

# WHATCOM COUNTY MARINE TRADES IMPACTS

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Prepared for

Whatcom Commercial Fishermen's Association  
&  
Working Waterfront Coalition of Whatcom County

Prepared by



CENTER OF ECONOMIC AND BUSINESS RESEARCH

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## Background

The Center for Economic and Business Research (CEBR) was asked to evaluate the economic and employment impacts of the Whatcom Marine trades. This work stems from the study “Washington State Maritime Cluster: An Economic Impact Study” - prepared for the Economic Development Council of Seattle and King County, and the Workforce Development Council of Seattle/King County in 2013. This study estimates that more than 57,000 people are employed directly in marine related jobs, generating \$15.2 billion in gross business income. Indirect and induced jobs, those related to or supported by the direct jobs, include another 90,000 jobs in the state.

In 2013, the Port of Bellingham commissioned a study to measure economic impacts of its entire operations, including marine trades and a study that just measured impacts of its operations pertaining to the commercial fishing /seafood processing industry. However, it only measured impacts of commercial activity based on Port-owned property.

Maybe not surprisingly, the question of overall economic impacts of the marine trades in Whatcom County is much easier to ask than it is to answer. While it may seem simple to count the jobs in the marine area and then count the other jobs that depend on the marine jobs, it really isn't obvious where to draw the boundaries. For example, fishermen use fishing gear. Should we count only the fishers as being in the marine area, knowing we will count the gear manufacturers when we count the indirect and induced jobs? Or should we consider both fishers and gear manufactures when we count the number of people in the marine area, knowing that the gear manufactures serve more people than just fishers who live in Whatcom County? Similarly, should we count people who process fish as being in a marine job, or should we count them as being in the (food) manufacturing sector?

In the end, CEBR considered several different methods to estimate the number of workers employed in marine trades and the number of jobs that depended indirectly on those marine jobs. In each case we made an effort to minimize the risk of double counting – which would arise if we counted, say, a gear manufacturer as being in the marine trades and then let our model effectively count them again as being indirectly tied to marine trades.

Note: in the jargon of economic impact analysis, the challenge is to first determine the direct impacts. In this case, we are trying to count the number of workers in marine trades. We then use software packages to estimate the related indirect and induced impacts. The indirect impacts come through business-to-business activities and the induced impacts come through household spending. For example, if you add or subtract a worker at one of the refineries, you will have ripple effects because the refinery will increase or decrease spending with other firms accordingly. In addition, household spending will increase or decrease as well, resulting in more ripple effects at restaurants and other places.

## About the Authors

This report has been prepared by the Center for Economic and Business Research (The Center) located within the College of Business and Economics at Western Washington University (WWU). The Center works in partnership with businesses, government entities and non-profits to bridge the resources of WWU students, faculty and staff from throughout the WWU Community to create high quality analysis and proposed solutions to challenges. From answering the simple question, creating understandable and thorough analysis documents, creating internships, class projects, to faculty projects, we assist in creating an informed path to help business owners and policy shapers make decisions to move forward. We are always seeking opportunities to bring the strengths of Western Washington University to fruition within our region. If you have a need for analysis work or comments on this report, we encourage you to contact us at 360-650-3909. To learn more about The Center, please visit us online at <https://cbe.wwu.edu/cebr/center-economic-and-business-research>.

## Impact Analysis

Using data gathered by the Whatcom Commercial Fishermen’s Association and the Working Waterfront Coalition of Whatcom County<sup>1</sup>, with help from Washington Sea Grant, on the number of commercial fishers who live in Whatcom County, native fishers, boat builders, boat repair workers, etc., we start with an estimate of 1,288 workers employed directly in marine trades outside of the Port of Bellingham operations. Using the IMPLAN software we estimate that those workers support an additional 773 jobs in the county, for a total of 2,062 jobs employed directly in or supported by marine trades.

We also considered the same industrial sectors as found in the state report and surveyed businesses in those industries to determine what portion of the workers could be considered as being dependent on marine activities. For example, our survey results suggested that perhaps 25 percent of the workers in the food manufacturing businesses were marine related. (While the larger food manufactures like Natures Path and Chocolate Necessities are clearly not related to marine trades, there are numerous smaller firms like Trans Ocean, Vital Choice, American Canadian Fisheries, Lummi Island Wild Salmon, and others that are clearly marine and still other food manufacturing firms, like Barleans, that have a portion of their workers in the marine area.) Using this approach, we estimated that are 1,350 workers were employed directly in marine trades and those workers supported an additional 815 jobs, for a total of 2,172 workers employed directly in or supported by marine trades. This estimate includes more assumptions and less actual counting of direct jobs, making it less precise. Still, it was reassuring to have a ‘top down’ estimate look similar to the other estimate.

In the end, CEBR projects that roughly 2,060 +/- jobs in Whatcom County outside of Port operations are marine jobs or depend on those marine jobs. The Port of Bellingham study identified 2,620 direct jobs on Port property related to marine activities and 1,382 indirect or secondary jobs, for a total of 4,002 jobs. Combining the results from these studies indicates a total of slightly more than 6,000 jobs related to marine trades – roughly 7% of the Whatcom County Workforce.<sup>2</sup>

The marine trades sector is composed of many small and medium sized companies with no dominant single employer. As a sector, it is comparable to many of the larger employers within the county.

It should be noted that we did not consider many non-market factors, such as the character of active boats on our waterfronts or the value of the county's maritime heritage.

Disclaimer: We relied heavily on the work done in the state report, prepared by Community Attributes in this analysis. We did not attempt to critique that report or try to improve on the methodology utilized.

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<sup>1</sup> The Coalition used the Washington State Study to determine what firms to include and which to leave out and/or what jobs to count at some firms and which not to count.

<sup>2</sup> Overlap in the secondary jobs considered in the two studies is possible. Future studies should try to look at marine trades as a whole, rather than in pieces in different studies.