



# Full Steam Ahead for Texas Ports

By José Joaquín López and Keith R. Phillips

*Texas is home to two of the nation's top five port districts, and growth has been consistently strong at ports across the state.*

**T**rade is booming. In real terms, world exports have nearly doubled since 1980, topping 26 percent of total output. As the world's largest importer and second-largest exporter, the United States has been a key contributor to the expansion of global trade. The surge in international shipments has meant increased business for U.S. ports, including those in Texas.

Texas is home to two of the nation's top five port districts and four of the top 20. Over the past decade, growth has been consistently strong at ports across the state. In 2005, the value of imports and exports processed through Texas ports was more than two and a half times what it was in 1996, growing about twice as fast as the national average (*Chart 1*).

Fueling the expansion of port activity have been such factors as increased U.S. international trade, a strong Southwest economy and Texas companies' rapidly rising exports.<sup>1</sup>

In Texas, international trade passes

primarily through large seaports on the Gulf Coast, large land ports on the Texas–Mexico border and, to a lesser degree, inland facilities such as Dallas/Fort Worth International Airport. While the border ports primarily serve Mexico, sea and air facilities provide Texas with direct or indirect routes to nearly all U.S. trading partners. Highway, railroad and pipeline connections link Texas' ports with energy, manufacturing, distribution and retailing centers throughout the country.

The increasing globalization of the U.S. economy seems likely to further tax Texas' trade networks, and some analysts foresee an increasing need for inland ports, which are located away from primary land, air and seaports but have the ability to process international trade. Although projects are under way in several parts of the state, the tremendous growth in international trade flowing through Texas hasn't yet created a significant demand for inland port services.

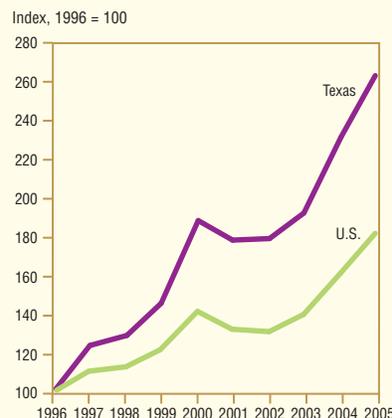
## Texas' Traditional Ports

Port activity is commonly measured either by weight or value of imports and exports processed through U.S. Customs. We focus on value rather than weight because the data are estimated in the same way for all port types, and they're more consistent with other economic measures, such as gross domestic product. Since we're interested in overall port activity, we don't distinguish between imports and exports.

For administrative and statistical purposes, U.S. Customs and Border Protection combines individual facilities into port districts that usually encompass large geographic areas.<sup>2</sup> The Dallas/Fort Worth district port, for example, covers a region roughly enclosed by a box with corners at San Antonio, Midland, Amarillo and Tulsa, Okla. (*Table 1*).

Texas' port districts are busier than ever and growing quickly (*Chart 2*). The

**Chart 1**  
**Texas Outpaces U.S.**  
**in Port Growth**  
(Value of international trade processed)



SOURCE: U.S. Customs and Border Protection.

**Table 1**  
**Texas' Port Districts, 2005**

Port district	Port	Share of total value (percent)	
<b>Dallas/Fort Worth</b> \$38.24 billion	D/FW	97.65	
	Austin	0.85	
	San Antonio	0.85	
	Oklahoma City	0.28	
	Tulsa	0.16	
	Amarillo	0.15	
	Alliance	0.03	
	Addison	*	
	Lubbock	0	
Midland	0		
<b>El Paso</b> \$46.68 billion	El Paso	96.43	
	Santa Teresa, N.M.	2.59	
	Presidio	0.84	
	Columbus, N.M.	0.11	
	Albuquerque, N.M.	0.02	
	Fabens	0.01	
<b>Houston/Galveston</b> \$136.41 billion	Houston	62.89	
	Corpus Christi	11.30	
	Houston Intercont.	7.01	
	Freeport	6.86	
	Texas City	5.73	
	Galveston	5.57	
	Lavaca	0.65	
<b>Laredo</b> \$137.89 billion	Laredo	69.26	
	Hidalgo	13.93	
	Brownsville	8.65	
	Eagle Pass	5.60	
	Del Rio	2.24	
	Rio Grande City	0.17	
	Progreso	0.10	
	Roma	0.06	
	Edinburg Airport	0	
<b>Port Arthur</b> \$23.94 billion	Port Arthur	63.30	
	Beaumont	36.48	
	Orange	NA	
	Sabine	NA	

\*Less than .01 percent

SOURCE: U.S. Customs and Border Protection.

North American Free Trade Agreement reduced barriers and greatly increased commerce between the U.S. and Mexico, helping make the Laredo port district the nation's fourth largest. The Houston/Galveston port district follows right behind Laredo in terms of the total value of exports and imports. El Paso, West Texas' major U.S.-Mexico border crossing, ranks 15th. Somewhat surprisingly, the inland trade hub under D/FW's jurisdiction is 20th.

U.S. Customs data by district, which are available since 1996, show that Houston and Laredo have been the fastest growing among the nation's 10 biggest ports over the past nine years (*Chart 3*).

The Houston port district's spurt has been especially rapid in the past three years, with trade value almost doubling.

Laredo is the leading route for cargo flowing to and from Mexico, accounting for roughly half the value of land-borne U.S.-Mexico trade. Nearly 97 percent of the Laredo port district's activity involves Mexico. For El Paso, the figure is 93 percent. Inputs and finished products from maquiladoras and other manufacturing-related products make up the bulk of the trade passing through El Paso and Laredo.

While El Paso and Laredo largely serve Mexico, Houston's port district is more diversified. Mexico ranks as its largest trading partner but accounted for just 11 percent of activity in 2005. Venezuela, Nigeria, China, United Kingdom, Germany and Saudi Arabia play significant roles in Houston's imports and exports (*Table 2*). It takes 47 countries to make up 90 percent of the port's activity. The surge in Houston's traffic in the past three years has been broadly spread across countries, although trade with China, Iraq and Angola has been particularly strong, each more than tripling.

Much of the economic activity along Texas' Gulf Coast is related to the oil and gas, petrochemicals and refining industries. This is reflected in trade activity, where 57.1 percent of the imports and exports in the Houston port district is oil and related products and chemicals.

Although D/FW has a relatively small share of total U.S. trade, it ranked second among the nation's 42 port districts in growth over the past nine years. In terms of diversity, D/FW lies between the border ports and Houston. Six Asian countries account for more than three-fifths of the district's trade, led by China. The share of trade value with China going through the D/FW port district has more than tripled in the past 10 years, going from 8.4 percent to 27.5 percent.

During the same period, the share of trade value between the U.S. and China increased from 4.3 percent to 11 percent.

When looking at Texas trade from the perspective of individual ports rather than districts, almost all significant state facilities have experienced strong growth over the past nine years (*Chart 4*). D/FW's international trade expanded at an average annual rate of 21.5 percent, followed by Port Arthur at 15.1 percent, Hidalgo at 14.2 percent, Corpus Christi at 13.7 percent, Houston at 11.6 percent, Laredo at 10.6 percent, El Paso at 8.9 percent and Brownsville at 7.1 percent.<sup>3</sup> In the past three years, Houston and Corpus Christi have been the fastest growing Texas ports.

Texas ports—in particular, those on the Rio Grande—may well see a further increase in traffic because of the potential for Asian shipments to be processed through Mexican facilities and sent to the U.S. market.

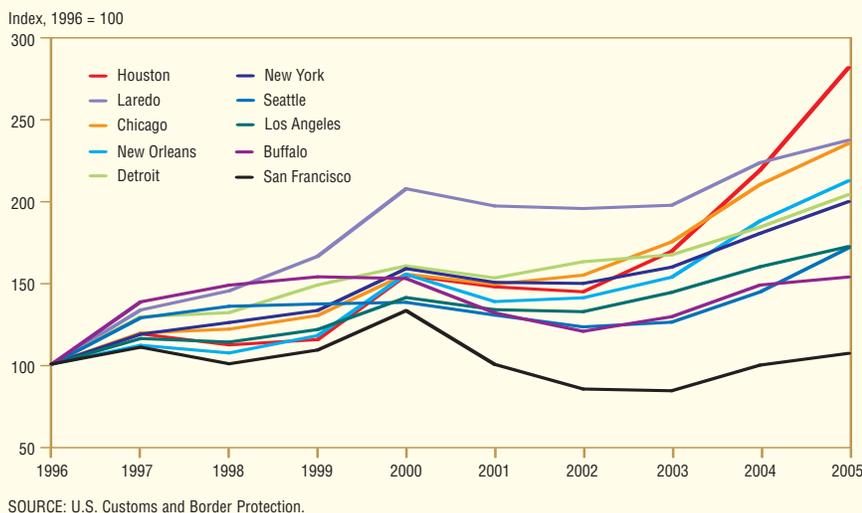
Lázaro Cárdenas, on Mexico's lower west coast, is the country's deepest Pacific

**Chart 2**  
**Four Texas Port Districts Among Top 20 in the United States, 2005**



SOURCE: U.S. Customs and Border Protection.

### Chart 3 Houston and Laredo Lead Growth in Trade Value of Top 10 Port Districts



Coast port, able to receive the largest containers currently built. It's already considered a cheaper alternative to Los Angeles. Kansas City Southern, a U.S. railroad company, has acquired the railways connecting Lázaro Cárdenas' port to Mexico City and Monterrey to Laredo.

#### Inland Ports: An Alternative?

Inland ports are being developed to augment traditional trade channels. These facilities are still not well understood, even though they've existed in the U.S. for at least 80 years.<sup>4</sup>

Inland ports not only move export or import processing away from potentially congested borders, seaports and airports, they also serve as a location where goods receive further processing before shipment to their final destination.

A logistics or business park located away from usual ports of entry but staffed with a U.S. or foreign customs broker is one example of an inland port. Inland ports are typically foreign trade zones, where duties aren't paid on imports until they're shipped out of the designated area to a U.S. location. If goods are sent to a foreign country, no duty is imposed.

Inland ports' potential benefits aren't wholly dependent on processing of international trade, and the status is often sought to enhance the activities commonly associated with industrial parks, such as

warehousing and manufacturing.

For producers, shippers and carriers, inland ports offer lower supply-chain costs, foreign trade zone benefits and logistics improvements. Some goods may be processed at traditional ports but then travel to inland ports for extra processing and assembly. If the value-added operations occur at an inland port, one or more supply-chain links can be eliminated or significantly reduced.

Goods assembled or manufactured at an inland port can also be warehoused on-site, eliminating transport from manufacturing to warehousing. These gains are more likely at inland ports strategically located near sources of value-added inputs to imported components, including labor, or close to retailers and other final destinations.

Texas' inland ports are in their infancy. Alliance Texas Logistics Park in Fort Worth is the state's only significant inland port currently processing international trade through customs. At least two other large projects are being developed, however. The Port Authority of San Antonio has begun work on an inland port on the city's south side, but it doesn't yet have customs operations. The Dallas Agile Port System/Port of Dallas is in the planning stages.

Alliance Texas Logistics Park—formerly Fort Worth Alliance Airport—opened in December 1989 as the first entirely industrial airport in the Western Hemisphere.<sup>5</sup>

The 11,600-acre facility houses more than 140 companies. It includes a runway able to handle virtually any type of aircraft, access to the interstate highway system via I-35 and one of the nation's largest intermodal rail yards, operated by BNSF Railway.

The Alliance development has spurred the creation of housing, parks and retail stores in surrounding areas. While the development has grown to a significant size, U.S. Customs data for Alliance show that the inland port processed only \$10.85 million of international trade in 2005, or less than 1 percent of customs trade value in the D/FW port district.

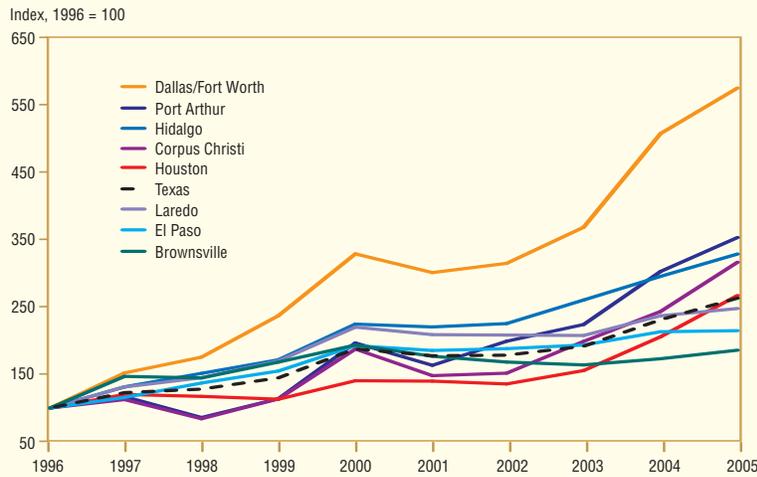
After Kelly Air Force Base closed in July 2001, its facilities were leased to the Port Authority of San Antonio, a business entity that, with support from the city of San Antonio and Bexar County, created KellyUSA, recently renamed Port San Antonio.<sup>6</sup> The development's 1,928 acres include an 11,500-foot, heavy-duty runway and access to the Union Pacific and BNSF railroads. The project has more than 63 tenants, almost fully leasing its 8.2 million

Table 2  
Houston and Dallas/Fort Worth Trade Links

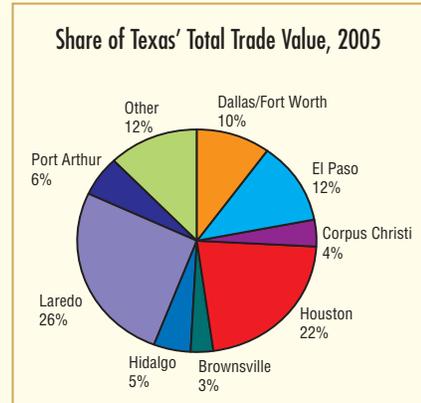
Trade partner	Share of total value, 2005 (percent)	Growth in share, 1995-2005 (percent)
<b>Houston/Galveston</b>		
Mexico	11.38	4.43
Venezuela	9.23	1.52
Nigeria	4.65	1.99
China	4.37	2.23
United Kingdom	4.21	-2.95
Germany	4.15	0.30
Saudi Arabia	4.06	-0.40
Brazil	3.60	-0.05
Netherlands	3.05	-0.43
Algeria	2.81	-0.03
<b>Dallas/Fort Worth</b>		
China	27.49	19.08
South Korea	10.02	3.98
Japan	6.99	-14.39
Singapore	6.27	2.54
Malaysia	6.19	2.75
Taiwan	6.05	-1.75
Germany	3.30	-1.77
Philippines	3.26	1.07
United Kingdom	2.89	-1.73
Thailand	2.81	-1.03

SOURCE: Foreign Trade Statistics, U.S. Census Bureau.

**Chart 4**  
**Value of Goods Processed at Texas Ports**



SOURCE: U.S. Customs and Border Protection.



*The Texas and U.S. economies have benefited from the growing amounts of trade that have flowed through Texas' ports.*

square feet of building space. Currently, Customs data show no processing of international shipments at Port San Antonio.

Planning for the Dallas NAFTA Trade Corridor project, located south of Dallas, began in the fall of 2004.<sup>7</sup> It includes a component called the Dallas Agile Port System/Port of Dallas, which will be a shipping, receiving and distribution hub for inbound and outbound containers through Gulf Coast and Pacific seaports. In April 2005, Dallas authorities signed an agreement with the U.S. Maritime Administration and Port of Houston Authority to further develop the facility. In addition, the Dallas development seeks to serve as an inland distribution center for the ports of Los Angeles and Long Beach, as well as for the

Mexican Pacific ports of Lázaro Cárdenas, Manzanillo, Topolobampo and Guaymas.

### Keep on Truckin'

The total value of trade flowing through Texas ports has been increasing rapidly in recent years, and it's likely to continue to grow at strong rates.

Ports throughout the state have seen gains, and two of the largest port districts in the country, Laredo and Houston, are the fastest growing of the top 10 U.S. ports. Much of the growth over the past 10 years has been spurred by increased trade with Mexico and, more recently, by gains in trade with China.

The Texas and U.S. economies have benefited from the growing amounts of trade that have flowed through Texas' ports. Increased globalization will likely result in continued growth for the state's traditional ports. As they develop, inland ports could play a larger role in making Texas an efficient place to process imports and exports.

*Lopez is an economic analyst and Phillips is a senior economist and policy advisor at the San Antonio Branch of the Federal Reserve Bank of Dallas.*

### Notes

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<sup>1</sup> For an analysis of the strength of exports from Texas producers, see "Spotlight: Texas Exports Taking Top Spot in Selling Overseas," by Fiona Sigalla, *Southwest Economy*, Federal Reserve Bank of Dallas, January/February 2006.

<sup>2</sup> For a complete listing of U.S. ports of entry, see [www.cbp.gov/linkhandler/cgov/toolbox/contacts/ports/cbp\\_ports\\_entry.ctt/cbp\\_ports\\_entry.pdf](http://www.cbp.gov/linkhandler/cgov/toolbox/contacts/ports/cbp_ports_entry.ctt/cbp_ports_entry.pdf).

<sup>3</sup> Even though the Texas border towns are not considered inland ports, their geographic proximity to the Mexican maquiladora industry creates the merging of inbound logistics and manufacturing that is distinctive of inland ports.

<sup>4</sup> For a complete description of inland ports, see "The Identification and Classification of Inland Ports," by Sara Jean Leitner and Robert Harrison, Center for Transportation Research, University of Texas at Austin, Research Report no. 4083-1, August 2001, and "Inland Ports: Planning Successful Developments," by Jolanda Prozzi, Russell Henk, John McCray and Robert Harrison, Research Report no. 4083-2, October 2002, at [www.utexas.edu/research/ctr/pdf\\_reports](http://www.utexas.edu/research/ctr/pdf_reports).

<sup>5</sup> See [www.alliancetexas.com/Alliance/About+Alliance](http://www.alliancetexas.com/Alliance/About+Alliance).

<sup>6</sup> See [www.portsanantonio.us/ongoing\\_development.asp](http://www.portsanantonio.us/ongoing_development.asp).

<sup>7</sup> See [www.dallasnafta.com/default.asp](http://www.dallasnafta.com/default.asp).