



Economic Impacts of the Jefferson County Shrimp Fishery

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The Jefferson County shrimp fishery is an important part of the Jefferson County economy and the Texas shrimp industry. Shrimp harvesting and processing an important part of the Texas marine economy. Between 2014 and 2019, Jefferson County's shrimp harvest accounted for 22.4% of the total Texas shrimp harvest by weight and 21.3% 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 Jefferson County shrimp fishery contributes approximately \$47.1 million to the county economy and 991.2 part- and full-time jobs (Table 1). In an average year, the county's shrimp processing sector contributes \$9.1 million and 34.5 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 employment is greater than employment in the best year because jobs are calculated based on the number of

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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.

Best Year Impacts							
Impact Type	Employment	Labor Income	Value Added	Output			
Direct Effect	1,039.5	\$21,846,600	\$60,667,400	\$60,787,100			
Total Effect	1,123.0	\$25,449,500	\$66,904,700	\$71,782,500			
Average Year Impacts							
Impact Type	Employment	Labor Income	Value Added	Output			
Direct Effect	917.6	\$19,284,300	\$37,416,800	\$37,490,600			
Total Effect	991.2	\$22,455,800	\$42,909,200	\$47,166,600			
Poorest Year Impacts							
Impact Type	Employment	Labor Income	Value Added	Output			
Direct Effect	732.0	\$15,383,200	\$27,581,500	\$27,635,900			
Total Effect	790.7	\$17,911,800	\$31,960,900	\$35,350,300			
Economic impact values are not additive across measures (employment, labor income, value added, and output).							

Table 1. Dockside Impacts for Jefferson County

Table 2. Processing Impacts for Jefferson County

Best Year Impacts						
Impact Type	Employment	Labor Income	Value Added	Output		
Direct Effect	17.8	\$1,268,400	\$2,331,700	\$7,789,800		
Total Effect	38.1	\$2,005,200	\$3,742,900	\$10,066,300		
Average Year Impacts						
Impact Type	Employment	Labor Income	Value Added	Output		
Direct Effect	16.1	\$1,148,700	\$2,111,700	\$7,054,700		
Total Effect	34.5	\$1,816,000	\$3,389,700	\$9,116,300		
Poorest Year Impacts						
Impact Type	Employment	Labor Income	Value Added	Output		
Direct Effect	13.6	\$966,100	\$1,776,000	\$5,933,300		
Total Effect	34.5	\$1,527,300	\$2,850,800	\$7,667,200		
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

References

Bureau of Economic Analysis. 2021. 2015-2019 Compensation of Employees by NAICS Industry, Table CAINC6N. <u>https://www.bea.gov/data.</u>

Bureau of Economic Analysis. 2021. 2015-2019 Total Full-Time and Part-Time Employment by NAICS Industry, Table CAEMP25N. <u>https://www.bea.gov/data.</u>

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NOAA, National Marine Fisheries Service. 2020b. Federally permitted vessels data.

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