



# Economic Impacts of the Suspension of Juice Content Requirement on Imported Grapefruits from Mexico

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## *Introduction*

The U.S. is the fifth largest exporter of fresh grapefruit in the world, totaling \$50.3 million in 2021. Moreover, the United States also imports fresh grapefruit, totaling \$28.0 million in 2021. Major grapefruit exporters to the United States are Mexico, South Africa, Israel, Peru, and China, accounting for 99.8 percent of the total in 2021. Mexico's share of the U.S. grapefruit market has averaged 47.2 percent since 2011 ranging from 15.4 percent in 2017 to 87.4 percent in 2013.

The [U.S. Standards for Grades of Florida Grapefruit](#) and [Marketing Order 905.306](#) sets standards for grade, size, quality, and maturity for grapefruit imported to the U.S. However, [PATCH #65](#) on April 26, 2021, USDA ordered the suspension of the juice content requirement that pertains to maturity determination for imported grapefruits under Section 8e. The relaxation in standards of maturity for imported grapefruits gives an unfair advantage to Mexican grapefruit producers and exporters over Texas and U.S. producers overall. Mexican grapefruit imports from January to December 2021 have increased by 93.1 percent year-over-year. Moreover, imports from January to March 2022 are 71.4 percent higher compared to the same period in 2020. The Texas Cooperative Inspection Program (TCIP) reported 208 loads of grapefruit crossing from Mexico to Texas between September 15, 2021, and March 25, 2022. Based on TCIP inspection reports, if the juice content requirement for maturity determination had not been suspended, 417 out of 545 lots out of those 208 loads would have failed quality standards and been rejected. **In other words, 76.5 percent of the tested lots would have previously been rejected for sale to American consumers.**

The following economic impact of PATCH #65 and the suspension of juice content requirement for imported grapefruits on the Texas commercial fresh grapefruit industry were estimated using IMPLAN, an economic input/output model. Economic multipliers for each sector of the economy were used to estimate how increased imports from Mexico and a reduction in Texas grapefruit sales will affect business activity, income, and employment in other sectors of the economy that supply inputs and services to the grapefruit industry.

## *Current Situation and Economic Baseline*

Texas commercial fresh market grapefruit production has an average value of \$184.2 million. Texas grapefruit production is located in the Lower Rio Grande Valley, with Hidalgo County accounting for about 85 percent of Texas bearing acres in 2020. Texas is the third largest citrus producing state behind Florida and California.

IMPLAN modeling estimates that the total business activity supporting Texas fresh grapefruit production is \$299.9 million annually. This includes farm level business activity of \$184.2 million and off-farm business activity of \$115.7 million. In addition, farm and related sector

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value added, or income, generated by grapefruit production is \$136.2 million, while another \$64.1 million is generated off-farm in input supply, transportation, finance, real estate, health care, wholesale/retail trade and the food/beverage industry. The Texas fresh grapefruit industry employs directly or indirectly 4,286 people (Figure 1). Employment used to produce and market the Texas fresh grapefruit crop is estimated to be 3,306 jobs. The balance of employment, or 980 jobs, is located in other sectors including agriculture support activities, 459 jobs; restaurants, food, beverages and retail, 64; health care, 36 jobs; real estate, 26 jobs; wholesale, transport and warehousing, 21 jobs; and business services, 12 jobs (Figure 2). The remaining jobs are spread among numerous sectors.

Significant purchases of goods and services associated with the Texas grapefruit industry are dispersed over many sectors of the economy. Business activity associated with the most important supporting sectors includes agriculture support activities, \$16.7 million; real estate, \$11 million; pesticide and other agricultural chemicals, \$5.2 million; and wholesale, transport and warehousing, \$5.9 million. Health care services at \$8.6 million, food and beverage sales at \$3.2 million, and banking services at \$2.3 million. The remaining business activities are spread among numerous sectors.

### ***Potential Economic Impacts of the Suspension of Juice Content Requirement***

Winter storm Uri affected grapefruit production for both 2020/21 and 2021/22 seasons. Grapefruit production for both seasons were 95,500 and 66,469 tons, respectively, well below their historical average of 227,410 tons. Historically, around 56 percent of Texas grapefruit production went into the fresh market, however, due to the winter storm shortage 47.8 percent went into the fresh market in 2021/22 season. Given the Texas grapefruit production shortage, it is assumed that Mexico will cover that shortage with at least their historical U.S. market share of 47.2 percent. Moreover, assuming a \$31/carton or \$1,550/ton and that 76.5 percent of the fresh grapefruit imports from Mexico would have been rejected due to failed quality standards, the Texas grapefruit industry could permanently lose \$51 million from customers that have a bad experience consuming fresh grapefruit.

Therefore, the suspension of juice content requirement for grapefruit imported to the United States is estimated to result in a \$82.9 million annual loss to the Texas fresh grapefruit industry from an increase of Mexican grapefruit imports. Losses in fresh grapefruit sales are estimated to reach \$51 million. These sales losses would be accompanied by an additional loss of \$31.9 million in associated economic activity required to produce and market the crop. A total of 1,203 jobs would no longer be required to support the Texas fresh grapefruit industry. Of these, 928 would be in citrus production and 275 in agriculture services, finance, business, health care, transportation, wholesale/retail trade and food/beverages.

### ***Summary***

The Texas fresh grapefruit industry could experience economic losses of up to \$82.9 million annually due to the suspension of the juice content requirement from Mexican grapefruit imports. In addition, 1,203 jobs would no longer be needed to produce and market the crop. About 275 of these economic and job losses would be off farm in agricultural services, finance, real estate, health care, wholesale/retail trade, transportation and food/beverages.

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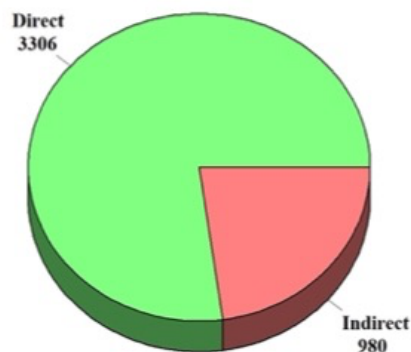
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**Figure 1. Texas Fresh Grapefruit Employment**

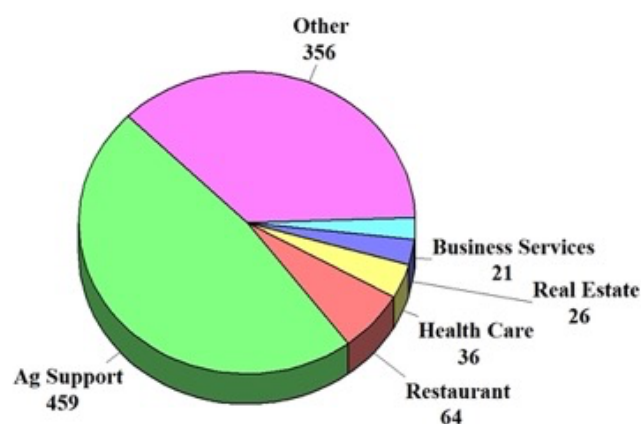
Total Grapefruit Employment: 4,286 Direct and Indirect



Source: IMPLAN model estimation

**Figure 2. Texas Fresh Grapefruit Indirect Employment**

Total Indirect Grapefruit Employment: 980



Source: IMPLAN model estimation