



Economic Impact Assessment Report For Port of Yarmouth (2023)

Prepared for Yarmouth Area Industrial Commission

Port of Yarmouth

Prepared by ASBB Consulting
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List of Acronyms

- Canadian Port Authorities (CPA's)
- Tri-County Regional Centre for Education (TCRCE)
- Port of Yarmouth (POY)
- Yarmouth Area Industrial Commission (YAIC)
- Town of Yarmouth (TOY)
Municipality District of Yarmouth (MDOY)
- Municipality of Argyle (MOA)
- Municipality of Clare (MOC)

Acknowledgements

We would like to express our heartfelt appreciation for the valuable contributions made by each member that has contributed to the consultations on drafting the proposed marketing levy models. Their engagement, active participation, and insightful feedback have played a pivotal role in shaping the outcomes of this initiative.

The collective expertise and diverse perspectives brought forth during the engagement sessions, discussions, and feedback have greatly enriched our understanding of the current state of Port of Yarmouth. The contributions provided invaluable insights that will guide future decision-making processes.

ASBB and Port of Yarmouth extend its deepest gratitude to each participant who dedicated their time and shared their knowledge. Without their insights this project would not be possible.

ASBB is grateful for the Board of POY to allow us to undertake this important work for showcasing the economic impact for our community. We are grateful to serve our communities with our expertise and local passion.

Note

The report is based on comprehensive research and stakeholder consultations and does not reflect the personal views or opinions of the author. The content is presented objectively and without bias, solely to inform and provide insights based on the data collected. The author's perspective has not influenced the findings or conclusions derived from the research and consultations.

Executive Summary

On behalf of ASBB Consulting, we present this comprehensive report on the Port of Yarmouth, which serves as a vital economic hub in the region, accommodating approximately 40 fishing vessels and housing the TCRCE office space. Our analysis focuses on the economic impact of the Port's activities, categorized into direct, indirect, and induced effects. The study employs a methodological framework utilizing Statistics Canada's Supply-Use tables and industry multipliers, aimed at understanding the intricate economic interactions across various sectors.

The Port of Yarmouth's economic significance is multi-dimensional, encompassing operational management, substantial fish landings (notably of scallop, herring, and lobster), and broader economic influences such as employment, tax contributions, and local spending. Our report highlights the Port's critical role in the provincial fishing industry's GDP, with an in-depth analysis of the value and impact of fish landings.

Our findings reveal that the Port generates considerable economic output, predominantly through the fisheries sector. We detail the comprehensive financial contributions of the Port, including aspects of revenue, GDP, labor income, taxes, and employment. The report also explores various potential economic scenarios, ranging from the consequences of neglecting infrastructure upgrades to the benefits of strategic repairs, capacity enhancements, and the integration of tourism-focused activities.

Incorporating insights from stakeholder interviews, we have identified key areas of focus, including the expansion and diversification of the seafood industry, the necessity of infrastructure improvement, opportunities in tourism development, and the imperative to address environmental and regulatory challenges. Stakeholders have also emphasized the need for effective financial strategies, collaborative approaches, addressing the concerns of fishermen, ensuring sustainability, recognizing local economic impacts, and considering strategic asset management.

In summary, ASBB Consulting's report provides a thorough analysis of various investment scenarios at the Port of Yarmouth, underscoring the substantial economic benefits of infrastructural repair and expansion. Our report integrates stakeholder perspectives, stressing the importance of industry diversification, infrastructural improvements, and strategic planning. Our aim is to guide informed decision-making for the Port's future development, ensuring its ongoing economic contribution to the region while addressing the highlighted concerns and aspirations of its stakeholders.



1.0 Introduction

1.0 Why an Economic Impact Study?

The Port of Yarmouth currently requires approximately \$20 - \$30 million of capital investments to bring the port infrastructure back to a standard where current and future commercialization activities can be sustained. Conducting an economic impact study can be highly beneficial for independent ports like the Port of Yarmouth in several ways:

- 1. Understanding Economic Contribution:** Economic impact studies help independent ports like the Port of Yarmouth assess their role in the local and regional economy, including job creation, income generation, and tax contributions.
- 2. Promoting Investment:** Well-documented studies attract both private and public investments by showcasing the positive economic effects the port generates, encouraging funding for improvements and expansion.
- 3. Supporting Strategic Planning:** Findings inform the port's strategic development plans, enabling it to focus on sectors that benefit most from its activities and foster sustainable growth.
- 4. Advocacy and Public Relations:** Study results can be used for advocacy to gain community and policymaker support, which is vital for securing permits, funding, and regulatory approvals.
- 5. Forecasting and Risk Management:** By including forecasts and scenarios, economic impact studies help ports identify risks and challenges, enabling proactive risk management and adaptation to economic fluctuations or industry changes.

Conducting an economic impact study serves as a valuable tool for independent ports like the Port of Yarmouth. It not only quantifies the port's economic contributions but also supports strategic planning for regional economic development, investment attraction, and providing an economic driver to various commercialization efforts for the area and community.

The forthcoming sections are designed to set the tone and background necessary for understanding the context of the Port of Yarmouth within the broader landscape of ports in Canada. This foundational information will provide a comprehensive understanding of the role and significance of Canadian ports, including how the Port of Yarmouth fits into this larger framework. By exploring the geographically strategic functions, economic impacts, and operational models of Canadian ports, readers will gain a clearer perspective on where the Port of Yarmouth stands in comparison to its counterparts, and the unique contributions it makes to both local and national economies.

1.1 Background on Canadian Ports

Canadian ports are a fundamental part of the country's economy and infrastructure, playing a vital role in facilitating trade and transportation. Here's a comprehensive background on Canadian ports, including their typical operations, revenue generation, and the differences between various types of ports such as small craft harbors, independent ports, and Transport Canada-owned ports.

Major Typical Operations of Ports

1. **Cargo Handling:** This includes loading and unloading of containerized, bulk, and break-bulk cargo.
2. **Storage and Warehousing:** Ports provide storage facilities for goods awaiting shipment or collection.
3. **Intermodal Transportation Services:** Ports often serve as hubs where goods are transferred between different modes of transportation (ship, rail, truck).
4. **Logistics and Distribution:** Managing the flow of goods from origin to destination, including customs clearance and coordination with shipping lines.
5. **Maintenance and Repair:** Providing services for ships, including repairs, fueling, and provisioning.

Revenue Generation in Ports¹: Below we note some typical revenue generators for ports across Canada.

1. **Dockage and Berthage Fees:** Charges for ships docking at the port.
2. **Cargo Handling Charges:** Fees for loading, unloading, and handling cargo.
3. **Storage and Warehousing Fees:** Charges for storing goods at port facilities.
4. **Leasing and Property Rentals:** Income from leasing space or facilities to businesses operating within the port.
5. **Services Charges:** Fees for additional services like piloting, towing, waste disposal and energy sales.

Different Types of Ports in Canada

(a) Small Craft Harbors²

Small Craft Harbors are harbors which belong to the nationwide program run by Fisheries and Oceans Canada (DFO). The program is geared towards the upkeep of harbors that are critical to the fishing industry. In September 2018, the program was responsible for 1,008 harbors, including 882 fishing harbors and 126 recreational harbors. Together, these harbors

¹ Transport Canada. "Ports Modernization Review: Discussion Paper." (2018).

² Government of Canada, "Ports, Harbors, and Anchorages", 2023 Web: <https://tc.canada.ca/en/marine-transportation/ports-harbours-anchorages>

represent over 10,000 structures valued at approximately \$5.6 billion. Regarding divestitures, small craft harbors which are derelict, have low activity, or are used for recreational purposes are divested or planned to be divested in the future.

(b) Independent Ports

Independently owned ports are those that are divested federally and are currently independently owned. The ports are diverse in terms of timing of divestiture, lines of business, capital infrastructure requirements and capital availability and the communities in which they are located. The governance structure of independently owned ports varies with each port. Port of Yarmouth and Port of Digby are examples of independently owned ports.

(c) Canadian Port Authorities (CPA's)

Canada Port Authorities (CPAs) advance the growth and prosperity of the Canadian economy by managing key marine infrastructure and services in a commercial manner, accounting for input from users and local communities.

CPAs³ are federally incorporated, autonomous, non-share corporations that are expected to be self-sufficient and operate independently from the federal government but within the parameters of the CMA and their Letters Patent. Letters Patent outline the port's governance, major activities and powers, and set out the lands and waters under a CPA's management. CPAs' core activities focus on shipping and navigation (e.g., transporting goods and passengers). CPAs also conduct non-core activities (e.g., borrowing to support transportation undertakings and land acquisition under their own names) to support port operations. When conducting non-core activities, CPAs are not acting as "agents of the Crown" and are solely responsible for such undertakings. CPAs are not Crown corporations pursuant to the *Financial Administration Act*.

Each CPA is governed by a board of directors, which is responsible for setting the strategic direction of the CPA and overseeing operational decisions, including establishing its management cadre. Boards comprise 7 to 11 representatives appointed by the federal (1), provincial (1) and municipal (1) governments, and port user group representatives (four to six) appointed by the Governor in Council upon the recommendation of the Minister. Directors have a fiduciary responsibility to the CPA, and not to their appointing body.

(d) Transport Canada Owned Ports

These ports, under federal management, are owned by the Canadian federal government and managed within the Transport Canada portfolio, reflecting their national significance for trade or strategic reasons. They are funded and operated by the government, with their focus and operations directed towards national interests rather than local concerns, ensuring they align with broader strategic objectives.

³ Ibid 2.

Canadian ports, varying in size and function, are integral to the country's trade and transportation network. They handle a diverse range of operations, from cargo handling to logistics, and generate revenue through various services and fees. The differences in management and focus between small craft harbors, independent ports, and Transport Canada-owned ports highlight the diverse maritime needs across Canada. As dynamic entities, these ports continue to evolve with advancements in technology and shifts in global trade patterns.

1.2 Background on Port Divestitures in Canada

The history of port divestitures in Canada is closely tied to broader economic and governance changes in the late 20th century. It was driven by the recognition that traditional federal oversight of ports and harbors was often inefficient, bureaucratic, and detached from the specific needs of local communities. As a result, the Canadian government embarked on a process of decentralization and devolution of port management authority.

Key Milestones:

1. **1980s - 1990s⁴:** During this period, the Canadian government began to explore ways to transfer control of certain ports from federal agencies to more local and autonomous entities. The idea was to empower communities and regions to have a more direct say in how their ports were managed and developed.
2. **Canada Marine Act (1998):** The Canada Marine Act, passed in 1998, was a pivotal piece of legislation that formalized the shift towards independent port authorities. This act laid the groundwork for the creation of numerous port authorities across the country. It aimed to achieve several key objectives:
 - i. **Greater Efficiency:** By granting more autonomy to port authorities, the act sought to make port operations more efficient, responsive, and competitive in the global marketplace.
 - ii. **Local Control:** The act empowered local communities to have a say in the management of their ports, recognizing that each port had unique economic and regional characteristics.
 - iii. **Economic Development:** Port authorities were expected to play a role in driving economic development in their regions by attracting trade, investment, and job opportunities.
3. **Port Authority Expansion:** In the years following the passage of the Canada Marine Act, numerous independent port authorities were established across Canada. These entities took over the management and operation of various ports, including major ones like the Port of Vancouver, Port of Halifax, and smaller regional ports like the Port Authority of Yarmouth.

These changes were made to promote economic growth, efficiency, and greater responsiveness to the unique needs of each port and its surrounding region. This shift has empowered independent port authorities, including the POY, to contribute to regional development while also addressing environmental and safety concerns.

⁴Walker, Tony R., et al. "Harbour divestiture in Canada: implications of changing governance." *Marine Policy* 62 (2015): 1-8.

1.3 Current State of Port's in Canada

Independently owned ports in Canada, while playing a pivotal role in the country's trade and economic infrastructure, face several contemporary challenges similar to that of Port of Yarmouth (POY):

1. **Infrastructure Upgrades and Capacity Expansion⁵:** As global trade volumes increase and shipping and fish harvesting vessels become larger, independently owned ports must invest heavily in upgrading their infrastructure and expanding capacity. This includes lengthening berths, deepening channels, and enhancing cargo handling equipment. Securing funding for these large-scale projects can be challenging.
2. **Environmental Sustainability:** There is growing pressure for ports to adopt more sustainable practices. This includes reducing carbon emissions, managing waste more effectively, and mitigating the impact on local ecosystems. Implementing these green initiatives often requires significant investment in new technologies and processes.
3. **Community Relations and Local Impact:** Balancing port development with community interests can be challenging. Ports must address concerns related to noise, traffic, and environmental impacts to maintain good relations with local communities.

Addressing these challenges requires a strategic approach, significant investment, and collaboration with various stakeholders, including governments, industry partners, and local communities. By overcoming these hurdles, independently owned ports in Canada can continue to contribute effectively to the country's economic growth and global trade network.

This economic impact study aims to bring together the economic and regional importance of Port of Yarmouth, and outlines a set of recommendations for future impact.

⁵ Ircha, Michael C. "Ports: A Component of Canada's Critical Infrastructure...," *Canadian Ports Magazine*, Association of Canadian Port Authorities (2003).

1.4 About Port of Yarmouth

The Port of Yarmouth (POY) located in the downtown of the Town of Yarmouth (TOY) is a vital economic asset for the region, serving as a gateway for trade, transportation, and tourism. Located in the Town of Yarmouth, Nova Scotia, the port has a rich history and plays a pivotal role in driving economic growth and supporting local communities.

Historically owned by the federal government, the port assets were built in 1960's through 1974. The POY assets were formally divested to the community through the federal port divestiture program to the Yarmouth Area Industrial Commission (YAIC) in 2001.⁶

The current governance structure for the port (for the last 13 years)⁷ represents an ownership structure where one third of the assets are owned respectively by TOY, Municipality of the District of Yarmouth (MODY) and Municipality of Argyle (MOA). There are currently three directors from each partner, chairman, Vice-Chair and Secretary/Treasurer and these positions are elected within the group. The port has primarily been a working port where commercial and independent fishermen pay berthage for their fishing vessels.

Currently, the port is a major hub of the fishing industry in Southwest NS, which has Canada's most productive fishing grounds, and one of the largest lobster fishing grounds in the world. On average, in the last 5 years, the port accounted for approximately 2.1%, or nearly \$25 million of Nova Scotia's fishing GDP. The port lands anywhere between 44 million to 85 million pounds of lobsters per year as well as other species such as herring, scallops and groundfish. The port currently charges tariffs on fishing vessels, haul-outs access and other items related to docking including electricity which is one source of the port's revenue. The other vital source includes renting port assets to various organizations.

Beyond the current economic contributions, the Port of Yarmouth has the potential for being a significant driver of the economy, including in tourism, maritime transport, a hub for testing and piloting ocean technology and other market attraction activities which will add to the economic landscape of Yarmouth.

Below we list the port assets with pictures to give an idea of the location of the potential repairs discussed throughout this section. The pictures also provide the reader with a visual location of the assets described throughout the economic impact.

⁶ During this time the ferry terminal operations were not part of the port nor its operations as it currently stands today.

⁷ Port of Yarmouth Perspective on The Yarmouth Waterfront, December 10th, 2023

(i) POY Assets

Below is an overview of the main port assets⁸.



Port Manager's office (the main port office building).



Former Coast Guard building.



The Old Government wharf.



The Tri-County Regional Centre for Education.



Lobster Rock Wharf



Marginal Wharf

⁸ Port of Yarmouth Condition Assessment. SHM Canada
<https://www.shmcanada.com/port-of-yarmouth-assessment>

1.5 Repair Needs at POY

The Port of Yarmouth currently faces critical challenges in its infrastructure, necessitating significant upgrades to maintain operational integrity and safety. These enhancements are vital for safeguarding the well-being of our fishermen, who play a crucial role in the local economy. Additionally, the recent closures of several regional wharves, primarily due to decisions by the Department of Fisheries and Oceans (DFO), have resulted in increased pressure on available capacity for fishing vessel landings. Without appropriate upgrades, the Port of Yarmouth risks exacerbating this capacity constraint. Conversely, by undertaking these infrastructure improvements, the port stands to seize a strategic opportunity to accommodate additional fishing vessels, thereby enhancing its service offerings. Moreover, considering the port's susceptibility to harsh weather conditions prevalent in the harbor area, prioritizing infrastructure repair and upgrades is not only a strategic decision but also an essential step in ensuring the long-term viability and resilience of the Port of Yarmouth.

In 2017 an assessment of the current assets were done to understand the current state of the Port's assets. The engineering firm, SHM Canada conducted an Physical Asset Condition and Evaluation of Old Government Wharf, Marginal Wharf, Lobster Rock Wharf, and associated decks, bridges, and causeways⁹. Furthermore, in 2019 RSEI completed an Electrical Physical Asset Condition and Evaluation. The findings included that the existing electrical facilities at the Old Government Wharf, Marginal Wharf, and Lobster Rock Wharf require significant repairs and upgrades, with estimated costs of \$693,000, \$93,000, and \$770,000, respectively. Common issues include damaged or end-of-life receptacles, weatherproofing deficiencies, and the need for protection against aggressive weather conditions. The proposed improvements involve replacing outdated materials with salt-resistant alternatives, addressing structural damage to light poles, and aligning electrical repairs with major structural upgrades. The Port of Yarmouth faces a pressing need for infrastructure upgrades, including its electrical systems, as indicated by assessments conducted in 2019 and 2017. Recommendations include prioritizing safety and capacity expansion, investing in floating docks, and addressing challenges in garbage disposal to enhance operational efficiency. These measures aim to ensure the port's viability, profitability, and environmental sustainability.

The report also recommended prioritizing the port's capacity as increasing the capacity with the addition of floating docks would allow for safer docking, and additional docking of fishing vessels. If capacity were to be increased the port would need more winches and new equipment to diversify the species that are brought to the wharfs.

Garbage disposal was also included as a current ongoing problem that was recommended to be addressed. Throughout the analysis below garbage disposal was also an important need identified by fishing vessels to improve docking experience.

⁹ Port of Yarmouth Condition Assessment. SHM Canada
<https://www.shmcanada.com/port-of-yarmouth-assessment>

1.6 Current Revenue Streams for POY and Berthage Fees

Table 1 below provides an understanding of the current revenue streams at POY. The current revenue streams for POY include berthage fees, rents collected from the regional school board, and other governmental support. The largest portion of the revenue is currently collected from rent from the regional school board.

Table 1: Port of Yarmouth Revenues (Gross)

Revenues	2022	2021	2020	2019	2018
Berthage	\$150,316	\$127,202	\$123,100	\$122,222	\$121,831
Rent	\$215,379	\$214,793	\$216,051	\$216,283	\$216,660
Other	\$32,928	\$27,807	\$27,830	\$32,463	\$39,739
Total	\$398,623	\$369,802	\$366,981	\$370,968	\$378,230

In the next section, we present the current berthing fees for the Port of Yarmouth, detailing the specific costs associated with various types of vessels and durations of stay. For a comprehensive understanding, this section will also include a comparison of similar berthing fees from other ports. This comparative analysis will provide readers with a clearer perspective on how the Port of Yarmouth's fees align with or differ from other ports, aiding in assessing the competitiveness and value proposition of the Port of Yarmouth for potential users.

Table 2: Berthage Fees of Port of Yarmouth and Nearby Ports

Port of Yarmouth	
Vessel type	Price per day /m
Fishing vessels, home Port, Yarmouth, N.S., < 15.4 metres	\$0.60
Fishing vessels, home Port not Yarmouth, N.S., <15.4 metres	\$0.88
All other fishing vessels, > 15.4 metres	\$1.80
All other commercial vessels	\$2.20
Pleasure craft	\$12
Unauthorized berthage	\$500

Port of Sydney

Berthage rates per gross registered tons	Price (rounded)
First period of 12 hours or part thereof	\$0.05
Second period of 12 hours or part thereof	\$0.05
Succeeding period of 12 hours or part thereof	\$0.03

Minimum daily rate

Vessels less than 100'	\$150
Vessels over 100'	\$200

Port of Shelburne

Fishing Vessels under 15.4m in length; 6.1m in width (Daily) per meter	\$0.49
Non-Fishing Vessels under 15.4m in length; 6.1m in width (Daily) per meter	\$0.99
All Vessels over 15.4m in length; 6.1m in width (Daily) per meter	\$2.64
All Vessels Loading / Offloading	\$3.38

Berthage less than one (1) day will be charged at the rate for one (1) day; vessels loading or offloading for any portion of a day will be charged the loading/offloading rate for the day; there is a maximum charge of twenty (20) days berthage per month after which there will be no charge for berthage for the remainder of the month.

Port of Digby

Monthly Rates /m2		
Mo. Rate Floating Dock		Mo. Rate Main Wharf
\$3.78		\$3.47

Floating Dock /m2			
1 Week Rate	2 Week Rate	3 Week Rate	Monthly Rate
\$1.25	\$2.50	\$3.75	\$3.78

Main Wharf /m2			
1 Week Rate	2 Week Rate	3 Week Rate	4 Week Rate
\$1.18	\$2.36	\$3.54	\$3.47

John's Cove Berthage Fees

Season	Monthly Price
Lobster Season (6 months)	\$240
Summer (6 months)	\$120

Compared to the other ports in the area the berthage fees of the POY's fees are different from that of the port's listed above. Based on location POY's fees structure is most similar to that of John's cove. Other major ports for docking such as Wedgeport and Shelburne add almost an hour to the vessel's landing time.

Although right now these fees are a revenue stream it could be something to consider increasing in the future upon infrastructure upgrades. This could allow the port to reinvest this into maintaining the infrastructure and offering more services to keep up with the other ports.

Real Estate is one of the main revenue streams for the port. TCRCE building is currently on a 10 year lease. It is a good property to have although it brings to the attention the need for more parking. The ice plant provides an annual revenue stream of roughly \$10,000 dollars per year.

The next section delves into the actual economic impact study.



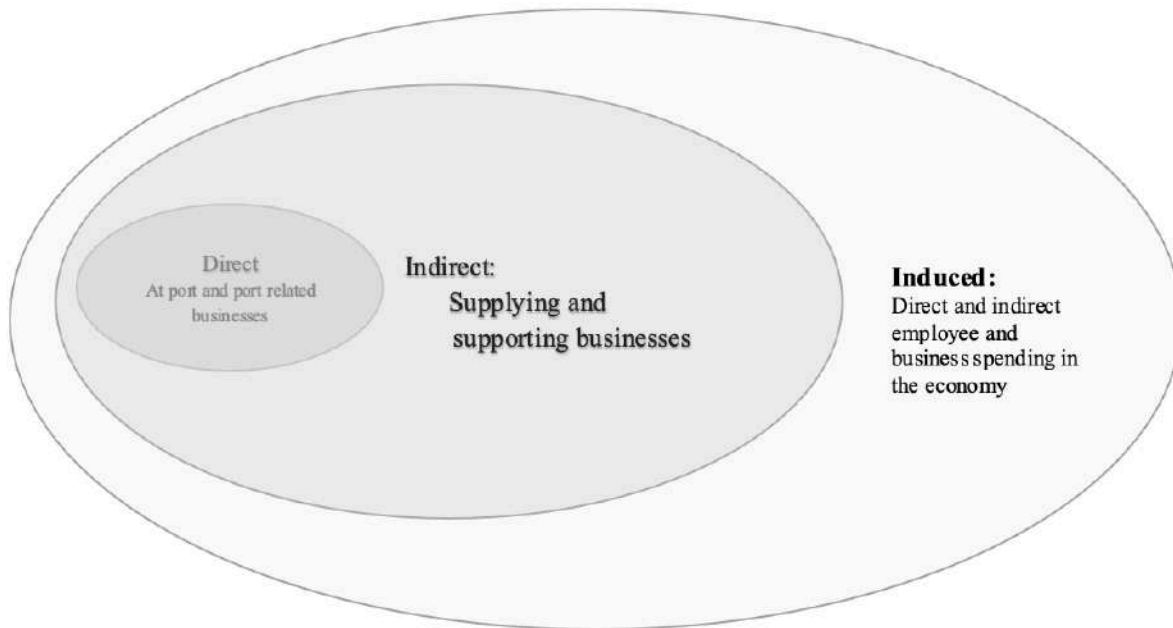
2.0 Economic Impact of POY

2.1 Overview

The Port of Yarmouth (the Port), composed of 3 wharves (Old Government Wharf, Marginal wharf, and Lobster Rock wharf) and a rental property, provides services for approximately 40 fishing vessels as well as office space for the Tri-County School Board. The activities from the Port, in addition to the fish landings the Port's wharves provides for and the school board's activities constitute the port infrastructure's direct activities, from an economic impact standpoint.

Economic impact is a measure of the revenue and employment effects associated with a sector of the economy, a specific project, or a change in government policy or regulation. In this case of this report, economic impact refers to the economic contributions associated with the ongoing activities of the port of Yarmouth and its related businesses. The three major components of the economic impact are classified as direct, indirect, and induced impacts as outlined in Figure 1 below. Recognizing the economic importance of the Port of Yarmouth, the port was interested in undertaking an economic impact study which will measure the direct, indirect and induced impacts associated with the port's activities in Yarmouth County and area.

The economic impact assessment will not only provide valuable insights into the port's contributions but also support evidence-based decision-making. The findings will guide the new and existing board to make the strategic decisions required for the necessary upgrades and continuation of POY's geographical location as a strategic economic driver for the region and community. Figure 1 below summarizes the economic impact process.

Figure 1: Economic Impact Process

In order to make the reader familiar with the common economic terms to be used during the economic impact analysis, we have provided a list of definitions in Appendix B. The next section touches on the methodology used to derive the economic analysis for POY.

2.3 Methodology

The economic impact study for the Port of Yarmouth was carried out using a specialized method that involves analyzing how different sectors interact in the economy. This method is based on data and tools provided by Statistics Canada, particularly their Supply-Use tables and industry multipliers.

The steps of applying the multipliers are:

The multipliers are ratios that are used by multiplying them to the output, or revenues as a proxy. So for every dollar of output or revenue an industry generates, it will generate GDP that is between 0 and \$1. As an example, in 2019, the GDP multiplier for the fishing industry's GDP (direct) was \$0.60.

Let's break this down for clarity:

1. **Statistics Canada Supply-Use Tables¹⁰:** These tables are detailed datasets that show how industries supply and use various goods and services. They provide a snapshot of the economic activities and interactions between different sectors in Canada.
2. **Industry Multipliers¹¹:** These are factors derived from the Supply-Use tables. They help understand how changes in one industry (like the Port of Yarmouth's operations) can affect other industries and the economy as a whole. For example, if the port's activity increases, these multipliers can estimate the ripple effect this increase has on other sectors.
3. **Applying Multipliers to Port of Yarmouth Data:** The study applied these multipliers to the fishing revenue of the Port of Yarmouth, using the actual data on fish landings volumes and values reported by the port. This helps to estimate how the port's fishing activities contribute to the wider economy. It is important to note that these are provincial multipliers and not specific to Yarmouth alone.
4. **TCRCE Impacts:** For the impacts related to the TCRCE (presumably a specific component or entity related to the port), the study used employment data. It involved 'reverse engineering' - a method where you start with the known outcomes and work backward to apply the multipliers. This method is more suitable for public institutions like the TCRCE, which operate differently from profit-driven businesses, focusing more on public service than on maximizing profits.
5. **Reference Year for the Study:** The year 2019 was chosen as the basis for this analysis, despite having access to 2020 data. This decision was made because 2020 was an atypical year due to the COVID-19 pandemic, which significantly altered production and cost structures across businesses. Using 2020 as a reference could skew the results due to these extraordinary circumstances.

The economic impact study for the Port of Yarmouth, utilizing Statistics Canada's Supply-Use tables and industry multipliers, also incorporates a scenario-based analysis to understand the potential outcomes under different conditions. This approach is essential to anticipate and plan for future developments. The scenarios are based on varying levels of infrastructure investment and development at the port:

1. **Scenario of Unaddressed Infrastructure:** This scenario explores the economic implications if no improvements or repairs are made to the existing infrastructure of the Port of Yarmouth. It helps in understanding the potential risks and downsides,

¹⁰ Statistics Canada, "Supply and use tables, detail level, provincial and territorial (x100)", 2023. Web: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610047801>

¹¹ Statistics Canada, "Input-Output multipliers, detail level", 2023. Web: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610059401>

including possible declines in efficiency, safety, and attractiveness to current and potential port users.

2. **Partial Infrastructure Improvement:** In this scenario, the study considers the effects of undertaking some, but not all, necessary infrastructure improvements. This might involve prioritizing critical repairs or updates while delaying others. The analysis here aims to gauge how such partial improvements would impact the port's operations, revenue, and overall economic contribution.
3. **Full Infrastructure Development for Market Expansion:** The most ambitious scenario assumes a complete overhaul and upgrading of the port's infrastructure, aiming to enhance its capabilities and attractiveness significantly. This scenario is designed to understand the economic benefits of fully investing in the port's infrastructure, potentially enabling it to attract new market opportunities and diversify its service offerings.

Each scenario provides insights into how different levels of investment and development at the Port of Yarmouth could impact its economic role and contributions. The study uses these scenarios to model the potential future states of the port, offering a comprehensive view of the potential paths forward and their respective economic implications. This scenario-based approach is particularly useful for decision-makers in planning and prioritizing infrastructure investments, ensuring that the port continues to be a vital economic asset.

In summary, this economic impact study uses a sophisticated approach to understand how the Port of Yarmouth's activities, particularly in fishing, affect the broader economy. By using specific economic models and data tailored to public institutions, the study aims to provide a realistic picture of the port's economic contributions.

The next section introduces the current economic drivers of the port as well as provides a background to the landings.

2.4 Current Economic Drivers at POY

At the Port of Yarmouth, three primary economic drivers play a pivotal role in its operation and contribution to the regional economy. The first driver encompasses the operational framework of the port, which includes the staff who manage day-to-day activities, the operating costs and revenues generated, and the engagement of third-party services essential for its functioning. The second driver is the significant activity of fish landings, particularly scallop, herring, and lobster, which not only supports the local manufacturing and processing sectors but also facilitates the transport of goods. This activity is a substantial source of employment and contributes to tax revenues. The third driver is the broader economic impact generated by the port, including employment opportunities, tax contributions, and spin-off spending that benefits local and provincial economies. This impact extends to entities like the TCRCE, showcasing the port's role in various facets of the community's economic landscape. Together, these drivers illustrate the multifaceted economic significance of the Port of Yarmouth.

These drivers are summarized in Figure 2 below.

Figure 2: Economic Impacts at Port of Yarmouth



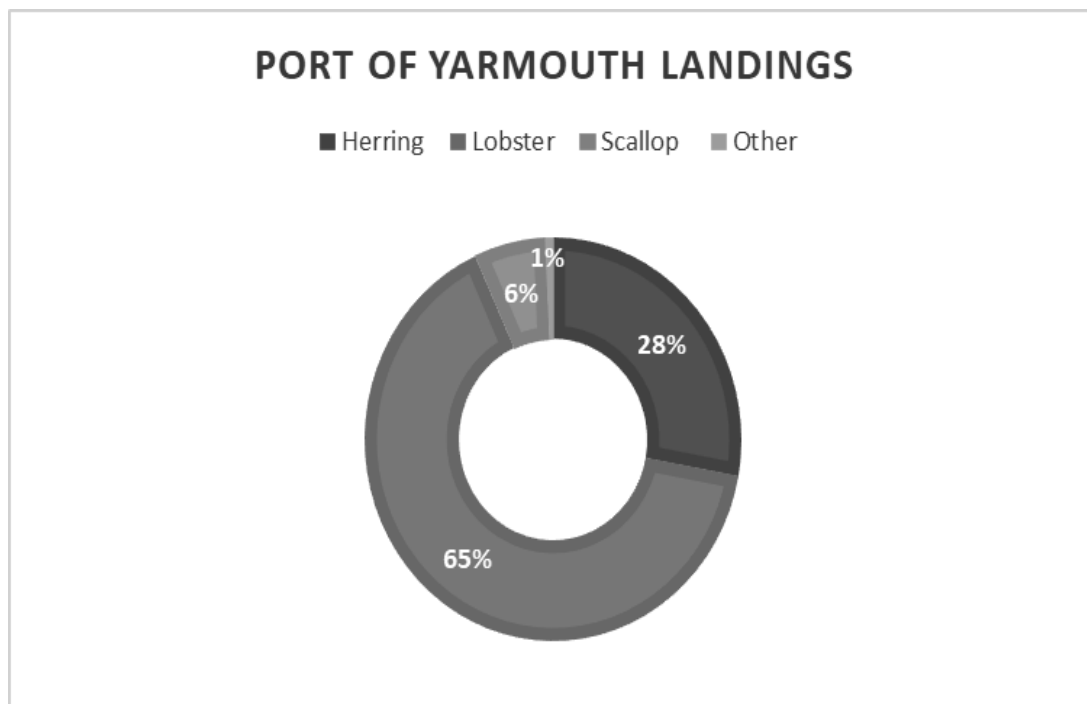
The next section discusses the landings at the Port and its economic value.

2.5 Landings Type

The Port of Yarmouth has a notable impact on the provincial fishing industry's GDP, primarily influenced by the value of fish landings. The landings for the Port of Yarmouth was provided by POY for the purposes of this study. For a comprehensive analysis, fish landing impacts from 2017 to 2023 (excluding the outlier year 2020) have been averaged to smooth out annual fluctuations. However, scallop landings were averaged only for the last two years, reflecting

changes due to the departure of a major scallop harvesting client in 2021 which caused a large dip in the POY's landing volumes. Currently, the Port's contribution to the provincial fishing GDP is approximately 1.7%, based on 2021 data. This is a decrease from the 2016-2020 period, where the presence of the scallop harvester raised the average GDP contribution to 3.2%. The primary catches driving this economic activity are lobster, herring, and scallop, with lobster leading the contributions as detailed in Figure 3. This analysis underscores the Port of Yarmouth's significant and dynamic role within the regional maritime economy.

Figure 3: Landings by type, Port of Yarmouth



The table below indicates the market price of the landings at the Port of Yarmouth with their market value derived from landing data provided by POY. The prices reflect the last five year average 2018-2022 (excluding 2020). The landing values are used to calculate all of the direct, indirect and induced effects.

Table 3: Market Value of Landings Table (5 year average; scallops 2 year average)

Type of Landing	Unit Price	Value
Lobster	\$8.50	\$20,704,973
Herring	\$0.30	\$8,840,190
Scallop	\$1.40	\$1,929,369
Groundfish	\$1.10	\$145,401
Other	\$1.40	\$76,218

Source: Port of Yarmouth Landing data ([here](#))

The next section discusses the current economic impacts.

2.6 Current Economic Impacts

The Port of Yarmouth (POY) plays a pivotal role in the local economy, predominantly through its fishing activities. A significant portion of the economic value generated by the port, over 80%, is attributed to the fisheries sector, as evidenced by the value of fish landings. This aligns with the port's strategic focus, where the majority of its assets and operations are dedicated to supporting fishing activities. In contrast, the port's direct operations account for approximately 1% of the GDP impact, while the leasing of office space to the school board contributes nearly 20%.

In terms of overall economic output, the activities associated with the Port of Yarmouth generate approximately \$49 million in revenues. This figure encapsulates the port's direct economic contributions, totaling \$37 million, along with the economic impact of its supply chain (indirect impacts) at \$5.9 million, and the broader economic effects stemming from employment and income generated by the port and its suppliers (induced impacts), which amount to \$6.8 million.

Regarding Gross Domestic Product (GDP) contributions, the Port of Yarmouth adds \$23.2 million in value through its combined activities in port operations, fishing, and education. The indirect and induced impacts contribute an additional \$7.2 million to the GDP. Of the total GDP impact of \$30.7 million attributed to the port's activities, \$15.4 million is in the form of employment income, with taxes accounting for \$1.4 million. The remaining portion of the GDP is largely recognized as profits accruing to asset owners. This financial breakdown

underscores the significant economic influence of the Port of Yarmouth, primarily driven by its fishing-related operations.

In its totality, the Port of Yarmouth currently contributes approximately 280 Full time equivalent (FTE) jobs to the economy, of which over 200 are located locally, and the other 80 somewhere in Nova Scotia (potentially also in South West Nova Scotia).

Table 4 below summarizes the overall impacts broken down by direct, indirect and induced.

Table 4: Summary of Current Economic Impact for the Port of Yarmouth

	Output (Revenue)	GDP	Labour Income	Jobs (FTEs)	Taxes
1. Port of Yarmouth	\$682,597	\$336,564	\$200,992	4	\$16,974
Direct	\$430,389	\$191,093	\$125,243	2	\$10,760
Indirect	\$159,674	\$85,647	\$51,647	1	\$2,235
Induced	\$92,534	\$59,824	\$24,102	1	\$3,979
2. Fishing	\$41,268,390	\$24,691,302	\$10,713,300	193	\$1,133,962
Direct	\$31,696,152	\$19,049,387	\$7,733,861	130	\$982,581
Indirect	\$5,071,384	\$2,725,869	\$1,806,681	36	\$25,357
Induced	\$4,500,854	\$2,916,046	\$1,172,758	27	\$126,024
3. Tri-County School Board	\$7,960,603	\$6,007,616	\$4,741,506	88	\$231,216
Direct	\$5,125,952	\$4,239,162	\$3,947,983	70	\$35,882
Indirect	\$625,366	\$333,187	\$220,416	5	\$3,127
Induced	\$2,209,285	\$1,435,267	\$574,107	13	\$192,208
Total	\$49,228,993	\$30,698,918	\$15,454,806	281	\$1,382,152

Note: The impacts of all activities are not additive as the economic impact from the Port of Yarmouth are already included in the indirect impact inputs of fishing and Tri-County School Board. Including the Port's economic impacts in the total would be double counting.

2.7 Potential Economic Impacts: Scenario Analysis

This section of the report focuses on evaluating the prospective economic implications for the Port of Yarmouth (POY) under various development scenarios. This analysis is critical within the context of the comprehensive report, as it aims to project the economic outcomes associated with different levels of infrastructural investment in the port. Specifically, it contrasts the economic repercussions of failing to upgrade the port's assets adequately against the potential benefits that could be realized through basic infrastructural enhancements, such as dredging. These enhancements are poised to capture readily available economic opportunities and expand the port's capacity.

In this analysis, ASBB has methodically developed three distinct scenario cases. These scenarios are designed to assess the future economic impacts of the Port of Yarmouth, taking into account both the likelihood and the scale of the required repairs. Given the current state of the port's infrastructure, which necessitates various degrees of refurbishment, each scenario presents a different trajectory, detailing the potential economic outcomes that could ensue from respective courses of action. This structured approach allows for a comprehensive understanding of the economic ramifications tied to strategic decisions regarding the port's infrastructure and development.

Scenario 1: No action

The first scenario presents a case where none of the infrastructure upgrades are addressed and POY is unable to host any vessels. If no repairs are undertaken to fix the various problems the wharfs suffer from, two potential results could occur, they include, but are not limited to:

- **Scenario 1.1:** Insurance coverage is withdrawn, and the Port of Yarmouth is forced to stop all fishing activities and the port is closed down to the public. All that would remain are the economic impacts of the Tri-County School Board activities. This represents approximately 20% (\$6M of the nearly \$30M) of current GDP of the Port's total activities (Section 3 of Table 1). This scenario would lead to some 130 FTE jobs lost or displaced out of Yarmouth. Similarly, there would be tax revenues losses of approximately \$1.2M.
- **Scenario 1.2:** The wharf starts deteriorating and as time progresses, fewer boats are able to land their catch at the Port. The port can scale down the fishing and port economic impact to reflect this. For example, if 25% less boats land at the Port with their catch, we reduce the impacts of fishing activities by 25%. We expect that the Tri-County School Board activities would remain the same. This is represented in table 2, below. Output goes down by 22%, and GDP by 21% from the

current economic impacts (output decrease of over \$10M, and GDP of over \$6M per year). This scenario would lead to some 30 FTE jobs lost in the Yarmouth area. Tax revenue losses could attain approximately \$870K.

Table 5: Scenario 1.2 - Fishing vessel capacity at the wharf decreases 25%

	Output (Revenue)	GDP	Labour Income	Jobs (FTEs)	Taxes
Port of Yarmouth	\$682,597	\$336,564	\$200,992	4	\$16,974
Fishing	\$30,951,293	\$18,518,477	\$8,034,975	145	\$850,471
Tri-County School Board	\$7,960,603	\$6,007,616	\$4,741,506	88	\$231,216
Total	\$38,911,896	\$24,526,093	\$12,776,481	233	\$1,081,687

In light of the constrained commercial docking facilities at neighboring wharves and ports, this situation poses not only a risk of substantial economic detriment to the Port of Yarmouth but also forebodes potential financial repercussions for the wider region of South West Nova Scotia and the province at large. The inability of fishing vessels to secure alternate berthing locations and process their catch could precipitate a gross domestic product (GDP) decline ranging from \$6 million to \$25 million. Additionally, this scenario might result in a significant reduction in employment, estimated to be between 48 and 193 jobs, as indicated in scenarios 1.1 and 1.2 of our analysis.

ASBB Consulting recognizes the imperative need to evaluate and quantify the capacity of ports in Southwest Nova Scotia to accommodate both independent and commercial fishing fleets. This crucial aspect is thoroughly addressed in the recommendations section of our comprehensive report.

Scenario 2: Repairs are undertaken (including necessary dredging)

In Scenario 2, essential and minimal repairs are carried out to preserve the existing vessel capacity. Additionally, dredging is conducted to facilitate the accommodation of larger vessels, including scallop trawlers and Department of Fisheries and Oceans (DFO) vessels.

- Scenario 2.1:** In this sub scenario, the dredging allows for one large scallop trawler to return to the Port of Yarmouth. This additional vessel significantly increases the economic impact of the Fishing activities: Output increases by 55% and GDP by 53% from the current context (an increase of \$27M in output and \$16M in GDP per year). An increase in fishing FTE jobs of 85 and \$700K in taxes per year could result from this investment

Table 6: Scenario 2.1 Repairs to maintain vessel capacity and dredging to allow larger vessels into the Port of Yarmouth

	Output (Revenue)	GDP	Labour Income	Jobs (FTEs)	Taxes
Port of Yarmouth	\$682,597	\$336,564	\$200,992	4	\$16,974
Fishing	\$68,192,542	\$40,800,299	\$17,702,826	319	\$1,873,776
Tri-County School Board	\$7,960,603	\$6,007,616	\$4,741,506	88	\$231,216
Total	\$38,911,896	\$24,526,093	\$12,776,481	407	\$1,081,687

Note: The impacts from the activities are not additive as the economic impact from the Port of Yarmouth are already included in the indirect inputs of fishing and Tri-County School Board. Including the Port's economic impacts in the total would be double counting.

- Scenario 2.2:** Extensive repairs allow for additional vessels to use the wharf for fish landings and berthing, in addition to the dredging. The dredging will have allowed for more independent and large scale vessels to berth in Yarmouth. To ease the analysis in comparing between scenarios, an additional 25%, or 10 vessels is added to scenario 2.1. For this scenario, Output increases by 89%, and GDP by 86% from the current scenario from the current context (an increase in output of \$44M and GDP of \$26M per year). An additional 140 FTE fishing jobs as well as \$1.2M in tax revenue per year could result from such an investment.

Table 7: Scenario 2.2 Repairs and Construction (+25% vessel capacity)

	Output (Revenue)	GDP	Labour Income	Jobs (FTEs)	Taxes
Port of Yarmouth	\$742,197	\$365,951	\$218,541	4	\$17,914
Fishing	\$85,240,677	\$51,000,375	\$22,128,532	400	\$2,342,220
Tri-County School Board	\$7,960,603	\$6,007,616	\$4,741,506	88	\$231,216
Total	\$93,201,280	\$57,007,991	\$26,870,038	488	\$2,573,436

Note: The impacts from all activities are not additive as the economic impact from the Port of Yarmouth are already included in the indirect inputs of fishing and Tri-County School Board. Including the Port's economic impacts in the total would be double counting.

Important caveat:

It's crucial to acknowledge that the economic gains anticipated from the refurbishment and expansion of the Port of Yarmouth are not newly generated revenue streams but rather a reallocation of existing economic benefits within the province. Specifically, the increase in fishing vessels utilizing the port is likely to correspond to a redistribution of economic activity from other provincial regions.

However, there is potential for an increment in fishing activities beyond the initial projections used to estimate economic benefits. This uptick could be attributed to improved logistics in catch landing and an enhanced convenience for fishers, potentially leading to more frequent fishing expeditions. Accurately assessing the impact of such behavioral changes on fishing frequency and economic outcomes exceeds the scope of this report. A thorough analysis would necessitate further engagement with the local fishing community to gain deeper insights into these behavioral dynamics.

Scenario 3: Scenario 2 plus an additional focus on tourism and hospitality

Scenario 3 delineates a strategic pivot towards integrating a tourism and hospitality dimension into the Port of Yarmouth's operations. This approach encompasses augmenting the port's offerings with retail and food service establishments, along with introducing harbor tours, a feature commonly associated with tourist-centric port towns and cities. This strategy is predicated on the understanding that the introduction of these new tourism-focused activities will not interfere with the port's existing operations.

In terms of financial projections, this scenario is based on conservative revenue estimates, yet anticipates an uptick in tourist influx due to the enhanced range of services provided by the port. The projected revenue streams under this scenario are as follows:

- **Food Services:** The inclusion of additional dining options, such as a restaurant and a snack bar, is expected to generate revenues of approximately \$750,000.
- **Retail Operations:** Sales of tourist-oriented merchandise are forecasted to contribute around \$200,000 in revenue.
- **Eco-Tourism and Harbor Tours:** These activities are projected to bring in revenues of about \$250,000.

Table 8: Scenario 3, Tourism and hospitality focus

	Output (Revenue)	GDP	Labour Income	Jobs (FTEs)	Taxes
Tourism	\$337,000	\$216,000	\$154,200	6	\$8,656
Harbour Tours	\$393,250	\$203,250	\$146,750	5	\$13,925
Restaurant & Food Services	\$996,000	\$561,700	\$375,000	13.5	\$26,809
Total	\$1,389,250	\$764,950	\$521,750	19	\$49,390

The revenues generated by a hospitality business at the Port of Yarmouth, outlined by scenario 3, could generate additional revenues (here, nearly \$1.4M in total revenues, leading to almost \$800k in GDP and 19 additional FTE jobs), and while this scenario does not create the economic impact magnitude of the fishing industry at the Port, looking to expand tourism at the Port may be an additional mechanism to bring in more funds to revitalize the Port *for all* the activities taking place.

Summary of Scenarios and Analysis for POY

Chart 2 presents the economic impact of the proposed scenarios for the Port of Yarmouth. In the prevailing economic climate, refurbishing the wharf is projected to boost the Gross Domestic Product (GDP) by 66%, elevating it to \$41 million. Correspondingly, this refurbishment is expected to augment labor income and tax revenues by 64%, raising them to \$18 million and \$1.9 million, respectively.

Further, an investment aimed at increasing vessel capacity by 25% would potentially escalate the fishing-related GDP by 107%, reaching \$52 million, compared to the current economic

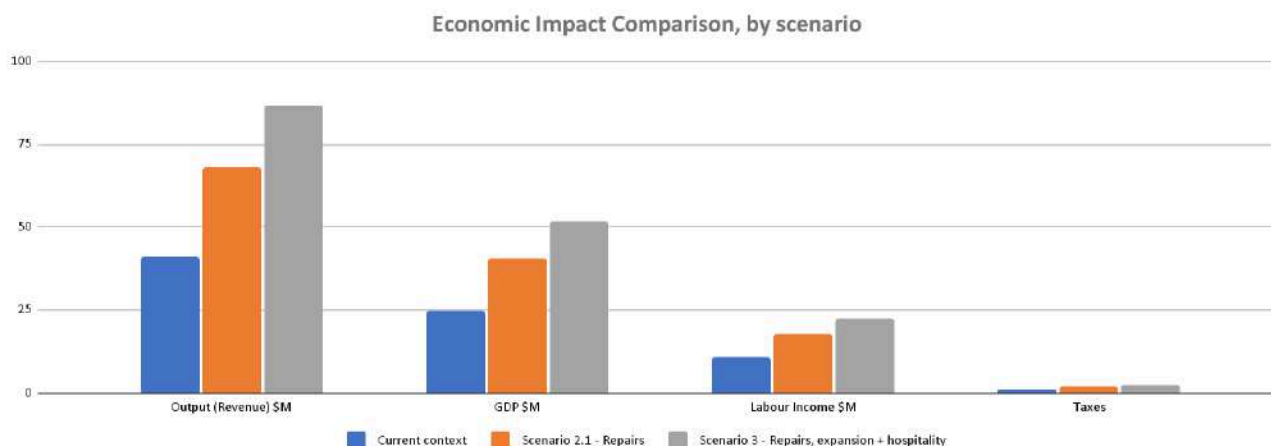
baseline. This investment is also likely to enhance labor income and tax revenues by 100% and 110%, respectively, totaling \$23 million and \$2.4 million (refer to Chart 2 for details).

The overall economic implications suggest that investment in both the repair and potential expansion of the Port of Yarmouth would yield substantial economic benefits for Yarmouth and its neighboring communities. Notably, the failure to undertake necessary repairs could lead to the deterioration and possible closure of the port, posing significant challenges for fishermen in finding alternative docking facilities.

In terms of economic returns, the annual GDP gains from completing the necessary repairs would more than compensate for the investment required for the wharf's refurbishment. This is particularly significant considering the potential loss of a home port for the fishing community if these repairs are not executed.

However, there are no detailed estimates available for the economic viability of expanding the port's capacity for fishing purposes. The intention of this analysis is to provide a perspective on the economic impact of scaling up from the current capacity, thereby illustrating the potential economic benefits of such an investment decision.

Chart 2: Investment scenario impacts on Fishing





3.0 Stakeholder Engagements

ASBB embarked on a thorough economic impact analysis for the Yarmouth port, necessitating engagement with diverse stakeholders invested in the port's operations and prospective growth. Objectives of Engaging Stakeholders were:

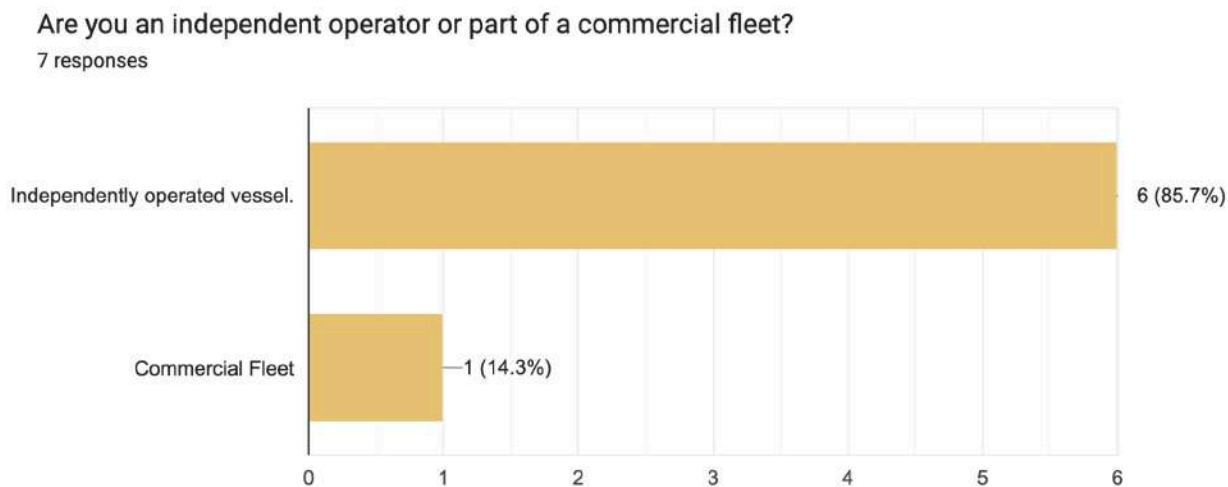
1. Formulate two hypothetical plans for the port's economic impact, encompassing case study development and stakeholder interaction.
2. Initiate transparent communication with entities such as tourism authorities, the town of Yarmouth, and other potential collaborators to highlight the port's significance.
3. Learn about best practices and market opportunities as they relate to the Port of Yarmouth, including financial, social, and economic aspects.

There were two components of the stakeholder engagements. The first was a survey sent out to the fishing fleets in Port of Yarmouth to understand aspects of economic impacts such as job creation, and the others were to understand the primary concerns from the viewpoint of fishing vessels landing in POY to be better able to draft recommendations outlined in Section 7.

3.1 Survey of Independent Fishing Vessels

ASBB undertook a fishing vessel survey the results of which are reported in Appendix A. We present the summary here.

Figure 4 : Type of Fishing Fleet

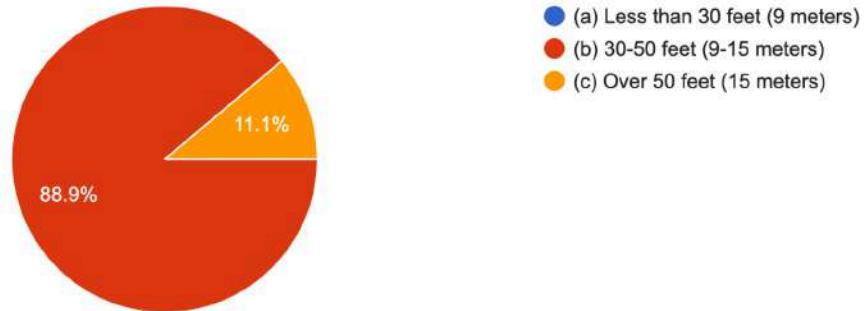


The majority of respondents from fishing fleets indicated that they are independently operated indicating that POY is a large host of independent fishing vessels in the region.

Figure 5: Length of Fishing Fleet

(ii) Approximate size or length of your vessel:

9 responses

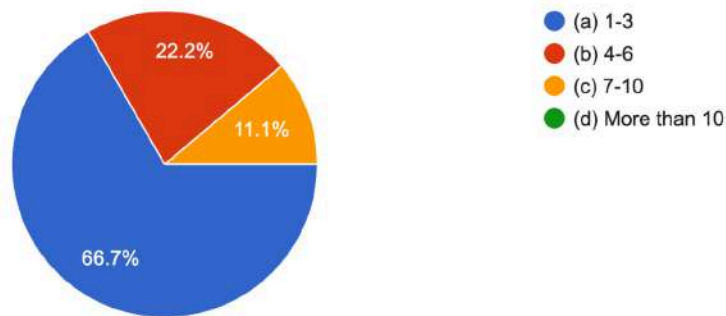


88% of the respondents reported that their fishing fleets were between 30-50 feet long. The vessel size has been an increasingly prominent issue at POY as the infrastructure is not strong enough to host large fleets, as a result the full capacity of the wharf cannot be utilized to collect berthage fees. The increasing size of fishing vessels adds significantly to that constraint.

Figure 6: Number of Crew Members

2. Crew and Employment: Number of crew members typically on board:

9 responses

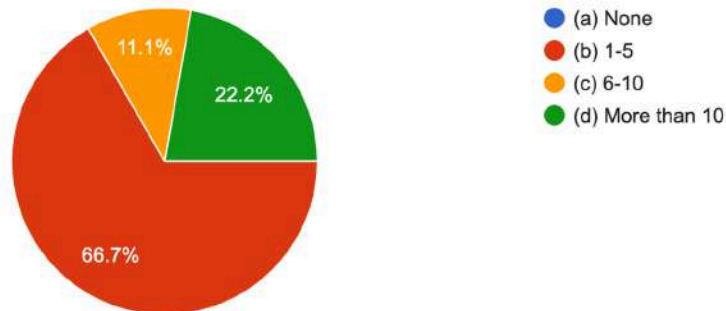


67% of respondents indicated that they had between 1-3 crew on board their vessels.

Figure 7: Locally Employed Individuals

How many local individuals does your vessel employ, directly or indirectly?

9 responses

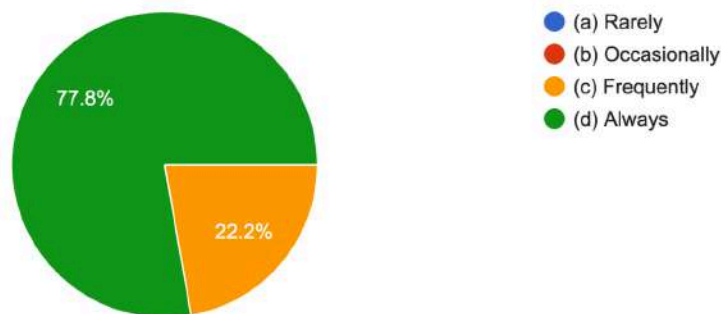


Nearly 67% of the respondents indicated that the majority of their crew came locally, indicating that the fleeting vessels create a large portion of the area's employment.

Figure 8: Can Fishing Vessels Land Elsewhere

3. Port of Yarmouth Experience: How frequently do you berth or land at the Port of Yarmouth each year?

9 responses

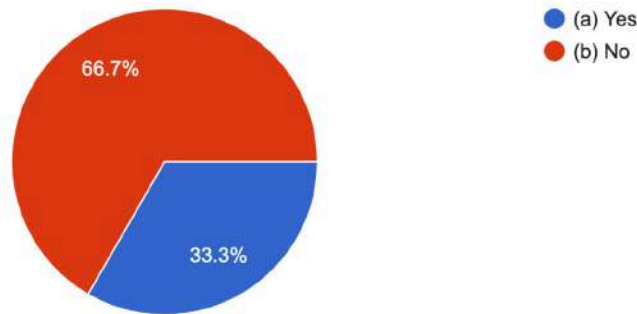


Majority of the respondents indicated that the POY was the most frequent place which the vessels landed. This is an important question in terms of capacity, as the next question in Table 6 indicates that the majority of fishing vessels landing in POY do not have an alternative landing site.

Figure 9: Can Fishing Vessels Land Elsewhere

4. Considering Nearby Ports: Have you ever considered using nearby ports or landing points as alternatives to the Port of Yarmouth?

9 responses

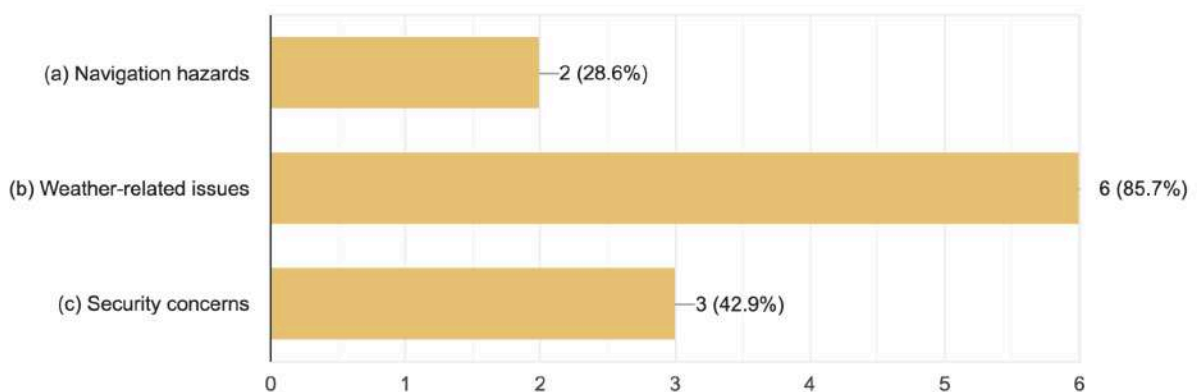


Approximately 67% of survey participants revealed that they had not contemplated utilizing an alternative neighboring port for docking. The findings from our stakeholder interviews suggest that a majority of fishing vessels are constrained from switching ports, despite their preferences, due to the limited capacity of nearby ports to accommodate additional vessels.

Figure 10: Can Fishing Vessels Land Elsewhere

6. Navigation and Safety: Are there any specific navigation or safety concerns you have when operating in the Port of Yarmouth? (Select all that apply)

7 responses



The majority of fishing vessels expressed their concern for the POY not being equipped or strong enough to weather strong storms and weather related incidents in recent years, especially due to climate change (strong storms, and frequent hurricanes).

3.2 Stakeholder Engagements

ASBB undertook a comprehensive stakeholder engagement to understand both the local views for the future market opportunities for POY but also understand the political landscape that the board would face in terms of attaining the necessary funding required for the upgrades. The summary of the engagements are listed below.

- Town of Yarmouth
- Municipality of Yarmouth
- Municipality of Argyle
- DFO
- YASTA
- Yarmouth Chamber of Commerce
- WREN
- Acadia First Nation
- John's Cove Wharf Group
- Comeau Sea Foods
- IMO Foods
- Yarmouth Seafood Products
- Port of Digby
- Rockville Carriers
- Bayview Marine Ltd & Morco Metal Works Ltd
- Cold Water Lobster Association
- Nova Scotia Seafood Alliance, Executive Director
- Atlantic Cruise Association, Executive Director
- Logitec Group
- Independent Fishing Boat 1
- Independent Fishing Boat 2

Summary of Stakeholders:

The themes emerging from stakeholder interviews about the Port of Yarmouth and surrounding areas focus on critical aspects such as expanding and diversifying the seafood industry, enhancing port infrastructure, developing tourism, and tackling environmental and regulatory challenges. Stakeholders also highlighted the importance of financial strategies, collaborative efforts, addressing fishermen's concerns, ensuring long-term sustainability, assessing economic impacts, and considering strategic asset management.

1. **Seafood Industry Expansion and Diversification:** There is a significant focus on exploring new seafood options, such as sea cucumbers, and the expansion of seafood processing capabilities. Stakeholders like IMO Foods and Rockville Carriers are interested in more efficient operations and exploring new seafood markets.
2. **Port Infrastructure and Capacity:** Many stakeholders, including Yarmouth Port and John's Cove Wharf Group, discuss the need for infrastructure improvements, such as wharf repairs, enhanced docking facilities, and accommodating larger vessels. These improvements are crucial for supporting the expansion of commercial activities, including fishing and transportation.
3. **Tourism Development:** Entities like DFO and Destination Marketing emphasize the potential of tourism at the Port of Yarmouth. Suggestions include improving accessibility, creating spaces for seafood consumption, and exploring cruise operations.
4. **Regulatory and Environmental Challenges:** There are concerns about navigating regulatory challenges, addressing climate change impacts, and ensuring environmental sustainability. These are key to maintaining and enhancing port operations.
5. **Financial and Operational Constraints:** Many stakeholders, including municipalities and various seafood businesses, note financial constraints and the need for strategic investments. The focus is on securing funding for infrastructure improvements and exploring new revenue streams.
6. **Collaboration and Strategic Planning:** There is a recurring theme of the need for collaboration among various stakeholders, including government entities, local businesses, and industry associations, to address the port's challenges and opportunities.
7. **Fishermen's Concerns and Needs:** Fishermen express frustration over unaddressed concerns and the need for better port facilities. Issues like limited funding, marine transport challenges, and lengthy permit processes are highlighted.
8. **Sustainability and Long-term Viability:** The emphasis is on creating a sustainable and efficient port that supports diverse needs, including fishing, cargo shipping, and tourism. There's a call for a forward-thinking approach to adapt to challenges like climate change.

9. **Local Economic Impacts:** The economic significance of the port and the fishing industry to the local community is a key concern. The loss of port facilities would have substantial economic repercussions.
10. **Transportation Opportunities:** Industry stakeholders including private businesses in the transportation and logistics sectors expressed their interests in being potentially able to expand their operations at the POY, although it's heavily dependent on the state of repairs.
11. **Strategic Consolidation and Asset Management:** Discussions on merging assets like the ferry terminal and port facilities are mentioned, with varying opinions on the feasibility and potential benefits.

In summary, the focus is on expanding and diversifying the seafood industry, improving port infrastructure, developing tourism, addressing environmental and regulatory challenges, securing financial support, fostering collaboration, addressing fishermen's concerns, ensuring sustainability, understanding local economic impacts, and exploring strategic asset management.



4.0 Market Opportunities

in that position, and advantageously for
of the key factors, its role as a point of

customs clearance and its linkage to an airport. This combination offers a unique blend of logistical capabilities that can be leveraged to significantly enhance its commercial value, drawing parallels from other successful ports like the Port of Sydney.

1. **Customs Clearing Point:** Being a point of customs clearance, similar to the Port of Sydney, the Port of Yarmouth can capitalize on this by offering streamlined and efficient customs services. This makes it an attractive entry point for international trade, reducing the time and complexity involved in importing goods. By ensuring quick and hassle-free customs processing, the port can attract more cargo ships and increase its throughput, thereby boosting its commercial value.
2. **Linkage to an Airport:** The proximity or direct linkage to an airport adds a multimodal transport advantage. This connection allows for the easy transfer of goods between sea and air transport, expanding the range of logistics solutions the port can offer. This multimodal connectivity is particularly valuable for time-sensitive or high-value cargo, enhancing the port's appeal to a wider range of clients, including those requiring rapid shipping options.

4.1 Potential Market Opportunities for POY

The engagements and case studies conducted for this study, outlined a series of economic opportunities for POY to consider. The Port of Yarmouth, positioned strategically in Nova Scotia, Canada, offers a wealth of market opportunities, primarily due to its advantageous geographical location and the potential to diversify its services across various maritime sectors. Here are some key areas of opportunity:

1. Cargo and Transportation: Yarmouth's location is ideal for serving as a cargo and transportation hub. Situated close to major shipping routes and with easy access to both domestic and international markets, the port can significantly expand its role in global supply chains. By enhancing its cargo handling capabilities and establishing efficient transportation links, Yarmouth can attract a larger share of maritime cargo traffic.

2. Tourism and Cruise Ship Berthing: The natural beauty of Nova Scotia, combined with the cultural and historical richness of Yarmouth, makes it an attractive destination for cruise ships. Developing dedicated berthing facilities and tourism infrastructure can transform the port into a popular stop for cruise liners, thereby bolstering the local tourism industry. This expansion can lead to increased spending in local businesses, hospitality, and cultural experiences, benefiting the broader economy.

3. Fishing Industry Expansion: Given its maritime heritage and proximity to rich fishing grounds, Yarmouth has the potential to grow its fishing industry. Investing in facilities that cater to larger fishing vessels and providing enhanced services such as modernized processing and storage facilities can attract more fishing activities. This growth can lead to increased employment opportunities and economic benefits for the local community.

4. Diversification into Marine Tourism Capitalizing on the growing interest in recreational boating, Yarmouth can develop facilities for pleasure crafts, including marinas, repair services, and storage. This diversification would not only provide new revenue streams but also enhance the port's appeal to a broader range of maritime enthusiasts.

5. Strategic Partnerships and Collaborations: Forming strategic partnerships with shipping companies, tourism operators, and the local fishing community can open up new opportunities. Collaborations can lead to joint ventures, shared marketing efforts, and coordinated development projects, maximizing the port's potential.

6. Environmental and Sustainable Practices: Incorporating environmental sustainability into its operations can position Yarmouth as a leader in green port operations. This approach can attract businesses and consumers increasingly looking for environmentally responsible partners, providing a competitive edge in the market.

In summary, the Port of Yarmouth has numerous opportunities for growth and development, driven by its geographical advantages, the potential for diversification, and the ability to capitalize on emerging market trends. With targeted investments and strategic planning, the port can significantly enhance its economic footprint and become a pivotal maritime hub in the region.

4.2 Economic Multipliers of Potential Market Opportunities

In Table 9 below, ASBB has outlined a set of economic multipliers related to the market opportunities outlined below. The multipliers allow the board to understand the economic impacts of each market activity and thus will guide the board on prioritizing the opportunities based on the impacts.

Table 9: Economic Multipliers for Transportation Industry

Industry Type ¹²	Output (Per Dollar)	GDP (Per Dollar)	Jobs (per million dollars output)
Air Transport	\$2.010	\$0.932	8.182 Jobs
Rail Transport	\$1.712	\$1.06	5.417 Jobs
Water Transport	\$2.484	\$1.082	10.39 Jobs
Truck Transport	\$2.203	\$1.04	11.1 Jobs

Both the engagements and the secondary research indicated that transportation (especially that of water transport and cargo) had a large potential at the Port of Yarmouth, especially if it showed how the assets for the Port of Yarmouth and the Ferry Terminal which is under the control of Town of Yarmouth could be merged. Water transport produces the highest output

¹² Statistics Canada, Industry Multipliers, 2023

per dollar along with GDP compared to other modes of transport, however truck transport is a close substitute.

Table 10: Tourism Multipliers

Industry Type ¹³	Output (Per Dollar)	GDP (Per Dollar)	Jobs (per million dollars output)
Traveler Accom	\$2.068	\$1.114	19.63 Jobs
Food Services	\$1.977	\$1.141	14.56 Jobs
Ground Transport	\$2.068	\$1.114	19.63 Jobs

The consultations with the Town of Yarmouth, Department of Fisheries and Oceans (DFO), and additional municipal stakeholders unanimously emphasized the need to enhance the aesthetic appeal of the town's waterfront. Furthermore, discussions with key players in the tourism sector, including Yarmouth Area Shore Tourism Association (YASTA) and the Atlantic Cruise Association, underscored the robust capabilities of the Port of Yarmouth's customs facilities, which serve as a primary entry point into Canada. These interactions have identified significant opportunities for the docking of cruise ships and the development of tours originating from these vessels. Table 10 showcases the economic multipliers of the ground transportation and the traveler accommodations industry, encompassing hotels and alternative accommodations.

Table 11: Fishing Sector Economic Impact Multipliers

Industry Type ¹⁴	Output (Per Dollar)	GDP (Per Dollar)	Jobs (per million dollars output)
Fishing, Trapping, and Hunting	\$1.678	\$0.976	7.55 Jobs
Seafood Product Preparation	\$2.41	\$0.992	10.01 Jobs
Repair Construction	\$2.161	\$1.062	12.03 Jobs
Ship & Boat Building	\$2.097	\$1.02	8.889 Jobs

¹³ Statistics Canada, Industry Multipliers, 2023

¹⁴ Statistics Canada, Industry Multipliers, 2023

The fishing sector represents a key area of focus for the Port of Yarmouth (POY). Recent shifts in species landings pose certain challenges while simultaneously offering new opportunities within the fishing landscape. The most significant value addition in this sector is derived from the manufacturing process, particularly in fish processing. These processing facilities are a major source of employment in Southwest Nova Scotia, playing a critical role in the regional economy. As indicated in Table 11, seafood processing constitutes the most substantial indirect effect of fishing activities associated with POY. Furthermore, there are emerging opportunities in ancillary industries, such as ship and boat building, as well as construction and repair services, which could serve as complementary sectors alongside the core activities of POY. The next section presents a set of case studies on similar ports.



5.0 Case Studies

5.1 Similar Case Studies

In this section, we delve into a selection of case studies that offer valuable insights and lessons for the Port of Yarmouth. By examining the strategies, challenges, and successes of similar ports, we aim to draw out practical and applicable lessons that can be used to enhance the Port of Yarmouth's operations and strategic positioning. These case studies encompass a range of scenarios, from ports excelling in logistics and customer service to those that have innovatively tackled environmental and operational challenges. The learnings from these cases will provide a comprehensive understanding of best practices in the industry and help identify opportunities for growth and development at the Port of Yarmouth.

We have included case studies from Port of Digby, Port of Sydney, Port of Corner Brook in NFL and Port of Portland, Maine all of which are independently owned ports. The cases were selected based on the similarities to the Port of Yarmouth, in geography, market potential, and infrastructure needs.

1. Case Study: Port of Digby, Nova Scotia, Canada



Port Type: Independently Owned Port

Overview

The Port of Digby, located in Nova Scotia, Canada, is a quintessential example of a small, regional port with a focus on local industries and community needs. It is particularly known for its seafood industry, notably the famous Digby scallops.

Key Features and Operations

- **Primary Focus:** The port is heavily oriented towards the fishing industry, with a significant portion of its activities centered around the seafood catch, particularly scallops.
- **Facilities:** It includes facilities for docking, offloading, and processing seafood, along with support services for the local fishing fleet.

- **Tourism:** The Port of Digby also supports local tourism, being a popular destination for its scenic beauty and seafood cuisine. It occasionally accommodates cruise ships, adding to its tourism appeal.

Economic Impact

- **Local Economy:** The port is a vital contributor to the local economy, particularly through the seafood industry. It supports numerous local jobs, both directly in fishing and indirectly in processing, hospitality, and tourism.
- **Exports:** While primarily serving local and regional markets, the port also plays a role in exporting seafood, especially scallops, to other parts of Canada and internationally.

Challenges

- **Sustainability:** One of the main challenges is ensuring sustainable fishing practices to protect the scallop population and other marine life.
- **Market Fluctuations:** The port's economic health is closely tied to the seafood market, which can be volatile.
- **Infrastructure Needs:** Like many smaller ports, maintaining and upgrading infrastructure to meet current and future needs is an ongoing challenge.

Recent Developments

- **Infrastructure Investments:** The port has seen investments in upgrading its facilities to better support the fishing industry and to accommodate larger vessels.
- **Sustainable Practices:** There has been an increased focus on sustainable fishing practices to ensure the long-term viability of the seafood industry.

The Port of Digby is a prime example of a small, specialized port that plays a significant role in its local community. Its success hinges on balancing the needs of the fishing industry with sustainability concerns and adapting to changing market dynamics. As such, it's an integral part of Digby's cultural and economic fabric, underlining the importance of small ports in regional economies.

2. Case Study: Port of Corner Brook, Newfoundland, Canada



Port Type: Independently Owned Port

Overview: The Port of Corner Brook, situated in Newfoundland, Canada, is a vital hub that reflects the unique characteristics of a small, regional port, emphasizing local industries and community integration. Notable for its proximity to vast forest areas, the port is a crucial point for the paper and forestry industries.

Key Features and Operations:

- **Primary Focus:** The port is heavily involved in the paper and forestry industries, handling a significant amount of raw materials and finished products in these sectors.

- **Facilities:** It includes facilities for loading and unloading forestry products, and also provides services to support local businesses in these industries.
- **Tourism:** Corner Brook's port also aids the local tourism sector, boasting picturesque landscapes and outdoor activities, attracting visitors and occasional cruise ships.

Economic Impact:

- **Local Economy:** The port significantly contributes to the local economy, especially through the forestry and paper industries. It supports various jobs, both directly in these sectors and indirectly in related fields like transportation and tourism.
- **Exports:** The port is pivotal in exporting forestry products, impacting both national and international markets.
- **Diversification:** Efforts to diversify the port's activities are ongoing to reduce dependence on single industries.

Challenges:

- **Industry Sustainability:** A key challenge is ensuring sustainable forestry practices to protect natural resources.
- **Market Sensitivity:** The port's economic stability is closely linked to the health of the forestry and paper markets, which can be unpredictable.
- **Infrastructure and Adaptation:** Modernizing infrastructure to keep pace with industry demands and environmental standards remains a crucial ongoing task.

Recent Developments:

- **Infrastructure Upgrades:** The port has been focusing on upgrading its facilities to enhance efficiency and environmental sustainability in its operations.
- **Sustainability Initiatives:** There's an increasing emphasis on sustainable practices in the forestry industry to ensure long-term ecological and economic health.

The Port of Corner Brook exemplifies the role of a small, specialized port in supporting and shaping the local community and economy. Its success is anchored in balancing industry needs with environmental sustainability and adapting to evolving market and industry landscapes, making it a cornerstone in Newfoundland's regional economic structure.

3. Case Study: Port of Sydney, Nova Scotia, Canada



Port Type: Privately Owned Port

Overview: The Port of Sydney, located in Nova Scotia, Canada, serves as a strategic maritime hub, showcasing the dynamics of a versatile, publicly owned port. It is renowned for its broad service range, including industrial shipping, cruise line operations, and being a key player in the regional economy.

Key Features and Operations:

- **Diverse Functionality:** The Port of Sydney is multifaceted, accommodating industrial shipping, cruise lines, and local fishing activities.
- **Facilities:** It features extensive facilities, including cargo handling areas, passenger terminals for cruise ships, and support infrastructure for fishing vessels.

- **Tourism:** As a cruise ship destination, the Port of Sydney significantly contributes to the local tourism industry, attracting numerous visitors to the region's cultural and natural attractions.

Economic Impact:

- **Local and Regional Economy:** The port is a substantial economic driver, supporting a range of jobs in shipping, tourism, and the fishing industry.
- **Exports and Imports:** It plays a pivotal role in international trade, facilitating imports and exports, which include a variety of goods that bolster the local and national economy.
- **Tourism Boost:** The cruise industry's presence at the port boosts local businesses, including hospitality, retail, and cultural sectors.

Challenges:

- **Market Variability:** The port's diverse operations make it susceptible to global market fluctuations, particularly in tourism and international trade.
- **Environmental Concerns:** Balancing industrial activities with environmental stewardship is a constant challenge, especially in managing cruise ship impacts and industrial pollution.
- **Infrastructure Development:** Continual investment in modernizing and expanding port facilities is necessary to accommodate larger vessels and changing industry needs.

Recent Developments:

- **Infrastructure Expansion:** Recent efforts focus on expanding and upgrading the port's infrastructure to accommodate larger vessels, particularly in the cruise sector.
- **Sustainable Practices:** Initiatives to enhance environmental sustainability in operations have been prioritized, aiming to minimize the port's ecological footprint.

The Port of Sydney is a prime example of a multifunctional port that significantly influences its local and regional economies. Its success hinges on effectively managing diverse operations, from industrial shipping to tourism, while navigating environmental challenges and evolving market conditions. As such, it stands as a vital component in Nova Scotia's economic landscape.

4. Case Study: Port of Portland, Maine, USA



Port Type: Privately Owned Mixed-Use Port (Commercial, Industrial, and Tourism)

Overview: The Port of Portland in Maine, USA, stands as a vibrant example of a mixed-use port, effectively blending commercial, industrial, and tourism aspects. Its strategic location along the Northeastern seaboard makes it a crucial maritime hub in the region.

Key Features and Operations:

- **Diverse Operations:** The port supports a wide range of activities, including commercial shipping, industrial operations, and a burgeoning tourism sector.

- **Facilities:** The port boasts comprehensive facilities, including container and bulk cargo terminals, cruise ship berths, and specialized areas for industrial activities.
- **Tourism:** Portland's port has become increasingly popular with cruise ships, which has bolstered the local tourism industry, showcasing the city's rich cultural heritage and natural beauty.

Economic Impact:

- **Economic Driver:** The port is a significant contributor to both the local and regional economies, supporting a variety of industries.
- **Trade Gateway:** As a trade gateway, it facilitates a substantial amount of cargo, including imports and exports that are crucial to the economy of Maine and the broader Northeastern United States.
- **Tourism Boost:** The cruise ship industry brings a significant number of tourists to Portland, positively impacting local businesses, such as hospitality, retail, and entertainment.

Challenges:

- **Balancing Diverse Needs:** Managing the diverse requirements of commercial, industrial, and tourist operations is a complex task that requires constant attention and adaptation.
- **Environmental Considerations:** The port must continuously address environmental concerns related to maritime and industrial activities, particularly in terms of pollution control and ecosystem preservation.
- **Infrastructure Modernization:** Keeping up with the infrastructure needs of a growing and diversifying port is a constant challenge, necessitating regular updates and expansions.

Recent Developments:

- **Infrastructure Expansion:** Recent efforts at the port have focused on expanding and modernizing facilities to handle increased cargo volumes and larger vessels, including cruise ships.
- **Sustainability Initiatives:** The port has been implementing environmentally sustainable practices to minimize its ecological impact and promote green operations.

The Port of Portland represents a dynamic and multifaceted maritime hub, integral to Maine's economic vitality. Its success lies in its ability to handle a mix of commercial, industrial, and tourism-related activities, all while navigating the challenges of modern port operations, including environmental stewardship and infrastructure development. This makes it a key player not only in Maine's economy but also in the broader maritime landscape of the Northeastern United States.

Case Study Summary:

The case studies of the Ports of Digby, Corner Brook, Sydney, and Portland reveal several overarching themes:

- **Specialization and Community Focus:** Each port has a distinct focus reflecting local industry needs. Digby is renowned for its seafood, particularly scallops, while Corner Brook is pivotal in the paper and forestry industries. This specialization shapes their operations and community roles.
- **Economic Contribution:** All ports are key economic drivers in their regions. The Port of Digby supports the seafood industry, Corner Brook is integral to forestry and paper, Sydney facilitates a range of activities including industrial shipping and tourism, and Portland blends commercial, industrial, and tourism sectors. They all support local jobs and contribute to regional economies.
- **Tourism as a Vital Component:** Tourism plays a significant role in these ports. Digby and Sydney, for instance, attract tourists through their scenic beauty and as cruise destinations, adding to their economic diversity.
- **Challenges in Sustainability and Infrastructure:** Sustainability is a common challenge, with each port focusing on practices that protect their respective ecosystems. Additionally, maintaining and upgrading infrastructure to meet current and future demands is a recurrent theme.
- **Adaptability and Diversification:** The ports show efforts to diversify their activities to stabilize their economic impact. For instance, Corner Brook focuses on reducing dependence on single industries, and Sydney and Portland adapt to changing market conditions by accommodating various operations.
- **Recent Developments and Future Focus:** Investments in infrastructure and sustainable practices are notable recent developments. Upgrading facilities, accommodating larger vessels, and implementing environmentally sustainable practices are key focus areas for future growth and viability.



6.0 Recommendations

ASBB has formulated a strategic set of seven recommendations for the Port of Yarmouth (POY) Board. These recommendations are systematically outlined in Section 7, titled 'Next Steps'.

The basis of these recommendations lies in the comprehensive economic impact analysis detailed in Section 2, the insights garnered from stakeholder engagements presented in Section 3, and an evaluation of market opportunities, including analogous case studies, featured in Section 4. The primary objective of these recommendations is to guide POY in implementing a series of measures focused on upgrading its assets to contemporary standards. Moreover, these recommendations aim to assist POY in identifying and adopting strategic business opportunities.

Recommendation 1: Upgrade and Enhance Port Assets

In light of the findings from the economic impact assessment, particularly under scenario 1, it is evident that failing to upgrade the port assets of the Port of Yarmouth (POY) could lead to significant economic repercussions. If POY opts against modernizing its assets, the resultant scenario, as detailed in Section 3 of Table 1, indicates a potential loss of approximately 80% of the Port's current Gross Domestic Product (GDP) contribution. This would leave only the economic impacts generated by the TCRCE activities, which account for a mere 20% (equating to \$6 million of the nearly \$30 million) of the Port's total GDP activities.

Such a scenario would precipitate the loss or displacement of approximately 130 Full-Time Equivalent (FTE) jobs from Yarmouth, alongside a notable decrease in tax revenues, estimated at around \$1.2 million. This would represent a substantial loss for POY, both in economic and operational terms.

In response to this critical situation, ASBB strongly recommends that POY prioritize a series of immediate and effective measures to bring the wharf and associated assets up to contemporary standards. These 'quick fixes' are essential not only for maintaining the current level of economic contribution but also for ensuring the long-term viability and growth of the Port. Implementing these upgrades will safeguard against potential economic losses and position POY for future success.

Recommendation 2: Optimize Berthage Fee Structure

After a thorough analysis of the berthage fee structure at the Port of Yarmouth (POY) in relation to its industry counterparts, it has become evident that there is potential for POY to reassess and potentially increase its fee structure. This adjustment could more effectively address the port's ongoing maintenance and future repair requirements. Detailed comparisons of these fee structures are presented in Table 2. ASBB suggests that while an immediate increase in berthage fees is not advisable prior to substantial upgrades in port infrastructure, it is prudent for POY to undertake a comprehensive review of its fee structure.

In our case studies, ASBB identified the ports of John's Cove and Port of Digby as relevant benchmarks for POY. These ports have successfully aligned their fee structures and the application of berthage fees towards the maintenance and infrastructure enhancements, rather than allocating these funds for broader regional or municipal initiatives. Given the significant costs associated with the necessary infrastructure improvements at strategic ports like POY, ASBB recommends a review and possible revision of bylaws or internal protocols regarding the allocation and utilization of fees. This approach should be more closely aligned with the practices observed at Port of Digby and John's Cove.

Recommendation 3: Build Strategic Alliances and Collaboration

Located in a geographically advantageous and strategically significant area, the Port of Yarmouth (POY) is uniquely positioned to establish the strategic partnerships necessary for building the necessary relationships and participating in shared regional initiatives. These initiatives could include preparing ports for climate change, fostering growth in the startup sector, partnering on transportation initiatives with nearby larger ports such as Port of Halifax, and expanding cargo and ground transport capabilities.

Some key elements that could be implemented include:

1. **Developing a Comprehensive Strategic Plan:** Developing a long-term strategic plan that is in alignment with both provincial and federal objectives is essential. This plan will require ongoing evaluation and monitoring to ensure it remains responsive to the evolving demands of the industry. It is imperative that this strategy encompasses the advancement of infrastructure, technology, and services, with a forward-looking approach that anticipates and effectively addresses future trends and challenges in the maritime sector.
2. **Strengthening Strategic Partnerships:** Strengthening already important relations with organizations such as Independent Marine Ports of Atlantic Canada (IMPAC), to ensure POY is able to form the strategic alliances for the upkeep of future infrastructure needs collectively.
 1. **Participating in a Maritime Coalition:** Engaging in a coalition of ports to enhance collective advocacy, share best practices, and improve operational efficiency. This coalition would serve as a platform for addressing common challenges, and regional lobbying efforts.
 2. **Strengthen Partnership with Acadia First Nation:** Strengthen Initiate relationships with the Acadia First Nation to leverage Acadia First Nations substantial maritime sector presence, assimilating their insights and priorities into the port's operational and strategic decision-making.

Recommendation 4: Conduct a Comprehensive Regional Port Capacity Assessment

ASBB's analysis indicates that the Port of Yarmouth (POY) contributed approximately 2.1% to the overall Gross Domestic Product (GDP) of Nova Scotia over the last five years. In fact in 2023 alone, POY contributed to 6% of NS's total fishing GDP. Stakeholder engagements have highlighted a critical situation where nearby ports are operating at full capacity and are unable to accommodate additional fishing vessels. Moreover, with the potential closure of more wharves by the Department of Fisheries and Oceans (DFO) in the surrounding areas, there is a likelihood of an increased number of fishing vessels seeking landing spots. Additionally, POY has received numerous inquiries about landing additional vessels but has been constrained by limitations such as insufficient dredging and lack of other infrastructural upgrades.

To address these challenges and opportunities, it is recommended that POY initiates a detailed survey of regional port capacities. This survey should aim to:

1. **Accurately Assess Current Capacities and Expansion Potential:** It is advised that a comprehensive survey be conducted in the Southwest Nova Scotia region. The primary objective of this survey is to thoroughly assess the existing capacity of the region's wharves and their potential for expansion. This evaluation is crucial to ascertain whether the region possesses both the current and future capability to adequately support the vital commercial fishing industry. The survey is also recommended to focus on the capacity to accommodate various types of vessels, taking into account key factors such as size, weight, and operational necessities. The insights gained from this survey will be pivotal in guiding strategic decisions and development plans for POY. Understanding the regional capacity constraints and opportunities will enable POY to strategically position itself in the maritime sector.
2. **Facilitate Regional Collaboration and Optimize Resources:** By aligning the capacities and needs of different ports in the region, the survey will promote regional collaboration. This collaboration is essential for optimizing resource allocation, enhancing maritime operations, and addressing common challenges faced by ports in the region.
3. **Support Funding and Repair Cases:** The survey findings will provide empirical data that can be leveraged by POY to substantiate requests for funding and justify the need for repairs and upgrades. This data-driven approach will strengthen POY's case for investments and improvements.

Ultimately, a comprehensive understanding of regional port capacities will empower POY to make informed decisions, advocate for necessary resources, and enhance its role in the regional maritime economy.

Recommendation 5: Consolidating POY Assets with Strategic Local Assets

Stakeholder engagements have highlighted significant community interest in the aesthetic improvement of the waterfront. Further, discussions with tourism organizations have emphasized the Port of Yarmouth's critical economic role as a primary entry point through customs. It is therefore essential to capitalize on the port's strategic assets to promote sustainable commercial growth. This requires a focus on the strategic consolidation of port assets, balancing the operational needs of working harbors with tourism and other vital activities. The strategy will encompass active pursuit of funding and integration of best practices from benchmark ports to optimize the Port of Yarmouth's commercial potential in a complex maritime environment.

1. **Merging POY and TOY Assets:** During our stakeholder engagement sessions, a significant theme that surfaced was the potential consolidation of the Port of Yarmouth's (POY) assets with those of the Town of Yarmouth's (TOY) ferry terminal. Stakeholders, particularly from the tourism sector, highlighted that Yarmouth is close to being able to accommodate luxury cruise vessels similar to those hosted by Sydney, NS. This opportunity is currently hindered by POY's limitations in dredging capacity and hosting capabilities. Additionally, the underutilization of TOY's ferry terminal, which operates only seasonally, was identified as a missed opportunity during off-peak seasons. Given that the ferry terminal is also approaching a period for significant infrastructure upgrades, there exists a strategic opportunity for POY to integrate its assets with the ferry terminal. This merger could facilitate a more synchronized approach to infrastructure development, aligning commercial activities of both entities with the broader economic development goals of the community.
2. **Develop an All-Inclusive Risk Management Strategy:** ASBB acknowledges that the proposed merger of infrastructural assets presents both potential opportunities and risks. Therefore, we advise the implementation of a robust risk mitigation strategy for POY. This strategy should encompass an effective risk management framework, tailored to address future risks and community needs while safeguarding POY against potential regional disputes and governance challenges. The framework will include comprehensive measures designed to navigate the complexities arising from the port's multifaceted roles and the diverse interests of its stakeholders. This proactive approach will be crucial in ensuring seamless operations and effective resolution of conflicts, thereby maintaining the port's operational integrity and community relations.

Recommendation 6: Address Future Environmental Needs

Over the past years, environmental considerations have become a paramount concern for ports throughout the region, including the Port of Yarmouth. The escalating challenge of rising sea levels necessitates the elevation and reinforcement of port structures to withstand

storms and other climate-related events. Feedback from fishing vessel operators also highlights the need for robust infrastructure capable of securing boats during severe weather conditions, including provisions for double-tying during storms.

Additionally, insights gathered from shipyards and the Atlantic Cruise Association indicate a shift towards the construction of hybrid and electric boats and ships. This evolving trend underscores the imperative for the Port of Yarmouth to proactively adapt its infrastructure to accommodate these future developments, thereby ensuring its long-term operational viability and alignment with environmental sustainability objectives.

1. **Comprehensive Infrastructure Assessment:** Conduct an in-depth analysis of the Port of Yarmouth's existing infrastructure, assessing present capabilities while forecasting future requirements especially those related to climate change. This evaluation should consider trends in vessel sizes, advancements in technology, and the combining of tourism and industrial activities.
2. **Gradual Infrastructure Enhancement Strategy:** Formulate a step-by-step plan for infrastructure improvements, prioritizing elements based on immediate necessities, potential economic benefits, environmental sustainability, and community influence. This strategy will segment the infrastructure requirements into manageable projects. Each segment will be structured to be independently fundable, allowing for flexibility in pursuing funding opportunities, while also being 'shovel-ready' for opportunistic financial injections or announcements. This is a recommendation born from the case study for Port of Digby.
3. **Climate Change Resilience and Sustainability Framework:** Develop an extensive plan focused on enhancing the port's resilience to climate change. This plan should emphasize adaptive and mitigative strategies to minimize environmental impacts on port operations, grounded in environmental sustainability principles.
4. **Maritime Sector Evolution Assessment:** Conduct regular evaluations of the evolving requirements within the maritime industry, taking into account the change in fishing stock, environmental changes and other technological advancements and shifts in economic dynamics. This ongoing assessment should inform the strategic direction for necessary port upgrades and enhancements to fit the needs of future commercial activities at POY.

Recommendation 7: Focused Market Assessment and Diversification

The stakeholder consultations have revealed a series of market opportunities that could position the Port of Yarmouth (POY) as a self-sustaining commercial entity, generating substantial revenue streams. These market opportunities include ground transportation links to POY, further development of the marine tourism industry, as well as cargo. Although these opportunities have been identified primarily through stakeholder engagement, a thorough analysis of their feasibility is essential. This analysis should incorporate a detailed quantitative

labor market evaluation and involve interactions with potential vendors to gauge the practicality and viability of these opportunities. ASBB Consulting recommends that the Port of Yarmouth undertake a comprehensive market assessment study. This study is crucial for understanding the evolving market dynamics and ensuring that the port's strategic planning is in sync with emerging trends.

Key components of the market impact study can include:

1. **Comprehensive Market Analysis:** Conducting a comprehensive study to assess current and emerging market trends in the maritime sector, including trade patterns, cargo demand, and technological advancements. This study will focus on identifying unique opportunities and challenges for the Port of Yarmouth, considering global shipping trends and changing cargo types. The insights gained will be used to inform data-driven strategic development, enabling the port to adapt its strategic planning to future market shifts effectively.
2. **Competitive Landscape Assessment:** Conducting a Competitive Landscape Assessment to analyze the competitive environment, identifying best practices from regional ports in Southwest Nova and larger ports like Halifax, exploring potential partnerships and market opportunities that align with POY's strategic strengths. Complement this with Stakeholder Engagement to gain a comprehensive understanding of market conditions from various perspectives. These combined efforts will equip the Port of Yarmouth with essential insights for informed decision-making, fostering sustainable growth and enhancing its competitive position in the maritime industry. These recommendations aim to bolster the Port of Yarmouth as a dynamic, sustainable, and integrated player in the regional maritime sector.



7.0 Next Steps

Below ASBB outlined some next steps and timelines to guide the actions of the recommendations.

Recommendation 1: Upgrade and Enhance Port Assets

- **Immediate Implementation of Quick Fixes:** Begin the immediate implementation of the identified 'quick fixes' to enhance the port's current infrastructure.
- **Securing Funding:** Pursue funding opportunities and lobbying efforts for the comprehensive upgrade of the Port of Yarmouth (POY).
- **Project Planning and Execution:** Develop and execute a detailed project plan for the infrastructure upgrades, ensuring alignment with economic objectives.

Recommendation 2: Optimize Berthage Fee Structure

- **Fee Structure Review:** Initiate a thorough review of the berthage fee structure and business plan related to the fee structure to ensure sustainability of the port.
- **Benchmarking Analysis:** Conduct a detailed comparison with the fee structures of John's Cove and Port of Digby.
- **Policy Revision:** Revise policies and bylaws regarding fee allocation and utilization based on the reviewed findings.

Recommendation 3: Build Strategic Alliances and Collaboration

- **Strategic Planning for POY:** Develop a well prioritized strategic plan in alignment with provincial and federal objectives to ensure POY's operations remain relevant federally and regionally.
- **Partnership Development:** Strengthen relationships with IMPAC and explore forming a maritime coalition.
- **Engagement with Acadia First Nation:** Strengthen relationships with the Acadia First Nation through community engagement.

Recommendation 4: Conduct a Comprehensive Regional Port Capacity Assessment

- **Regional Survey Execution:** Conduct a detailed survey in the Southwest Nova Scotia region to assess capacity and expansion potential.
- **Collaboration Enhancement:** Work towards regional collaboration and resource optimization based on survey findings.
- **Funding and Repair Advocacy:** Utilize survey data to support funding requests and justify infrastructure upgrades.

Recommendation 5: Consolidating POY Assets with Strategic Local Assets

- **Asset Merger Analysis:** Analyze the feasibility and benefits of merging POY and TOY assets.
- **Risk Management Strategy Development:** Develop a comprehensive risk management framework for the proposed merger.
- **Community and Stakeholder Engagement:** Engage with the community and stakeholders to discuss and align the merger's potential benefits.

Recommendation 6: Address Future Environmental Needs

- **Infrastructure Assessment:** Conduct a detailed analysis of existing infrastructure with a focus on climate resilience.
- **Gradual Infrastructure Enhancement:** Plan and implement step-by-step infrastructure improvements.
- **Sustainability Framework Development:** Create a framework focused on climate change resilience and environmental sustainability.

Recommendation 7: Focused Market Assessment and Diversification

- **Market Analysis:** Undertake a comprehensive market assessment study to understand emerging trends and opportunities.
- **Competitive Landscape Assessment:** Analyze the competitive environment and identify strategic market opportunities.
- **Stakeholder Engagement:** Engage with stakeholders to validate market opportunities and align strategies.

These steps are designed to guide the Port of Yarmouth in implementing the set of recommendations effectively, positioning it for sustainable growth and enhanced operational efficacy in the maritime sector.

TABLE 12: ACTION ITEMS PER RECOMMENDATIONS

The table below outlines and prioritizes the steps outlined above broken down per recommendation.

Action Items	Priority	Owners	Length (Time)
Recommendation 1: Upgrade and Enhance Port Assets			
Step 1: Project Planning of Repairs	HIGH	BOARD OF POY	2-3 months
Step 1: Immediate and Short Term Repairs	HIGH	BOARD OF POY	3-6 months
Step 2: Secure Long Term Funding for Revitalization	MEDIUM	BOARD OF POY	6-12 months
Recommendation 2: Optimize Berthage Fee Structure			
Step 1: Fee Structure Review and Benchmarking	MEDIUM	BOARD OF POY	6-12 months
Step 2: Incremental Fee Adjustment	LOW	BOARD OF POY	12-24 months
Recommendation 3: Build Strategic Alliances and Collaboration			
Step 1: Strategic Planning for POY	MEDIUM	BOARD OF POY	12-18 months
Step 2: Partnership Development	LOW	BOARD OF POY	18-24 months
Step 3: Engagement with Acadia First Nation	MEDIUM	BOARD OF POY	6-12 months
Recommendation 4: Comprehensive Regional Port Capacity Assessment			
Step 1: Capacity Survey	HIGH	ASBB & POY	3-6 months
Step 2: Strategic use of Findings for Attaining Funding	MEDIUM	ASBB & POY	6-12 months
Recommendation 5: Consolidating POY Assets with Strategic Local Assets			
Step 1: Asset Merger Analysis	MEDIUM	BOARD OF POY & TOY	6-12 months
Step 2: Risk Management Strategy Development	MEDIUM	BOARD OF POY & TOY	12-24 months
Step 3: Community and Stakeholder Engagement	MEDIUM	BOARD OF POY & TOY	6-12 months
Recommendation 6: Address Future Environmental Needs			
Step 1: Infrastructure Assessment for Climate Change	HIGH	BOARD OF POY & ENGINEERING	3-6 months
Step 2: Sustainability Framework & Implementation	MEDIUM	BOARD OF POY & ENGINEERING	6-12 months

Recommendation 7: Focused Market Assessment and Diversification			
Step 1: Market Analysis	MEDIUM	ASBB & POY	6-12 months
Step 2: Competitive Landscape Assessment	MEDIUM	ASBB & POY	12-14 months
Step 3: Engagements for Testing Market Practicality	MEDIUM	ASBB & POY	12-14 months

By categorizing the recommendations into high, medium, and low priority tiers, ASBB aims to equip the Port of Yarmouth (POY) with a clear and structured action plan. This approach is intended to guide POY in effectively implementing the necessary changes for this vital community asset, ensuring that resources are optimally allocated and efforts are focused on the most critical areas first.



8.0 Appendix

Appendix A: Survey Results

Below are the results of the fishing vessel survey conducted as part of this study.

Port of Yarmouth Fishing Vessel Survey

Dear Fishing Vessel Operator at Port of Yarmouth,

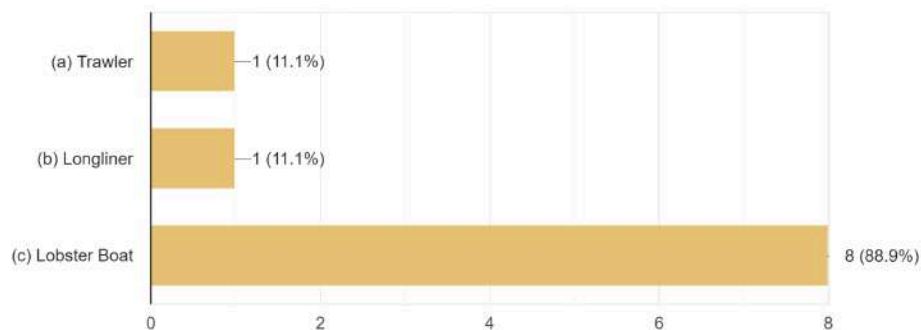
The Port of Yarmouth is currently conducting an Economic Impact Assessment (EIA) and has hired ASBB Consulting, a local Economics and Research firm in Yarmouth, NS to conduct the EIA study. As part of the assessment we would like to understand the potential opportunities and challenges faced by fishing vessels berthing at the Port of Yarmouth. You are an extremely valued member of this Port, and we hope that your responses will direct the port in making the best improvement plans going forward.

Thank you for taking the time to participate in this survey. Your insights are valuable in helping us improve the Port of Yarmouth to better serve your needs. Please provide your feedback by selecting the most appropriate response for each section.

Section A: Vessel and Crew Information:

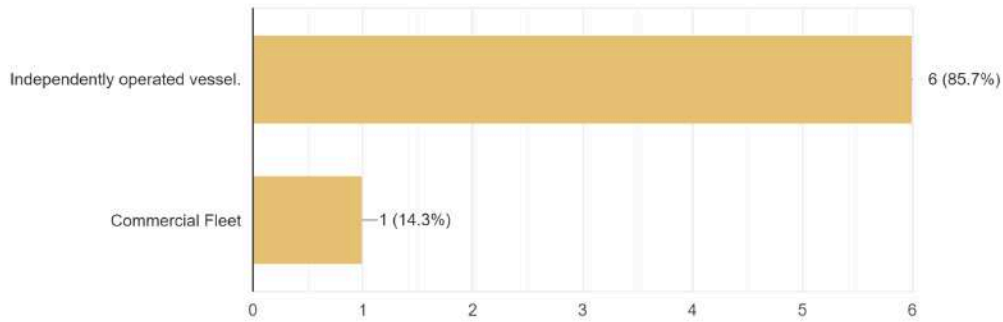
(i) Type of fishing vessel:

9 responses



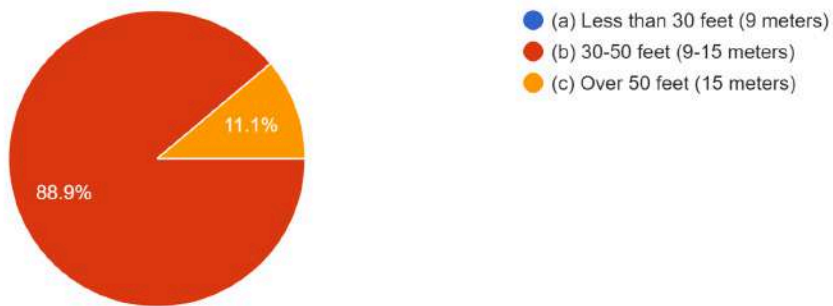
Are you an independent operator or part of a commercial fleet?

7 responses



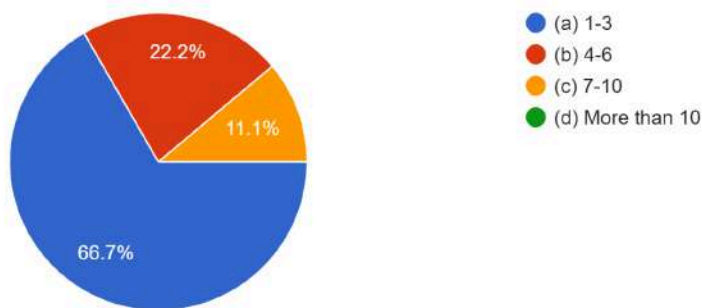
(ii) Approximate size or length of your vessel:

9 responses



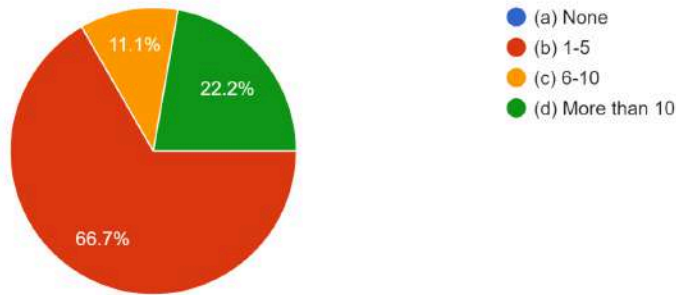
2. Crew and Employment: Number of crew members typically on board:

9 responses



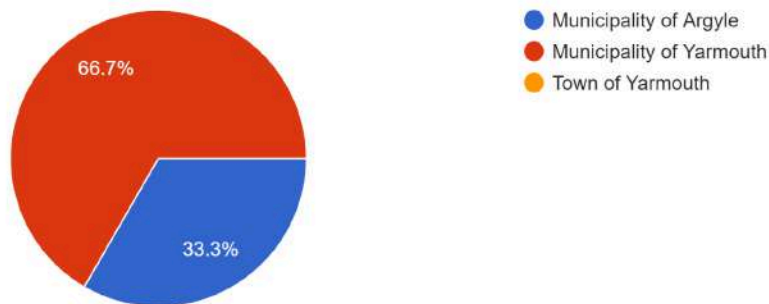
How many local individuals does your vessel employ, directly or indirectly?

9 responses



Where is your primary location of residence (We are trying to understand where the economic benefits are distributed).

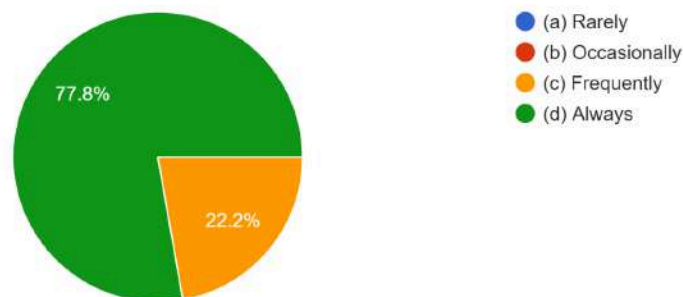
6 responses



Section B: Port Usage and Considerations:

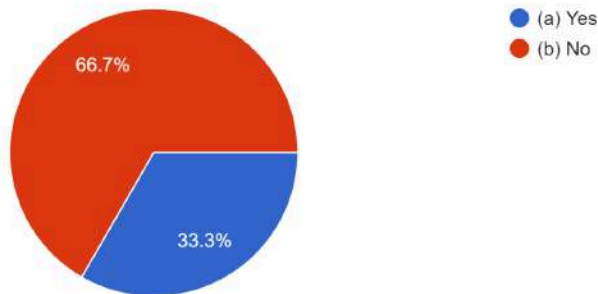
3. Port of Yarmouth Experience: How frequently do you berth or land at the Port of Yarmouth each year?

9 responses



4. Considering Nearby Ports: Have you ever considered using nearby ports or landing points as alternatives to the Port of Yarmouth?

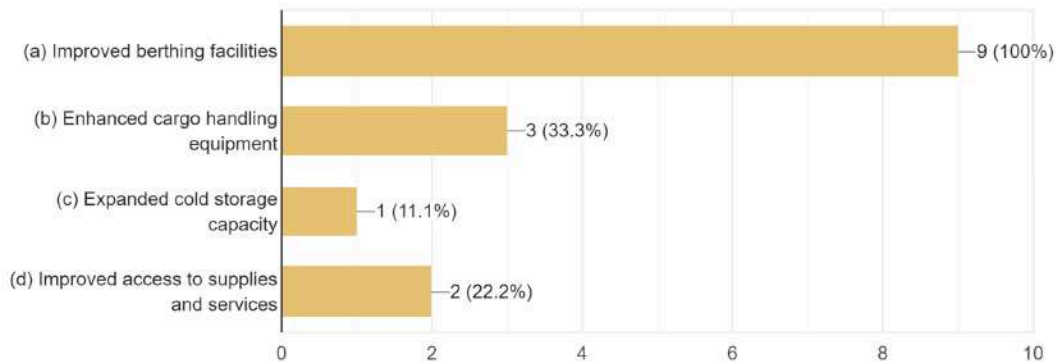
9 responses



Section C: Port Facilities and Safety:

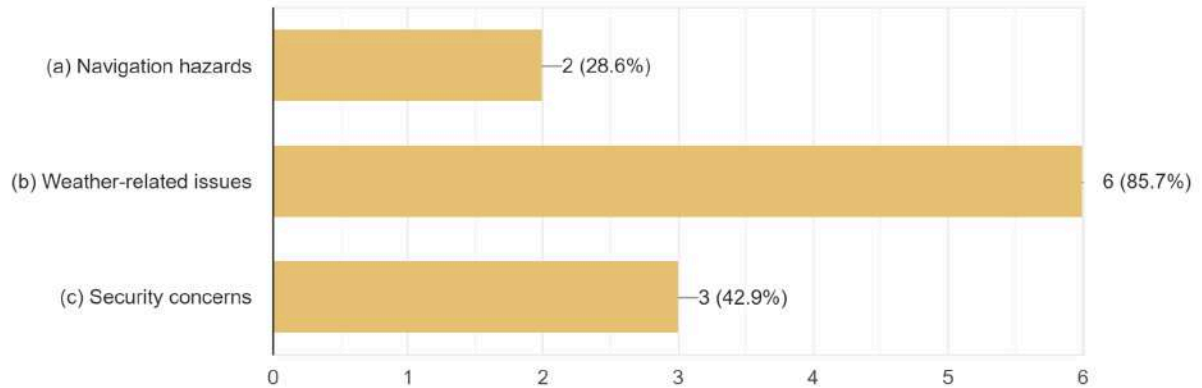
5. Convenience and Upgrades: Which improvements or upgrades would make berthing and landing at the Port of Yarmouth more convenient for your operations? (Select all that apply)

9 responses



6. Navigation and Safety: Are there any specific navigation or safety concerns you have when operating in the Port of Yarmouth? (Select all that apply)

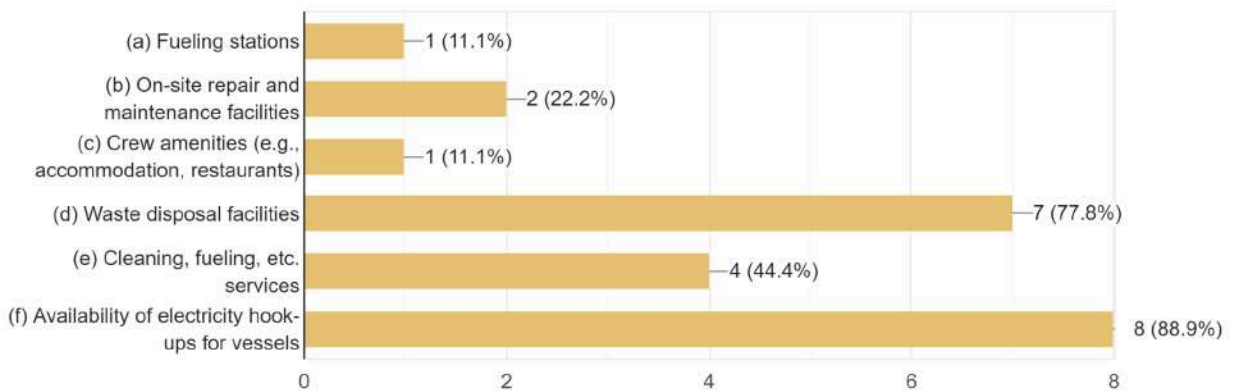
7 responses



Section D: Port Services and Amenities:

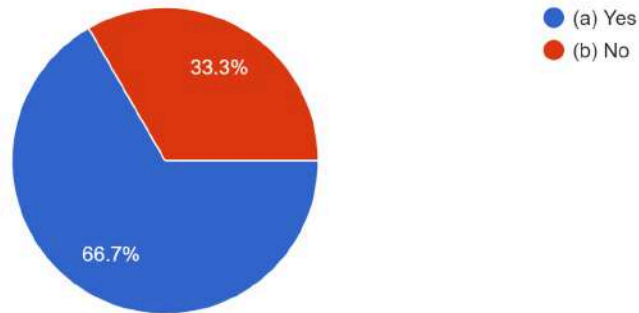
7. Services and Amenities: What additional services or amenities would you like to see offered at the Port of Yarmouth to support your operations? (Select all that apply)

9 responses



8. Third-Party Services: Have you utilized any cleaning, fueling, etc. services at the Port of Yarmouth?

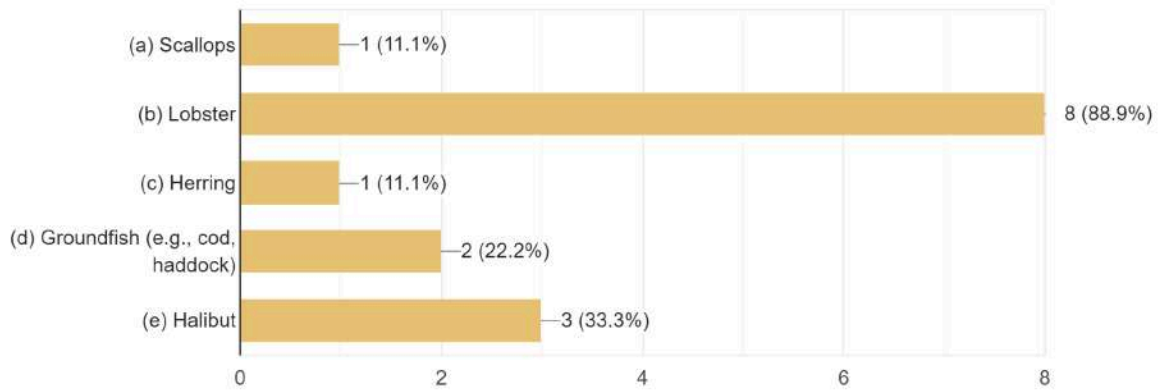
9 responses



Section E: Catch and Fishing Gear:

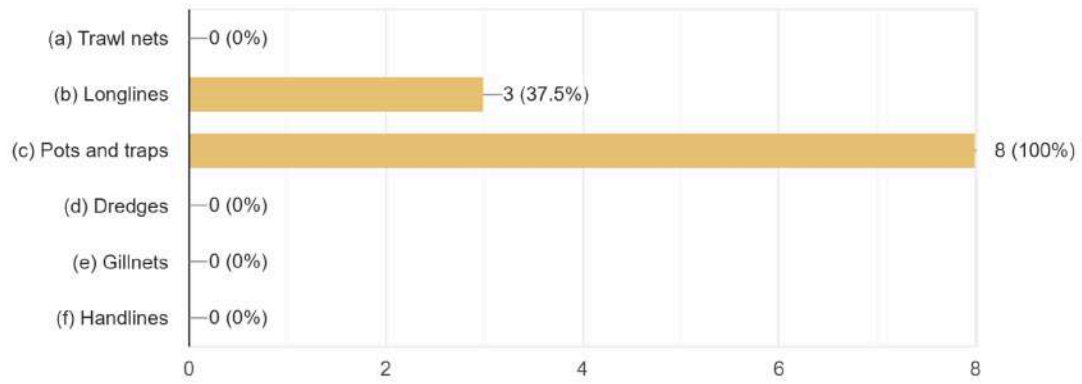
What types of catch are typically associated with your fishing operations? (Select all that apply)

9 responses



10. Fishing Gear: What types of fishing gear do you predominantly use? (Select all that apply)

8 responses



Appendix B: Economic Impact Definitions

To facilitate the reader's understanding of the report and key concepts discussed, we have outlined some definitions in this section.

2.2.1 Gross Domestic Product (GDP)

There are three main methods of calculating GDP (income, expenditure and production-based). For the purposes of this exercise, and when looking at the economic impacts of specific industries and sectors, production-based GDP calculations are the method of choice.

Simplified production-based GDP formula: $GDP = \text{output (revenue)} - \text{inputs (costs)}$

GDP is often viewed as value-add, as it is the value-added an industry adds to inputs from other industries (upstream). As an example, a fish processing company creates value by processing (value-add) raw fish obtained by the fisher (input) into a final product (output), such as smoked fish ready for the consumer.

The GDP number does not only include company profits and surpluses into its result (revenue – cost= profits), it also includes employment income and wages, as this is later spent into the economy and is part of the economic impact of the industry.

2.2.2 Direct Economic Impacts

Direct economic impacts are the impacts of the industry or sector studied. For the purpose of this analysis, it involves the activities conducted by the Port of Yarmouth (e.g. berth and property rental, the fishing vessels (fishing) and the Tri-County School Board (TCSB) rental (administrative work the staff performs). As an example, direct employment would be all those employed by the Port, the fishing vessel owners, and the TCSB employees working in the building rented by the Port.

2.2.3 Indirect Economic Impacts

Indirect impacts are the economic impacts derived from the suppliers of the studied industry. So as an example, the Port will require electricity to conduct its activities. The impact to the electricity sector's activities coming from the Port is in this case considered an indirect impact. This analysis is done for all the inputs needed by the Port, the fishing vessels and the TCSB. This is then done for the suppliers of the suppliers and suppliers of the suppliers of the suppliers, and so on, to gain an understanding of the level of reverberations of the targeted industry on the rest of the industry.

Note: this does not include the downstream part of the economy, i.e. when looking at the indirect impacts of fishing, processing of seafood is not included in that analysis. To do this, you would need to look at the processing industry, and its indirect impacts to capture fishing

2.2.4 Induced Economic Impacts

Induced impacts are the impacts generated by the wages, employment income and profits created by the direct and indirect activities generated by the industry studied. For example, if a fisher employed by the fishing industry spends a dollar at a coffee shop, this would constitute an induced impact. The same could be said for the spending by the employee working for the electricity company providing services to the Port.

The next section describes the methodology undertaken to derive the results of the economic impact analysis for POY.

Appendix C: Detailed Economic Impacts by Scenario

Scenario 1.2 - Fishing vessel capacity at the wharf decreases 25%

	Output (Revenue)	GDP	Labour Income	Jobs (FTEs)	Taxes
1.Port of Y.	682,597	336,564	200,992	4	16,974
Direct	430,389	191,093	125,243	2	10,760
Indirect	159,674	85,647	51,647	1	2,235
Induced	92,534	59,824	24,102	1	3,979
2.Fishing	30,951,293	18,518,477	8,034,975	145	850,471
Direct	23,772,114	14,287,040	5,800,396	98	736,936
Indirect	3,803,538	2,044,402	1,355,011	27	19,018
Induced	3,375,641	2,187,035	879,569	20	94,518
3.Tri-County School Board	7,960,603	6,007,616	4,741,506	88	231,216
Direct	5,125,952	4,239,162	3,946,983	70	35,882
Indirect	625,366	333,187	220,416	5	3,127
Induced	2,209,285	1,435,267	574,107	13	192,208
Total*	38,911,896	24,526,093	12,776,481	233	1,081,687

*The impacts from all activities are not additive as the economic impact from the Port of Yarmouth are already included in the indirect inputs of fishing and Tri-County School Board. Including the Port's economic impacts in the total would be double counting.

Scenario 2.2 Repairs and Construction (+25% vessel capacity)

	Output (Revenue)	GDP	Labour Income	Jobs (FTEs)	Taxes
1.Port of Y.	720 176	336 564	424 074	4	17 914
Direct	467 968	191 093	125 243	2	11 699
Indirect	159 674	85 647	51 647	1	2 235
Induced	92 534	59 824	24 102	1	3 979
2.Fishing	85 240 677	51 000 375	22 128 532	400	2 342 220
Direct	65 469 030	39 346 887	15 974 443	269	2 029 540
Indirect	10 475 045	5 630 337	3 731 735	74	52 375
Induced	9 296 602	6 023 151	2 422 354	57	260 305
3.Tri-County School Board	7 960 603	6 007 616	4 741 506	88	231 216
Direct	5 125 952	4 239 162	3 946 983	70	35 882
Indirect	625 366	333 187	220 416	5	3 127
Induced	2 209 285	1 435 267	574 107	13	192 208
Total*	93 201 280	57 007 991	26 870 038	488	2 573 436

Scenario 2.1 Repairs to maintain vessel capacity and dredging to allow larger vessels into the Port of Yarmouth

	Output (Revenue)	GDP	Labour Income	Jobs (FTEs)	Taxes
1.Port of Y.	682,597	336,564	200,992	4	16,974
Direct	430,389	191,093	125,243	2	10,760
Indirect	159,674	85,647	51,647	1	2,235
Induced	92,534	59,824	24,102	1	3,979
2.Fishing	68,192,542	40,800,299	17,702,826	319	1,873,776
Direct	52,375,224	31,477,509	12,779,555	215	1,623,632
Indirect	8,380,036	4,504,269	2,985,388	59	41,900
Induced	7,437,282	4,818,521	1,937,883	45	208,244
3.Tri-County School Board	7,960,603	6,007,616	4,741,506	88	231,216
Direct	5,125,952	4,239,162	3,946,983	70	35,882
Indirect	625,366	333,187	220,416	5	3,127
Induced	2,209,285	1,435,267	574,107	13	192,208
Total*	76,153,145	46 807 915	22,444,332	407	2,104,992

*The impacts from all activities are not additive as the economic impact from the Port of Yarmouth are already included in the indirect inputs of fishing and Tri-County School Board. Including the Port's economic impacts in the total would be double counting.

Scenario 2.2 Repairs and Construction (+25% vessel capacity)

	Output (Revenue)	GDP	Labour Income	Jobs (FTEs)	Taxes
1.Port of Y.	742,197	365,951	218,541	4	17,914
Direct	467,968	207,778	136,179	2	11,699
Indirect	173,616	93,126	56,156	1	2,235
Induced	100,613	65,048	26,206	1	3,979
2.Fishing	85,240,677	51,000,375	22,128,532	400	2,342,220
Direct	65,469,030	39,346,887	15,974,443	269	2,029,540
Indirect	10,475,045	5,630,337	3,731,735	74	52,375
Induced	9,296,602	6,023,151	2,422,354	57	260,305
3.Tri-County School Board					231,216
Direct	7,960,603	6,007,616	4,741,506	88	
Indirect	5,125,952	4,239,162	3,946,983	70	35,882
Induced	625,366	333,187	220,416	5	3,127
Induced	2,209,285	1,435,267	574,107	13	192,208
Total*	93,201,280	57,007,991	26,870,038	488	2,573,436

*The impacts from all activities are not additive as the economic impact from the Port of Yarmouth are already included in the indirect inputs of fishing and Tri-County School Board. Including the Port's economic impacts in the total would be double counting.

Table 8: Scenario 3, Tourism and hospitality focus

	Output (Revenue)	GDP	Labour Income	Jobs (FTEs)	Taxes
1. Tourism shops	337,000	216,000	154,200	6	8,656
Direct	200,000	133,000	117,800	5	2,600
Indirect	64,400	36,000	17,600	0,5	902
Induced	72,600	47,000	18,800	0,5	5,155
2. Harbour Tours	393,250	203,250	146,750	5	13,925
Direct	250,000	116,250	103,250	4	9,250
Indirect	74,500	42,250	25,500	1	894
Induced	68,750	44,750	18,000	1	3,781
3. Restaurant and other food service	996,000	561,700	375,000	13,5	26,809
Direct	750,000	324,750	261,750	11	22,500
Indirect	227,250	119,250	66,000	1,5	3,409
Induced	18,750	117,700	47,250	1	900
Total	1,389,250	764,950	521,750	19	49,390

Appendix D: Economic Multipliers

The multipliers are derived specifically from Nova Scotia industries for Nova Scotia industries. It is important to note that the multipliers are reported at a provincial level, which means they are not specifically for Yarmouth, NS. Multipliers at the municipal levels do not exist publicly, but can be obtained privately. Since this study made comparisons with other industries at the provincial level, we felt the use of provincial multipliers were more appropriate. Provincial-level multipliers are generally weighted averages of industries across a province, and this can sometimes be biased on other regions, but because a large proportion of fishing happens in the Yarmouth region, we do not believe that the multipliers are inappropriate to use in our analysis.

- Fishing is included in the *Fishing, hunting and trapping* aggregate, but there is little hunting and trapping in Nova Scotia, so the multipliers leans heavily towards the fishing industry
- The Port of Yarmouth's direct activities are part of the *Support activities for transportation* industry
- TCRC activities fall under *Elementary and secondary schools* industry

For this exercise, 2019 multipliers¹⁵ were used even though 2020 were available, as 2020 cost and revenue functions did not represent a normal year, due to Covid-19.

Table 13: Table of Multipliers

	Direct multiplier			Indirect multiplier			Induced multiplier		
	Fishing, hunting and trapping	Support activities for transportation	Elementary and secondary schools	Fishing, hunting and trapping	Support activities for transportation	Elementary and secondary schools	Fishing, hunting and trapping	Support activities for transportation	Elementary and secondary schools
	Per dollar of output								
Taxes on products	0.008	0.007	0.007	0.002	0.005	0.001	0.021	0.032	0.065
Gross domestic product (GDP) at	0.601	0.444	0.827	0.086	0.199	0.065	0.092	0.139	0.280
Labour income	0.244	0.291	0.770	0.057	0.120	0.043	0.037	0.056	0.112
Taxes on production	0.023	0.018	..	0.003	0.009	0.004	0.007	0.011	0.022
	Per million dollars of output								
Jobs	4.106	4.377	13.656	1.125	2.340	0.968	0.865	1.310	2.629

Note: - We used 2019 multipliers vs a 5-year average because the i-o model works under the assumption that technology doesn't change at a fast pace, and 2019 being the latest year (excluding 2020 due to covid), we have the most recent multipliers to apply to our recent revenue numbers.

Description of Multipliers:

The input-output multipliers are derived from the supply and use tables. They are used to assess the effects on the economy of an exogenous change in final demand for the output of

¹⁵ Statistics Canada, "Input-Output multipliers, provincial and territorial, detail level", 2019

a given industry. They provide a measure of the interdependence between an industry and the rest of the economy.

The national and provincial multipliers show the direct, indirect, and induced effects on gross output, the detailed components of GDP, jobs, and imports. Like the supply and use tables, the multipliers are presented at four levels of aggregation: Detail level (236 industries), Link-1997 level (187 industries), Link-1961 level (111 industries) and Summary level (35 industries).

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