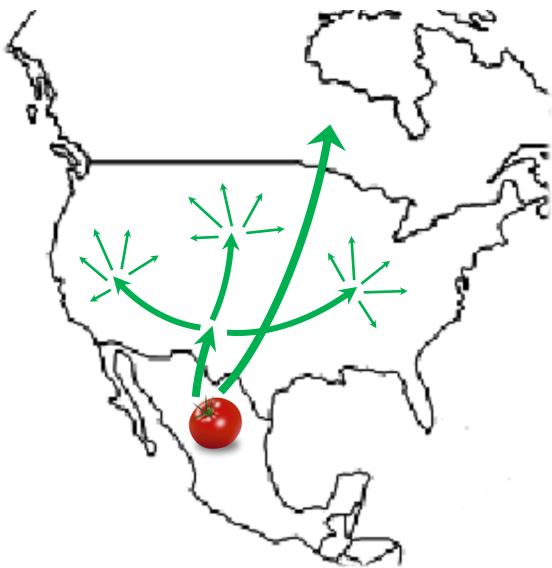


Mexican Fresh Tomatoes: Agribusiness Value Chain Contributions to the U.S. Economy

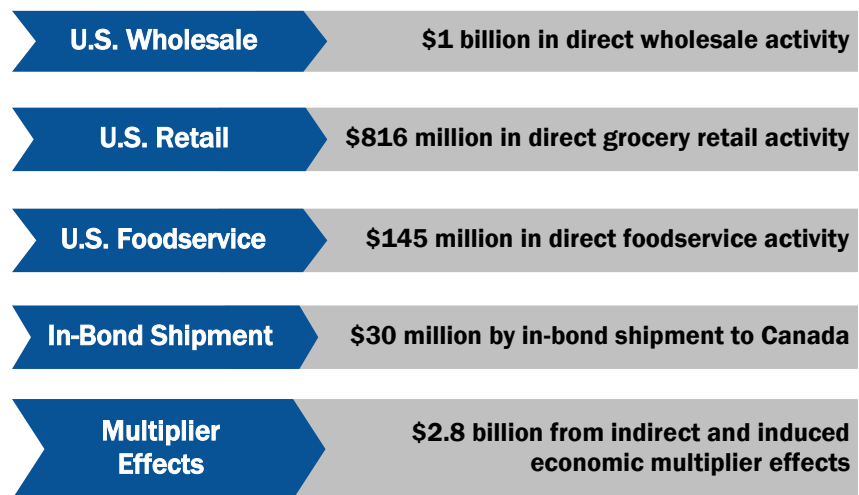
Dari Duval, Ashley Kerna Bickel, George Frisvold
Department of Agricultural & Resource Economics, University of Arizona Cooperative Extension
January 2018

What Is the Issue?

Imported fresh produce, such as tomatoes, supports economic activity, jobs, and income in the United States, even though it is grown elsewhere. In the case of tomatoes grown in Mexico, international agribusiness supply chains support forward-linked industries that deliver fresh tomatoes to end buyers in the United States and Canada, as well as backward-linked industries that supply inputs to agricultural producers in Mexico. This study estimates the total contribution of Mexican fresh tomatoes to the U.S. economy, including industries involved in delivering fresh tomatoes from ports of entry to end consumers (direct effects), and the multiplier effects in other U.S. industries through business-to-business transactions (indirect effects) and household-to-business transactions (induced effects).



The **\$4.8 billion** in total sales was generated through:



What Did the Study Find?

U.S. and Canadian fresh tomato imports from Mexico (valued at \$1.9 billion and \$255 million in 2016, respectively) contributed an estimated **\$4.8 billion in total economic activity** to the U.S. economy in 2016 including direct, indirect, and induced multiplier effects. That activity supported nearly **33,000 full- and part-time jobs** earning \$1.4 billion in employee compensation. In total, **\$2.9 billion in U.S. gross domestic product (GDP)** was directly and indirectly supported by the value chain delivering imported fresh tomatoes from Mexico to Canada and to U.S. consumers through grocery retail and foodservice industries. Over \$400 million in federal tax revenue and roughly \$350 million in state and local tax revenues were generated in 2016. Top U.S. industries affected (in terms of jobs supported) include food and beverage retail, wholesale, real estate, full-service restaurants, and employment services.

By the Numbers

17.4 lbs

... Annual per capita fresh tomato availability in the U.S. in 2015. Fueled by consumer demand over the last 25 years, per capita fresh tomato supply has increased by 32%, fulfilled largely by imports.

9.4 million

... Average pounds of tomatoes arriving to the U.S. daily from Mexico in 2016.

90%

... Share of Mexican tomato imports arriving through top 3 ports of entry in 2016—Nogales, AZ; Pharr, TX; and Otay Mesa, CA. Ports of entry support sophisticated logistics clusters in local economies.

3.4 billion

... Pounds of tomatoes imported by the U.S. from Mexico in 2016.

Imports from Mexico in 2016

Tomatoes (round)



1.7 billion pounds

Plum (Roma) tomatoes



1.5 billion pounds

Grape tomatoes



167 million pounds

Cherry tomatoes



61 million pounds

Jobs Contribution

In 2016, U.S. and Canadian import of fresh tomatoes from Mexico directly and indirectly supported an estimated 33,000 jobs in the U.S. economy. Jobs were supported directly in wholesale, grocery retail, food service, and transportation industries, as well as through multiplier effects in other industries outside the tomato value chain. The top industries in terms of jobs supported were retail food and beverage stores (12,400 jobs), wholesale trade (4,500), and real estate (1,000). Industries such as hospitals, real estate, and restaurants were supported through induced multiplier effects, or when individuals employed in the tomato value chain spend their incomes on household goods and services.

Top 10 industries accounting for the 33,000 jobs supported by Mexican tomato imports

Industry	Total Jobs	% of Jobs	Cumulative % of Jobs
Retail food and beverage stores	12,400	38%	38%
Wholesale trade	4,500	14%	52%
Real estate	1,000	3%	55%
Full-service restaurants	600	2%	56%
Employment services	500	2%	58%
Limited-service restaurants	500	2%	59%
Warehousing and storage	500	2%	61%
Hospitals	500	2%	63%
Truck transportation	400	1%	64%
Services to buildings	400	1%	65%
All other sectors	11,500	35%	100%

How was the study conducted?

Forward supply chain linkages (for wholesale and retail activities) were estimated using a price margin approach applied to shipping point, terminal market, and retail price data for tomatoes in the U.S. National input-output accounts were used to estimate the value of foodservice tomatoes using gross operating surplus as a share of total costs. The IMPLAN 3.1 national input-output model was used to estimate the multiplier effects of this supply chain activity to the U.S. economy.