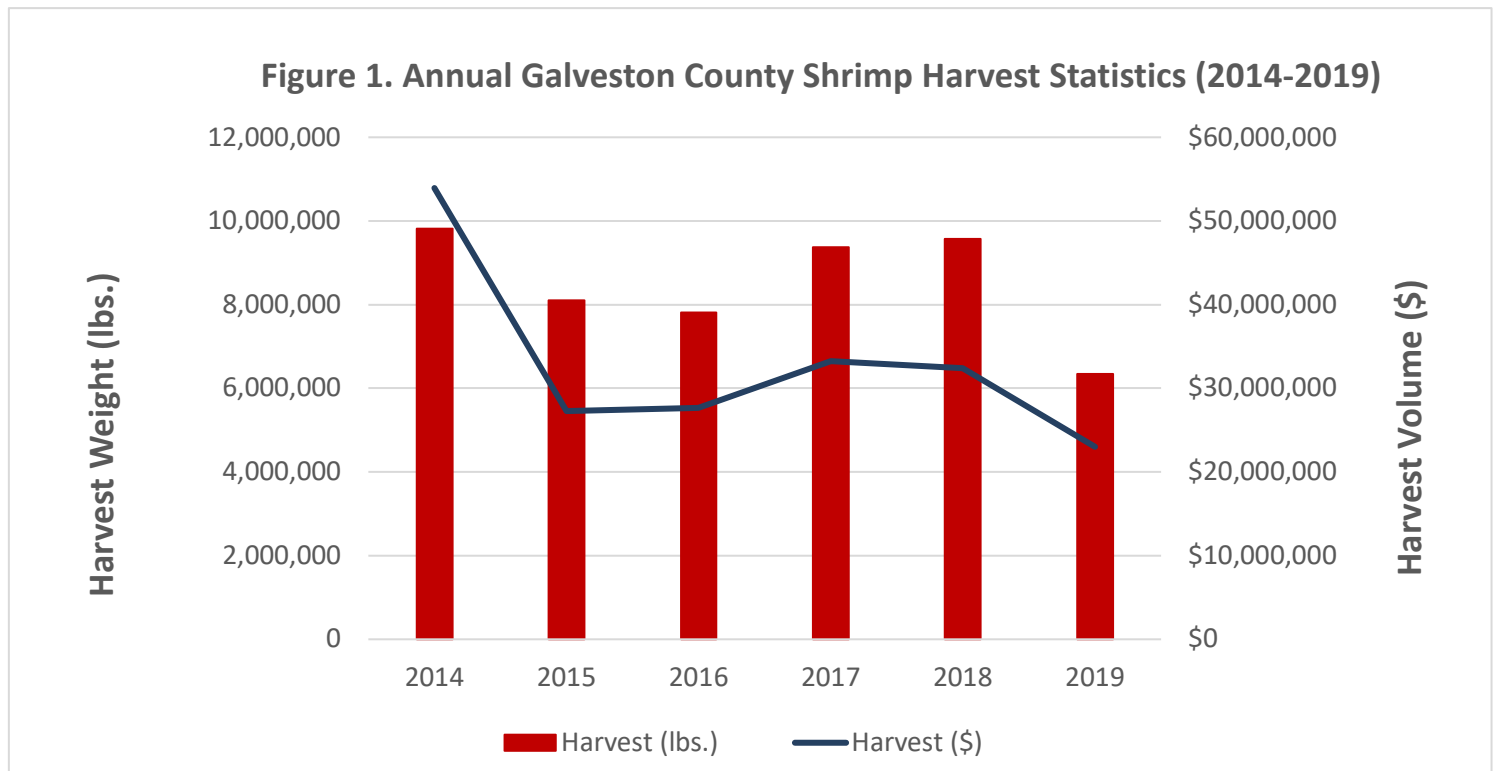


## Economic Impacts of the Galveston County Shrimp Fishery

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The Galveston County shrimp fishery is an important part of the Galveston County economy and the Texas shrimp industry. Shrimp harvesting and processing an important part of the Texas marine economy. Between 2014 and 2019, Galveston County's shrimp harvest accounted for 20.3% of the total Texas shrimp harvest by weight and 18.7% of the total Texas shrimp harvest by value (Figure 1).



Economic impacts of dockside and processing revenues were calculated for three scenarios: 1) the best year, 2) an average year (average of the six years), and 3) the worst year. These scenarios account for the substantial variability in annual harvests and revenues (see Figure 1).

Four types of impacts are estimated: employment (number of jobs due to the shrimp fishery), labor income (combined income of those employed as a result of the shrimp fishery), value added (the shrimp fishery's contribution to GDP), and output (the effect of shrimp fishery direct spending on overall economic activity).

In an average year the Galveston County shrimp fishery contributes approximately \$42.2 million to the county economy and 877.2 part- and full-time jobs (Table 1). In an average year, the county's shrimp processing sector contributes \$10.4 million and 37.8 part- and full-time jobs to the local economy (Table 2). Labor income is a component of value added, which is a component of output, so these figures cannot be summed. Average

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employment is greater than employment in the best year because jobs are calculated based on the number of shrimping vessels and dockside pounds. The best year based on dockside value was not year with the largest harvest by weight due to variations in price.

Table 1. Dockside Impacts for Galveston County

Best Year Impacts				
Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	922.3	\$19,383,300	\$53,827,000	\$53,933,200
<b>Total Effect</b>	<b>1005.8</b>	<b>\$22,261,000</b>	<b>\$59,653,300</b>	<b>\$64,609,000</b>
Average Year Impacts				
Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	804.5	\$16,907,600	\$32,856,200	\$32,921,100
<b>Total Effect</b>	<b>877.2</b>	<b>\$19,410,700</b>	<b>\$37,927,400</b>	<b>\$42,207,900</b>
Poorest Year Impacts				
Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	609.3	\$12,805,800	\$22,960,300	\$23,005,600
<b>Total Effect</b>	<b>664.4</b>	<b>\$14,700,700</b>	<b>\$26,799,700</b>	<b>\$30,036,000</b>
Economic impact values are not additive across measures (employment, labor income, value added, and output).				

Table 2. Processing Impacts for Galveston County

Best Year Impacts				
Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	23.8	\$1,236,400	\$2,211,800	\$9,498,400
<b>Total Effect</b>	<b>43.7</b>	<b>\$1,931,500</b>	<b>\$3,721,700</b>	<b>\$12,062,800</b>
Average Year Impacts				
Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	20.6	\$1,070,800	\$1,915,500	\$8,225,800
<b>Total Effect</b>	<b>37.8</b>	<b>\$1,672,700</b>	<b>\$3,223,100</b>	<b>\$10,446,700</b>
Poorest Year Impacts				
Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	15.3	\$798,000	\$1,427,500	\$6,130,300
<b>Total Effect</b>	<b>28.2</b>	<b>\$1,246,600</b>	<b>\$2,402,000</b>	<b>\$7,785,300</b>
Economic impact values are not additive across measures (employment, labor income, value added, and output).				

### Analysis Notes

- Annual shrimp landings data (amount and value) were provided by NOAA Fisheries; landings (weight) are measured in headless pounds.
- Statewide direct employment was calculated by assuming five workers per federally permitted vessel and three workers per state permitted vessel (NOAA, 2020b), and county jobs were estimated based on the county's share of Texas harvest by weight.
- Direct labor income is based on 2015-2019 average Texas wages for "Forestry, fishing, and related activities" reported by the Bureau of Economic Analysis.
- Economic impacts were calculated using IMPLAN (2019), a software program that calculates economic impacts using classic input-output analysis.
- Fishing impacts were calculated using 2017 IMPLAN sector 17 and wage compensation (sector 5001) multipliers using the analysis-by-parts method.
- Processing impacts were calculated using 2017 IMPLAN sector 93 multipliers

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