



Economic Impacts of U.S. Imports of Fresh Produce from Mexico by 2025

CNAS Report 2018-1

March 2018

Introduction

Produce imports from Mexico are a major source of economic activity in the Lower Rio Grande Valley of Texas. The United States imported \$12.9 billion of produce and products from Mexico during 2017, including fresh, frozen and processed fruits, vegetables, and nuts. About 98 percent of these imports entered the United States by land ports between Mexico and Texas, New Mexico, Arizona, and California. When considering only fresh fruits and vegetables, which is nearly ninety percent of the total, imports totaled \$11.7 billion. These imports were shipped in 475,207 forty-thousand pound truckloads. About 49.5 percent of U.S. fresh fruit and vegetable imports from Mexico entered through Texas land ports, arriving in 235,228 truckloads and worth \$6.3 billion. The most active single port for fresh produce imports from Mexico in 2017 was Pharr, Texas with 155,422 truckloads followed closely by Nogales, Arizona with 153,314 truckloads. Otay Mesa, California (51,783 truckloads) and Laredo, Texas (46,488 truckloads) rounded out the top four.

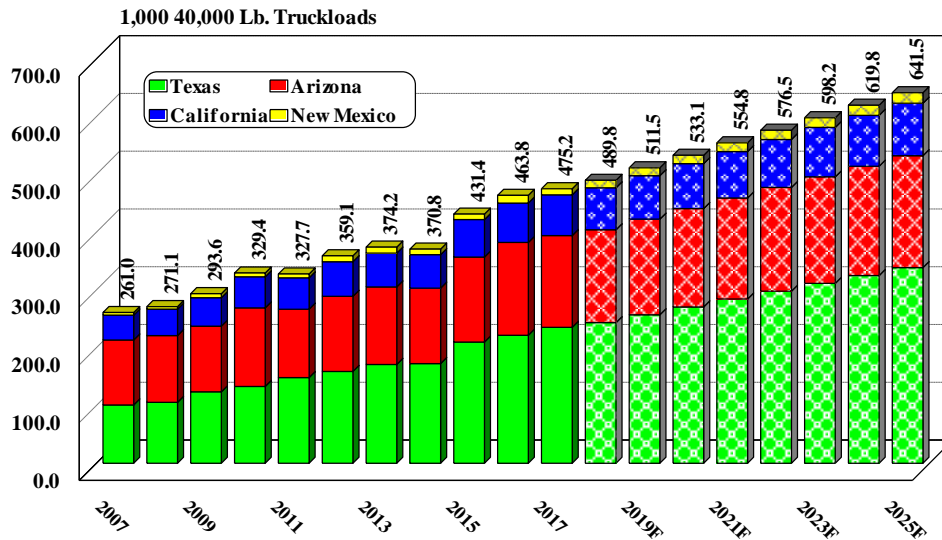
Baseline Projection

Over the next five to seven years, produce imports from Mexico are expected to grow with the majority of this growth coming into the United States via Texas. In an effort to quantify how much U.S. produce imports from Mexico are expected to grow by 2025, a linear trend forecasting approach was used to estimate the volume and flow of imports based upon trends that were present from 2007-2017. Linear trend analysis was conducted in order to develop a baseline estimate. This is a conservative approach because no significant changes are considered; therefore, it represents a baseline for growth in imports from Mexico and assumes that the future will be reflective of the past. Further, it is assumed that the mix of imports will remain relatively stable over the time period.

Based upon the assumptions above, it is estimated that U.S. fresh produce imports from Mexico via truck will increase to 641,511 truckloads by 2025, or 35.0 percent above 2017 levels (Figure 1). Most of this growth will occur through Texas ports with imports expected to grow by 44 percent to 338,716 truckloads. By 2025, Texas is estimated to account for 52.8 percent of all U.S. produce imports from Mexico as compared to 49.5 percent in 2017. Arizona, the second leading state for these shipments, is forecast to cross 193,821 truckloads of fresh produce in 2025, up 21.9 percent from the 158,951 trucks which crossed during 2017. This growth in imports has implications throughout the border economy in general and the Texas economy in particular.

Prepared by Flynn Adcock, Luis Ribera and Daniel Hanselka, Department of Agricultural Economics, Texas A&M AgriLife Research/Texas A&M AgriLife Extension Service. This research updates CNAS Report 2017-1, February 2017, by Adcock, Ribera and Hanselka. For additional information, please contact lribera@tamu.edu or fjadcock@tamu.edu, or call 979-845-3070. <http://cnas.tamu.edu>.

Figure 1. U.S. Imports of Fresh Produce from Mexico by Truck, 2007-2025F



Source: Agricultural Marketing Service, USDA and Department of Agricultural Economics, Texas A&M University 2018-2025 Forecast based on 2007-2015 Model

There are several factors which likely account for the continued expected growth in U.S. import of fresh produce in general and particularly through Texas. One important factor is U.S. interest rates are beginning to rise, causing the dollar to appreciate which will spur even more imports. Another important factor is the expanded use of Mexican Federal Highway 40 between Mazatlan and Reynosa for shipments of produce. Further, an expanded infrastructure of trade services providers in the Lower Rio Grande Valley area has been built to accommodate recent and expected increases in imports, illustrating industry’s belief that increased shipments through Texas are likely to continue for the longer term.

While these estimates are based upon the best available current information and solid assumptions regarding future trends, it is likely that actual numbers will be slightly different than the forecast. For instance, Arizona imports are expected to grow much slower than Texas when considering the combination of decreases in truck crossings due to Mexican Highway 40 and increased demand in the western United States. However, it is possible that either factor is more dominant, leading to either a higher or lower trend during 2018 – 2025.

Estimated Economic Impacts

When considering the entire U.S./Mexico border region of Texas, New Mexico, Arizona and California, there was an estimated \$783.9 million of direct economic output attributed to produce imports from Mexico during 2017 (Table 1). By 2025, this is expected to grow to \$1.06 billion with the leading sectors where import-related output occurred will be truck transportation at \$320.8 million and warehousing at \$250.2 million, followed by sorting, grading and packing (\$198.6 million), customs brokering (\$173.2 million), and miscellaneous border services (\$115.6 million). This direct output will require an additional \$1.19 billion in economic activity from supporting industries

for a total economic impact of \$2.25 billion. Leading supporting industries in 2025 are expected to include real estate with \$156.8 million, business services (\$134.2 million), financial services (\$109.2 million), health care (\$89.1 million), energy (\$65.7), wholesaling (\$56.1 million), retail (\$48.7 million), food and drinking businesses (\$46.7 million), and other transportation (\$46.6 million).

Total employment in the four-state region associated with handling fresh produce imports in 2025 is estimated at 18,238 jobs. Most jobs were in sorting, grading and packing, 3,782 jobs, followed by customs brokering with 2,846 jobs, 2,180 jobs in the warehousing sector, truck transportation with 2,094 jobs, and 775 jobs in miscellaneous border services. Supporting industries with significant job impacts include business services with 1,192 jobs, health care (884 jobs), food and drink establishments (701 jobs), financial services (544 jobs), retail (532 jobs), and real estate (478 jobs).

Table 1. Summary of Economic Activity from U.S. Produce Imports from Mexico over Land Borders, 2017 and 2025 Forecast

	TX/NM/AZ/CA		Texas	
	2017	2025F	2017	2025F
Total Truckloads	475,207	641,511	235,288	338,716
Direct Economic Output	<i>Million Dollars</i>			
Truck Transportation	\$237.6	\$320.8	\$117.6	\$169.4
Warehousing	\$185.3	\$250.2	\$91.8	\$132.1
Sorting, Grading and Packing	\$147.1	\$198.6	\$85.8	\$123.6
Customs Brokering	\$128.3	\$173.2	\$63.5	\$91.5
Miscellaneous Border Services	\$85.5	\$115.6	\$42.5	\$61.0
Total Direct Economic Output	\$783.9	\$1,056.2	\$401.1	\$577.5
Total Supporting Economic Output	\$884.7	\$1,194.3	\$448.5	\$645.7
Total Economic Output	\$1,668.6	\$2,252.5	\$849.6	\$1,223.2
Total Jobs Supporting Produce Imports	13,510	18,238	7,836	11,281

Economic impacts of produce imports on Texas are also important. Direct economic activity attributed to the produce import industry was \$401.1 million during 2017, requiring an additional \$448.5 million in economic activity from supporting industries for a total economic impact of \$849.6 million. By 2025, this is expected to grow to \$577.5 million in direct activity and \$645.7 million in supporting activity for a total of \$1.2 billion in economic activity throughout the Texas economy. Direct output will be led by truck transportation at \$169.4 million and followed by warehousing (\$132.1 million), sorting, grading and packing (\$123.6 million), customs brokering (\$91.5 million), and miscellaneous border services (\$61.0 million). Real estate (\$83.9

million), business services (\$80.5 million), financial services (\$69.7 million), and healthcare (\$48.1 million) will be the leading supporting industries in terms of output.

About 11,281 jobs will be required throughout the Texas economy to support these import operations during 2025. Sorting, grading and packing will require 2,910 jobs, followed by customs broker services (1,538 jobs), warehousing (1,479 jobs), truck transportation (1,121 jobs), and miscellaneous border services (500 jobs). Business services with 716 jobs will be the leading supporting sector in terms of employment, followed by health care (478 jobs), food and drink establishments (426 jobs), retail (317 jobs), financial services (313 jobs), and real estate (245 jobs).

Conclusion

The economic impacts of U.S. produce imports from Mexico on southwestern land ports of entry are substantial, expected to total \$2.25 billion by 2025 as these imports continue to grow over the next five to seven years. Additional employment will occur as 18,238 jobs will be required to support this increase in economic activity. In Texas alone, the total economic activity to support the additional imports will be \$1.22 billion, along with 11,281 jobs. Any delays, disruptions or related barriers to entry of fresh produce causes a ripple effect in terms of economic and employment losses across a wide spectrum of regional economies.



<http://cnas.tamu.edu>

Table 2. U.S. Produce Imports from Mexico over land borders, 40,000# Equivalent Loads

BASELINE: Linear Trend Projection for each state and total United States

	Texas	Arizona	California	New Mexico	Total	Texas as % of Total	Texas Growth Rate
2007	101,025	112,327	43,264	4,378	260,992	38.7%	-----
2008	105,522	115,609	45,713	4,304	271,147	38.9%	4.5%
2009	123,777	113,495	49,417	6,938	293,627	42.2%	17.3%
2010	133,039	136,031	53,849	6,462	329,381	40.4%	7.5%
2011	148,331	118,389	54,479	6,496	327,694	45.3%	11.5%
2012	158,968	130,019	60,006	10,154	359,147	44.3%	7.2%
2013	171,064	134,168	58,638	10,355	374,224	45.7%	7.6%
2014	172,648	130,549	57,989	9,594	370,779	46.6%	0.9%
2015	209,817	147,191	64,882	9,484	431,373	48.6%	21.5%
2016	221,662	160,602	68,237	13,254	463,755	47.8%	5.6%
2017	235,288	158,951	70,622	10,346	475,207	49.5%	6.1%
2018	243,519	160,794	72,593	12,891	489,797	49.7%	3.5%
2019	257,118	165,512	75,191	13,649	511,470	50.3%	5.6%
2020	270,718	170,230	77,788	14,408	533,144	50.8%	5.3%
2021	284,318	174,948	80,386	15,166	554,817	51.2%	5.0%
2022	297,917	179,666	82,983	15,924	576,490	51.7%	4.8%
2023	311,517	184,384	85,581	16,682	598,164	52.1%	4.6%
2024	325,116	189,103	88,178	17,440	619,837	52.5%	4.4%
2025	338,716	193,821	90,775	18,199	641,511	52.8%	4.2%

2018-2025 estimates are forecast based on 2007-2017 data.

Source: USDA/AMS Market News Portal – Fruits and Vegetables

	Texas	Arizona	California	New Mexico	Total
Growth from '16	44.0%	21.9%	28.5%	75.9%	35.0%