GREATER VICTORIA HARBOUR AUTHORITY MARKET ASSESSMENT

Prepared for Greater Victoria Harbour Authority

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Executive Summary
Market Analysis for Cargo Opportunities at Ogden Point Marine Terminal - Executive Summary

Martin Associates was retained by Greater Victoria Harbour Authority (GVHA) to conduct a comprehensive study of potential cargo and non-cruise market opportunities for the GVHA to pursue at the Ogden Point Marine Terminal (OPMT). The OPMT is one of five properties operated by the Greater Victoria Harbour Authority (GVHA). The property consists of a 34.6 hectare, deep water port facility with four piers. Pier A offers two berths (1,100 ft and 800 ft) and 100,000 sq ft warehouse, while two 1,040 ft piers are located at Pier B. All berths are between 31 and 35 feet of water draft. The Victoria Port is currently the busiest cruise ship port-of-call in Canada and is an integral port in the Alaskan cruise market, particularly between the Port of Seattle and Alaska. OPMT is also an important depot for undersea fiber optic cable repair. A heliport provides direct services to Vancouver and Vancouver International Airport.

In addition to cruise passengers and ferry operations, the OPMT facility has handled logs, lumber, pulp and paper, grain and fish processing. However, these cargo operations have ceased operation. The grain elevator was dismantled in 1978, and the CNR discontinued operations to OPMT in that same year. Lumber shipments ended in 1984, and the fish processing facility, operated by BC Packers closed in 1990.

The purpose of the current study is to identify new cargo market opportunities for OPMT in order to diversify revenue sources, and create new economic development opportunities for the Greater Victoria area. In identifying such cargo opportunities, it is essential that each opportunity be evaluated with respect to:

- Revenue generation
- The compatibility with cruise operations
- Minimal impact on the local community in terms of:
    - Truck traffic
    - Air Quality
    - Light pollution
- Job creation and associated economic impact
- Minimal investment by the GVHA

Based on the industry analysis conducted by Martin Associates and the interview process with the maritime stakeholders on Vancouver Island and in Vancouver, nine specific potential market opportunities were identified. The 9 opportunities are summarized in the following paragraphs.

Log Opportunity

There is a potential to market to Jordan River for the use of OPMT for ship direct vessel loading. Currently the logs are towed to the Fraser River Docks, and loaded on to vessels for direct export. At OPMT a midstream operation would be required. Based on the interviews with the logging operations in Jordan River, this opportunity represents a 192,000 tonne annual potential. The development of this operation would require minimal port investment. The operation would have minimal community impact since the operation is a direct load from water storage to vessel. However, the issues that must be addressed include adequate water storage at OPMT; the required 32,000 tonne per vessel requirement for a full ship load may strain the capacity at Jordan River; and there could be a potential seasonal conflict with cruise operations, but this would depend upon the location of the logging operation. Such a location would be addressed in a Port-wide master plan.

Automobile Ferry Service and Storage

Victoria automobile dealers currently are served directly by highway truck from import terminals in Vancouver using the BC Ferry System. The traffic congestion in Victoria now impacts the ability to deliver directly to individual dealers. Therefore, there may be a potential to deliver the automobiles from Vancouver to a central location at OPMT using a vessel/barge service, and then distribute to individual dealers on an as needed basis. This business opportunity provides potential growth of the existing operation. Additional services for this opportunity could include a small auto cleaning/detailing service at OPMT. The operation will create additional truck traffic around the OPMT area, and detailed traffic studies would be required to quantify these potential traffic impacts as well as environmental impacts. The operation would have a minimal impact on cruise operations, as scheduling of the ferry service could be controlled to minimize any berth conflicts. The actual dimensions of the storage area would be determined as part of detailed port master plan.

Container Feeder Service

A container service has recently been established focusing on outbound forest products from Nanaimo to Port Metro Vancouver for transshipment onto vessels (at Port Metro Vancouver) for export moves to Asia. There are approximately 500,000 TEUs equivalent of consumable goods consumed annually on Vancouver Island, and Victoria is clearly the key consumption point for these containers. The current container market on Vancouver Island is served by ferry, and since there is limited distribution center activity on Vancouver Island, most containers are now delivered directly to the retailers and wholesalers by truck. The barge service rotation would bring containers from Port Metro Vancouver to OPMT, unload and pick up empties, sail to Nanaimo to pick up containerized forest products before returning to Port Metro Vancouver to unload containerized forest products and empties, then load containerized consumables for a return sail to OPMT.

Such a service would generate about 11,500 TEUs per year, and assuming a 2,500 - 5,000 TEUs per acre per year throughput utilization, a 4 - 5 acres storage area would be required at OPMT. However, the location of this terminal and footprint would need to be refined as part of a detailed port-wide master plan

The container operation would provide a good economic impact to the region in terms of job creation, and would also provide a diversified revenue generator to the GVHA. The operation would require a container crane, and this investment may be borne by the operator or the GVHA, based on terms of the agreement. The container operation requires acreage on dock, and the operation will increase truck traffic through the OPMT neighbourhood. Conflict with the cruise season would need to be monitored and vessel scheduling will be critical and must be coordinated with the forest products operation at Nanaimo. Investment by the GVHA would be limited to fencing and lighting, and the potential purchase of a mobile container crane. However, it is recommended that the terminal operator supply the mobile crane. Investing in the correct infrastructure, fitting barge service into cruise ship schedule during summer months (year round service), and working with the barge operator, would allow the service to call OPMT with a regularly scheduled container service.

Yacht Relocation

Victoria is a key consolidation point for yachts sailing in the Pacific Northwest, and has been served by YachtPath. Although the economic downturn has limited business, YachtPath expects this business to return to Victoria in the next several years. While Victoria is the preferred consolidation point for regional yachts to be relocated, the water depth has limited service in past, as additional yacht repositioning services require deeper water, as such services need submerging operations to load the yachts onto the vessel. About 40 ft of water is required.

The number of yachts using this service via Victoria varies annually, driven by economic conditions. Prior to the recession, the yacht repositioning services were moving between 7 and 15 yachts per year via Victoria per call, and the repositioning services make up to 8 calls per year. This activity generates revenue to the GVHA from marina operations and further generates economic activity in the local economy due to the purchases for food and beverages by the crew on the yachts, as well as unscheduled maintenance work with local boatyards. Based on the interviews with the vessel repositioning services, Victoria is a major port of call for the repositioning services that can operate in less than 40 ft. of water.

Inner Harbour Fish Processing Relocation

A fish distribution operation currently located in the Inner Harbour presents an opportunity for expansion at OPMT. The fish is frozen at sea on the factory ships, and then delivered to the facility at the Inner Harbour for delivery into Vancouver via the ferry service. There is the potential to diversify and expand into fresh fish and processing, but the current site cannot accommodate this expansion. To locate at OPMT, the processing operation would require a floating dock and a 3,000 sq ft fenced area on land. This relocation to OPMT would provide economic benefits to the community with preserving and adding new job opportunities should the operation expand into fresh seafood processing. The operation would enhance the revenue diversification to the Port, but would require the Port to provide utilities to the operation. However, the utility costs could be covered under lease arrangements. This operation would result in increased truck traffic in the OPMT neighbourhood. The actual location of the operation and the traffic impact would have to be studied as part of a detailed port-wide master plan.

Construction Industry Support

Several major construction projects are planned for Victoria/Vancouver Island. The regional construction industry typically relies on just-in time-delivery to handle the construction materials and supplies, and each contractor is focused on its own project. However, with the volume of major construction projects occurring on Vancouver Island over the next 5 years, it is possible that the contractors engaged in these projects could coordinate project supplies in such a way as to purchase in bulk and achieve economies of scale. In addition, each contractor typically has its own space for laydown and storage, and perhaps OPMT could serve as a central consolidation point for material and supply storage to support the numerous projects. For example, several large construction projects are planned on Vancouver Island in the next several years. Two north island hospitals are planned to be built and ready to operate by 2017. The Campbell River and Courtney hospitals are a $300-$400 million dollar project. Request for Qualifications were received in June of 2012. BC Hydro is building the $1 billion John Hart Dam. Procurement of the project is planned for summer 2013 with construction beginning shortly thereafter. Three companies, PCL Constructors Westcoast, Peter Kiewit Infrastructure, and WCC construction Canada delivered bids in August 2012 for the Johnson Street Bridge project located in Victoria. Victoria Sewage Plant also has a $300,000 project slated to start in two to three years. Defense Construction Canada plans to build a New Esquimalt Jetty in approximately 5 years.

The trade contractors typically arrange for their own transportation of materials to the site and there is limited to no consolidation or coordination between them. It is possible that the GVHA could assist in logistics support to these contractors, as well as provide a storage area for the contractors. While a detailed master plan would be required to identify actual required acreage to support the projects, for purposes of this market analysis it is assumed that the GVHA would provide three acres of fencing/lighting. This potential construction support opportunity could create unacceptable community views, and would likely impact the local community in terms of increased truck traffic. The volume of truck traffic could range from one trip per week to up to 10 trips per day depending on the construction activity and the supply schedule to move materials from OPMT to the construction site. The operation would require minimal investment by the GVHA, and would generate a diversified revenue source, based on required acreage. If

the support operation also included direct barge service with construction equipment into OPMT, then there exists a potential for conflict with cruise operations. As with the other opportunities, strict vessel scheduling would be required.

Expansion of Cable Laying and Maintenance Operation

The GVHA currently has a contract with GMS to provide berth and warehouse space to support the cable laying and maintenance operations. Expansion of the core business is not anticipated, but the opportunity is to market to GMS as well as other suppliers to provide power transmission services in support of the off-shore oil and gas platforms and off-shore wind farms in addition to current telecommunications services. This operation would be an expansion of current GVHA operation at OPMT, and would have minimal impact on truck traffic and the surrounding community. Furthermore, to the extent that this expanded business could be accommodated under the current contract terms, the impact on revenue diversification and growth is unclear at this time until additional intelligence can be gathered on this opportunity.

Boat Storage and Topside Repair

This opportunity would utilize the public boat launch to move boats on-shore and further provide on-shore storage and maintenance, both undercover as well as outside storage. This is a winter season operation and would have minimum impact on cruise operations as well as minimal impacts on the community. The economic impact would be small, but this activity could provide a diversified revenue source. The revenue would be based on the inside storage fees per boat as well as any outside storage charges. However, this could interfere with the ability of GVHA to market additional warehouse space for expansion of the current cable laying operation into a transmission and telecommunication operation serving the offshore platforms in the region. A one acre parcel is assumed for storage.

Layberth Operations

In addition to the layberth operation in support of the cable laying/maintenance operation, three additional opportunities for layberthing were identified. Occasionally, a vessel in the BC Ferry System is pulled from service for repair, and OPMT could provide a potential layberth for this operation. A second opportunity is to provide layberth services to the Seaspan barges that service the Victoria Shipyard. Finally with the gentrification of the Inner Harbour, the tugs

involved for marine support in the Victoria Harbour have been required to identify new areas for berthing. The potential to accommodate these tug operators at OPMT should be investigated.

Other

In addition to the more traditional maritime uses for the OPMT facility, the interviews with the stakeholders identified several other potential uses to enhance the revenue diversification of GVHA.

One opportunity noted was the development of a transportation hub at OPMT, incorporating the ferry system and float plane operations at OPMT. This would help reduce congestion in Victoria Harbour, allow for the development of a single ferry terminal, consolidate customs operations and integrate the other modes of transportation with the heliport operations.

The second opportunity involves the attraction of "green" based marine businesses, focusing on marine research, mapping, surveying and partnering with a local university to develop a maritime studies campus. In addition, the development relocation of a maritime museum was also identified as a possible use of a portion of OPMT. However, it is to be emphasized that these non-cargo related uses would also result in significant traffic in the residential area surrounding OPMT.

The development of these more "real estate type uses" should be the focus of an inner harbour master development plan, that would also incorporate a long term master development plan for OPMT, building off the results of the identified market potential opportunities, both cargo and cruise.

Implications for GVHA

In order to convert any of the identified potential market opportunities, it is critical that the GVHA develop an aggressive marketing campaign, targeting these opportunities and engage in open conversation as to the advantages of using OPMT. Further, through these discussions, the GVHA will need to prioritize the opportunities based on the likelihood of success, and begin a master planning process to identify optimal layouts of the various opportunities along with the cruise service/terminal development plans. It is critical that both the cruise opportunities and cargo opportunities be evaluated in terms of compatibility of operations at OPMT, as well as in a

manner to optimize GVHA revenue and economic impact, and yet minimize community and environmental impacts. The master plan must include a detailed assessment of costs of project development associated with the market opportunities (both cargo and cruise), as well the revenue potential to the GVHA of the market opportunities. Prior to development of any identified project, detailed feasibility studies will be required and it is necessary to identify the possibilities for public private partnerships.

Market Analysis for Cargo Opportunities at OPMT

Martin Associates was retained by the Greater Victoria Harbour Authority (GVHA) to conduct a comprehensive study of potential cargo and non-cruise market opportunities for the GVHA to pursue at OPMT. OPMT is one of five properties operated by the Greater Victoria Harbour Authority (GVHA). The property consists of a 34.6 hectare, deep water port facility with four piers. Pier A offers two berths (1,100 ft and 800 ft) and 100,000 sq ft warehouse, while two 1,040 ft piers located are at Pier B. All berths are between 31 and 35 feet of water draft. The Victoria Port is currently the busiest cruise ship port-of-call in Canada and is an integral port in the Alaskan cruise market, particularly between the Port of Seattle and the various ports in Alaska. OPMT is also an important depot for undersea fiber optic cable repair. A heliport provides direct services to Vancouver and Vancouver International Airport.

In addition to cruise passengers and ferry operations, the OPMT facility has handled logs, lumber, pulp and paper, grain, and fish processing. However, these cargo operations have ceased operation. The grain elevator was dismantled in 1978, and the CNR discontinued operations to OPMT in that same year. Lumber shipments ended in 1984, and the fish processing facility, operated by BC Packers closed in 1990.

The purpose of the current study is to identify new cargo market opportunities for the OPMT in order to diversify revenue sources, and create new economic development opportunities for the Greater Victoria area. In identifying such cargo opportunities, it is essential that each opportunity be evaluated with respect to:

- Revenue generation
- The compatibility with cruise operations
- Minimal impact on the local community in terms of:
    - Truck traffic
    - Air Quality
    - Light pollution
- Job creation and associated economic impact
- Minimal investment by the GVHA

As Exhibit I shows, Victoria is located in a region served by major Canadian and US ports, ranging from Prince Rupert to ports located on the Columbia River. The key ports include the container and bulk operations at Prince Rupert, Port Metro Vancouver, Seattle , Tacoma and Portland OR.

Exhibit I
Pacific Northwest Port Locations

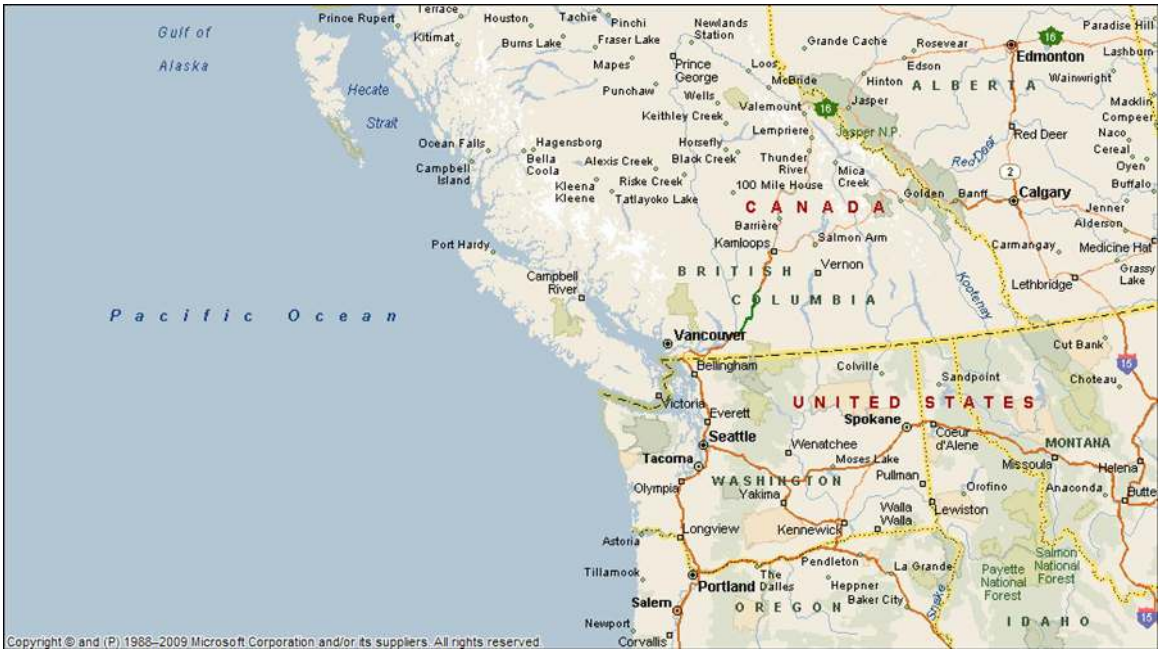


Exhibit 2
Vancouver Island

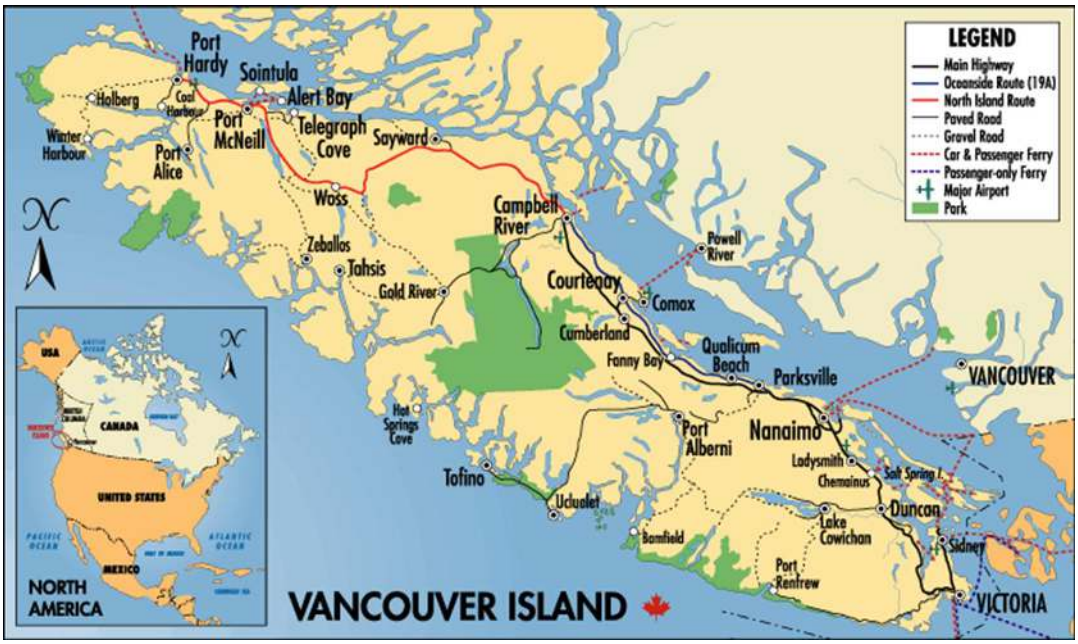


Exhibit 2 shows that the Greater Victoria area is currently served via several regional commercial ports and private marine terminals. OPMT is located on the Southeastern tip of Vancouver Island. Port Metro Vancouver is the dominant port in the region, and Canada's largest container port, handling about 22 million tonnes of containerized cargo annually. The majority of the containers are consumed throughout Canada. Vancouver's container terminals are the key terminals supplying containerized cargo to Vancouver Island. In addition, to the containerized cargo handled at Port Metro Vancouver, the port's terminals handle 84 million tonnes of bulk cargo, including coal, grain and potash, as well as petroleum. Port Metro Vancouver also handles 16 million tonnes of break bulk cargo and nearly 300,000 tonnes of automobiles, the majority of which are imported and distributed throughout the area. Port Metro Vancouver is the principal source of imported automobiles in the Greater Victoria region.

Nanaimo's total tonnage has doubled between the years 2009 through 2011, and this growth was fueled by the handling of logs. Logs have grown from 214,700 tonnes in 2009 to 1.5 million tonnes in 2011. Other forest products, primarily pulp, increased from 616,000 tonnes in

2009 to about 1.1 million tonnes in 2011. Export lumber grew from about 16,000 tonnes in 2009 to 175,000 tonnes in 2011.

Logs are Port Alberni's largest commodity accounting for 90% of the Port's tonnage. Logs handled at Port Alberni also increased significantly, growing from 300,000 tonnes in 2009 to 1.3 million tonnes in 2011. The remaining cargo is other forest products consisting of lumber, fuel wood, wood chips, and other paper waste tonnage.

The Greater Victoria Region is also served by several private docks located in the Victoria Harbour, primarily handling cargo such as aggregates, scrap and biomass.

This review of cargo activity at the neighbouring ports indicated that the Greater Victoria Harbour is served well by the neighboring commercial ports and that in order to develop a cargo market at OPMT, it is necessary to develop support activities that tie into the operations at the established commercial ports, and/or to identify a unique opportunity for OPMT. In addition, log exports have been the key growth market for the commercial ports located on Vancouver Island, suggesting that this may be a market potential for OPMT to pursue.

To identify other potential opportunities building off international traffic primarily handled at Port Metro Vancouver, and the log and forest products handled at Vancouver Island ports, Martin Associates conducted a series of interviews with 30 maritime industry stakeholders located in the Greater Victoria Region/Vancouver.

Key maritime industry stakeholders interviewed included:

- ACGI Port Agents
- PNW Agencies
- Wilhelm-Wilhelmsen Agency
- Tidal Transport
- Point Hope Shipyard
- Chamber of Shipping representing ship owners in British Columbia
- DP World
- Western Stevedoring
- Knappett Construction
- Tervita
- Seabreeze Corp

- Global Marine Systems
- Yacht Path, Intl.
- Dockwise Yacht Transport
- King Brothers Ltd.
- Seaspan Marine Corporation
- Canadian Overseas Group
- Canoe Cove Marina
- Transocean Transport Agency
- New Car Dealers Association of British Columbia

These interviews focused on the following areas to identify potential cargo opportunities for OPMT:

- Logs, Lumber, and other forest products
- Biofuels
- Automobile distribution within the Greater Victoria Region
- Feeder Operations, particularly containerized cargo, between Port Metro Vancouver and Vancouver Island
- Ship Construction and Repair
- Layberth and Vessel Cleaning
- Yacht repositioning
- Construction project support and offshore work
- Windmills and Project Cargo
- Fish Offloading/Fish storage/Fish Processing
- Scrap Steel and Metals

A review of each of the markets follows.

1. Logs and Forest Products

Most current log and lumber production occurs in the northern half of Vancouver Island at the following locations; Nanaimo including Harmac Mill

- Crofton
- Port Alberni
- Gold River

Currently, export logs are loaded directly to vessel for export, with the key destinations being China, Korea and Japan. Logs used for domestic usage are typically barged or trucked to the Canadian consumption areas. Port Metro Vancouver has historically handled the majority of

logs moving out of Southwest British Columbia, while Nanaimo and Port Alberni provide log and forest products operations on Vancouver Island.

Table 1 shows that Port Metro Vancouver terminals handled about 26.6 million metric tonnes of logs and forest products in 2011, including 7.4 million tonnes of logs and 19.2 million tonnes of forest products. Port Alberni shipped nearly 1.3 million tonnes of logs and 171 thousand tonnes of other forest products. The Port of Nanaimo handled approximately 2.6 million tonnes of forest products in 2011 consisting of logs, lumber, and pulp, inbound and outbound.

Table 1

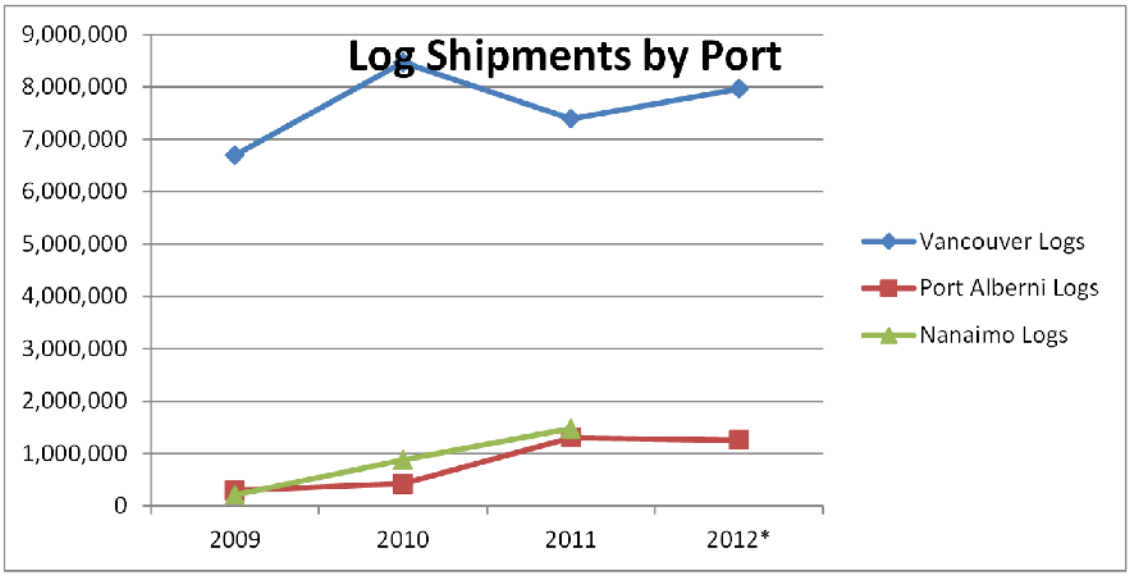
Summary of Logs and Forest Products at Regional Ports

	2009	2010	2011
Vancouver Logs	6,695,632	8,465,687	7,390,801
Port Alberni Logs	297,382	426,580	1,303,988
Nanaimo Logs	214,700	878,598	1,481,164
	2009	**2010**	**2011**
Vancouver Other FP	13,231,556	15,165,197	19,233,990
Port Alberni Other FP	75,600	80,000	171,112
Nanaimo Other FP	616,100	963,616	1,137,204

The Port of Nanaimo statistics account for export and domestic logs, lumber and other forest products. In 2011, the Port received 847,932 tonnes of domestic logs and 386,086 tonnes of domestic other forest products. With respect to outbound domestic shipments, the Port shipped 230,000 tonnes of lumber and other forest products.

Log shipments at all three ports have been increasing since 2009, as reflected in Exhibit 3. Also demonstrated in this Exhibit is the dominance of Port Metro Vancouver in the log shipment market.

Exhibit 3
Log Shipments by Port



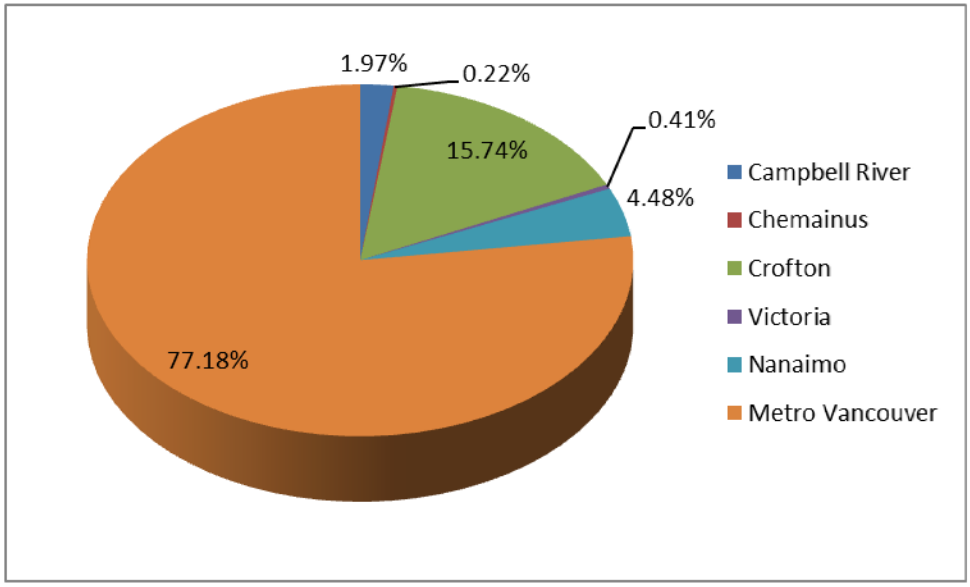
In addition to the main logging centers serving Port Metro Vancouver, Port Alberni and Nanaimo, limited logging activity also occurs in Jordan River and Sooke areas. Logs are currently towed from Jordan River to the Fraser River Docks (Port Metro Vancouver) for export. Interviews with the Jordan River Operations indicated that there may be a possibility to tow the logs to OPMT, rather than the Fraser River Docks, for a direct load onto a vessel. Currently, 32,000 tonnes of lumber are loaded per ship, and Jordan River is currently cutting about 16,000 tonnes per month. The market potential for OPMT is estimated at 6 ships per year. The success of this potential is dependent on the ability to provide water storage for the logs, for the two month period as they are accumulated for a ship load and the ability to load cost effectively.

2. Biofuels Markets

In 2009, (the most recent year for which detailed statistical data is available from Statistics Canada), about 1.2 million tonnes of biomass/biofuels were shipped internationally via Port Metro Vancouver and other regional ports. As Exhibit 4 demonstrates, the majority of the biofuels international waterborne shipments are handled via Port Metro Vancouver. The majority

of these biofuels exports consist of wood fuel followed by wood chips. Exhibit 4 presents the distribution of biofuels shipments by Port.

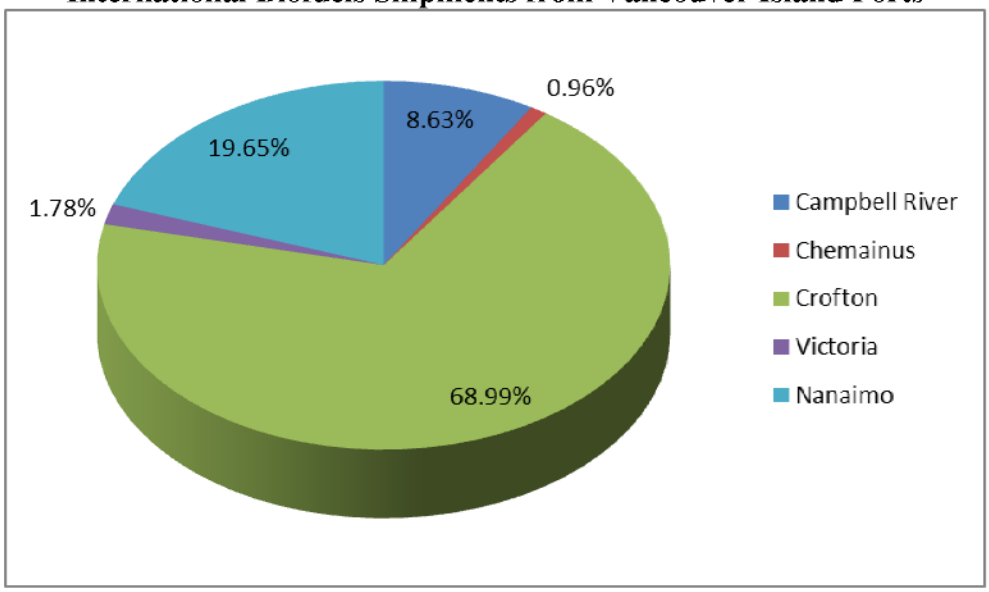
Exhibit 4
International Biofuels Shipments by Regional Port



Source: Statistics Canada

The Vancouver Island ports handled about 230,000 tonnes of the 1.2 million tonnes of international biofuels shipments moving via regional ports, with the majority of these shipments handled at facilities in Crofton. Exhibit 5 shows the distribution of biofuels shipments by Vancouver Island ports. Crofton, Nanaimo and Campbell River handled more than 85% of the Vancouver Island's biofuels exports. Crofton handles approximately 60% of the total exports. The private terminals in Victoria handled some biofuels. For example, the Ralmax Group currently handles 12 barges per year of hogfuel, which is a wood chip used for burning for energy production. This barge move is primarily to Washington State.

Exhibit 5
International Biofuels Shipments from Vancouver Island Ports



Source: Statistics Canada

In addition to the export activity, the majority of biofuels produced on the Island are consumed locally, as demonstrated by the fact that only 230,000 tonnes of biofuels are exported from Vancouver Island ports.

3. Automobile Storage and Distribution

Currently, Victoria and Vancouver Island automobile dealerships receive automobiles via highway truck using the BC Ferry operation. Dealers receive a notification from Annacis Island Terminal as to the number of trucks (with autos) that are scheduled for arrival about two days prior to the actual truck deliveries. In some cases, the Annacis Terminal will accommodate short time storage for a fee if the dealers require temporary storage. This direct truck deliver system has provided adequate inventory fulfillment reliability for local dealers. However, traffic constraints have continually become difficult for delivery of automobiles directly to dealerships from the ferry service, as truckers are receiving traffic violations during the discharge process.

One possibility to alleviate the individual dealership delivery problem directly from the ferry is to deliver the automobiles to a central distribution point, such as OPMT and then provide the inventory fulfillment to the dealers from this central location. This would require direct barge delivery into OPMT and then distribution on a fulfillment basis to the area dealerships.

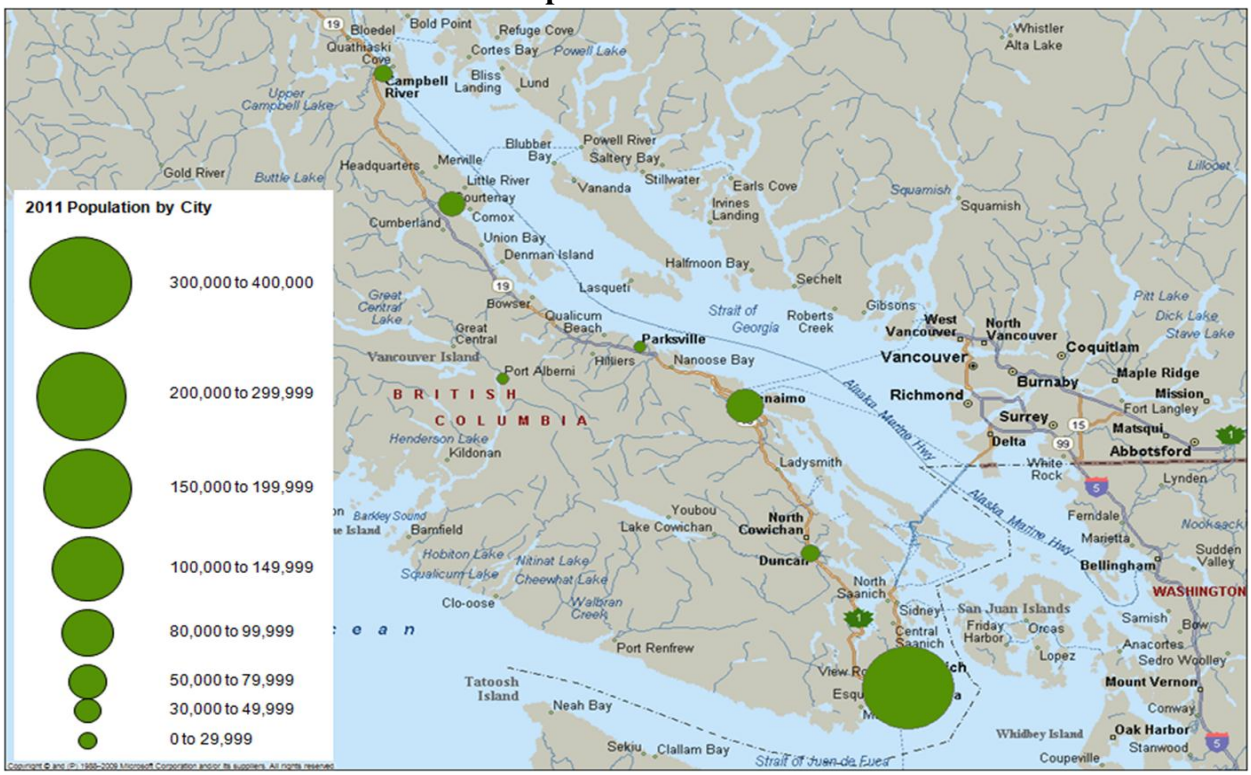
In the past, labor disputes with trucking companies serving auto dealers using the BC Ferry operation lead to inventory disruptions and an actual stoppage of automobile deliveries. During the labor dispute, a barge operation was in fact used to deliver autos directly into Victoria via a barge service. The use of the BC Ferry resumed after the labor dispute was settled. However, this incident suggests a potential opportunity to receive automobiles barged directly into Victoria.

It is to be emphasized that autos are currently being stored at OPMT for local dealerships, and the development of the barge operation directly to OPMT would be a logical extension of this operation. Currently, the operation provides storage for about 200 cars. Coastside Holdings and the New Car Dealers Association of BC have both expressed some interest in this service, provided that transportation costs would be competitive. In addition, it is possible that a small cleaning/detailing operation could be developed at the site. This development would require agreement with local unions similar to the current auto storage lease at OPMT.

4. Container Feeder Operations

It is estimated that about 500,000 twenty foot equivalent units (TEUs) of consumable goods are consumed on the Vancouver Island annually. Furthermore, as indicated in Exhibit 6, the majority of the population on Vancouver Island is concentrated in Victoria. Therefore, the majority of the consumption of the containerized cargo is likely to be consumed in Victoria.

Exhibit 6
Distribution of Population on Vancouver Island



The containerized market on Vancouver Island is currently served from Port Metro Vancouver terminals, using the ferry operations into Nanaimo. The containers typically move direct by truck from the Port Metro Vancouver container terminals and import distribution centers in Vancouver to direct consumption points on Vancouver Island. The results of the interviews conducted by Martin Associates indicate that very little distribution center activity occurs on Vancouver Island.

The fact that minimal distribution center activity exists on Vancouver Island, and more importantly that the majority of the 500,000 TEUs are likely consumed in the Victoria area provides a potential for the development of a direct vessel service into Victoria, and more specifically into OPMT.

The potential for container delivery into OPMT is further supported by the recent development of a container service connecting Nanaimo with Port Metro Vancouver. This service is based on the development of a forest products distribution/consolidation center at

Nanaimo, where forest products produced on Vancouver Island are loaded into containers and moved by the container feeder service into Port Metro Vancouver for export. This current service is a service from Nanaimo to Vancouver, and the feeder vessel arrives at Nanaimo from Vancouver with empty containers.

The GVHA could market a call at OPMT as a first call for this service, as a head-haul with containerized consumer goods destined for the Victoria metropolitan area. This service would compete with the current ferry service. The service could work in Vancouver on Monday and Nanaimo on Friday, with an intermediate call at OPMT for direct discharge on a Wednesday.

The weekly service to Victoria could include:

- 120 TEUs full inbound
- 100 TEUs empties to Nanaimo for use in stuffing forest products
- 100 TEUs empty returns out of Victoria
- 120 loads outbound forest products at Nanaimo

On an annual basis, this service would deliver about 11,500 TEUs to OPMT; this represents a capture rate of only 2.3% the 500,000 TEUs now consumed on Vancouver Island,. Currently, the cost to move a container from Vancouver Docks into Victoria is $1,356 per forty foot container or $1,104 per twenty foot container, including a roundtrip. This rate suggests that the barge rate inclusive of stevedoring and local drayage would need to be in the $500 per one way container move range in order to be competitive.

5. Support of Local Shipbuilding

Victoria is home to two shipbuilding and repair facilities. The Victoria Shipyard, a division of Seaspan Marine Corporation provides large tug and barge shipbuilding and repair services. The Esquimalt Graving Dock is owned and operated by Public Works and Government Services of Canada. The Graving Dock can handle vessels 361.5m length overall and 38.4m wide. The shipyard consists of two berths, one handling vessels up to 305m LOA and maximum draft of 10 m and another berth handling vessels up to 274m LOA and maximum draft of 12.2m. Services include machine shop, pipe fabrication and welding, joiner shop, steel fabrication and

welding, steel assembly and sheet metal, sandblasting, and spray paint booth. The Point Hope Shipyard, part of Ralmax Group, is a full service shipyard that also provides repair and refit services for all types of commercial vessels.

Point Hope Maritime caters to commercial vessels and yachts in the lengths ranging from 20m LOA to medium-sized ocean capable ships. Maximum draft is 6m. Services available include maintenance and refits, vessel and system repairs, shipwrights, aluminum welding, steel welding, sandblasting, coatings, and electrical work. Seaspan Marine Corporation has been awarded a portion of Canada's National Shipbuilding Procurement Strategy. This order consists of 7 new ship builds:

- 2 Joint Support Ships (option of one additional)
- 1 Offshore Oceanographic Science Vessel
- 3 Offshore Fisheries Science Vessel
- 1 Polar Icebreaker

The offshore oceanographic science vessel delivery is expected in 2014. The offshore fisheries science vessels and the polar icebreaker deliveries will follow after 2015. All delivery dates are dependent on final contract negotiations between the Federal Government and Seaspan, which as of now have not yet been finalized

The Point Hope Shipyard currently has adequate space for future needs, and the opportunity is limited for any support from OPMT. With respect to the Victoria Shipyard, the majority of the identified construction work will occur in the Vancouver Shipyard, also owned by Seaspan Marine. This work includes most of the steel work and outfit work. The Victoria Shipyard will serve to finish/outfit through final tests and trials of the vessels. The internal Seaspan tug and barge service will be used to manage equipment and supplies directly to Victoria Shipyard berths. Victoria Shipyard has 40,000 sq ft of its own storage and laydown area on shipyard property or within ½ mile of the yard.

Based on the interviews with the shipyard operators, the potential for OPMT for support work for the shipyards in terms of laydown areas appears limited due to the current excess capacity at the two shipyards.

6. Layberthing and Vessel Cleaning

Currently, vessels temporarily tie-up at the OPMT berths, particularly during the off-season for cruise ship calls. In some cases, the hulls of these vessels are cleaned prior to the vessels next port of call. This is a spotty and unpredictable market, but provides some revenue to the GVHA. Continued focus on this market is important, but always subject to the cruise ship vessel schedule at Victoria.

One opportunity for lay berthing is for use by the BC Ferry System. In the event a ferry is pulled from service for a top side repair/maintenance, a berth at the OPMT could provide such a service using ship repair resources already in place in the Victoria area. BC Ferry's currently layberth vessels pulled from service during winter months at the BC Ferry Richmond Facility near the Deas Tunnel.

A second, more predictable opportunity for layberthing is to provide berth space for Seaspan barges servicing the shipyard operations described previously. Finally, waterfront gentrification has pushed out the tug berths within the Inner Harbour. Based on interviews with the local maritime industry, tug berths are needed to support the Vancouver Island Maritime Industry, including cruise operations. With the shortages of tug berths, there is the potential for tug berthing at OPMT.

The attractiveness of these layberth opportunities not only will provide revenue to the GVHA in the non-cruise season, but also provides an opportunity to provide topside repair work for local ship repair services.

7. Yacht Repositioning

The Port of Victoria, as well as the Pacific Northwest waterways, is an attractive geographical region for recreational boating. However, the yachting season is seasonal to summer months. As fuel costs have increased in the past several years, the cost of repositioning the yachts and recreational boats have increased, resulting in the use of services that actually move the yachts from the Pacific Northwest to other areas of the world that have a more attractive winter climate. These yacht repositioning services have called the OPMT in the past,

but due to the economic downturn, yachting activity has declined since 2007. Yacht Path has provided this service historically, and expects this activity to increase in the future.

Dockwise Yacht Transport has made a few calls to Vancouver in previous years, but no calls to the Pacific Northwest this year due to lack of demand from the recession. However, Dockwise Yacht Transport uses a float-on/float-off vessel transport s that requires 40 ft of water for loading and unloading, thus limiting the service potential at OPMT.

In summary, the yacht transport business is a spot type business, and provides limited economic impact to the Victoria region. It is a market that provides some revenue to the GVHA, but is a non-predictable market, and further, is driven by economic conditions and limited by water depth at OPMT.

8. Cable Laying/Storage

The GVHA leases warehouse space and berth space in support of cable laying services to Global Marine Systems (GMS). This service is provided to a consortium of telecom companies. The telecoms pool their risk; hence the contract with GMS functions as an insurance policy. The telecoms hire GMS' services to provide these services. Typically, one vessel serves a specific geographical region, and the vessel and operation at OPMT serves the entire Northern Pacific Zone. Interview with GMS suggested that this level of service is adequate, given that it is rare for multiple maintenance issues to arise in one zone at a given point in time. Previously, a back-up vessel was also involved in servicing this zone, but the rare occurrences of multiple events and, given time this secondary vessel has been eliminated.

In addition to marine cable laying and servicing, companies such as Global Marine Systems have both telecommunications and power transmission divisions which can also support off-shore energy. This includes supporting oil and gas platforms, and off-shore wind farms. These vessels lay cables to link wind turbines and then bring that electricity to land, and also provide service to offshore oil production facilities.

GVHA is currently supporting the cable laying and repair industry through 2017. It is recommended that the Port keep this business, and further focus on developing a market niche to support off-shore exploration.. There are no current or planned off shore oil and gas projects to

date. However, should the Canadian Government open the door to off-shore oil and gas, OPMT is strategically located to be a prime support location for this activity. GVHA needs to closely monitor the off-shore oil and gas situation in Canada.

9. Support Base for Local Construction Projects

There are several major construction projects planned for Vancouver Island, and specifically the Greater Victoria area. It is possible that OPMT could be used to support major construction projects by providing logistics support as well as open storage for construction materials. The key construction projects include:

- Two North Island Hospitals: Campbell River and Courtenay. These projects represent $300-$400 million of construction activity. It is anticipated that these projects will occur in early 2013 and face completion in 2017 when both hospitals will be built and ready to operate.
- BC Hydro, John Hart Dam, represents a $1 billion project, with the procurement award in expected in summer 2013, and construction beginning shortly thereafter.
- Three companies have been selected to submit bids for the Johnson Street Bridge project., with construction due to start in late 2012 or early 2013
- Victoria Sewage Plant, which is a 2-3 year project.
- Defense construction of a new jetty is planned at Esquimalt, which is a 5 year project.

The regional construction industry typically relies on just-in-time delivery to handle the construction materials and supplies, and each contractor is focused on its own project. However, with the volume of major construction projects occurring on Vancouver Island over the next 5 years, it is possible that the contractors engaged in these projects could coordinate project supplies in such a way as to purchase in bulk and achieve economies of scale. In addition, each contractor typically has its own space for laydown and storage, and perhaps OPMT could serve as a central consolidation point for material and supply storage to support the numerous projects. Finally, the trade contractors typically arrange for their own transportation of materials to the site and there is limited to no consolidation or coordination between them. It is possible that the GVHA could assist in logistics support to these contractors, as well as provide a storage area for the contractors.

10. Commercial Fishing

The fishing industry is concentrated in the Ucluelet area. The fish are typically frozen on the factory ships and then landed at Ucluelet. There, the frozen fish is transferred to reefer trucks and moved to Vancouver for distribution/local consumption and/or export. If the fish were discharged in Victoria, the fishing vessels would experience an 8 hour diversion to call at OPMT and, therefore, the ability to participate in this market is limited.

However, an existing fish distribution operation located in the Inner Harbour currently handles frozen fish. The frozen fish are loaded onto trucks for delivery into Vancouver. Interviews with the processor indicated that there is potential to diversify and expand into fresh fish and processing. In order to pursue this market, the processor requires a 10ft x120ft floating dock with 6ft x45ft ramp. Also, 2,500-3,000 sq ft of fenced space on-shore would be required. In addition, GVHA would be required to provide a truck loading area as well as utilities to support the operation.

There is the possibility that the landing of fish at Canadian ports could increase in the future. The Canada/US Albacore Fishing Treaty was suspended after 2011 season for data collection. This treaty granted US and Canadian vessels rights to fish in both nations' waters and land fish in either country. The Treaty allowed vessels of one nation access to fuel and other on-shore amenities at the same rates as home-flagged vessels. The expiration of treaty means the British Columbia market is limited to 110 Canadian vessels. Reimplementation of the treaty would permit up to 150 US ships to fish Canadian waters and land their fish in Canadian ports, (although, according to Fisheries and Oceans Canada, in 2010, only 67 US vessels actually took advantage of the treaty's provisions.) With the reimplementation of the Treaty, demand for fish processing in Victoria could increase, further generating demand for areas at OPMT for fish processor development.

11. Recreational Boating

Recreational boating in the Greater Victoria Area plays an important role in the regional economy. There is an opportunity to utilize the public boat launch at OPMT to move boats on-shore, where winter storage and maintenance activity could be performed. Storage could be inside the existing warehouse, as well as in outside areas, using a racking system. The storage

and maintenance would occur during the winter months, and thus have a minimum impact on the cruise operations.

12. Support of Wind Energy

The development of wind farms as an alternative power generation source has been a growth market both in the United States and Canada, and the port infrastructure in both of these countries has played a significant role in the transport of imported towers, blades and nacelles. The handling of wind energy requires a significant amount of outside storage, as well as the ability for the road infrastructure to move dimensional cargo from the port to the wind farms.

Cape Scott is the only on-island wind farm. Construction began June 2012, and upon completion, there will be 66 1.5 MW turbines installed at the Cape Scott wind farm. The wind energy equipment is handled through Port Hardy. Due to Cape Scott's location with Ogden Point, OPMT is not competitive to serve this location, even if adequate infrastructure were available at the port.

Seabreeze Power Corporation is studying several locations for future wind farms. The sites for these farms are on the northern third of Vancouver Island, which appears to be the most viable area for development due to wind conditions. Due to the distance from OPMT, the supplying of these wind farms does not appear to be a potential market.

13. Scrap/Recycling

The shipment of scrap and recyclables is a growing market at many city-port combinations such as Victoria, and interviews were conducted by the team to assess the potential opportunities. Scrap steel from Vancouver Island is barged to Tacoma and palletized or unitized for export. Ralmax moves about 15,000 tonnes per month via barge, and these barges are loaded at the Ralmax docks. Similarly, Vancouver Island General Purpose Steel is served via Vancouver by ferry. This operation receives approximately three trucks per month.

Given the established scrap operations on Vancouver Island, the handling of scrap steel via OPMT does not appear to be a viable potential.

14. Summary of Market Opportunities

Based on the industry analysis conducted by Martin Associates and the interview process with the maritime stakeholders on Vancouver Island and in Vancouver, nine specific potential market opportunities were identified. These opportunities were then evaluated with respect to:

- Diversification of revenue source to the GVHA
- Compatibility with cruise operations at OPMT
- Minimum impact on community in terms of :
    - Traffic
    - Noise
    - Light pollution/view
    - Air quality
- Creation of economic activity:
    - Jobs
    - Income
    - Local business revenue to firms providing services in support of the opportunity
- Capacity constraints at OPMT
- Investment requirements for GVHA

The impact on revenue diversification and value was assessed for each opportunity using the existing GVHA tariff structure, as well as the lease structures in place on similar operations at other Pacific Northwest ports

The compatibility with cruise operations not only is focused on the seasonality of the cruise operations and the identified market opportunity, but also whether or not the opportunity could co-exist with the cruise operations on an annual basis.

The impact on the community is a relative measure, as the scope of the market study does not cover a detailed traffic or environmental assessment of each opportunity.

The economic impact of the opportunity is derived based on the modification of economic impact models Martin Associates has developed for more than 300 US and Canadian ports, including 16 Canadian ports, as well as the Washington Ports of Everett, Seattle, Bellingham, Tacoma, Olympia, Vancouver and Longview, as well as the Port of Portland (OR). A baseline economic impact model was developed for OPMT. This methodology is designed to measure the direct, induced and indirect impacts of the port opportunities. The direct jobs, income and revenue are based on operations at similar ports for which Martin Associates has developed

economic impact studies, and directly from the interviews with those involved in the potential opportunities.

The induced impacts measure the jobs created throughout the local, regional economies because individuals directly employed due to port activity spend their wages locally on goods and services such as food, housing and clothing. These jobs are held by residents located throughout the region, since they are estimated based on local and regional purchases. To estimate the induced jobs, a personal income multiplier for the waterborne transportation sector in British Columbia was developed by Statistics Canada Industry Accounts Division. The distribution of purchases by type of purchase (food at home, food in restaurants, housing, apparel, home furnishings, transportation, medical care, etc.) was developed for each from data provided to Martin Associates by Statistics Canada (2009 base data). The associated supplying industry jobs to sales ratios on a province level were supplied to Martin Associates by Statistics Canada (Provincial Input-Output Models). These ratios include the retail and wholesale re-spending impacts. The personal consumption expenditures from the port activity were then combined with these job multipliers to estimate the consumption induced impacts.

Indirect impacts are created within the region due to purchases of goods and services by firms, not individuals. These jobs are estimated from ratios of local purchases to direct revenue, that Martin Associates has developed from more than 300 port impact studies. The indirect impacts include jobs, income and tax impacts with office supply firms, maintenance and repair firms, parts and equipment suppliers, etc.

14.1 Log Opportunity

There is a potential to market to Jordan River for the use of OPMT for ship direct vessel loading. Currently the logs are towed to the Fraser River Docks, and loaded on to vessels for direct export. At OPMT a midstream operation would be required. Based on the interviews with the logging operations in Jordan River, this opportunity represents at 192,000 tonne annual potential. The development of this operation would require minimal port investment. The operation would have a minimal community impact since the operation is a direct load from water storage to vessel. However, the issues that must be addressed include adequate water storage at OPMT; the required 32,000 tonne per vessel requirement for a full ship load may

strain the capacity at Jordan River; and there could be a potential seasonal conflict with cruise operations, but this would depend upon the location of the logging operation. Such location would be addressed in a Port-wide master plan.

14.2 Automobile Ferry Service and Storage

Victoria automobile dealers currently are served directly by highway truck from import terminals in Vancouver using the BC Ferry System. The traffic congestion in Victoria now impacts the ability to deliver directly to individual dealers. Therefore, there may be a potential to deliver the automobiles from Vancouver to a central location at OPMT using a vessel/barge service, and then distribute to individual dealers on an as needed basis. This business is compatible with the current auto storage operation now in place at OPMT, and the direct delivery by barge service is an extension of this existing operation. In addition, there could also be the opportunity to develop a small auto cleaning/detailing service at OPMT. The operation will create additional truck traffic around the OPMT area, and detailed traffic studies would be required to quantify these potential traffic impacts as well as environmental impacts. The operation would have a minimal impact on cruise operations, as scheduling of the ferry service could be controlled to minimize any berth conflicts. The actual dimensions of the storage area would be determined as part of detailed port master plan.

For planning purposes, a one acre facility would be adequate initially to handle the auto storage. This would provide another storage area of 200 automobiles, in addition to the storage space now operated at OPMT.

14.3 Container Feeder Service

A container service has recently been established focused on outbound forest products from Nanaimo to Metro Vancouver for transshipment onto vessels (at Metro Vancouver) for export moves to Asia. There are approximately 500,000 TEUs per year consumed annually on Vancouver Island, and Victoria is clearly the key consumption point for these containers. The current container market on Vancouver Island is served by the BC Ferry, and since there is limited distribution center activity on Vancouver Island, most containers are now delivered directly to the retailers and wholesalers by truck. The potential weekly service to Victoria could include:

- 120 TEUs full inbound
- 100 TEUs empties to Nanaimo for use
- 100 TEUs empty returns out of Victoria
- 120 loads outbound paper at Nanaimo

Such a service would generate about 11,500 TEUs per year, and assuming a 2,500 - 5,000 TEUs per acre per year throughput utilization, a 4 - 5 acres storage area would be required at OPMT. However, the location of this terminal and footprint would need to be refined as part of a detailed port-wide master plan.

The container operation would provide a good economic impact to the region in terms of job creation, and would also provide a diversified revenue generator to the GVHA. The operation would require a container crane, and this investment may be borne by the operator or the GVHA, based on terms of the agreement. The container operation requires acreage on dock, and the operation will increase truck traffic through the OPMT neighborhood. Conflict with the cruise season would need to be monitored and vessel scheduling will be critical and must be coordinated with the forest products operation at Nanaimo. Investment by the GVHA would be limited to fencing and lighting, and the potential purchase of a mobile container crane. However, it is recommended that the terminal operator supply the crane.

14.4 Yacht Relocation

Victoria is a key consolidation point for yachts sailing in the Pacific Northwest, and has been served by Yacht Path. Although the economic downturn has limited business, YachtPath expects this business to return to Victoria in the next several years. While Victoria is the preferred consolidation point for regional yachts to be relocated, the water depth has limited service in past, as additional yacht repositioning services require deeper water, as such services need submerging operations to load the yacht s onto the vessel. About 40 ft water is required.

The yacht repositioning market has minimal community impact, but also has limited revenue potential and minimal economic impact.

14.5 Inner Harbour Fish Processing Relocation

A fish distribution operation currently located in the Inner Harbour presents an opportunity for expansion at OPMT. The fish is frozen at sea on the factory ships, and then

delivered to the facility at the Inner Harbour for delivery into Vancouver via the ferry service. There is the potential to diversify and expand into fresh fish and processing, but the current site cannot accommodate this expansion. To locate at OPMT, the processing operation would require a floating dock and a 3,000 sq ft fenced area on dock. The GVHA would provide for a truck loading area as well as utilities, while the processor would provide the floating dock and develop the fenced area. This relation to OPMT would preserve jobs in Victoria, as well as add to the economy should the operation expand into fresh food processing. The operation would enhance the revenue diversification to the Port, but would require the Port to provide utilities to the operation. However, the utility costs could be covered under lease arrangements. This operation would result in increased truck traffic in the OPMT neighborhood. The actual location of the operation and the traffic impact would have to be studied as part of a detailed port-wide master plan.

14.6 Construction Industry Support

Several major construction projects are planned for Victoria/Vancouver Island. The regional construction industry typically relies on just in time delivery to handle the construction materials and supplies, and each contractor is focused on its own project. However, with the volume of major construction projects occurring on Vancouver Island over the next 5 years, it is possible that the contractors engaged in these projects could coordinate project supplies in such a way as to purchase in bulk and achieve economies of scale. In addition, each contractor typically has its own space for laydown and storage, and perhaps OPMT could serve as a central consolidation point for material and supply storage to support the numerous projects. Finally, the trade contractors typically arrange for their own transportation of materials to the site and there is limited to no consolidation or coordination between them. It is possible that the GVHA could assist in logistics support to these contractors, as well as provide a storage area for the contractors.

While a detailed master plan would be required to identify actual required acreage to support the projects, for purposes of this market analysis it is assumed that the GVHA would provide three acres of fencing/lighting. This potential construction support opportunity could create unacceptable community views, and would likely impact the local community in terms of

increased truck traffic. The operation would require minimal investment by the GVHA, and would generate a diversified revenue source, based on required acreage. If the support operation also included direct barge service with construction equipment into OPMT, then there exists a potential for conflict with cruise operations. As with the other opportunities, strict vessel scheduling would be required.

14.7Expansion of Cable Laying and Maintenance Operation

The GVHA currently has a contract with GMS to provide berth and warehouse space to support the cable laying and maintenance operations. Expansion of the core business is not anticipated, but the opportunity is to market to GMS as well as other suppliers to provide additional services such as telecommunications and power transmission in support of the off-shore oil and gas platforms and off-shore wind farms. This operation would be an expansion of current GVHA operation at OPMT, and would have minimal impact on truck traffic and the surrounding community. Furthermore, to the extent that this expanded business could be accommodated under the current contract terms, the impact on revenue diversification and growth is unclear at this time until additional intelligence can be gathered on this opportunity.

14.8 Boat Storage and Topside Repair

This opportunity would utilize the public boat launch to move boats on-shore and further provide on-shore storage and maintenance, both undercover as well as outside storage. This is a winter season operation and would have minimum impact on cruise operations as well as minimal impacts on the community. The economic impact would be small, but this activity could provide a diversified revenue source. The revenue would be based on the inside storage fees per boat as well as any outside storage charges. However, this could interfere with the ability of GVHA to market additional warehouse space for expansion of the current cable laying operation into a transmission and telecommunication operation serving the offshore platforms in the region. A one acre parcel is assumed for storage.

14.9 Layberth Operations

In addition to the layberth operation in support of the cable laying/maintenance operation, three additional opportunities for layberthing were identified. In the event that a ferry operating in the BC Ferry System is pulled from service for required maintenance/repair, the OPMT could

provide a potential layberth for one of the ferries. A second opportunity is to provide layberth services to the Seaspan barges that service the Victoria Shipyard. Finally with the gentrification of the Inner Harbour, the tugs involved for marine support in the Victoria Harbour have been required to identify new areas for berthing. There may be a potential to accommodate these tug operators at OPMT should be investigated.

15. Evaluation of Potential Opportunities

Exhibit 7 identifies the estimated direct, induced and indirect job impacts, GVHA revenue impact, required port investment, cruise conflict and community impact for 7 of the 9 identified opportunities. The other two opportunities, expansion of the cable laying operations and yacht repositioning are current activities at OPMT, and the opportunities related to these existing markets involve expansion of the operations.

Exhibit 7
Summary of Opportunities

OPPORTUNITY	JOBS	PORT REVENUE ($1,000)	PORT INVESTMENT	CRUISE CONFLICT	COMMUNITY CONFLICT
CONTAINER	65	$898	FENCING/LIGHTING	TBD	TBD
LOGS	60	$350	NO	TBD	MINIMAL
FISH	50-60	$20-$30	UTILITIES	NO	MINIMAL
AUTOS	MINIMAL	$137	FENCING/LIGHTING	NO	TBD
CONSTRUCTION LAYDOWN	MINIMAL	$422	FENCING/LIGHTING	TBD	TBD
LAYBERTHING*	MINIMAL	TBD	NO	NO	MINIMAL
BOAT STORAGE/REPAIR	MIMINAL	$137	HYDRAULIC BOAT LIFT	NO	MINIMAL

* Depends on length of stay and number of vessels

From a job creation perspective, the container service, logging and fish processing relocation have similar annual job impacts. The other four opportunities have a minimal

economic impact. However, depending on the development of a direct automobile ferry operation, this could have a similar impact as the container service. However, potential auto volumes at this time are not quantifiable. The container operation would generate the largest revenue impact to the GVHA, assuming a 5 acre storage area and revenue of $35 per container. The support of the construction industry in terms of 3 acres of laydown area would generate the second largest revenue potential to the GVHA, but could have negative community impacts, in terms of traffic as well as in terms of impacting the view of the waterfront. Boat storage on two acres and topside repair have a minimal economic impact, but a significant potential in terms of revenue generation. Logs have a strong economic impact, as well as a revenue potential and this requires minimum investment on the part of the GVHA.

It is emphasized that these quantitative measures are very preliminary, and will be refined as part of a port-wide master plan and after the follow-up marketing calls are made by GVHA officials. However, the evaluation criteria suggest that each of the identified opportunities could enhance the revenue to GVHA, while minimizing the impact on the cruise season. The opportunities involving truck transportation to and from the OPMT terminal are those that would likely have the greatest impact on the community, but also have the greatest economic impact potential.

Exhibit 8 summarizes the non-cruise related market potentials identified for OPMT.

Exhibit 8
Summary of Opportunities

Opportunity	Market Potential Area	Load/Volume Potential	Required Land Area	GVHA Investment Required	ILWU Opportunity	Job Creation (#)	Port Revenue ($000)	Cruise Conflict	Community Conflict
Logs	Jordan River	192,000 tonnes annually	Water storage area required – size depends on loads	Minimal if any	Yes	60	$350	TBD	Minimal
Automobile Ferry Service & Storage	Vancouver – Annacis Island	200+ current # autos stored	1 acre	Fencing/Lighting	Yes	Minimal	$137	No	TBD
Container Feeder Service	Nanaimo	11,500 TEUs	4-5 acres storage area	Fencing/Lighting	Yes	65	$898	TBD	TBD
Yacht Relocation	Various	Various	Minimal	N/A	No	0	Minimal	TBD	TBD
Inner Harbour Fish Processing Relocation	Relocation from FW – dependent on US/Canada Tuna Treaty	4,000,000 lbs +	3,000 sq ft of fenced area plus floating dock – more if expansion into fish processing	Utilities – cost recovery and assumes operator invests other infrastructure	No	50-60	$20-$30 plus fish offloading concession based	No	Minimal
Construction Industry Support	Various – Vancouver Island destination	Unknown	Unknown	Fencing/Lighting	No	Minimal	$422	TBD	TBD
Expansion of Cable laying & Maintenance Operation	Marketing Opportunity – very little data available								
Boat Storage & Top Side Repair	Various – winter season opportunity	Unknown	Unknown	Hydraulic boat lift	No	Minimal	$137	No	Minimal
Layberth Operations	Local	Unknown	Berth Space	No	No	Minimal	??	No	Minimal

16. Non-Cargo Opportunities

In addition to the more traditional maritime uses for the OPMT facility, the interviews with the stakeholders identified several other potential uses to enhance the revenue diversification of GVHA.

One opportunity noted was the development of a transportation hub at OPMT, incorporating the ferry system and float plane operations at OPMT. This would help reduce congestion in Victoria Harbour, allow for the development of a single ferry terminal, consolidate customs operations and integrate the other modes of transportation with the heliport operations.

The second opportunity involves the attraction of "green" based marine businesses, focusing on marine research, mapping, surveying and partnering with a local university to develop a maritime studies campus. In addition, the development of a maritime museum was also identified as a possible use of a portion of OPMT. However, it is to be emphasized that these non-cargo related uses would also result in significant traffic in the residential area surrounding OPMT.

The development of these more real estate type uses should be the focus of an inner harbour master development plan, that would also incorporate a long term master development plan for OPMT, building off the results of the identified market potential opportunities, both cargo and cruise.

17. Implications

In order to convert any of the identified potential market opportunities, it is critical that the GVHA develop an aggressive marketing campaign, targeting these opportunities and engage in open conversation as to the advantages of using OPMT. Further, through these discussions, the GVHA will need to prioritize the opportunities based on the likelihood of success, and begin a master planning process to identify optimal layouts of the various opportunities along with the cruise service/terminal development plans. It is critical that both the cruise opportunities and cargo opportunities be evaluated in terms of compatibility of operations at OPMT, as well as in a manner to optimize GVHA revenue and economic impact, and yet minimize community and environmental impacts. The master plan must include a detailed assessment of costs of project

development associated with the market opportunities (both cargo and cruise), as well the revenue potential to the GVHA of the market opportunities. Prior to development of any identified project, detailed feasibility studies will be required and it is necessary to identify the possibilities for public private partnerships.