansion of the Ysleta-Zaragoza Bridge in El Paso
- Examining the possibility of constructing two new commuter bridges in the El Paso region
- Constructing a second span of the Veterans International Bridge at Los Tomates
- Organizing bi-national workshops with Mexican stakeholders
- Coordinating studies to assess safety and environmental impacts of commercial trade between Texas and Mexico, border crossing operations, and regional transportation planning issues.

Studies involving the automatic measurement of northbound commercial freight border crossing times are currently underway at the following locations:

- The Bridge of the Americas in El Paso, Texas
- The Pharr-Reynosa International Bridge on the Rise in Pharr, Texas

Truck traffic between Mexico and Texas is the main focus for most BTAC members. Some members, however, emphasize rail transportation for certain strategies. These members include:

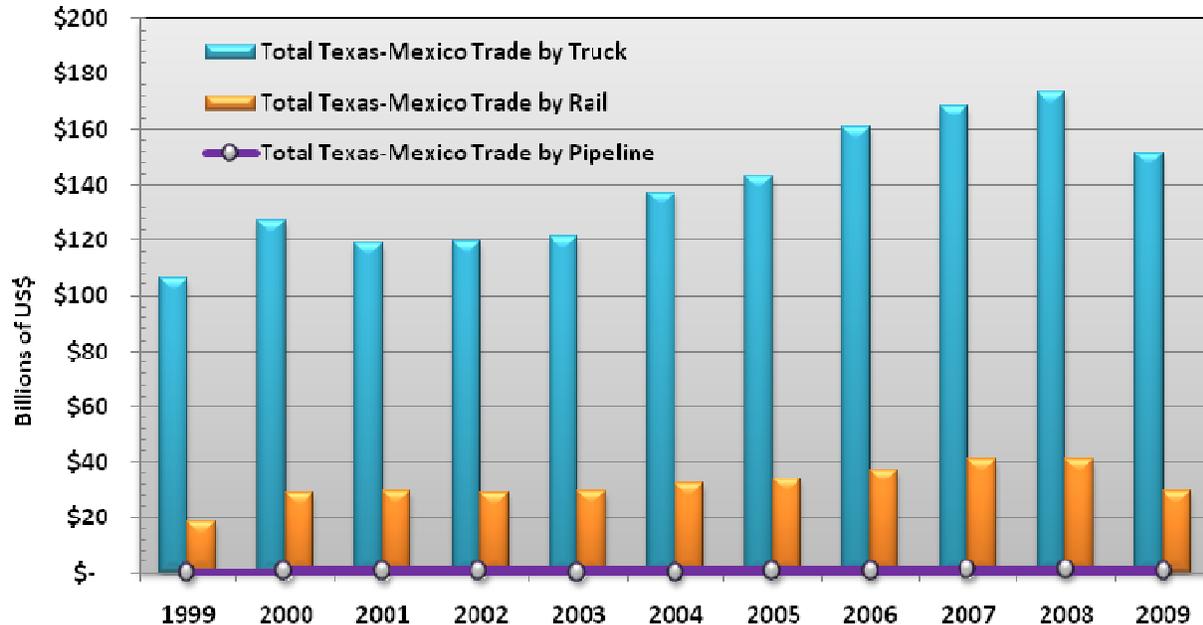
- *The Port of Corpus Christi*
- The Midland Odessa Transportation Organization
- Cameron County Regional Mobility Authority

Both city and state level BTAC members have mutually beneficial relationships with their counterparts / corresponding agencies in Mexico. These Mexican agencies include:

- Secretaría de Comunicaciones y Transportes (SCT) – Mexican Ministry of Communications and Transport
- Caminos y Puentes Federales de Ingresos y Servicios Conexos (CAPUFE) – Federal Roads, Bridges, and other Services Agency
- Secretaria de Relaciones Exteriores (SRE) – Foreign Relations Secretary
- Instituto Municipal de Investigación y Planeación (IMIP) – Municipal Institute for Planning and Research in Ciudad Juárez
- City government officials
- The Mexican states of Tamaulipas, Nuevo Leon, Coahuila, and Chihuahua.

VI. Concluding Remarks

The downturn in the economy generated by the financial crisis that started in 2007 severely impacted international trade around the world. Between 2008 and 2009, U.S. exports fell 22 percent and imports fell a dramatic 35 percent (Figure 25). The U.S. economy is recovering; however, several indicators suggest a weak recovery in coming quarters characterized by large government deficits and uncertainty globally.



Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).

Figure 25. Texas-Mexico Trade by Truck, Rail and Pipeline

Texas continues to be an important player in U.S. international trade, serving as the main gateway for trade with Mexico. Truck traffic continues to be the dominant mode for trade between the U.S. and Mexico. Texas is turning into an important link for trade with Asia through its seaports and through Mexico.

The following trends will eventually impact the Texas transportation system serving international trade:

- The downturn of the economy has changed traffic flows from China into the U.S. China's increased internal consumption and higher supply chain costs due to increased fuel prices will eventually decrease the amount of U.S. trade with China.
- Some firms that in the past moved to Asia have been coming back to North America—establishing manufacturing plants closer to the consumption points or “nearshoring.” Some of these manufacturing centers are located along the Mexico-Texas border.

- The expansion of the Panama Canal will provide U.S. ports along the East Coast and the Gulf of Mexico with direct all-ocean service from Asia. This will reduce the amount of traffic that travels by land modes between the U.S. West Coast and the East Coast, passing through Texas.

Reduction in trade flows to and from Texas, due to the financial crisis, has brought trade and commercial traffic volumes to 2006 levels. The economic slowdown generated by the financial crisis provides an excellent opportunity for Texas to plan for the new trade flow patterns that will spur the expansion period of the next economic cycle and have its infrastructure ready for potentially much higher traffic volumes.

Appendix: International Trade Value by All Transportation Modes

Table A1. 2009 International Trade by All Modes for Each Texas Port of Entry

Total Trade Value by All Modes	Total	Exports	Imports	Tons (imports)	Value per ton of imports
Laredo	\$ 95,582,296,902	\$ 45,693,014,482	\$ 49,889,282,420	11,816,887	\$ 4,222
El Paso	\$ 42,357,593,161	\$ 17,928,802,814	\$ 24,428,790,347	3,474,902	\$ 7,030
Hidalgo	\$ 19,154,184,723	\$ 8,551,090,127	\$ 10,603,094,596	3,658,779	\$ 2,898
Houston	\$ 12,847,250,776	\$ 4,696,558,303	\$ 8,150,692,473	20,684,539	\$ 394
Eagle Pass	\$ 12,482,725,808	\$ 4,562,592,755	\$ 7,920,133,053	2,970,543	\$ 2,666
Brownsville	\$ 9,794,536,849	\$ 6,131,413,501	\$ 3,663,123,348	1,304,165	\$ 2,809
Port Arthur	\$ 8,338,394,502	\$ 1,507,143,653	\$ 6,831,250,849	14,508,468	\$ 471
Houston/Galveston TX	\$ 3,328,490,807	\$ 1,502,263,597	\$ 1,826,227,210	5,007,080	\$ 365
Del Rio	\$ 2,284,323,029	\$ 1,042,025,653	\$ 1,242,297,376	192,707	\$ 6,447
Dallas/Ft. Worth Airport	\$ 426,252,391	\$ 294,258,207	\$ 131,994,184	14,908	\$ 8,854
Dallas/Ft. Worth TX	\$ 368,250,098	\$ 342,576,103	\$ 25,673,995	215	\$ 119,414
Progresso	\$ 285,651,527	\$ 196,728,045	\$ 88,923,482	210,521	\$ 422
Presidio	\$ 268,379,143	\$ 167,818,062	\$ 100,561,081	49,746	\$ 2,021
Rio Grande City	\$ 268,365,010	\$ 169,426,682	\$ 98,938,328	218,858	\$ 452
Roma	\$ 68,880,686	\$ 63,264,433	\$ 5,616,253	2,520	\$ 2,229
Fabens	\$ 3,643,716	\$ 3,419,031	\$ 224,685	4	\$ 56,171

Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).

Table A2. 2009 International Trade by Truck Only for Each Texas Port of Entry

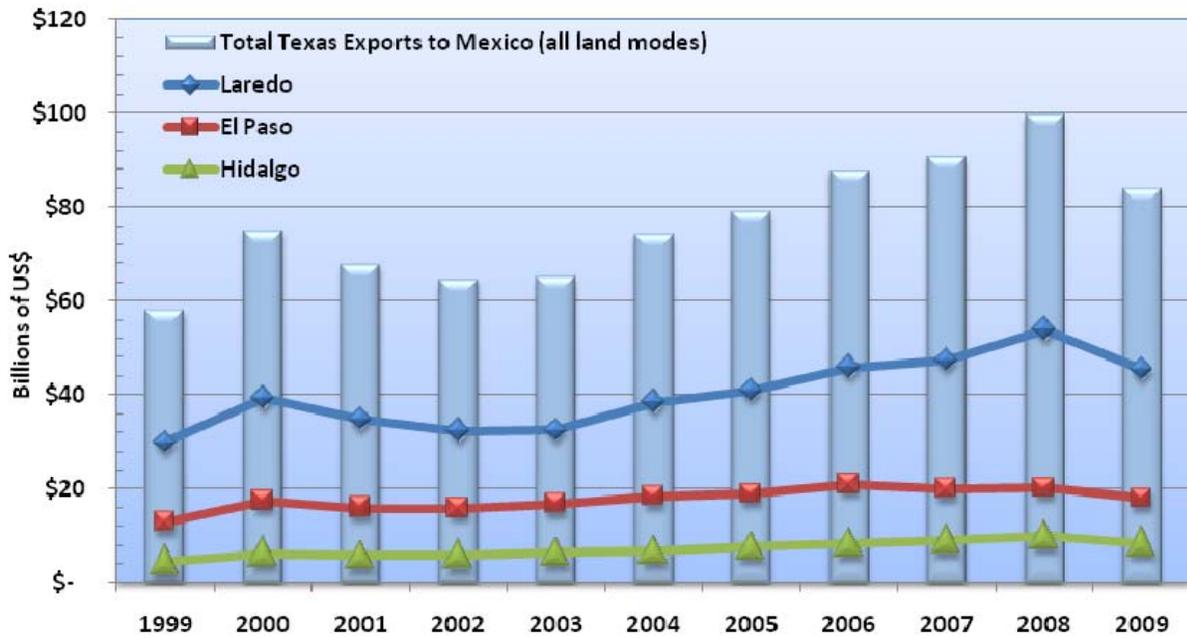
Total Trade Value by Truck	Total	Exports	Imports	Tons (imports)	Value per ton of imports
Laredo	\$ 79,781,307,805	\$ 36,985,022,510	\$ 42,796,285,295	9,613,342	\$ 4,452
El Paso	\$ 37,456,693,578	\$ 16,299,801,493	\$ 21,156,892,085	2,051,562	\$ 10,313
Hidalgo	\$ 18,822,634,806	\$ 8,383,848,605	\$ 10,438,786,201	3,322,400	\$ 3,142
Brownsville	\$ 8,254,274,464	\$ 4,842,168,718	\$ 3,412,105,746	787,020	\$ 4,335
Eagle Pass	\$ 3,794,666,870	\$ 1,404,426,606	\$ 2,390,240,264	482,413	\$ 4,955
Del Rio	\$ 2,282,517,171	\$ 1,040,219,795	\$ 1,242,297,376	192,707	\$ 6,447
Progreso	\$ 283,468,292	\$ 194,561,178	\$ 88,907,114	210,515	\$ 422
Rio Grande City	\$ 267,826,966	\$ 168,888,638	\$ 98,938,328	218,858	\$ 452
Presidio	\$ 245,138,973	\$ 144,680,464	\$ 100,458,509	49,745	\$ 2,019
Roma	\$ 66,514,269	\$ 60,898,016	\$ 5,616,253	2,520	\$ 2,229
Dallas/Ft. Worth Airport	\$ 13,903,502	\$ -	\$ 13,903,502	363	\$ 38,302
Houston	\$ 5,836,446	\$ -	\$ 5,836,446	2,452	\$ 2,380
Houston-Galveston - TX	\$ 2,039,621	\$ -	\$ 2,039,621	14	\$ 145,687
Fabens	\$ 1,508,438	\$ 1,508,438	\$ -	-	\$ -
Dallas/Ft. Worth - TX	\$ 1,208,868	\$ -	\$ 1,208,868	104	\$ 11,624

Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).

Table A3. 2009 International Trade by Rail Only for Each Texas Port of Entry

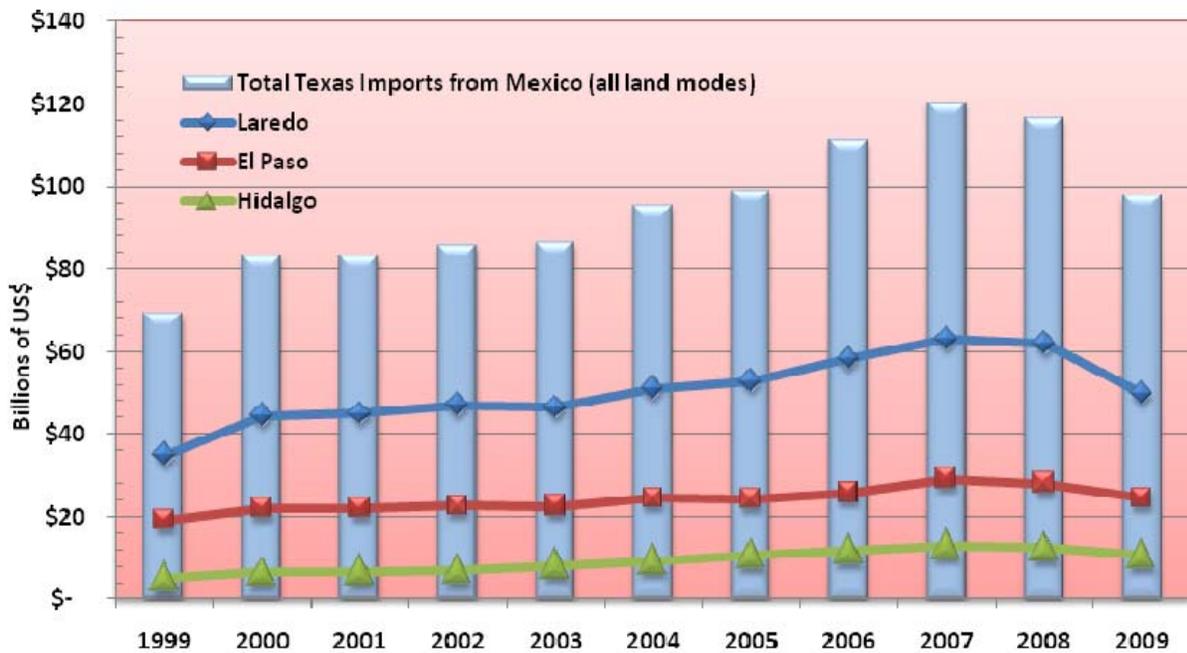
Total Trade Value by Rail	Total	Exports	Imports	Tons (imports)	Value per ton of imports
Brownsville - Texas	\$ 1,152,062,602	\$ 907,040,527	\$ 245,022,075	367,873	\$ 666
Del Rio - Texas	\$ 1,739,841	\$ 1,739,841	\$ -	-	\$ -
Eagle Pass - Texas	\$ 8,687,375,581	\$ 3,157,515,704	\$ 5,529,859,877	2,487,985	\$ 2,223
Laredo - Texas	\$ 14,990,004,943	\$ 8,015,779,226	\$ 6,974,225,717	2,201,481	\$ 3,168
Hidalgo - Texas	\$ 3,981,300	\$ 3,949,944	\$ 31,356	28	\$ 1,120
Rio Grande City - Texas	\$ 157,129	\$ 157,129	\$ -	-	\$ -
Progreso - Texas	\$ 16,368	\$ -	\$ 16,368	6	\$ 2,728
El Paso - Texas	\$ 4,327,766,178	\$ 1,461,303,723	\$ 2,866,462,455	1,417,486	\$ 2,022
Presidio - Texas	\$ 14,821,707	\$ 14,821,707	\$ -	-	\$ -
Fabens - Texas	\$ 1,903,759	\$ 1,903,759	\$ -	-	\$ -

Source: Developed by TTI with data from the US DOT, Bureau of Transportation Statistics (BTS).



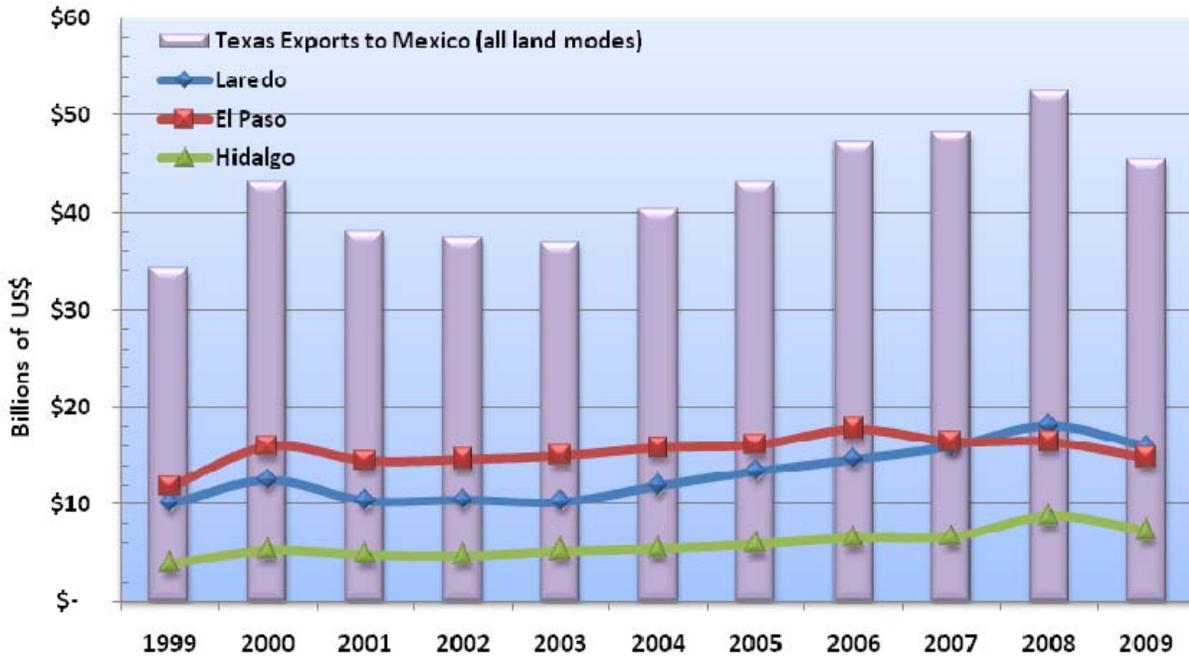
Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).

Figure A1. Total Texas Exports to Mexico (originating and in transit through Texas) All Land Modes



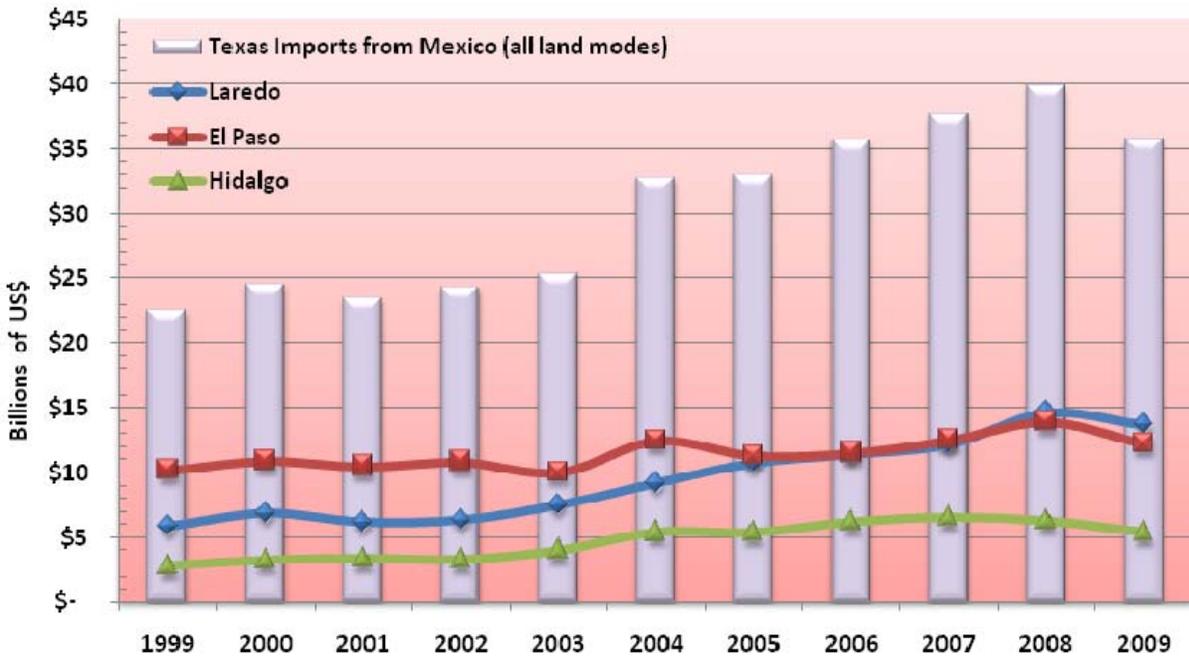
Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).

Figure A2. Total Texas Imports from Mexico (originating and in transit through Texas) All Land Modes



Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).

Figure A3. Texas-Only Exports to Mexico (originating in Texas only) All Land Modes



Source: Developed by TTI with data from the U.S. DOT, Bureau of Transportation Statistics (BTS).

Figure A4. Texas-Only Imports from Mexico (terminating in Texas only) All Land Modes