Texas ties that bind:

Lone Star industrial real estate and its link with U.S./Mexico trade


Robert C. Kramp
Director of Research & Analysis, Texas-Oklahoma Division
Pedro Niño, Jr.
Sr. Research Analyst, Texas-Oklahoma Division

U.S. manufacturing and foreign trade policy is commanding recent news headlines, and rightfully so. Exports comprise 14% of the U.S. economy, and the industry supports 40 million jobs nationwide as well as millions of trade-supported industrial and logistics square footage located in both primary and secondary commercial real estate markets. CBRE Research analyzed how deep this trade dynamic goes by studying the demand for industrial commercial real estate in Texas, where international export trade accounted for 17% of the state's private industry gross domestic product (GDP) in 2015, according to the U.S. Census Bureau and Bureau of Economic Analysis (BEA).

- Looking specifically at trade with Mexico, CBRE Research identified 30 U.S. states that rank Mexico as a first or second export destination, while 27 states place it in the top three origins of imports. Texas tops the export list where private industry exports valued nearly $250 billion in 2015, down from a previous all-time high in 2014 of more than $285 billion due mainly to the energy downturn. Despite a fall in U.S. dollar trade value, the flow of goods continues expanding and cargo border crossings continue setting records.

- Current international cross-border trade in Texas that flows specifically with Mexico has created long-term, widespread occupier demand for commercial industrial real estate, which by CBRE's estimates, could total more than 390 million sq. ft. of net occupied industrial space throughout Texas alone.

- CBRE's findings show that Texas plays a significant role not only as direct consumer and supplier to Mexico (accounting for as much as 234 million sq. ft. of industrial stock) but also as a major distribution hub for the out-of-state flow of goods, which supports up to an additional 160 million sq. ft. of Texas industrial real estate.

A COMPETITIVE GLOBAL ECONOMY WITH DOUBLE AND TRIPLE-DIGIT GROWTH

Today, most countries operate in a highly competitive and economically linked global environment that creates a mutually beneficial trade environment driven by skill and cost of production. The U.S. and Mexico are a prominent example of this synergy. The passage of the North American Free Trade Agreement (NAFTA) of 1993 between the U.S., Mexico, and Canada created economic linkages that accelerated trade between the U.S. and Mexico. Twenty-three years of demographic, commercial and industrial expansion, has positioned Mexico as the third largest U.S. trading partner, not far behind the top two. Published data show that following NAFTA, the correlation between Mexican and U.S. manufacturing output became stronger, and essentially, trade between the neighboring economies has expanded significantly, not only in imports but also in the export of American goods in the form of raw materials and finished retail consumables. Here, the nominal trade of goods has grown more than five-fold since 1993 to $532 billion in 2015, a 300% increase after adjusting for inflation.

Figure 1: Top 25 U.S. Metropolitan Exporters

Ranked by 2016 Export Value (All Counties)	
1. Houston-The Woodlands-Sugar Land, TX	14. Boston-Cambridge-Newton, MA-NH
2. New York-Newark-Jersey City, NY-NJ-PA	15. San Jose-Sunnyvale-Santa Clara, CA
3. Seattle-Tacoma-Bellevue, WA	16. Minneapolis-St. Paul-Bloomington, MN-WI
4. Los Angeles-Long Beach-Anaheim, CA	17. San Juan-Carolina-Caguas, PR
5. Chicago-Naperville-Joliet, IL-IN-WI	18. Atlanta-Sandy Springs-Roswell, GA
6. Detroit-Warren-Dearborn, MI	19. Portland-Vancouver-Hillsboro, OR-WA
7. Miami-Fort Lauderdale-West Palm Beach, FL	20. San Diego-Carlsbad, CA
8. Dallas-Fort Worth-Arlington, TX	**21. San Antonio-New Braunfels, TX**
9. New Orleans-Metairie, LA	22. Greenville-Anderson-Mauldin, SC
10. San Francisco-Oakland-Hayward, CA	23. Charlotte-Concord-Gastonia, NC-SC
11. El Paso, TX	24. Washington-Arlington-Alexandria, DC-VA-MD-WV
12. Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	25. Phoenix-Mesa-Scottsdale, AZ
13. Cincinnati, OH-KY-IN	

Source: International Trade Administration, U.S. Department of Commerce, Q1 2017.

The trade of services has also significantly expanded with a doubling nominal value, up 58% ($32 billion) adjusted for inflation, of U.S. exported services to Mexico since 1999; this is in response to outsourced information technology, research and development, legal and financial services, among others. Service imports have also doubled during the same period to $22 billion, up 61% also adjusted for inflation.

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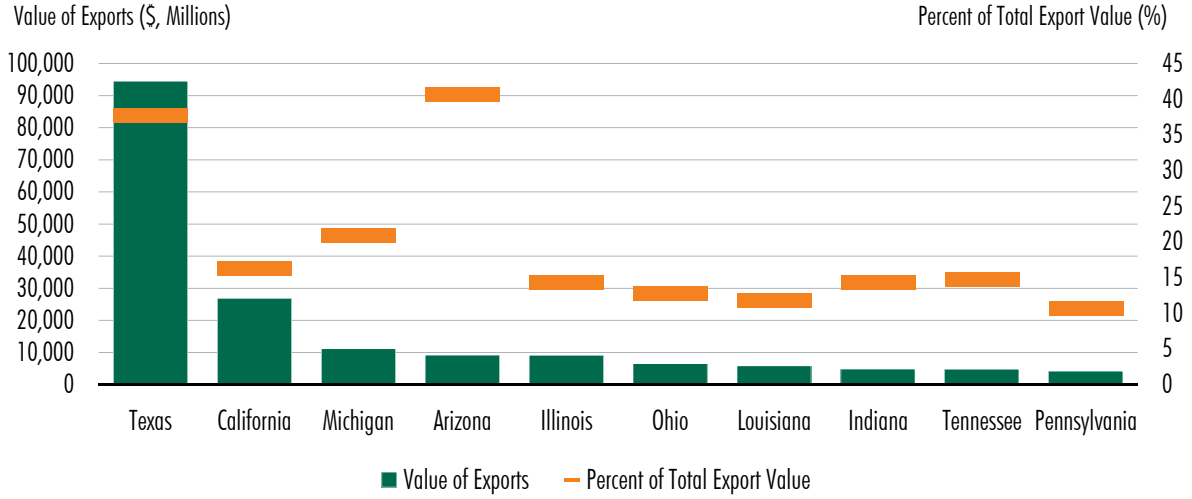
U.S./MEXICO TRADE SYNERGIES, WAGES, AND YOUR CAR

The economic relationship between the U.S. and Mexico has evolved beyond contemporary discussion over 'competitive wages.' Of equal importance is Mexico's industrial and logistical infrastructure has quickly become institutionalized, coupled with an expanding labor demographic and significant productivity gains and the country's physical proximity to the U.S., Mexico is now positioned as both a consumer and a high-skilled supplier.

Consider your car as an example; its production process was, in fact, part of a sophisticated, and likely multi-national, supplier network of both goods and services. The automotive supply chain entails the convergence of inputs and services from numerous and often international destinations. From as far as Michigan to Texas to Chihuahua and the Bajio, these industrial supply chains deeply support logistical demand for commercial real estate space as well as millions of jobs in multiple markets both at home and abroad. Research has shown that automotive components crisscross North American international borders as much as eight times before completion.

Similar scenarios are at play for many other U.S. consumer goods, such as appliances, electronics, food and agriculture, sophisticated medical supplies, and even high-skilled aerospace components. In addition, 40% of U.S. imports from Mexico started as goods in the U.S., compared to just 4% of imports from China, the largest trading partner of the United States. When taken into account, this trade dynamic lessens and potentially overturns the current U.S./Mexico trade deficit in favor of the U.S. and positively highlights the interdependence and strong linkages impacting the origin and destination of raw and finished materials.

Figure 2: Exports to Mexico: Top Ten U.S. States, 2015



Source: International Trade Administration, Q1 2017.

THE CONCLUDING BOTTOM LINE: TEXAS HAS 390 MILLION OF THEM

The Wilson Center estimates that U.S. trade with Mexico alone supports more than 382,000 jobs in Texas, the state with the highest volume of U.S./Mexico trade [1]. Moreover, 30 U.S. states—ranging from Washington to Florida—each have more than 50,000 jobs supported by this bilateral trade. These same trade jobs generate voracious demand for industrial warehouse and distribution space.

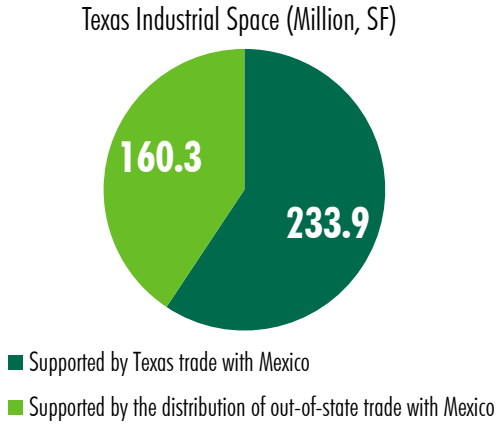
Consider Texas, with the largest amount of U.S./Mexico trade share by state. The state's origin and destination trade activities impact approximately 234 million sq. ft. of industrial space according to CBRE's research method. This demand is largely driven by cross-border trade synergies centered on product manufacturing and consumer growth via Texas' rapidly expanding demographics. In 2016, the state's population soared to nearly 28 million residents, a 55% increase since 1993 when NAFTA was adopted. In addition to Texas instate-specific activities, U.S. trade with Mexico also supports an additional 160 million sq. ft. of Texas-based warehouse and distribution space for the flow of goods out-of-state. According to CBRE's assessment, demand for commercial industrial real estate originating from U.S./Mexico trade flows totals more than 390 million sq. ft. of net occupied Texas industrial space.

Consequently, restraining the flow of U.S./Mexico trade could have unforeseen effects on U.S. economic growth, as the trade synergies between the two nations are so strongly intertwined. According to the Wilson Center, U.S. trade with Mexico directly supports

[1] The Wall Street Journal recently reported that The Peterson Institute for International Economics says the U.S. has had net job loss of 15,000 due to trade with Mexico but that the U.S. economy gained several hundred thousand dollars for each lost job. According to recent research by the Center for Business and Economic Research at Ball State University, 88% of job losses in manufacturing in recent years can be attributed to productivity growth, while the long-term changes are linked to the productivity of American factories.

approximately 5 million U.S. jobs. Consequently, any interruption of U.S./Mexico international trade could directly affect as much as 3.5% of total U.S. employment, as well as disrupt a significant driver of the U.S. GDP via exports. More specific to commercial real estate, an interruption in trade between these two countries could also weaken occupancy and demand for more than 390 million sq. ft., or 26%, of net occupied commercial industrial space in Texas alone.

Figure 3: Share of Supported Industrial Space



Source: CBRE Research, Q1 2017.

CBRE RESEARCH METHOD

Employment data were used to estimate the number of occupied industrial sq. ft. per industrial employee in conjunction with internal CBRE and third-party sourced data. These data were assessed per industrial market and used to calculate a state-wide average after accounting for size of market differences. CBRE Research then incorporated the most recent (2014) trade supported employment estimates from the Trade Partnership Worldwide. The final analysis included narrowing the net number of jobs by industry and by state, using a weighted system based on the total share of trade within state and country.

Two estimates were then calculated using our analysis of industrial employment and industrial stock. The first included space supported by the direct trade between Texas and Mexico. The second was done to estimate the amount of sq. ft. supported by trade pass through, where Texas is neither the origin nor destination. These analyses concluded in a probable range between 234 and 394 million sq. ft. of occupied Texas industrial stock supported by U.S./Mexico trade.

Figure 4: Average Industrial SF Occupied Per Industrial Employee

	Occupied SF Per Employee
Texas - Warehouse/Distribution	2,318
Laredo	2,260
El Paso	1,302
DFW	1,154
Texas - All Industrial (Wtd.)	1,067
McAllen	974
Houston	925
San Antonio	917
Austin	517

Source: CBRE Research, CoStar, Moody's Analytics, Q1 2017.

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FOR MORE INFORMATION, PLEASE CONTACT:

Robert C. Kramp
Director of Research & Analysis, Texas-Oklahoma Division
robert.kramp@cbre.com
+1 713 577 1715
Follow Robert on Twitter: @RobertKramp

Pedro Niño, Jr.
Sr. Research Analyst, San Antonio
pedro.nino@cbre.com
+1 210 253 6019
Follow Pedro on Twitter: @Pnjr

Bradley Smith
Research Analyst, Houston
+1 713 577 1740
bradley.SmithIII@cbre.com

Miller Hamrick
Research Coordinator, DFW
+1 214 979 6587
miller.hamrick@cbre.com
Follow Miller on Twitter: @mfhamrick

Elisabeth Downs
Research Coordinator, El Paso, McAllen
+1 915 313 8818
elisabeth.downs@cbre.com