Municipality of Skagway: Strategic Planning & Execution of Cruise-Related Facilities

Waterfront Strategic Vision Draft Plan

February 22, 2020

Bermello Ajamil & Partners

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1. Executive Summary

Recommendation

As outlined in the study, the Municipality of Skageway has the opportunity to design an operating model based upon the needs of the community. Thus, it would be in the best interest of the community to control the waterfront asset moving forward to a greater degree and reap the financial rewards and risk to the major waterfront asset. The Municipality of Skagway should Own and Operate its Waterfront into the long-term.

This provides control of the waterfront vision long-term for community access and use; and, provides control of primary business development – cruise, cargo, commercial. This path forward offers the MOS the ability to craft the operating structure to meet the needs of the community and set the precedent for the management of the waterfront. By example, this pathway would also allow for potential partnerships to be formed if they are in the best interest of the MOS community. They may include the New Cruise Pier either via direct investment or preferential berthing agreement for guarantees of traffic throughput or a PPP for a new cargo Ro Ro berth and upland cargo facility; as well as potential mining and commercial ventures. This venture will support investment through cruise passenger throughput (proven track record), thus limiting the overall risk moving forward.

Overview

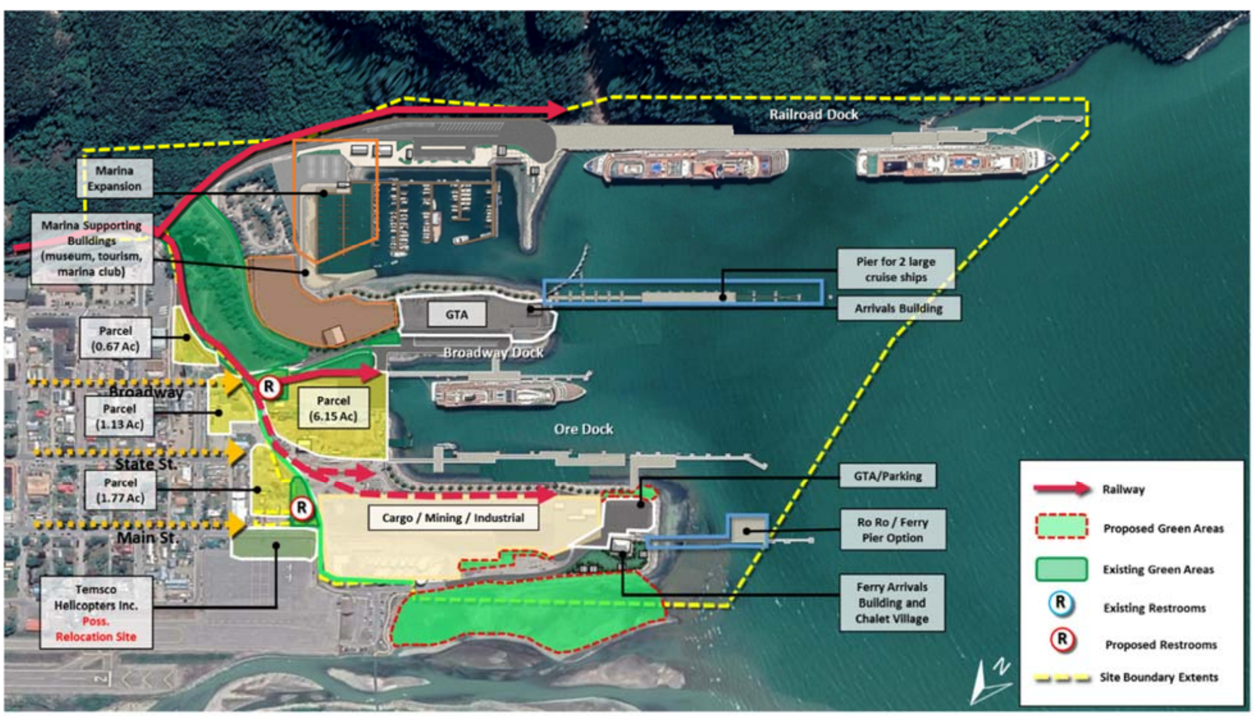
In March 1968 the City of Skagway leased a ~66.5-acre portion of the Skagway tidelands to the Pacific and Arctic Railway and Navigation Company (White Pass and Yukon Route Railroad (WPYR) until March 2023 – a 55-year lease term. In July 2018 the railroad was sold to Ketchikan-based Survey Point Holdings, its affiliates Rail Management Services, shareholders of the transportation company Carrix and Holland America Group (HAG) as part of the Carnival Corporation.

In anticipation of the lease expiration in 2023 a number of issues must be addressed including future ownership / operations of the MOS waterfront; upgrades and restoration to the docks and adjacent uplands to support not only the increasing cruise tourism passengers and increasing vessel sizes, but to meet the needs of the cargo, mining and commercial ventures that provide for the community of Skagway and Yukon year-round; access to the water's edge for citizens and visitors alike in order to link the downtown core with the port area for improved and safer vehicular and pedestrian traffic flows; infrastructure - inclusive of roads, sidewalks, sewer & water, energy, etc. that support the community and are impacted by the large influx of cruise visitors in the peak summer months; critical environmental remediation of the ore dock area including underlying soils to prevent further damages prior to the expiration of the current lease; expansion of the small boat harbour to accommodate increased demand for slips; collapsing AMHS ferry service to Skagway; and, providing for a primary cargo/fuel berth into the future to accommodate the needs of the community and Yukon territories mining potential.

Key Port of Skagway goals and objectives are outlined as follows:

- Environmental remediation of the Ore Basin;
- Enhancing and improving docks and upland tourism and commercial infrastructure, to accommodate larger cruise vessels in the immediate future (as early as 2022) and allow for a prioritized Ro/Ro cargo, ore and fuel berth / consolidated upland area to meet the needs of the community;
- Retain and improve waterfront areas for industrial purposes;
- Provide for pedestrian corridors linking the waterfront to the downtown core for guests, residents, and users to enjoy the waterfront;
- Improve traffic corridors linking the main thoroughfares to the Ore, Broadway, and Railroad Docks, as well as the upland cargo and commercial areas;
- Develop new, comprehensive signage and wayfinding program to better communicate pathways and improve the overall visitor experience;
- Integrate greenways, open spaces and parks along the water's edge;
- Develop an Ownership / Operator structure for the Port of Skagway that is efficient and well-functioning, increases revenue opportunities and provides for control of the waterfront to the MOS community; and,
- Define a long-term Waterfront Vision Plan for the Port that can be supported by the residents of Skagway and maintains opportunities for diversified economic activity that are conducted in an environmentally sound manner by and for the needs of the users and stakeholders.

Waterfront Vision Plan



The Municipality of Skagway's Long-term Waterfront Vision Plan provides for the needs of the community into the future from a physical and financial perspective. As a marquee Alaska cruise destination, Skagway will need to provide for an additional two large berths to allow for cruise traffic increases over the next 20-years. Based on berth demand estimates there is a need to provide a total of 5 berths from 2022 to allow for the mid-point cruise projection model[1], of which at least four should accommodate large cruise vessels of some 1,200-ft. In addition, it has been recognized that the Ore Dock should provide for the primary cargo/fuel/mining berth into the future and not allow for the regular displacement of these vessels due to the need of the berth for cruise ships.

A long-term waterfront vision plan for the Port of Skagway must serves the needs of the residents of Skagway and the inland Yukon into the future. The Port serves not only as a critical access way by providing flexibility for growth of a diverse set of waterfront businesses including cargo, mining, fuel, commercial, small boat harbor, ferry and cruise; but also can create revenues via direct tariffs, lease agreements and indirect taxes to allow the Municipality of Skagway to address and support resident needs and infrastructure required to support cruise tourism and the industrial activities of the Port. Through the small boat harbor expansion, and further development of park open spaces and greenways the vision plan can also provide for recreational access to the water's edge and connectivity to the downtown core for residents, cruise and ferry visitors.

The Vision plan for the Skagway waterfront and management / operations combined, should illustrate a path forward that facilitates sustainable and responsible growth. It should be reflective of the unique nature of the Port and its attributes including the provision for cruise tourism; mining; fuel supplies; cargo; recreational; and, commercial elements. The historical character of the port, community and surrounds must be preserved, while also recognizing the necessity for enhancing critical dock, uplands and roadway access infrastructure to support future needs.

Capital Plan

Skagway represents one of three marquee Alaska ports that serve to draw cruise passengers to the region throughout the summer months. Figure 10 shows Skagway's historical passenger and projected growth from 2010 through the 2039. A conservative capture rate of 76.2%, which is the 10-year trend for Skagway was used to show the projection range growing to between 1.634 and 2.044-million in 2039. Based upon the market assessment there is demand for 5 berths in 2022 under the mid scenario above. The Ore Dock would be used as an optional 6th cruise berth to allow for priority berthing to go to cargo/fuel operations on key days. Additional waterfront commodities include Mining Products; Fuel; General cargo; and, Ferry traffic. These commodities move through the Ore Dock with the primary operators being Petro Marine and Alaska Marine Lines.

[1] See Cruise Market Assessment Appendix A.

As part of the evaluation exercise to determine the potential ownership / operating / non-operating model and provide the MOS with a recommendation on moving forward the CIP elements were broken down into two specific options: Option A – No new Pier and Option B – New Pier.

Under Option A – No new Pier, the CIP items included in the overall build out totalling some $28.5-million in overall investment ($30.5 with inflation) over the period.

Under Option B that develops a New Pier for use in 2022 there is some $96.0-million in capital expenditures in the five year period from 2021 to 2026 ($100.8-million with inflation).

A major element in understanding the potential revenue flow for MOS under either scenrio outlined above is the distribution of cruise traffic. Option A most likely traffic split from 2022 – 2039 based upon the above modelling with the majority of cruise passenger traffic flowing through the Railroad Docks and capping at some 1.2-million per annum in 2039, while the Broadway / Ore Dock berths would see a substantially smaller share at 581,473-passengers in 2039. Option B passenger traffic split from 2022 – 2039 with a New Pier (2 new berths) dedicated to the MOS would be Railroad Docks at 40% (763,000 in 2039) and the remaining 4 berths at 60% per annum (1.0-million in 2039).

Two Models were tested: MODEL 1 – MOS OWNS AND OPERATES; and, MODEL 2 – MOS OWNS AND MANAGES THE PORT OPERATOR with an Option of No New Pier OR a New Pier.

Model 1A – No New Pier

- MOS is the Owner / Facility Manager
    - Leads marketing (with city tourism) and scheduling (with CLAA / Cruise Lines)
    - Security & stevedoring contract (either 3rd party or cruise line direct choice)
- CAPEX – $28.5 M
    - Includes small Boat Harbor expansion, Port Offices, OASIS Items, Ore Terminal & loader Demo., Cargo Move (No RORO), Berth rehabs and Commercial Village.
- Gross revenues to the MOS move from ~$541,660 in 2019 to ~$4.7-million in 2023 and ~$9.7-million in 2039.
- Expenses begin at ~$430,000 in 2021 as staffing is assembled and grows to ~$4.5-million in 2039. The largest share of annual expenses are salaries and maintenance.
- Model 1A provides positive net income for the MOS in 2028 (without CPV) at ~$74,000 and by 2039 produces ~$3.25-million. With CPV this moves to ~$12.3-million in 2039.

Model 1B – New Pier 2022

- MOS is the Owner and Facility Manager
    - Leads marketing (with city tourism) and scheduling (with CLAA / Cruise Lines)
    - Shares maintenance (contract out major items)
    - Janitorial (with city services / 3rd party)
    - Security & stevedoring (either 3rd party contract or cruise line choice)

    - Begin assembling staff in 2021 with GM & Staff (pier ops in 2022 / overall startup spring 2023)
- CAPEX – $96.0 M
    - Includes Broadway Ferry Cruise Pier (2 ship berths), Small Boat Harbor expansión, Port Offices, OASIS Items, Ore Terminal / loader Demo., Cargo Move (with RORO), Berth rehabs, Commercial Village, Ferry move & new terminal.
    - Potential PPP with cargo for Ro Ro berth and uplands.
- Gross revenues to the MOS move from ~$541,660 in 2019 to ~$10.4-million in 2023 and ~$21.2-million in 2039.
- Expenses begin at ~$700,000 in 2021 as staffing is assembled and grows to ~$4.5-million in 2039.
- Model 1B provides positive net income for the MOS in 2023 (without CPV) at ~$960,000 and by 2039 produces ~$10.2-million. With CPV this moves to ~$19.2-million in 2039.

Model 2A or 2B

Under Model 2A and 2B the MOS continues to own the waterfront, but manages a separate Port Operator under a lease agreement. As there are numerous paths forward under this alignment, translating this into a financial model for comparison purposes is a difficult task that does not produce a result that could be effective in this exercise. For discussion purposes we assume the following related to the Model:

The ramifications to the MOS under the lease model are clearly known as this has been in practice for the past 50 plus years. There has been less control and reward over the period. This could be adjusted to some degree in moving forward with a new lease model, but the MOS would likely be giving up substantial revenues in return for a port operator’s investment in new development whether it be a New Pier to meet the demands of the cruise industry or the other CAPEX items outlined in the Vision Plan.

Observations

Model 1A – Owner / Operator (No New Pier)

- This model could produce additional revenues with new tariffs and lease schedules.
- There were no new tariffs introduced as part of this model as no berth infrastructure was developed.

Model 1B – Owner / Operator (New Pier)

- Produces the highest revenues for the MOS.
- There is a higher level of risk as the MOS is taking on all operations and financing of major projects.
- However, financing risks can be mitigated through -
    - Non-recourse revenue bonds / Traffic or revenue guarantee agreements.
- MOS has the most control over the waterfront in this model.
- This option could support ~$100- million in major port development projects.

Model 2a or 2b – MOS Owns and Manages the Port Operator (Lease model)

- Has numerous paths forward for a final financial model.
- Least financial risk to MOS, but loss of upside potential.

- Less control of the waterfront business elements / community drivers (parks, pathways, etc.).

Action Plan

There are a two critical dates that must be considered in the action plan:

- **March 2023** Waterfront lease Expiration for which a number of key items must be addressed and prepared to coordinate a smooth transition. The MOS been in discussions internally and have experienced some pre-transition issues with respect to the Ore Dock Environmental cleanup, infrastructure claims, etc.

- **April/May 2022** for the opening of a new potential Broadway Pier for 2 large cruise vessels. This drives a number of other timelines and decisions related to the ferry dock, acquisition, movement (temp. / perm.) Financing, design/engineering, scheduling, etc. This element could be opened later (2023) but there are substantial advantages for the MOS to move this effort forward and be prepared for a 2022 opening allowing for additional flexibility on the waterfront and gaining direct cruise revenues prior to the lease expiration in 2023.

Below are a list of some of the major plan items to be addressed as part of the MOS plan recommendation to move forward with MOS Ownership / Operation of the Waterfront.

- Assembly passes resolution on the Management / Operations of the Waterfront
- Communicate the direction:
    - To the community and waterfront / port users stakeholders via outreach – simple and clear messaging to prepare for next steps
    - Cruise line, cargo lines, ferry,
        - Organize Cruise line meetings during SeaTrade (April 2020)
- Definition and resolution of major items related to the Lease Expiration
    - Ore Dock Remediation
    - Infrastructure exchange
    - Existing Lease transitions, renewals
    - Cargo Dock transition process / timing – Ro Ro Ramp, PPP Option, etc.
- Waterfront Plan Finalization
    - Timeline for implementation of plan elements
    - CAPEX for plan elements - funding
        - Major decisions on rail access
        - Ore Dock terminal demo / cargo movement
        - Temsco relocation
        - Small Boat Harbor expansion
        - OASIS trail system final options
- Management & Operations Plan – Prepare the management plan for the waterfront including:

    - Identify reporting system to MOS
    - Identify full chain of command / decision-making roles
    - Identify key Management positions – job descriptions, salary, dates of hire.
    - GM/Port Director hire to assist with the assembly of organization and hiring.
    - Budget Preparation – identification of revenue / expense ítems.
    - Business and finance plan
- Cruise Operating Plan (specifics)
    - Complete the Port Manual with tariffs and rules
        - Tariff development
        - Define tariffs
        - Communicate to users
            - Cruise – provide Minimum 12 to 18 month window for changes
    - Establish berth scheduling methodology
    - ISPS development & approvals by USCG
    - Establish process for 3rd Party service providers – security, stevedoring, etc.
    - Marketing Plan – interaction with White Pass, Skagway Tourism, CLIA, ATIA, etc.
- With New Pier (12 – 18 month design / build)
    - Acquisition, finalization of ferry terminal, dock
        - Relocation plan – temporary / permanent
    - Master plan and budget
    - Business plan
    - Technical studies – EIA, navigation, geotechnical
    - Pier design / upland design work – reception facility, GTA, ingress / egress
    - Permitting
    - Construction / Oversight

2. Overview

Along with the other key marquee ports in Alaska (Juneau and Ketchikan), the destination of Skagway has seen remarkable success with its increasing cruise tourism business over the past 30-years. This booming business combined with its deep water that allows for providing goods & services to the community of Skagway and into the Yukon (mining, fuel, commercial goods) makes the Port/Waterfront of Skagway a strategic key asset moving forward.

Located in the upper Lynn Canal and considered the northernmost point in Southeast Alaska, the Municipality of Skagway is 80 air miles from the City and Borough of Juneau, Alaska, and 110 miles by road from Whitehorse, Yukon Territory, Canada. The Port of Skagway is the northernmost ice free, deep-water port in North America and serves as a year-round transportation hub between Alaska, the Yukon Territory, Northern British Columbia, the Northwest Territories and Europe.

The Port of Skagway is the community's primary economic development resource and includes three deep-water docks (two within the MOS tidelands lease boundary), a barge cargo facility and storage yard, the State of Alaska's ferry terminal and dock, and a small boat harbour, as well as small commercial ventures. Cruise ships arriving in the summer months (primarily May - September), ore and fuel barges are served on the main docks of Skagway. The current ferry dock accommodates ferries managed by the Alaska Marine Highway System, small cruise ships and commercial vessels. The small boat harbor provides for recreation and commercial vessels for citizens from Skagway and into the Yukon.

In March 1968 the City of Skagway leased a ~66.5-acre portion of the Skagway tidelands to the Pacific and Arctic Railway and Navigation Company (White Pass and Yukon Route Railroad (WPYR) until March 2023 – a 55-year lease term. In July 2018 the railroad was sold to Ketchikan-based Survey Point Holdings, its affiliates Rail Management Services, shareholders of the transportation company Carrix and Holland America Group (HAG) as part of the Carnival Corporation.

In anticipation of the lease expiration in 2023 a number of issues must be addressed including future ownership / operations of the MOS waterfront; upgrades and restoration to the docks and adjacent uplands to support not only the increasing cruise tourism passengers and increasing vessel sizes, but to meet the needs of the cargo, mining and commercial ventures that provide for the community of Skagway and Yukon year-round; access to the water's edge for citizens and visitors alike in order to link the downtown core with the port area for improved and safer vehicular and pedestrian traffic flows; infrastructure - inclusive of roads, sidewalks, sewer & water, energy, etc. that support the community and are impacted by the large influx of cruise visitors in the peak summer months; critical environmental remediation of the ore dock area including underlying soils to prevent further damages prior to the expiration of the current lease; expansion of the small boat harbour to accommodate increased demand for slips; collapsing AMHS ferry service to Skagway; and, providing for a primary cargo/fuel berth into the future to accommodate the needs of the community and Yukon territories mining potential.

For some time the MOS has recognized the need to push forward with an understanding as to how best to deal with its waterfront given the circumstances presented by the current ownership / lease model; coming expiration of the lease; and the underlying leases and port infrastructure issues presented. This study is a result of the need of the MOS to evaluate its options and garner guidance as to the approach moving forward that is in the best interest of the community residents, MOS, waterfront users and stakeholders. The study is intended to evaluate the current ownership/operating options and provide a recommendation for moving forward. The following steps were undertaken as part of the process:

- Identifying the potential future cruise, freight, fuel and mining markets
- Evaluate the existing marine facilities
- Develop a waterfront vision plan based upon the market assessments, stakeholder and community input
- Define the cost to implement the vision plan
- Provide for a viable business structure (ownership/operations relationship) to meet the needs of the MOS into the long-term
- Outline an implementation strategy (Action Plan) to fulfil the recommendations

Along with the Bermello Ajamil & Partners, Inc. (B&A) Team, we also brought the Juneau-based McDowell Group to support us on this project due to their extensive experience in Alaska port and marine freight-related research, as well as 40-plus years of tourism and mining industry research and consulting. B&A has worked with the McDowell Group in the past and conducted the freight, fuel and mining market assessments for the study. The work done by the McDowell Group is included as an Appendix to the report.

As part of the process, B&A met with and collected input from a series of users and port stakeholders, community groups, and direct community input by more than 175 residents and non-residents. Feedback from the community is provided as an Appendix to the report.

This effort as well as other recent waterfront planning efforts by the Municipality garnered considerable public input outlining many priorities for the future development of the Waterfront / Port of Skagway. Thus, several Port of Skagway goals and objectives are outlined as follows:

- Environmental remediation of the Ore Basin;
- Enhancing and improving docks and upland tourism and commercial infrastructure, to accommodate larger cruise vessels in the immediate future (as early as 2022) and allow for a prioritized Ro/Ro cargo, ore and fuel berth / consolidated upland area to meet the needs of the community;
- Retain and improve waterfront areas for industrial purposes including the separation of tourism from these activities;

- Pedestrian corridors linking the waterfront to the downtown core and maintaining a safe, welcoming pathway for guests, residents, and users to enjoy the waterfront and access the downtown area and surrounds;
- Improved traffic corridors linking the main thoroughfares to the Ore, Broadway, and Railroad Docks, as well as the upland cargo and commercial areas;
- Development of a new, comprehensive signage and wayfinding program to better communicate pathways and improve the overall visitor experience;
- Integration of greenways, open spaces and parks along the water's edge to enhance resident and visitor experiences;
- Developing an Ownership / Operator structure for the Port of Skagway that is efficient and well-functioning, increases revenue opportunities and provides for control of the waterfront to the MOS community at the end of the current lease in 2023; and,
- Defining a long-term Waterfront Vision Plan for the Port that can be supported by the residents of Skagway and maintains opportunities for diversified economic activity that are conducted in an environmentally sound manner by and for the needs of the users and stakeholders.

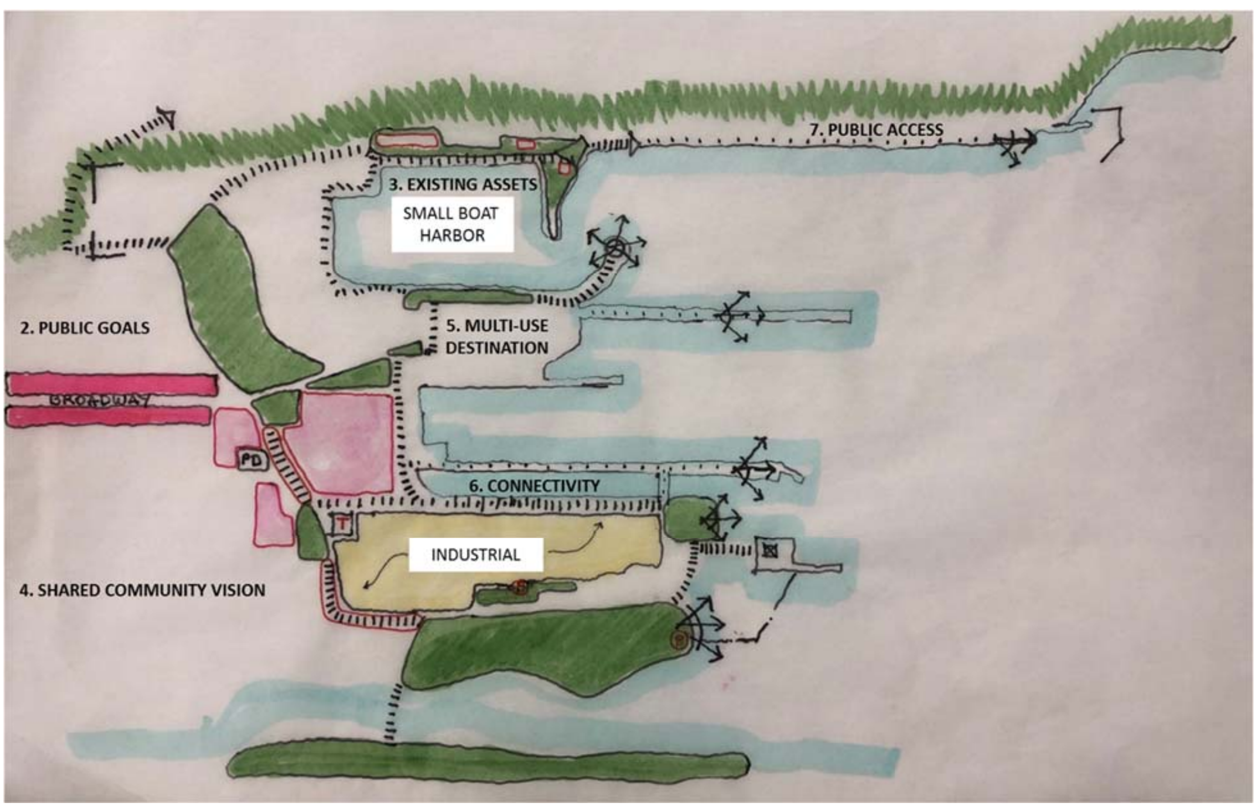
3. Future Waterfront Vision Plan

Skagway Waterfront Vision Plan

A long-term waterfront vision plan for the Port of Skagway must serves the needs of the residents of Skagway and the inland Yukon into the future. The Port serves not only as a critical access way by providing flexibility for growth of a diverse set of waterfront businesses including cargo, mining, fuel, commercial, small boat harbor, ferry and cruise; but also can create revenues via direct tariffs, lease agreements and indirect taxes to allow the Municipality of Skagway to address and support resident needs and infrastructure required to support cruise tourism and the industrial activities of the Port. Through the small boat harbor expansion, and further development of park open spaces and greenways the vision plan can also provide for recreational access to the water's edge and connectivity to the downtown core for residents, cruise and ferry visitors.

Based upon the cruise market assessment, berth demand analysis and design vessel conditions for Alaska, specifically Skagway there is a clear need to addresses required cruise berths in the short to long-term, while also providing a primary Industrial cargo berth and uplands to support MOS and inland Yukon business activities on a year round basis. Thus, the Vision plan for the Skagway waterfront and management / operations combined, should illustrate a path forward that facilitates sustainable and responsible growth.

Great Waterfronts



In assembling a great waterfront there must be an awareness of the specific place. Each waterfront and destination is unique based upon geography, history, and related port activities. There are a number of guiding principles that can assist in defining and developing a vision for a great waterfront space including the following elements:

- **Look first at the public spaces:** Provide for a network of well-connected multi-use public spaces. Address how any new construction will enhance existing destinations. Meeting public goals are the primary objective that should be defined through community engagement. Any type of redevelopment plan should adhere to the notion that the waterfront is inherently a public asset. In the context of Skagway this holds absolute.

- **Build on existing assets and context:** There is a locally grounded identity in Skagway that shoudl be reflected in the develoment and operations of the waterfront. The existing industrial uses should be preserved when they are compatible with surrounding land uses and upland needs to support economic development.

- **Shared community visión:** Looking out over the long-term the visión should provide initiatives to achieve new possibilities and enhancements to serve the community. Small steps can become powerful public changes by the mere enhancement of linkage and access to the waterfront via trail systems and scenic overviews.

- **Create multiple-use destinations:** Within and adjaccent to the waterfront that exist separately, but provide for a series of opportunities to explore for the residents and visitors. Each destination is interactive such as the small boat harbor and surrounding retail outlets and trails; or the ferry facility and adjacent waterfront structures providing new commercial activity options and encouraging longer use patterns whether they be extending the day or seasonality along the Skagway waterfront.

- **Connect destinations along the waterfront:** Make the beautiful Skagway waterfront walkable with a variety of activities that draw people to and from each for different reasons. While ensuring the commerical activities of the Port are meeting the needs of the users and stakeholders and prividng for the required functions today and into the future, the focus of the visión should be to maximize opportunities for public access and allow for interaction with the wáter's edge through a variety of means.

Finally, the development of the Vision Plan for the Skagway Waterfront should be reflective of the unique nature of the Port and its attributes including the provision for cruise tourism; mining; fuel supplies; cargo; recreational; and, commercial elements. The historical character of the port, community and surrounds must be preserved, while also recognizing the necessity for enhancing critical dock, uplands and roadway access infrastructure to support future needs.

Figure 1 provides an overview of the key ingress / egress points linking the waterfront with the downtown core and Yukon Highway. These are heavily sued for vehicular traffic to support cruise tourism the industrial capacity of the port. Broadway is the main thoroughfare and for moving in and out of the port for thousands of cruise tourists daily during the summer months. Main and State Streets provide for the most direct access ways to the Yukon Highway own business community from the primary industrial areas of the Port. In the mid- to long-term the continued enhancement of these roadways to provide for traffic to and from the port is crucial.

Figure 1: Vehicular Access

There are two distinct elements at the Port of Skagway. They include the working waterfront that consists of the cruise and cargo docks and their upland ground transportation areas, warehousing, boat storage and cargo laydown areas and the recreational waterfront that could provide for year round activities for the residents of Skagway through the continued development of pedestrian trails, scenic overlooks to Lynn Canal, mountains and wetlands.

Figure 2 illustrates the current OASIS committees suggested plan for shoreline trails and parks along and adjacent to the waterfront. Some trails already exist while others are proposed. As part of the future vision of the waterfront there should be safe wide pedestrian access ways connecting the cruise tourism berths with the downtown core designed to lead visitors to and from the downtown and provide an overall sense of the historical and natural atmosphere of Skagway. This will likely include widening of some sidewalks over time and the addition of appropriate signage for wayfinding, information and ambience of the community. Safe pedestrian and vehicular access across the heavily used railroad tracks along the port perimeter should be a priority. The White Pass Railroad, amongst other tourism activities are the cornerstone of the cruise tourism product of Skagway, thus access to the cruise ground transportation areas and the supporting ingress / egress should be provided for accordingly.

Figure 2: Pedestrian Access & Trails

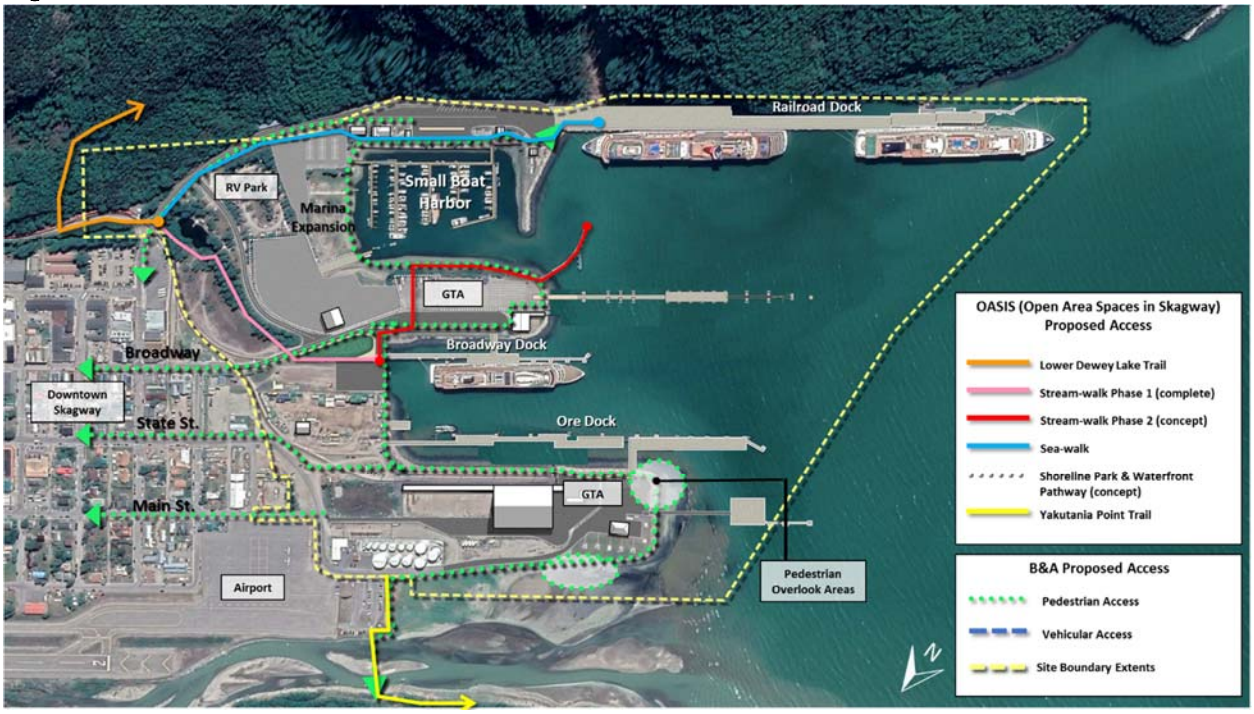
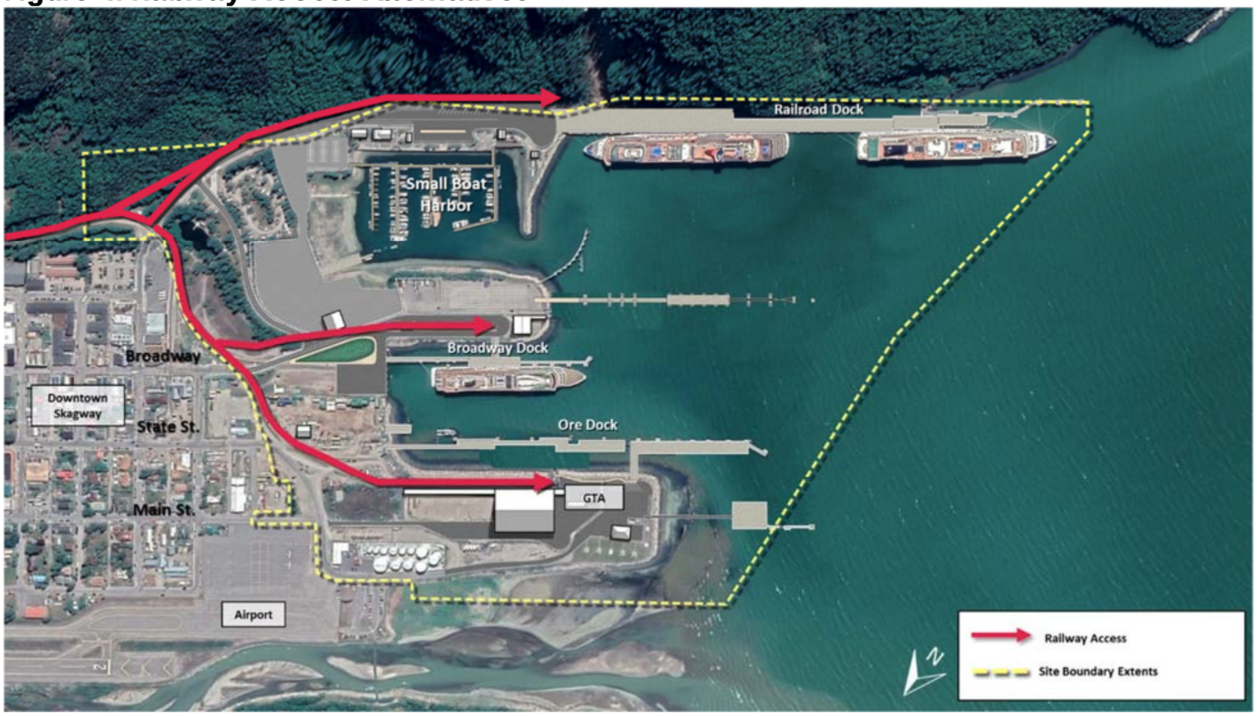


Figure 3 shows the existing and proposed green spaces that could be added to the waterfront to soften the edges and provide for relaxing areas for residents and visitors. Additional restrooms are also proposed to meet the demand of visitors into the future.

Figure 3: Existing & Proposed Green Space

As outlined above, access ways for the White Pass Railroad, servicing the cruise tourism industry should be provided due to the unique experience and relationship that is a part of Skagway. Close coordination with the operations of rail will be essential to allow for safe flows and use of crossings for other key cruise tourism vehicular access to the GTAs and industrial access for cargo, fuel and other commercial entities.

Figure 4: Railway Access Alternatives



Long Term Waterfront Vision Plan

The Municipality of Skagway's Long-term Waterfront Vision Plan provides for the needs of the community into the future from a physical and financial perspective. The key market assessments and user outreach efforts illustrated the need for an expanded small boat harbor; the addition of a New Cruise Pier to accommodate 2 large cruise vessels (Ferry Pier); the need for a primary industrial Ro/Ro and cargo/fuel/mining berth (Ore Dock) and uplands area (Ore Terminal) to serve the community and interior; and, the development of a new ferry berth and terminal (due to the age of the current facilities, AMHS operational issues, and displacement for a new cruise pier); enhanced pedestrian access and waterfront trails and overlooks; and, the potential for commercial areas adjacent to the port area and waterfront. The plan also moves the Temsco facility from its existing location to the airport following the lease expiration.

Figure 5 also identifies several commercial parcels that could be used for future development to further tie the waterfront to the downtown core. However, these areas should provide for the right type and sized venues to allow for the movement of cruise tourists to and from the entirety of the downtown core.

Figure 5: Long Term Waterfront Vision Plan

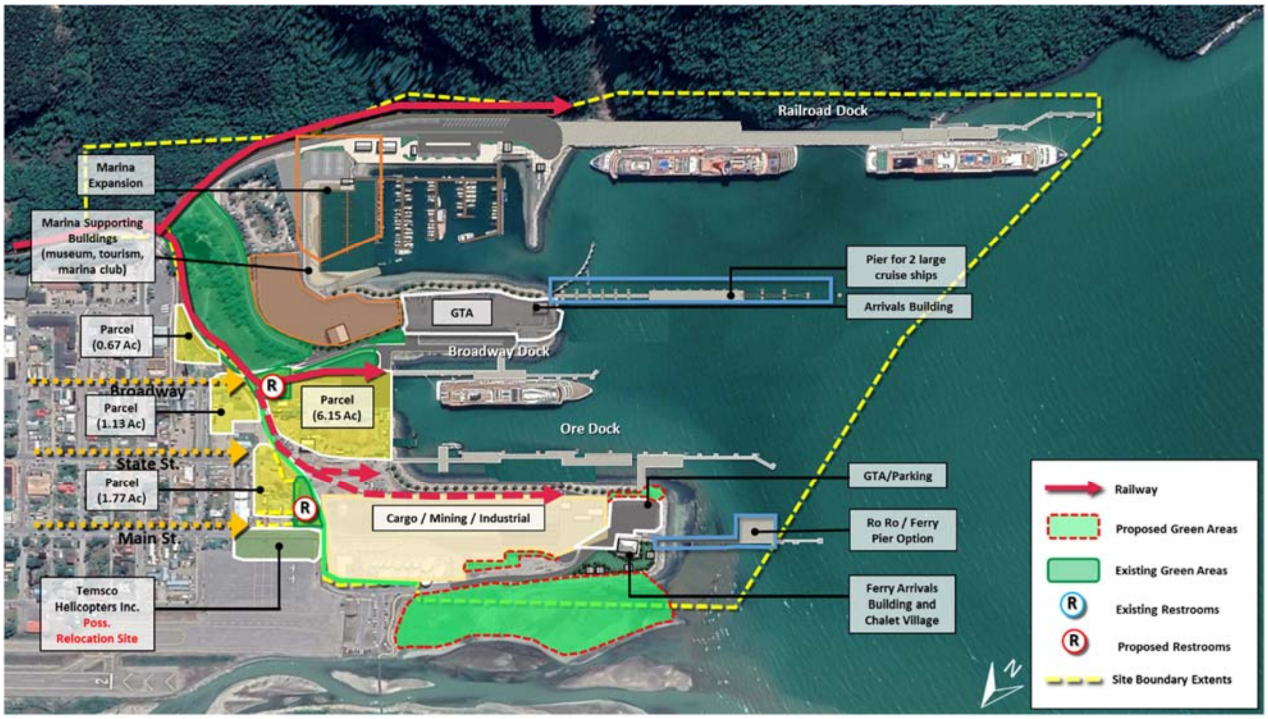
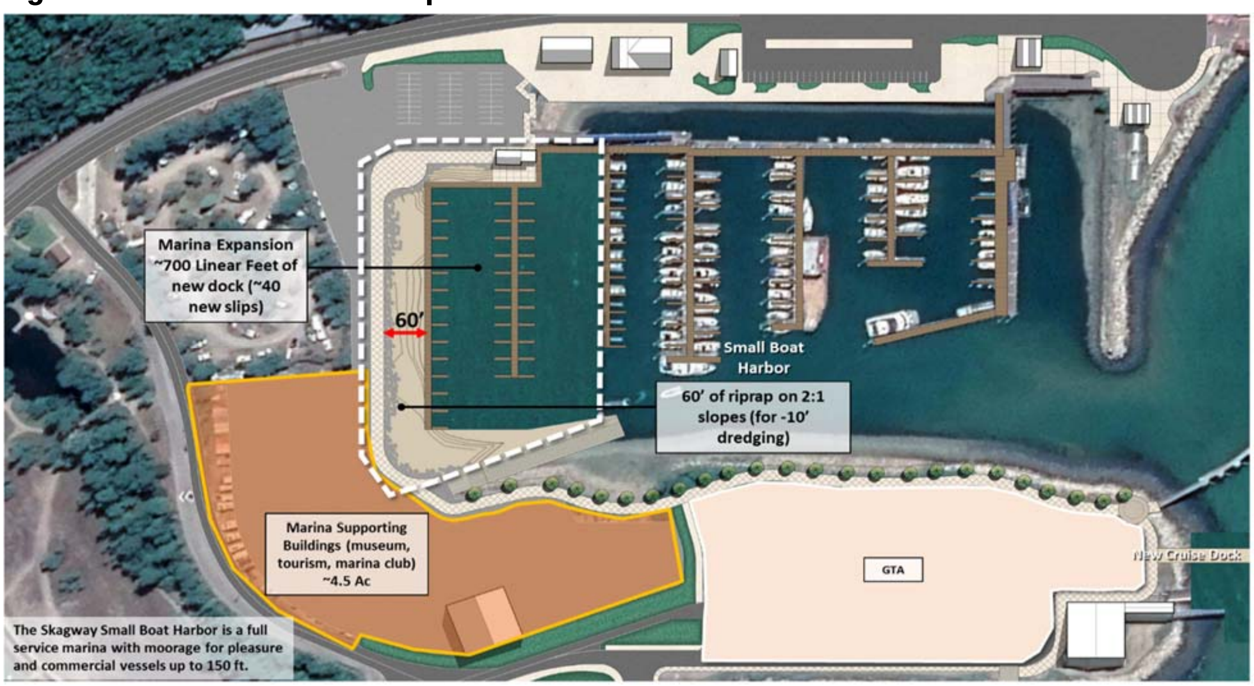


Figure 6 provides for an overview of the small boat harbor expansion that the MOS had already contemplated prior to this study allowing for an additional ~40 plus new slips as well as an enhanced upland support area for boat repair, storage, club, and other elements that complement the harbor and surrounds.

Figure 6: Small Boat Harbor Expansion

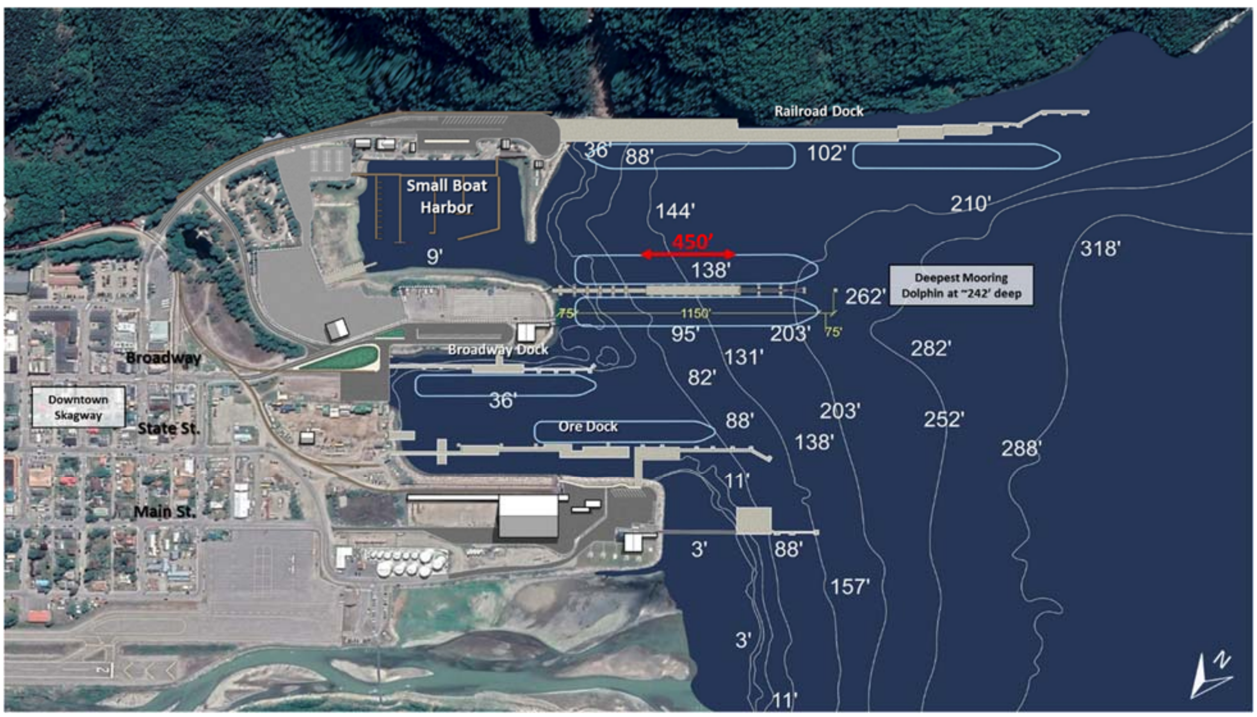


The marina support area and adjacent roadway and GTA should also be enhanced to provide for landscaping that is indicative of the Skagway area.

Ferry Pier Alternative – 2 NEW cruise berths

As a marquee Alaska cruise destination, Skagway will need to provide for an additional two large berths to allow for cruise traffic increases over the next 20-years. Based on berth demand estimates there is a need to provide a total of 5 berths from 2022 to allow for the mid-point cruise projection model[2], of which at least four should accommodate large cruise vessels of some 1,200-ft. In addition, it has been recognized that the Ore Dock should provide for the primary cargo/fuel/mining berth into the future and not allow for the regular displacement of these vessels due to the need of the berth for cruise ships. Thus, the development of a floating pier for 2 large vessels where the ferry pier currently exists would provide for this requirement – meeting the needs for cruise and cargo. See Figure 7.

Figure 7: Ferry Pier Alternative – New Cruise Berths



Both the Ore and Broadway Docks will also likely require upgrades / renovations from 2023 to replace fenders, bollards, and support structures. The Ore Dock loader would be dismantled and the upland Ore Terminal demolished or used for other industrial purposes dependent upon a final inspection, environmental mitigation and identified industrial uses.

While Broadway Dock would remain for small to mid-size vessels the adjacent Ground Transportation Area (GTA) would undergo major enhancements to service the New Ferry Pier which could add some 9,000-plus passenger daily (2 vessels) moving into the center of the Skagway waterfront.

[2] See Cruise Market Assessment Appendix A.

Figure 8 illustrates the simple use of the space for a wide lot to allow for a variety of vehicle types and carry over theme from existing structures along the waterfront. The area would provide for shelter, reception with restrooms, green buffers and be passenger and tourism provider friendly. Simple signage / striping would allow for easy changes.

Figure 8: Broadway Dock Transportation Concepts

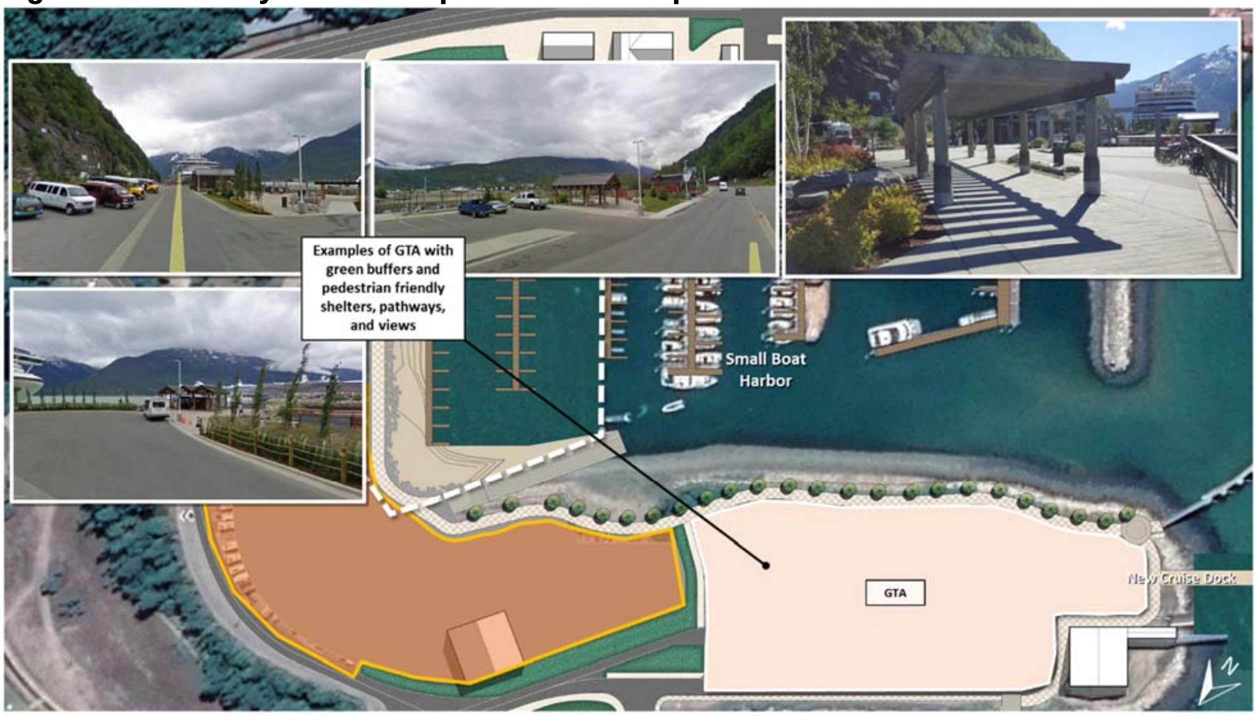


Figure 9 shows the potential permanent location for a new ferry facility. The adjacent areas would also provide for a GTA and parking area, as well as a commercial area with Chalet style out buildings that could provide commercial opportunities catering to ferry, cruise visitors, crew and residents. Once again the existing building theming would be carried over to this area. The green space and river access trail would be tied into the waterfront trail running throughout the port area. It would provide a unique mix of industrial and natural tourism elements.

The current tank farm and ore terminal area would be designated industrial and would provide the base for Ro/Ro cargo operations as well. This assemblage of area and berth may also provide an opportunity for the MOS and Operators to form a PPP to ensure the right infrastructure (Ro/Ro Berth / Fuel Headers) and operations are in place to meet long-term business requirements.

Figure 9: Ferry Terminal, Commercial Uplands and Industrial Area

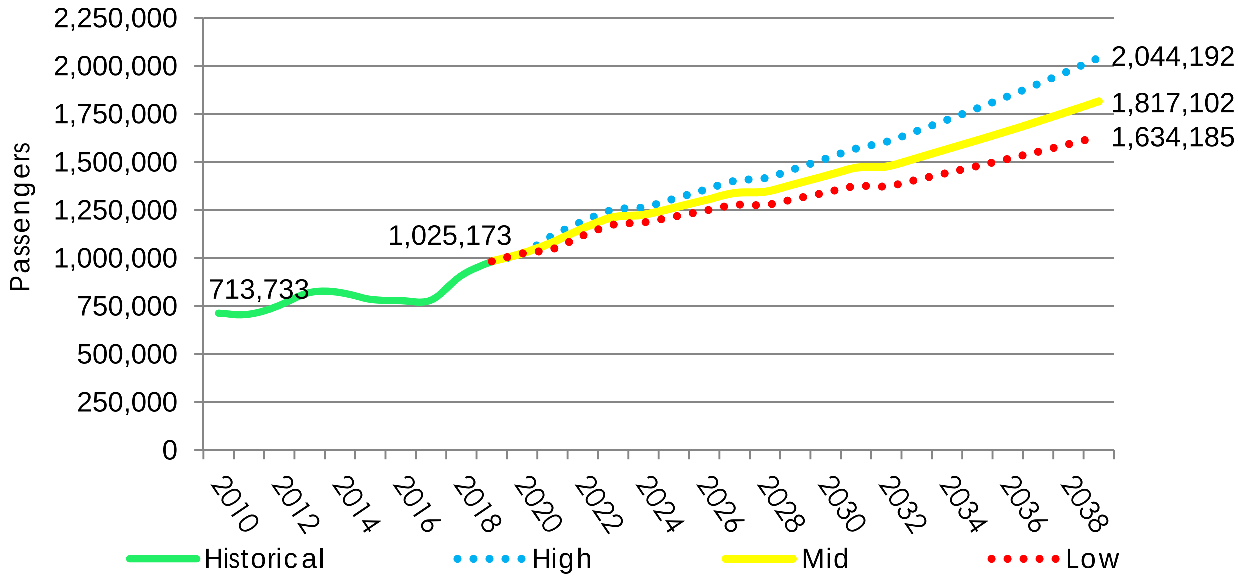
4. CAPITAL PLAN

Overview

Skagway represents one of three marquee Alaska ports that serve to draw cruise passengers to the region throughout the summer months. Figure 10 shows Skagway's historical passenger and projected growth from 2010 through the 2039. A conservative capture rate of 76.2%, which is the 10-year trend for Skagway was used to show the projection range growing to between 1.634 and 2.044-million in 2039. Growth is 2.6% - 3.7% per annum over the period. This growth is attributable to the desire of existing and new cruise brands serving a variety of demographics to deploy vessels and increase their capacity in Alaska.

Due to trends towards larger cruise ships and more cruise visitors, the MOS can expect the average vessel to increase in physical size and passenger capacity over time as well, growing from some 2,268-passengers per call on average in 2020, to more than 3,798 per call in 2039. Thus, existing port facilities and upland tourism infrastructure must be built to accommodate these increasing capacities. Overall it is estimated that cruise calls will grow from 452 to between 430 and 538 in 2039 as a majority of the passenger growth occurs through larger vessels and not strictly a higher volume of ships calling in Skagway.

Figure 10: Skagway Cruise Passenger Projections, 2010 - 2039



Berth Demand Conclusions

Based upon the market assessment there is demand for 5 berths in 2022 under the mid scenario above. The Ore Dock would be used as an optional 6th cruise berth to allow for priority berthing to go to cargo/fuel operations on key days.

It is also likely as the region continues to expand that berth calls will spread into weekend days due to the global Alaska berth demand issue and the needs for additional homeport berth options in Vancouver, Seattle and to a lesser degree Seward. The deployment of larger ships into the region will essentially stabilize berth utilization rates in the mid- to long-term; but also will place more pressure on the upland soft tourism infrastructure to deliver a wide variety of products and services to a large audience on a daily basis during the Alaska cruise season. Berth infrastructure also needs to support larger vessels and passenger capacities.

Under the high scenario there would be a need for 6 berths over the long-term. However, our recommendation is to plan now for 5 key berths into the future (mid-term) and then revisit demand every 5-years due to push / pull factors of the region marketplaces. There is a possible 6th berth required from 2027 in the high scenario.

As outlined above and as part of a business opportunity the MOS could provide a single pier with 2 large berths located in the mid port area (ferry terminal) in 2022 under the direct auspice of the MOS, prior to the expiration of the waterfront lease in 2023. Coordination for the necessary marine and geotech studies, design, financing, construction, permitting, berth scheduling, operations, tariff regulation development/ communication, etc. would need to begin immediately to allow for the berth to be ready for spring 2022.

Waterfront Commodities

Additional waterfront commodities include Mining Products; Fuel; General cargo; and, Ferry traffic. These commodities move through the Ore Dock with the primary operators being Petro Marine and Alaska Marine Lines. Appendix C: Skagway Freight & Ferry Traffic Analysis provides further details on the historical and projected capacities for each of the primary commodities listed above.

Petro Alaska Marine Services (Petro 49) serves Southeast Alaska with seven bulk fuel plants and marine fuel docks including the port of Skagway. A significant volume of fuel arriving in Skagway is transported to Yukon. Fuel is barged to Skagway from U.S. ports with barges arriving in Skagway about every 20 days carrying about 1.4 to 1.6 million gallons of fuel products. Total fuel storage capacity at the Port of Skagway is about 4 million gallons in 14 tanks that hold various combinations of jet fuel (ULSD #1), #1 and #2 diesel, aviation gas, regular unleaded gas and super premium unleaded gas. Aviation and unleaded gasoline are only sold in the local Skagway market. The vast majority of #1 and #2 diesel and all the jet fuel is sold into the Yukon market.

Alaska Marine Lines, a subsidiary of Lynden, Inc. provides weekly year-round barge service to Southeast Alaska communities including Skagway, carrying groceries, vehicles, construction materials, equipment, household goods, and other types of freight in container load, less than container load, reefer container, dry container, and bulk container. A Canadian Lynden company provides trucking services between Skagway and Yukon.

The barge typically arrives in Skagway between Monday afternoon and Tuesday afternoon, depending on several factors such as tides, weather, loads, etc. Offloading the barge involves a pass-pass procedure off the stern of the barge, where a forklift on the barge places a container, and a forklift on the dock picks the container, backs off the dock, and places the container within the yard. The Skagway dock can support roll-on/roll-off, however, the deck height of the barge and dock must be equal, either through timing of the tide cycle or use of barge ballast. Three to five hours are usually required to unload and load the barge in Skagway. Scheduling adjustments are occasionally required due to conflicts in dock access.

AML's yard is on subleased land. The 3-acre facility is appropriately sized for current freight volumes, according to a company representative. Though on leased land, all of the investment in the barge facility is AML's, including the existing dock, yard fencing, lighting, an office, and an enclosed cargo handling/equipment maintenance area.

Approximately 10,000 to 15,000 tons of freight are barged to Skagway annually for local consumption. In-bound tonnages destined for Yukon are highly variable from year to year but often exceed local volumes.

There is a need for future safe, reliable and affordable marine facilities. Barge requirements are for a 468-ft. LOA, 77-ft. beam, 22-ft. draft barge. This also requires manuevering, tug assist, with marine fuel header for a variety of products tied to the tank farm. AML needs at least two days per week for barge operations (12 – 18 hours), and this is challenging during the summer season due to volume and new pilotage restrictions limiting cruise operations in proximity to fuel barges.

In 2018, 23,777 passengers and 8,163 vehicles boarded AMHS ferries in Skagway. That same year, 26,074 passengers disembarked in Skagway, along with 9,335 vehicles. AMHS traffic had been trending up since 2015, however 2019 looks to be well below 2018 due to budget cut-driven service reductions and a nine-day ferry workers' strike. The outlook for ferry service in Lynn Canal and elsewhere in Alaska is uncertain, due to State budget cuts. That notwithstanding, the demand for ferry travel, including resident and non-resident travellers, is expected to be steady or trending up slightly. Thus, it is important for the MOS to strategically include ferry operations in the waterfront planning process.

Capital Plan

As part of the Waterfront Vision Plan development and to provide for budgetary items to be used within a Port Financial Model a series of order of magnitude cost estimates were developed for implementation between 2021 and 2026 based upon the needs of the Skagway waterfront from an infrastructure, management and operations perspective.

The following is a list of Capital Expenditure items identified as part of the overall vision plan:

- Small Boat Marina Expansion
    - Uplands support area redevelopment
- Broadway Floating Pier
    - Movement of ferry float
    - Temporary ferry operations area
    - Refurbish reception facility
    - GTA build-out
- Broadway Dock Rehab
    - Deck, fenders, bollards
    - Dredging
- Ore Dock Rehab
    - Deck, fenders, bollards
    - Dredging (environmental mitigation / clean-up)
- Ore Loader Demo
- Ore Terminal Demo
    - Site Paving and laydown area development
    - Cargo area relocation
- Final Ferry Pier Relocation (2023)
    - Upland terminal and GTA development
    - Commercial Chalet Village Development
- Waterfront Pedestrian Trail / Overlook Development
    - Crosswalks
    - Fencing
    - landscaping
- MOS Port Office / Maintenance Area Development
    - Temp to permanent option (is there an existing option?)
    - Parking
- Equipment
- Gangways(TBD)
- Security Barriers / Fencing
- Vehicles (port staff / maintenance)
- Commercial Lot Development (longer term)
- Others to be Identified

Table 1 provides an overall listing of the key Capital Improvement Projects identified for the MOS waterfront for potential implementation from 2021 to 2026. The sum total is ~$100,000,000 over the period.

Table 1: Capital Plan Elements and Cost Estimates

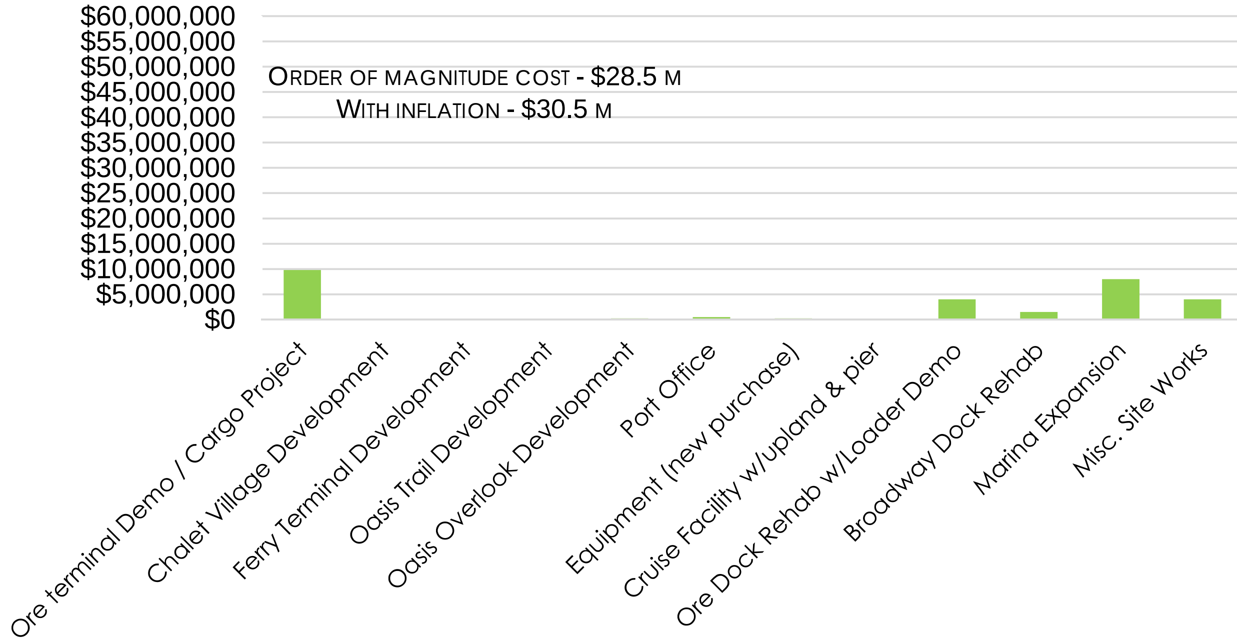
CAPEX Item	Years Used	Projected Cost
Ore terminal Demo / Cargo Project	2024/25	$9,800,000
Chalet Village Development	2025/26	$3,400,000
Ferry Terminal Development	2023/24	$11,270,000
Oasis Trail Development	2023	$178,000
Oasis Overlook Development	2024	$250,000
Port Office	2023	$500,000
Equipment (new purchase)	2023	$240,000
Cruise Facility w/upland & pier	2021/22	$52,870,000
Ore Dock Rehab w/Loader Demo	2024/25	$4,000,000
Broadway Dock Rehab	2023/24	$1,500,000
Marina Expansion	2021/22	$8,000,000
Misc. Site Works	2023-26	$4,000,000

Additionally, as part of the evaluation exercise to determine the potential ownership / operating / non-operating model and provide the MOS with a recommendation on moving forward the CIP elements were broken down into two specific options:

- Option A – No new Pier
- Option B – New Pier

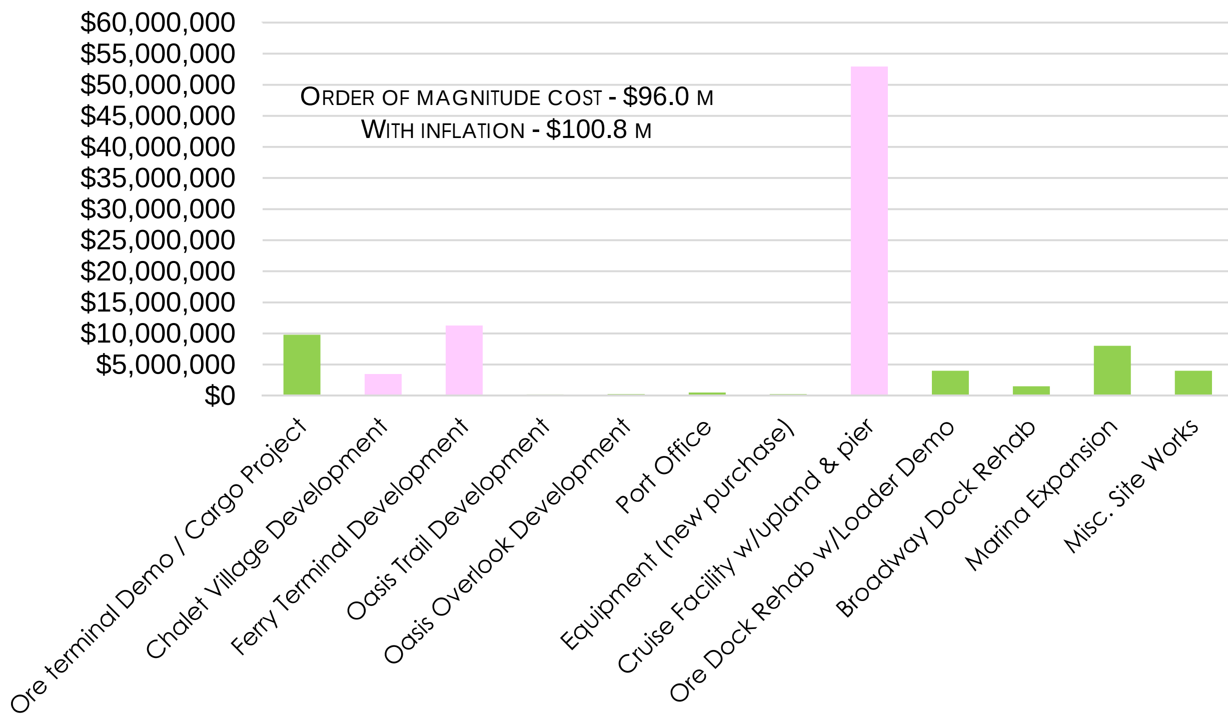
Under Option A – No new Pier, the CIP items included in the overall build out include those items shown in Figure 11 totalling some $28.5-million in overall investment ($30.5 with inflation) over the period. The largest projects are the Ore Terminal demolition and Cargo project which develops a Ro/Ro Ramp and new upland cargo facility in the current Ore Terminal area, while also addressing the needed upgrades of the Ore Dock inclusive of fuel headers as well $13.8-million). This does not include a floating pier extension for cruise vessels. The small boat harbour marina expansion ($8-million), Broadway Dock rehabilitation ($1.5-million), and miscellaneous site works for roadway improvements, equipment acquisition, signage, etc. ($4-million).

Figure 11: Option A – Capital Plan Elements without New Pier



Under Option B that develops a New Pier for use in 2022 there is some $96.0-million in capital expenditures in the five year period from 2021 to 2026 ($100.8-million with inflation). See Figure 12.

Figure 12: Option B – Capital Plan Elements WITH New Pier

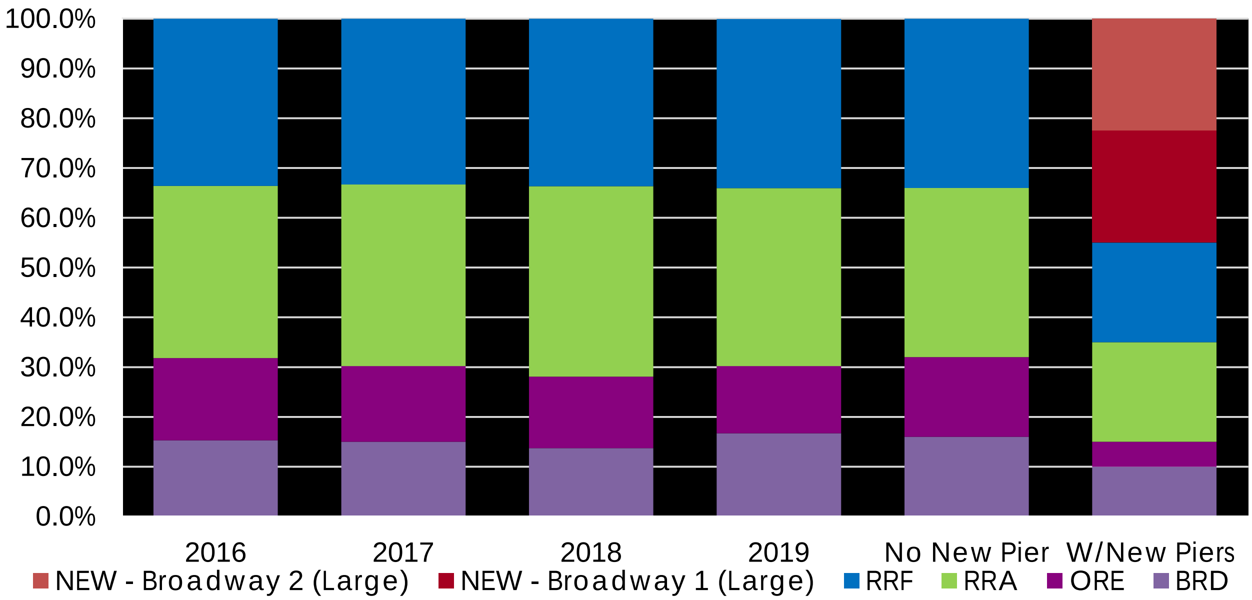


The largest additional items nder Option B are the Chalet Village Development ($3,400,000); Ferry Terminal Development with new floating pier ($11,270,000); and, the Cruise Facility w/upland & pier ($52,870,000).

Cruise Traffic Split

A major element in understanding the potential revenue flow for MOS under either scenrio outlined above is the distribution of cruise traffic, specifically passengers due to the relevant tariffs associated with each option. Thus, Figure 13 shows the average passenger traffic split from 2016 to 2019 for the current berths at the Port of Skagway. Two berths are owned and operated by the White Pass Railroad (RRF and RRA) and are able to accommodate the largest cruise vessels calling Skagway. Under the current lease model the Ore Dock (ORE) and Broadway Pier (BRD) are also used for cruise operations with Broadway supporting mid-size ships and the Ore Dock being used for larger ships, but in need of enahncements to accept a wider variety of vessel types based upon past studies performed for the MOS.

Figure 13: Traffic Split Scenario, Avg. 2016-2019, Scenarios A & B



Combined the Railroad Dock berths accommodate ~68% of cruise passenger traffic with 32% being driven to the Broadway and Ore Dock under Option A – No New Pier. If the MOS builds out a New Pier as illustrated in Option B for use in 2022 then it is estimated that the balance of cruise passenger traffic would change to allow for more flexbility to use the new large berths by brands not specifically part of the Carnival Corporation brands. Thus, the traffic split contemplated under this option would be 40% passenger traffic at the Railroad Docks; 45% at the New Pier Berths; 10% at Broadway – a natural reduction as this would be more likely used for smaller to mid size ships; and 5% at the Ore Dock as this berth would now be the primiary cargo / fuel berth and used for scheduling cruise vesssels only as a secondary option.

Figure 14 illustrates the Option A most likely traffic split from 2022 – 2039 based upon the above modelling with the majority of cruise passenger traffic flowing through the Railroad Docks and capping at some 1.2-million per annum in 2039, while the Broadway / Ore Dock berths would see a substantially smaller share at 581,473-passengers in 2039.

Figure 14: Option A Cruise Passenger Split – without New Pier, 2022 - 2039

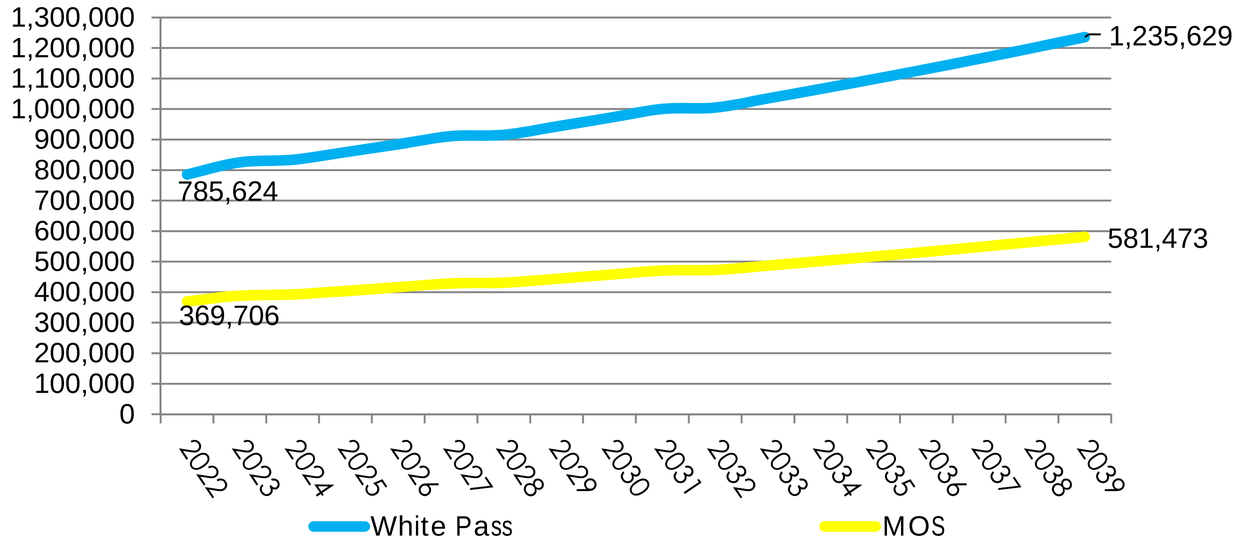
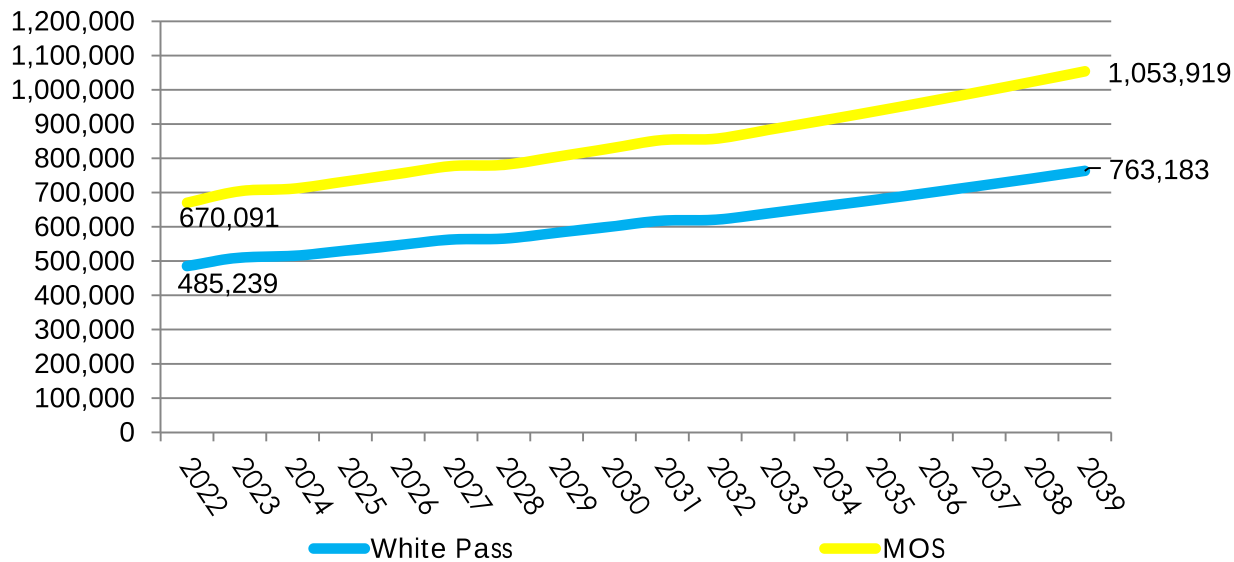


Figure 15 shows the Option B passenger traffic split from 2022 – 2039 with a New Pier (2 new berths) dedicated to the MOS. Under this scenario the split would be Railroad Docks at 40% (763,000 in 2039) and the remaining 4 berths at 60% per annum (1.0-million in 2039).

Figure 15: Option B Cruise Passenger Split – WITH New Pier, 2022 - 2039



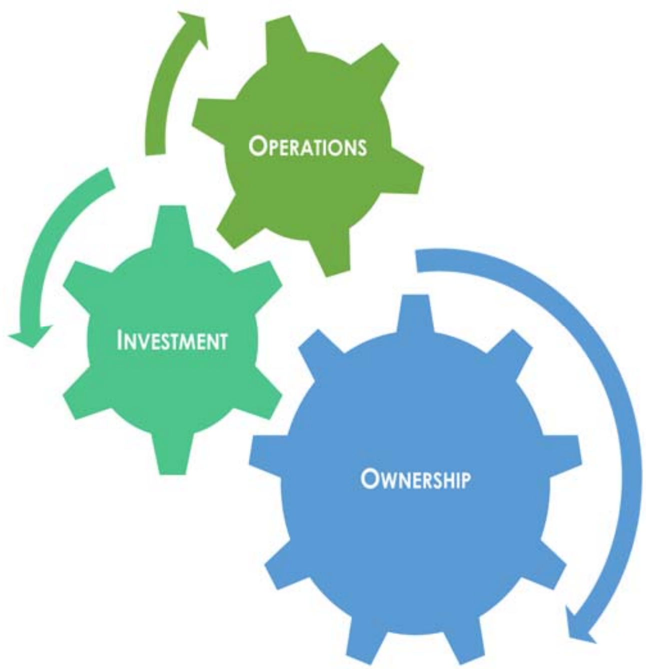
5. PORT OPERATIONS AND WATERFRONT DEVELOPMENT MODELS

Overview

There are many port operation and management models being used worldwide. One size does not fit all and most models are born from historical practices, such as the current Skagway lease model born from an agreement signed in 1968, well before the advent and substantial growth of Alaska cruise tourism that provides millions of dollars in revenues to cruise lines, tourism entities and communities throughout the region. However, it is clear that the MOS does not get a fair share of direct revenues through the current model based upon a simple examination of the current annual lease payment ($127,200 per annum) v. potential cruise wharfage/dockage revenues that could well exceed $10-million in Gross revenues per annum, not including the Alaska CPV fund that goes directly to the City on an annual basis.

The Municipality of Skagway has a clean slate and can take this opportunity to design and implement an ownership / management / operating model that is in the best interest of the residents of Skagway and responds to the community with a long-term vision and a strategic fit specifically to your needs.

The three major drivers of assembling a port operating and development model are shown in the adjacent graphic:



- **Operations:** This can vary from a singular entity providing all tasks in a port environment to an entity that provides limited functions with some being contracted out to third parties to supply the services such as housekeeping, stevedoring and line handling.
- **Investment:** What party or parties are willing to be responsible for the development and investment risk for the port infrastructure that is required to meet the needs of the users/stakeholders and thereby provides a return on investment.
- **Ownership:** This can vary greatly from port to port dependent upon a wide variety of factors including historic precedent; governmental model (city, private entity, county department, or port authority). As with any business model, each provides a different level of opportunities and challenges, risks and rewards.

As illustrated in Table 2 there are a wide variety of operating model combinations that are depndent upon how relationships are established and circumstances of the primary ownership as to their ability to fund projects or want to control the management and operations of the facility. There is no right or wrong operating methodology, only what is best for the principle that has ownership of the port.

Table 2: Operating Model Combinations

	OWNERSHIP	INVESTMENT	OPERATIONS
PORT	PORT	PORT	PORT
CRUISE LINE v1	PORT	CRUISE LINE	CRUISE LINE
CRUISE LINE v2	PORT	CRUISE LINE	OPERATOR
OPERATOR	PORT	OPERATOR	OPERATOR
PRIVATE	PRIVATE ENTITY	PRIVATE ENTITY	OPERATOR

Table 3 provides a series of port operational examples. As shown there is no singular model that is preferred within the prot relam, but rather a combination of operational elements that is formed in the best interest of the ownership of the port property. Thus, in the case of the MOS, the operating model should be based upon the desired level for for control of the major asset that provides for commerce, revenues and economic impact to the community. To what degree the MOS participates in the many elements of the port operational mix is dependent upon past experience, an assessment of each operating element (revenue v. expense) and the direct impacts on operations such as investment, marketing and scheduling.

Table 3: Port Operational Mixes

	Traditional East US	New York	Los Angeles	Barcelona	Seattle	Singapore	Miami A
Ownership							
Investment							
Marketing							
Scheduling							
Line relationship							
Fiscal agent							
Housekeeping							
Maintenance							

Major maintenance	Port/Govt.	Port/Govt.	Port/Govt.	Operator	Port/Govt.	Port/Govt.	Port/Govt.
Operations	Port/Govt.	Operator	Operator	Operator	Operator	Operator	Operator
Ground security	Port/Govt.	Operator	Port/Govt.	Operator	Operator	Operator	Operator
Ship / terminal security	Port/Govt.	Port/Govt.	Port/Govt.	Operator	Operator	Operator	Operator
Parking	3rd Party	Operator	3rd Party	Operator	Operator	Operator	Operator
Line handling	Port/Govt.	Operator	Operator	Operator	Operator	Operator	3rd Party
Stevedoring	Operator	Operator	3rd Party	Operator	Operator	Operator	3rd Party
Secondary uses	Port/Govt.	Operator	Port/Govt.	Operator	Operator	Operator	Port/Govt.
Key:	Operator	Port/Govt.	3rd Party				

Public Policy

Another way that communities assess the future of a waterfront is to determine whether it is a singluar asset of the community? The waterfront is viewed by many as something to be held in the public trust that provides for public access and waterfront integration into the community. This has been discussed extensively in Skagway and much of the feedback provided via surveys and meetings speaks directly to this point.

Are the private and public sector goals aligned? Typically private entities look for a profit and return on investment, while the Public looks more at economic and social (job creation/service) impacts. The MOS wants to provide for access to the waterfront for the residents of the community and ensure that over the long-term the Port works for ythe community overall in terms of providing positive impacts and allowing for revenues to fund infrastrucutre within the Port and City that is required to meet the needs of the residents and visitors.

How will the customers (lines and port users) react to the MOS operating the waterfront? The long-term impacts should be considered relative to the establishment of an entitiy to manage and operate the port including the risk associated with port investments and the rewards for controlling the future of the waterfront. Skagway has a proven crusie tourism track record that can provide for the base revenues to fund multiple important projects moving forward and limit the overall risk to the City. Other prots in the US and regionally, such as Ketchikan, have specifically funded crusie port projects (non-recourse bonds through the Alaska Bond Bank) based solely upon cruise market assessments. Upland support infrastructure must also be addressed that will be in need of upgrade and replacement to support the visitor tourism industry and other year round residential needs.

Table 4 provides an outline of two port operating models for Skagway. Model 1 – MOS owns and operates the Skagway Waterfront from 2023. The MOS would take on the primary responsibility of Facility Manager (staffing accordingly); Marketing (imperative that cruise, cargo and other aspects are lead by the facility manager); and, Berth scheduling in coordination with facility users, and in the case of cruise coordinating directly with cruise lines, CLAA and White Pass. Maintenance requirements would be divided into major (typically bid to third parties dependent upon the project) and routine maintenance (taken care of by Port Staff hired accordingly). Janitorial services could either be bid out to a third party or kept within the Port. Since entities exist within Alaska and the Port of Skagway, it would be recommended to allow for bidding out of security services (cruise vessel related) and Stevedoring including line handling, gangway movement and vessel servicing. The MOS could license companies and either allow cruise lines to choose a provider directly or the services could go through the MOS.

Table 4: Port Operating and Development Models

	Model 1 – MOS owns and operates			Model 2 – MOS owns and manages operator		
	MOS	Port Operator	3rd Party	MOS	Port Operator	3rd Party
Owner						
Facility Manager						
Marketing						
Berth Scheduling						
Maintenance						
Security Services						
Janitorial						
Stevedoring						
Notes	MOS hires Mgnt. Staff; Operates all facets of port operations with exception of stevedoring / ISPS security. Uses Police for overall port security. Contracts with 3rd Party or allows cruise lines to choose. Option out some heavy Maintenance, and Janitorial services (unless part city dept.) Moderate risk / Higher reward			MOS is owner. RFP for Operator based upon lease mechanism. MOS involved in Marketing / Scheduling with Operator / CLAA. Operator has rights to security and stevedoring. (May also allow for cruise line choice) Low risk / Moderate reward		

This model provides for moderate risk as the MOS must hire staff, conduct oversight of the operations, invest and stimulate market growth to be successful. However, this model also provides for a greater reward to the MOS and residents through the control of the waterfront allowing for continuity with the direction of the community and direct revenue at a much greater rate than seen today to allow for direct economic and social impacts.

Model 2 – MOS owns and manages/oversees a Port Operator for the Skagway Waterfront from 2023. The MOS would oversee a Facility Manager; Marketing would be a shared venture due to the critical impact this has on the Port and community as well as Berth scheduling in coordination with the Operator, facility users, and in the case of cruise coordinating directly with cruise lines, CLAA and White Pass. Maintenance, Janitorial, Security services and Stevedoring would all be handled by the Port Operator with the approval of the MOS.

Under this scneario the MOS has less overall risk, but gives up more control of the warterfront development and operations. The actual level of reward is much more dependent upon contractual conditions and the ability to oversee and direct the port operating entity. However, moving forward in both cases, the MOS has the ability to set the specific parameters that are in the best interest of the City.

Skagway Port Operations

Table 5 outlines the Skagway Port Operations options.

Table 5: Skagway Port Options

	OPTION A NO NEW PIER	OPTION B NEW PIER
MODEL 1 – MOS OWNS AND OPERATES	**1A**	**1B**
MODEL 2 – MOS OWNS AND MANAGES THE OPERATOR	**2A**	**2B**

Model 1A – No New Pier

- MOS is the Owner / Facility Manager
    - Leads marketing (with city tourism) and scheduling (with CLAA / Cruise Lines)
    - Security & stevedoring contract (either 3rd party or cruise line direct choice)
- Begin assembling staff in 2022 with GM & Staff (startup spring 2023)
- Cruise Financials
    - Use existing SPH tariff rates as baseline moving forward
    - No tariff increase from 2022/23
    - Use a 2% escalator or CPI from 2023
    - Traffic split based upon existing percentage splits (RR / Broadway / Ore)
- Cargo & Petroleum Financials
    - Use existing lease models

- Ferry continues as presently done
- Commercial Financials
  - Use existing lease models (under City & WP)
  - White Pass, Temsco & AIDEA sub leases end in 2023 (not renewed)
  - New commercial lease options NOT included in model
    - These would be additional land lease items
- CAPEX – $28.5 M
  - Includes small Boat Harbor expansion, Port Offices, OASIS Items, Ore Terminal & loader Demo., Cargo Move (No RORO), Berth rehabs and Commercial Village.

Model 1B – New Pier 2022

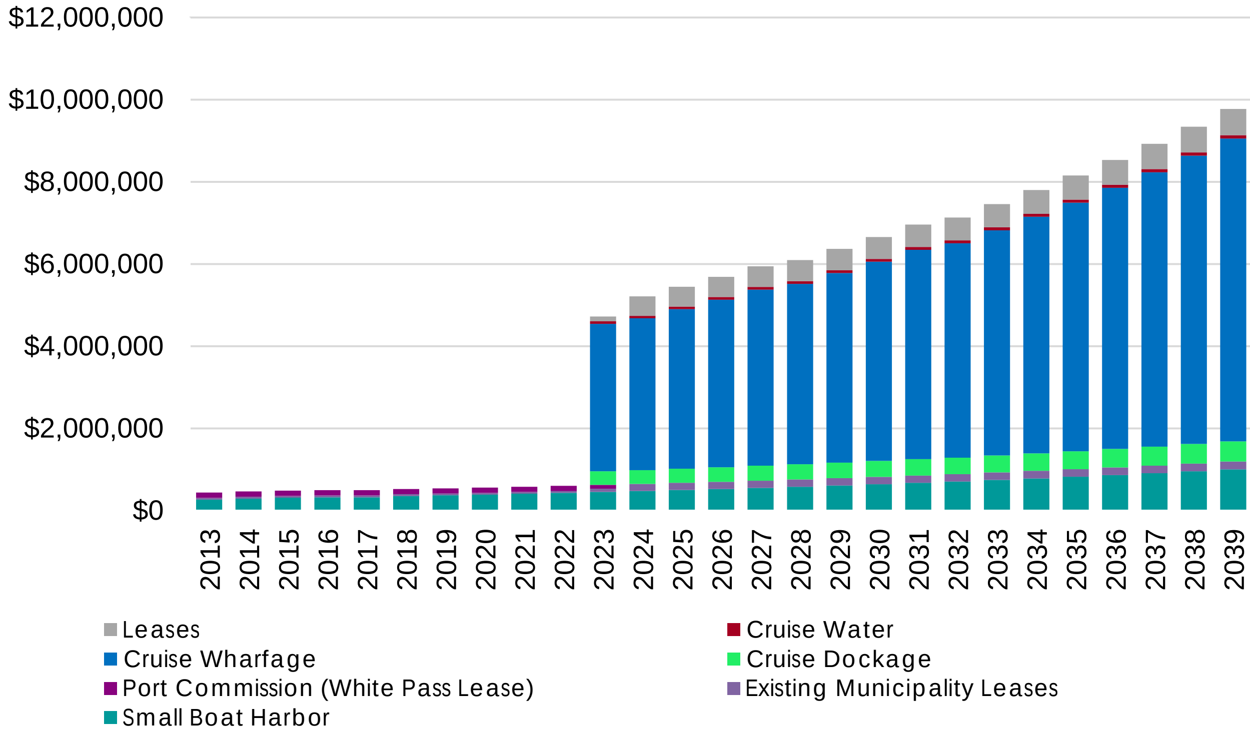
- MOS is the Owner and Facility Manager
  - Leads marketing (with city tourism) and scheduling (with CLAA / Cruise Lines)
  - Shares maintenance (contract out major items)
  - Janitorial (with city services / 3rd party)
  - Security & stevedoring (either 3rd party contract or cruise line choice)
  - Begin assembling staff in 2021 with GM & Staff (pier ops in 2022 / overall startup spring 2023)
- Cruise Financials
  - From 2022 - adds $3.00 per passenger additional wharfage and GTA access fees $1.00 per passenger (rail pax and vehicles)
  - Use a 2% escalator or CPI from 2024
  - Use existing SPH tariff rates as baseline moving forward
  - Traffic split based upon existing percentages with 2 New city berths (RR / Broadway / Ferry Pier / Ore – now a secondary Cruise berth)
- Cargo & Petroleum Financials
  - Use existing lease models
  - Ferry moves (Temsco move to airport)
- Commercial Financials
  - Use existing lease models (under City & WP)
  - White Pass, Temsco & AIDEA sub leases end in 2023 (not renewed)
  - New commercial lease options NOT included in model
    - These would be additional land lease items
- CAPEX – $96.0 M
  - Includes Broadway Ferry Cruise Pier (2 ship berths), Small Boat Harbor expansión, Port Offices, OASIS Items, Ore Terminal / loader Demo., Cargo Move (with RORO), Berth rehabs, Commercial Village, Ferry move & new terminal.
  - Potential PPP with cargo for Ro Ro berth and uplands.

Revenues

The revenue models are shown below based upon the above outlined models. The models show the existing revenues based on historical information through the end of the MOS Waterfront Lease including passenger wharfage, dockage, water, etc. In 2023, the model calculated for 3 months of passenger revenues the City would capture once the lease expires. In 2024, 100% of passenger fees are reflected in the model from MOS facilities (not including passenger throughput for the Railroad Docks). The model used the existing subleases and updated lease values based on market value appraisals (2023+). Thus, the existing MOS Leases currently reflected per agreement have not been changed / extended at this point. Figures 16 and 17 do not reflect the Commercial Vessel Passenger Excise Tax (CPV) received from the State of Alaska.

Under Model 1A gross revenues to the MOS move from ~$541,660 in 2019 to ~$4.7-million in 2023 and ~$9.7-million in 2039. Capex is $28.5-million. See Figure 16.

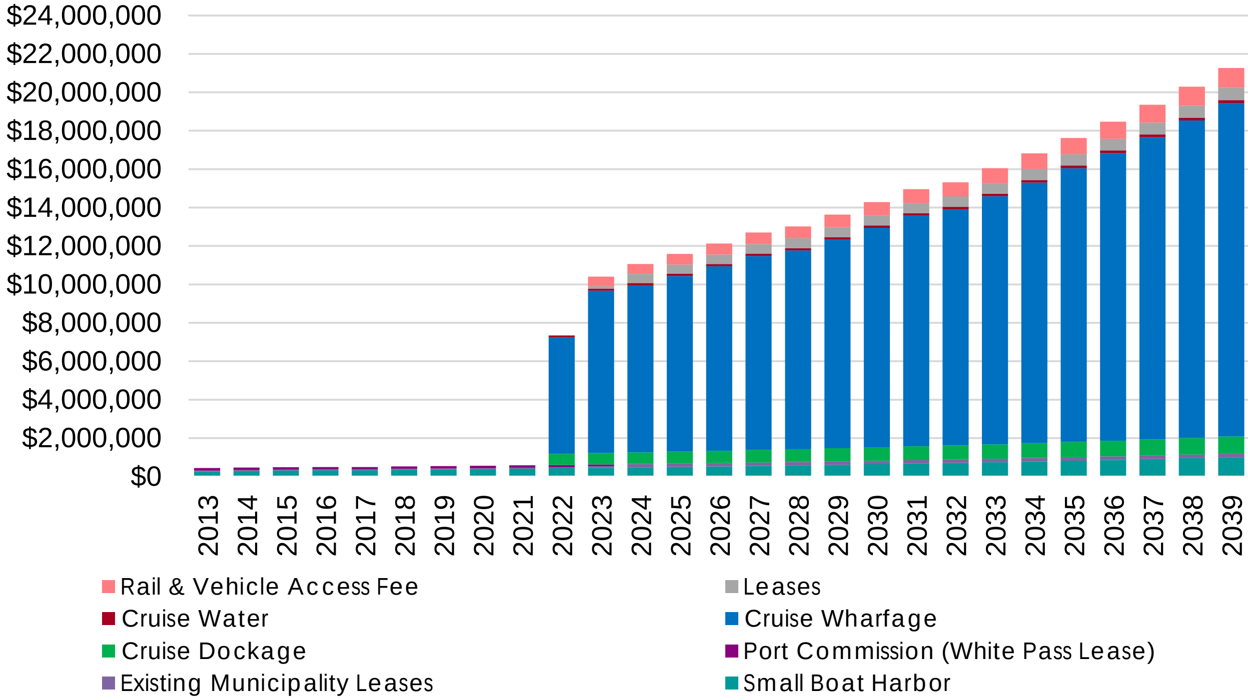
Figure 16: Model 1A – Gross Revenues



Under Figure 17 – Model 1B the biggest financial impact is the addition of a new pier providing for substantially more direct revenues to the MOS from 2022. There is also additional development funds required to build the pier, but the long-term revenues support this investment and provide for a substantial return. Figure 17 also adds $3.00 from 2022 and GTA access fees $1.00 per passenger (rail pax and vehicles) for MOS Piers Only to further address the investment and subsequent annual payback.

Thus, under Model 1B gross revenues to the MOS move from ~$541,660 in 2019 to ~$10.4-million in 2023 and ~$21.2-million in 2039. Capex is $96.0-million.

Figure 17: Model 1B – Gross Revenues



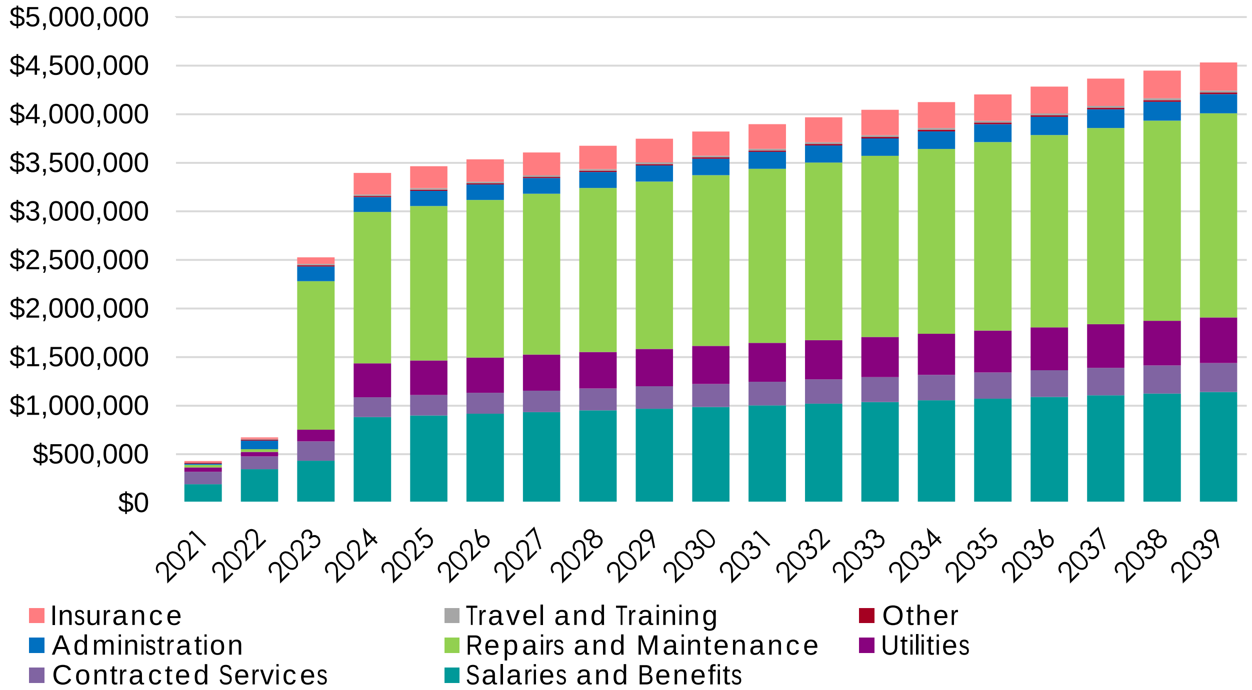
Expenses

Key expenses to the MOS that have been added to the Model 1A and 1B figures are outlined below. Again, the MOS has the ability to define and build the Port Management Team and Operations in a way that best meet the goals & objectives set forth. Thus, expenses include:

- Management Team
  - General Manager – from 2021
  - Secretary – from 2021
  - Asst. Manager – from 2022
  - MIS Manager/ Support/Web - from 2023
  - Billing Clerk – from 2023
  - Maintenance Manager - from 2022
  - Asst. Maintenance Manager – from 2023
  - Technical Staff (2) – from 2022
- Other Expense Items
  - Outsourced services (housekeeping, maintenance, security)
  - Administration
  - Travel & Training
  - Insurance
- Other line item expenses based on historical small boat harbor expenses, increasing with CPI.

Under Figure 18 expenses begin at ~$430,000 in 2021 as staffing is assembled and grows to ~$4.5-million in 2039. The largest share of annual expenses are salaries and maintenance.

Figure 18: Model 1A – Expenses



Under Figure 19 expenses begin at ~$700,000 in 2021 as staffing is assembled and grows to ~$4.5-million in 2039. The largest share of annual expenses are salaries and maintenance.

Figure 19: Model 1B – Expenses

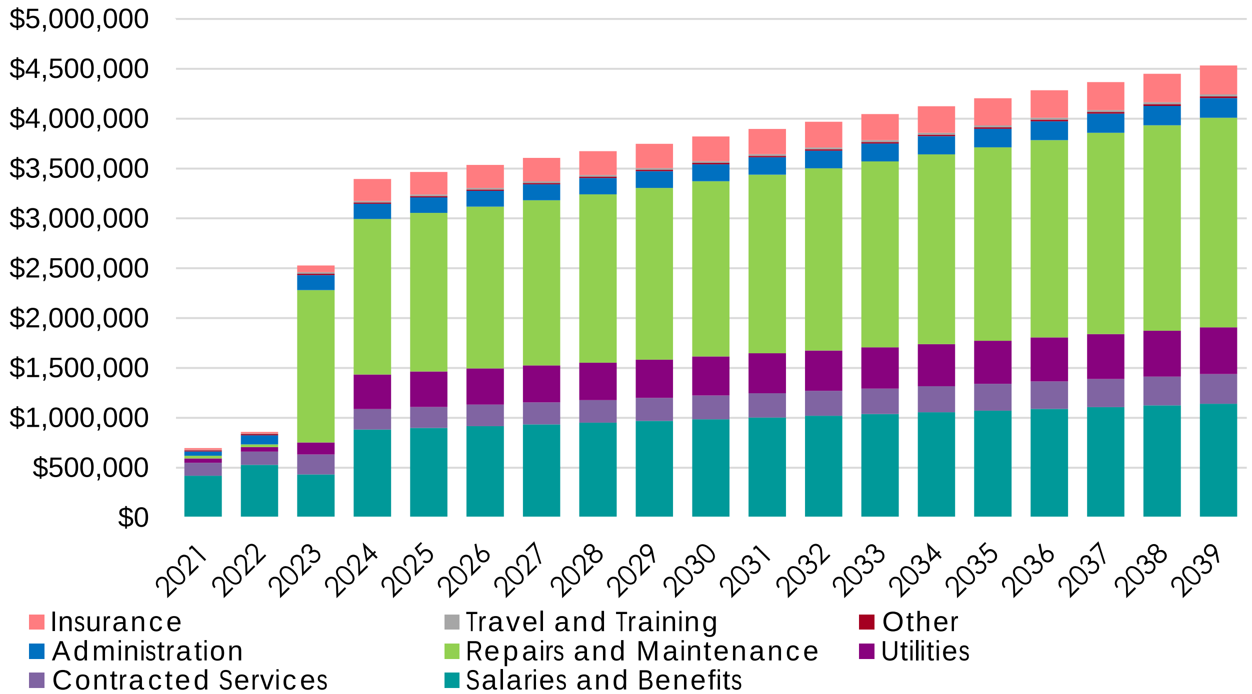
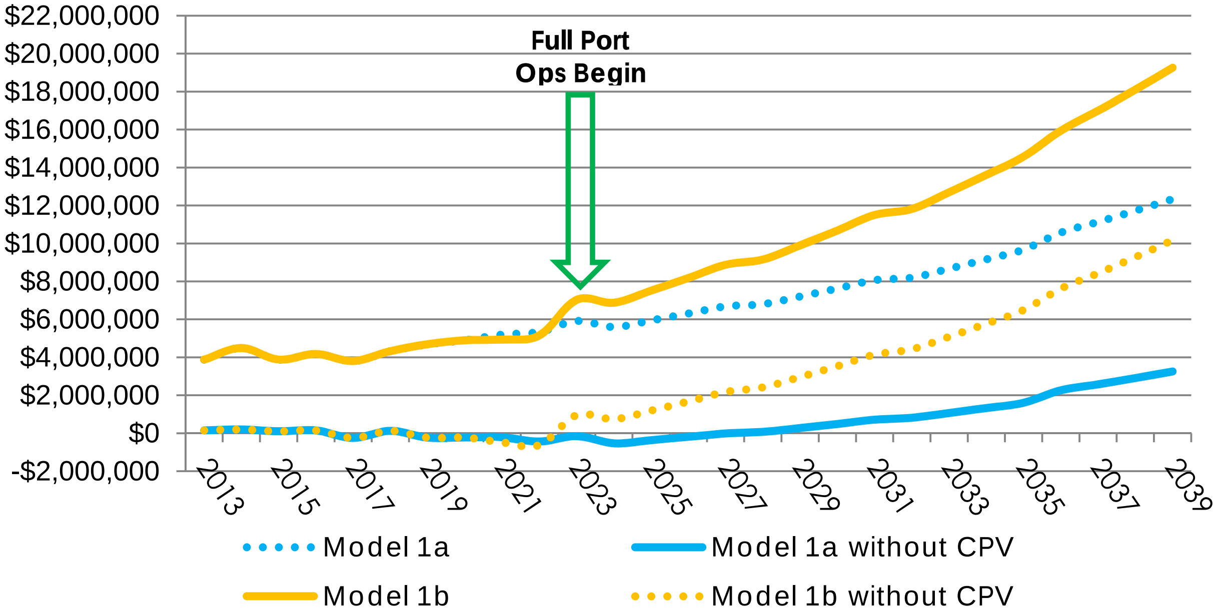


Figure 20 provides a model comparison between 1A and 1B illustrating net income after debt (before depreciation) with full port operations beginning from March 2023. Both models are also shown with and without CPV which is a reflection of the overall passenger volume to the MOS including all berths whether they be under the auspice of the MOS or owned by White Pass.

- In 2020 both models produce a negative -$222,273 without the benefit of the CPV. This is ~$4.9-million with the CPV.
- Model 1A provides positive net income for the MOS in 2028 (without CPV) at ~$74,000 and by 2039 produces ~$3.25-million. With CPV this moves to ~$12.3-million in 2039.
- Model 1B provides positive net income for the MOS in 2023 (without CPV) at ~$960,000 and by 2039 produces ~$10.2-million. With CPV this moves to ~$19.2-million in 2039.

Figure 20: Model 1A and 1B Net Income After Debt (Before Depreciation)



Model 2A or 2B

Under Model 2A and 2B the MOS continues to own the waterfront, but manages a separate Port Operator under a lease agreement. As there are numerous paths forward under this alignment, translating this into a financial model for comparison purposes is a difficult task that does not produce a result that could be effective in this exercise. For discussion purposes we assume the following related to the Model:

While managing the Port Operator the MOS shares in marketing due to its importance for the port operations, specifically cruise. In addition, the MOS would approve ALL tariff rates annually. The MOS may or may not share in major CAPEX & Maintenance items. Financially, it is assumed that all collected tariffs would go to the Port Operator and then the MOS would collect the CPV and a Port Operator Annual Lease payment to be negotiated accordingly.

Cargo, fuel, commercial and ferry operations would likely continue as is, unless cargo could be carved out for a separate joint venture / PPP with the Operator. For any new commercial lease options within the port they would need to be decided upon accordingly. From a CAPEX perspective it is likely the Port Operator would pay 100% of port development limiting front end risk in this regard. Thus, based upon the level of investment, revenues, etc. final payments to the MOS would be negotiated accordingly.

The ramifications to the MOS under the lease model are clearly known as this has been in practice for the past 50 plus years. There has been less control and reward over the period. This could be adjusted to some degree in moving forward with a new lease model, but the MOS would likely be giving up substantial revenues in return for a port operator's investment in new development whether it be a New Pier to meet the demands of the cruise industry or the other CAPEX items outlined in the Vision Plan.

Observations

Model 1A – Owner / Operator (No New Pier)

- This model could produce additional revenues with new tariffs and lease schedules.
- There were no new tariffs introduced as part of this model as no berth infrastructure was developed.

Model 1B – Owner / Operator (New Pier)

- Produces the highest revenues for the MOS.
- There is a higher level of risk as the MOS is taking on all operations and financing of major projects.
- However, financing risks can be mitigated through -
  - Non-recourse revenue bonds.
  - Traffic or revenue guarantee agreements.
- MOS has the most control over the waterfront in this model.
- This option could support ~$100- million in major port development projects.

Model 2a or 2b – MOS Owns and Manages the Port Operator (Lease model)

- Has numerous paths forward for a final financial model.
- Least financial risk to MOS, but loss of upside potential.
- How would the MOS participate in the major projects?
- Less control of the waterfront business elements / community drivers (parks, pathways, etc.).

Recommendations

As outlined, the MOS has the opportunity to design an operating model based upon the needs of the community. Based upon our assessment of the current situation for the MOS it would be in the best interest of the community to control the waterfront asset moving forward to a greater degree and reap the financial rewards and risk to the major waterfront asset. Thus the Municipality of Skagway Owns and Operates its Waterfront into the long-term. This provides control of the waterfront vision long-term for community access and use; and, provides control of primary business development – cruise, cargo, commercial. This path forward offers the MOS the ability to craft the operating structure to meet the needs of the community and set the precedent for the management of the waterfront. By example, this pathway would also allow for potential partnerships to be formed if they are in the best interest of the MOS community. They may include the New Cruise Pier either via direct investment or preferential berthing agreement for guarantees of traffic throughput or a PPP for a new cargo Ro Ro berth and upland cargo facility; as well as potential mining and commercial ventures. This venture will support investment through cruise passenger throughput (proven track record), thus limiting the overall risk moving forward.

Action Plan

For planning purposes there are a two critical dates that must be considered in the action plan:

- **March 2023** Waterfront lease Expiration for which a number of key items must be addressed and prepared to coordinate a smooth transition. The MOS been in discussions internally and have experienced some pre-transition issues with respect to the Ore Dock Environmental cleanup, infrastructure claims, etc.

- **April/May 2022** for the opening of a new potential Broadway Pier for 2 large cruise vessels. This drives a number of other timelines and decisions related to the ferry dock, acquisition, movement (temp. / perm.) Financing, design/engineering, scheduling, etc. This element could be opened later (2023) but there are substantial advantages for the MOS to move this effort forward and be prepared for a 2022 opening allowing for additional flexibility on the waterfront and gaining direct cruise revenues prior to the lease expiration in 2023.

Plan Items

Below are a list of some of the major plan items to be addressed as part of the MOS plan recommendation to move forward with MOS Ownership / Operation of the Waterfront.

- Assembly passes resolution on the Management / Operations of the Waterfront
- Communicate the direction:
  - To the community and waterfront / port users stakeholders via outreach – simple and clear messaging to prepare for next steps
  - Cruise line, cargo lines, ferry,
    - Organize Cruise line meetings during SeaTrade (April 2020)
- Definition and resolution of major items related to the Lease Expiration
  - Ore Dock Remediation
  - Infrastructure exchange
  - Existing Lease transitions, renewals
  - Cargo Dock transition process / timing – Ro Ro Ramp, PPP Option, etc.

- Waterfront Plan Finalization
    - Timeline for implementation of plan elements
    - CAPEX for plan elements - funding
        - Major decisions on rail access
        - Ore Dock terminal demo / cargo movement
        - Temsco relocation
        - Small Boat Harbor expansion
        - OASIS trail system final options
- Management & Operations Plan – Prepare the management plan for the waterfront including:
    - Identify reporting system to MOS
    - Identify full chain of command / decision-making roles
    - Identify key Management positions – job descriptions, salary, dates of hire.
    - GM/Port Director hire to assist with the assembly of organization and hiring.
    - Budget Preparation – identification of revenue / expense ítems.
    - Business and finance plan
- Cruise Operating Plan (specifics)
    - Complete the Port Manual with tariffs and rules
        - Tariff development
        - Define tariffs
        - Communicate to users
            - Cruise – provide Minimum 12 to 18 month window for changes
    - Establish berth scheduling methodology
    - ISPS development & approvals by USCG
    - Establish process for 3rd Party service providers – security, stevedoring, etc.
    - Marketing Plan – interaction with White Pass, Skagway Tourism, CLIA, ATIA, etc.
- With New Pier (12 – 18 month design / build)
    - Acquisition, finalization of ferry terminal, dock
        - Relocation plan – temporary / permanent
    - Master plan and budget
    - Business plan
    - Technical studies – EIA, navigation, geotechnical
    - Pier design / upland design work – reception facility, GTA, ingress / egress
    - Permitting
    - Construction / Oversight

There will be many other items that will need to be specifically outlined at some point as this moves forward, but these are key items presently identified.

6. Existing Conditions

Existing Waterfront Facilities

No physical engineering inspection / assessment was conducted as part of the study. Our Team did a visual inspection of the docks and upland areas of the port property and based upon our observations it is likely that there will be some specific rehabilitation of the major Ore and Broadway Docks, as well as the issue currently being examined as to the replacement of the floating ferry pier and walkway. A rehabilitation budget and an annual maintenance budget have been included in the expenses / capital improvements for the Port. This does not take into consideration the environmental remediation of the Ore Dock basin as this should be completed prior to the end of the Waterfront Lease in March 2023.

The primary deep-water docks at the Port of Skagway include the Ore Dock, Broadway Dock, and the Railroad Dock, all of which are owned by the White Pass & Yukon Railroad. As part of the 1968 MOS Lease agreement, the Ore and Broadway Docks are located on the municipal tidelands until March of 2023. Today, the ferry dock is owned by the State of Alaska and is jointly utilized by AMHS and MOS. The small boat harbor is owned and managed by the Municipality. See Figure 21 showing the pier structures and upland areas associated with the Skagway Waterfront.

Figure 21: Existing Waterfront Conditions

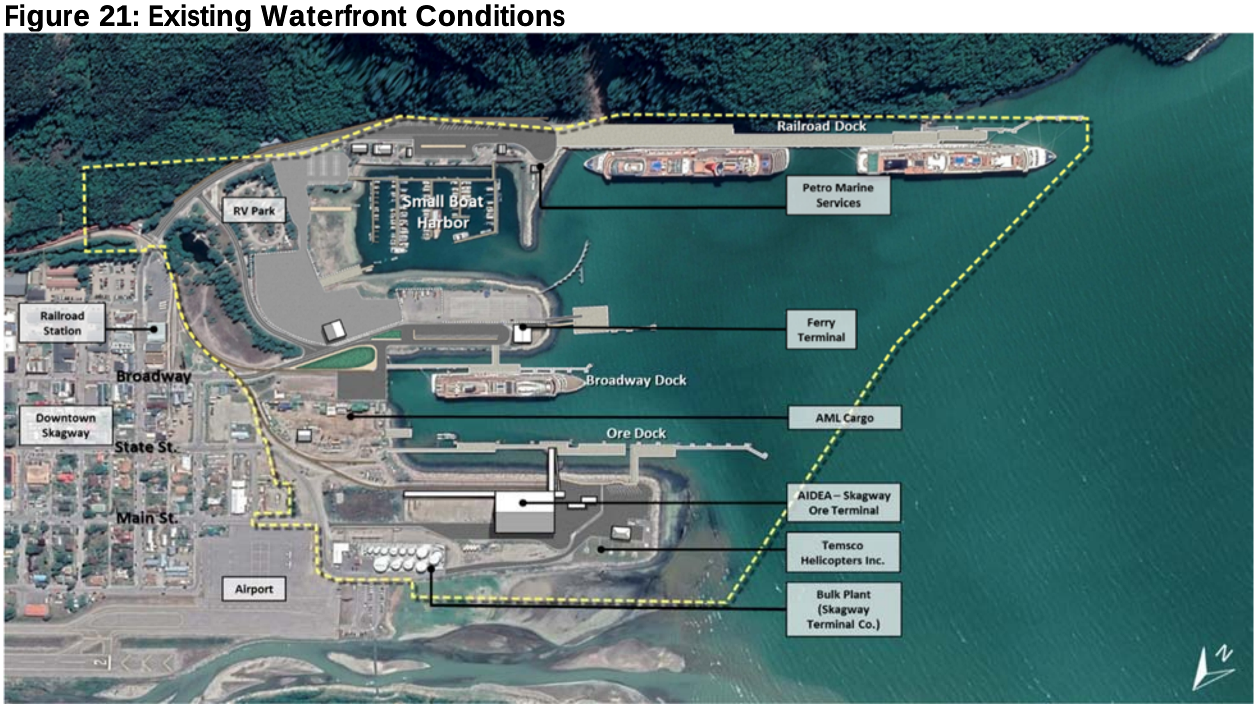
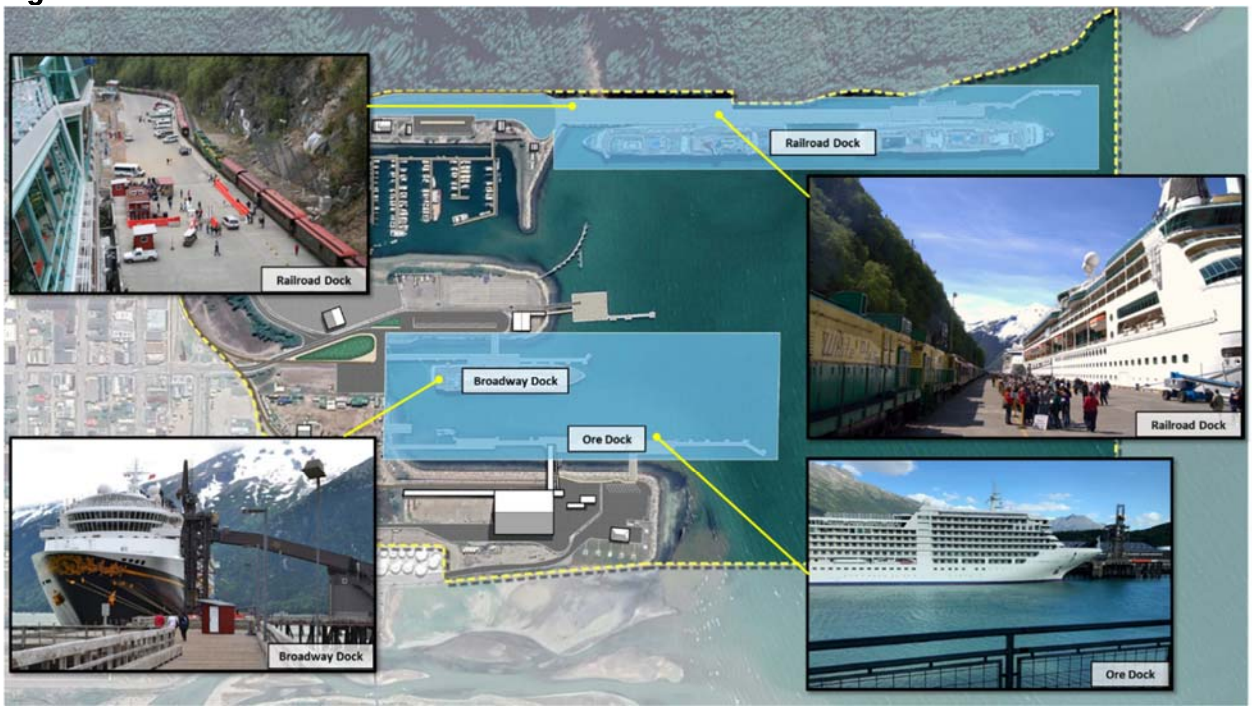


Figure 22 shows the three cruise docks of which the Railroad Dock (WPYR Ownership) is outside of the Lease agreement; and the Broadway and Ore Dock are within the MOS tidelands lease agreement.

Figure 22: Cruise Docks



The Ore Dock was built in 1969 for the bulk loading of ore and has been modified to handle cruise ships, as well as fuel barges and cargo vessel berthing. The Ore Dock is older wood pile platform construction and has limited load restrictions. The ship Ore Loading Tower, located near the mid-point of the dock, prevents cruise ships from using the full-face length of the dock due to hull and lifeboat overhangs. Ore Dock specifics are as follows:

- 1600 feet (1800 feet long with dolphins)
- 64,000 LB (29,000 Kg) GVW vehicle ramp
- 1,000 ton (907 metric tons) per hour loading spout
- Dock side fuel headers

Petro Marine Services operates the marine fuel depot located near the mid-point of the Ore Dock. They service Skagway and the Yukon from this site. All of the fuel arrives in Skagway on barges. Alaska Marine Lines (AML) constructed a container barge facility at the head of the Ore Dock in 2001. The approach dock forming the AML ramp is constructed to a high standard for loaded forklifts.

Based upon past studies, the Ore Terminal located north of the Ore Dock had been operating intermittently until 1998, when soft base metal prices forced the mines to shut down. The terminal had not been in operation after that time until the first shipment of concentrate from Sherwood Copper Corporation in October 2007. The Alaska Industrial Development and Export Authority (AIDEA) currently controls the terminal site and facilities. White Pass controls the Ore Dock and thus it is used today for berthing cruise ships during the summer season. The area underneath the ship loader in the Ore Basin has been identified by the State of

Alaska as a contaminated area, and remediation of the site is a top priority for the community of Skagway. The MOS and White Pass Ownership, as part of the existing lease agreement, are in discussions as to the methodology and timeline for the remediation effort that must be completed prior to the March 2023 lease expiration.

Broadway Dock is located on the peninsula to the east of the Ore Dock and used primarily as a cruise ship berth. Modifications were completed in 2006, allowing for the dock to accommodate a 970-ft. LOA cruise vessel. It is of primarily wood pile construction and will require some rehabilitation work due to the construction type. Broadway Dock specifics are as follows:

- Single berth with a dock length of 650 ft.
- Capable of accommodating vessels up to 970 ft. LOA.
- Dock has been used in the past to tranship timber

WPYR owns the Railroad Dock and leases the underlying tidelands under the Railroad Dock from the State of Alaska. The Railroad Dock is 1,825 feet long with additional breasting dolphins that provide for berthing of two cruise ships. The Railroad Dock is made up of two distinct docks joined by a short steel plate. Figure 23 illustrates the industrial elements of the Skagway Waterfront made up of the AML, AIDEA and Petro Marine operations.

Figure 23: Industrial Operations

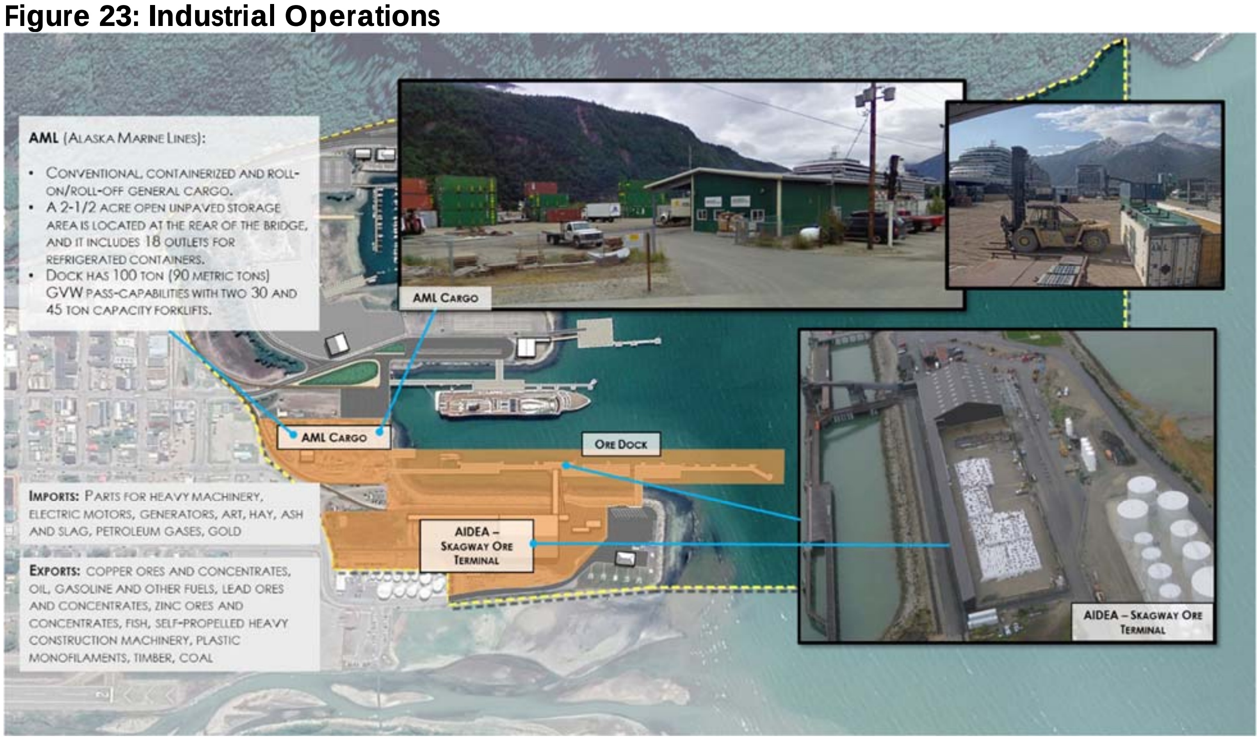
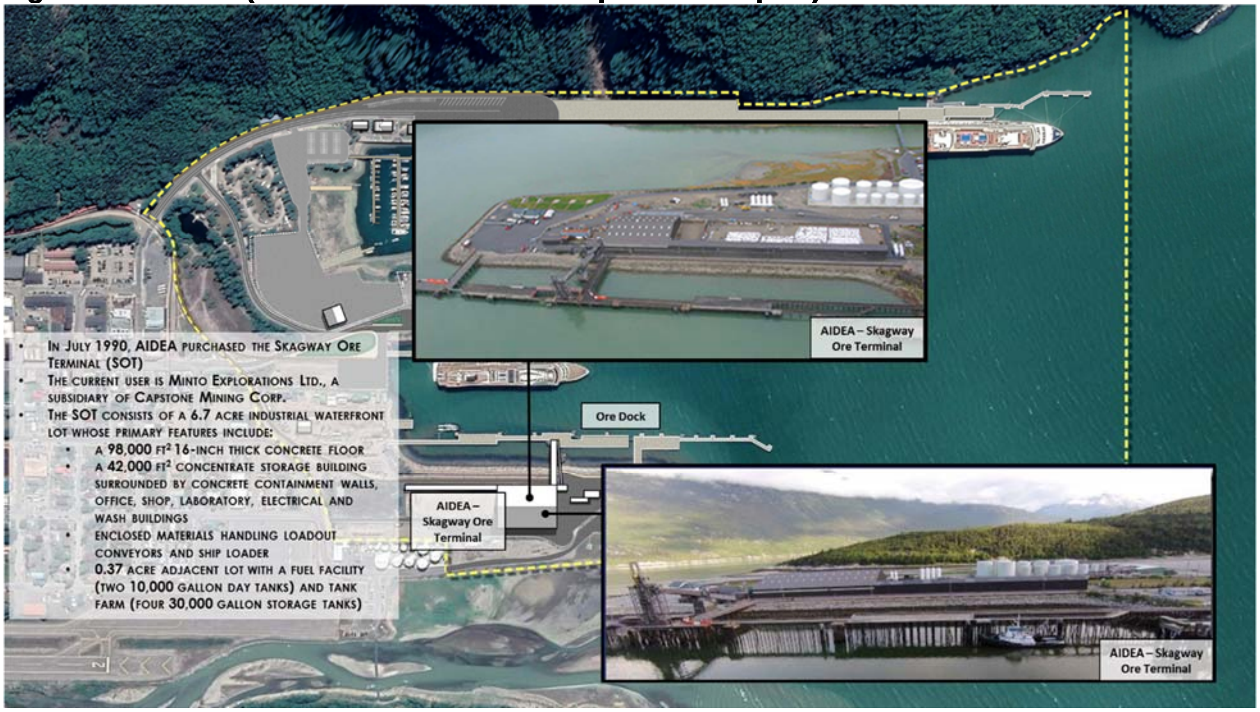


Figure 24 shows the AIDEA Ore Terminal including warehouse and fuel facility that was purchased by the State Corporation.

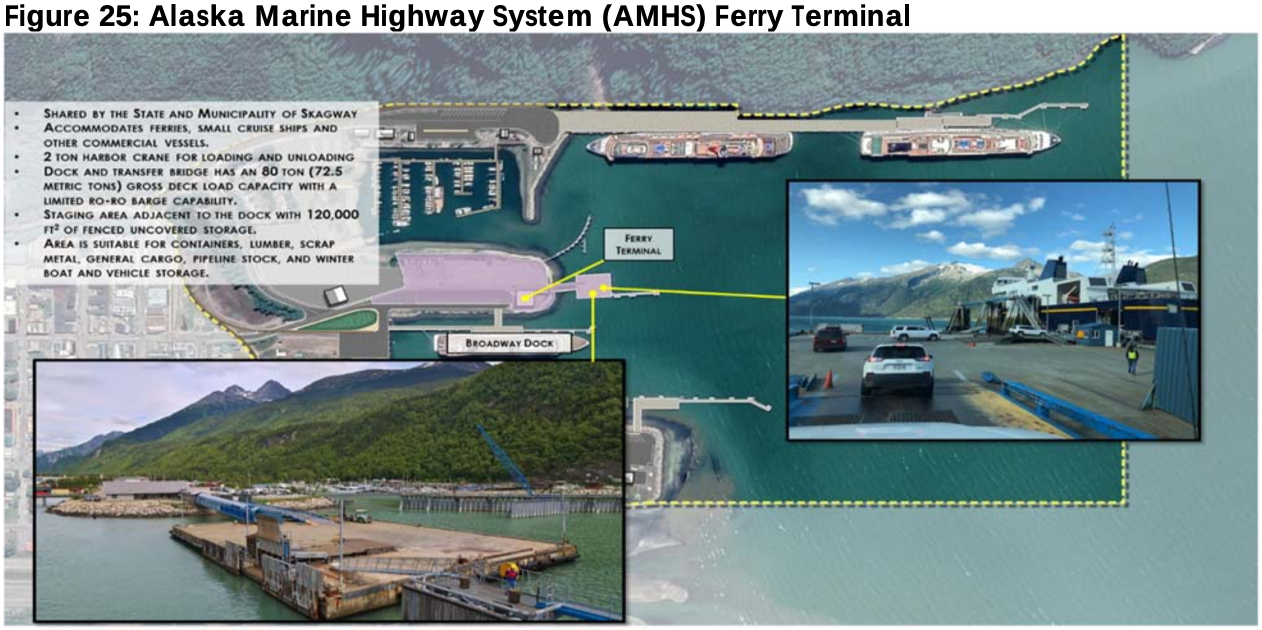
Figure 24: AIDEA (Alaska Industrial Development + Export) Ore Terminal



Alaska Marine Highway System (AMHS) Ferry Dock

AMHS provides an important link for communities such as Skagway. This is particularly critical for Skagway, where flights are often cancelled due to inclement weather. The MOS is currently in discussions with the State as to the opportunity associated with the ferry dock due to state budgetary considerations and the need for ferry service for the community of Skagway moving forward. See Figure 25.

Figure 25: Alaska Marine Highway System (AMHS) Ferry Terminal



The Alaska Marine Highway System (AMHS) budget has been reduced dramatically (by over $40 million) compared to last fiscal year resulting in reduced service to many communities and the suspension of service during winter months for others. Governor Dunleavy has produced two recent directives (Alaska Marine Highway Directive and the Property Disposal Directive; Figure 1 & 2) aimed at reducing the operating costs of the AMHS which could negatively impact ferry service to Skagway. In response to the Governor's actions the Municipality of Skagway (MOS) has made a commitment to maintaining ferry service for its community members and is currently pursuing several ways to maintain ferry service in Skagway.

There are also several commercial waterfront commercial properties that fall under leases directly with the MOS or as part of sub leases through the Waterfront Tidelands Lease of 1968. These would therefore expire as of March 2023. Figure 26 illustrates some of the leased commercial properties.

Figure 26: Waterfront Commercial Properties

Table 6 shows the existing MOS commercial lease agreements tied to the waterfront either as part of the main lease agreement or smaller commercial and industrial lease arrangements. The beginning and end dates, as well as the land area are provided in the table.

It would be assumed that as part of the transition each lease would be examined and a determination made as to the continuation and subsequent value and time extension of the lease moving forward. As noted, no lease option was provided for the Taiya Marine Services, which expired in July 2019. The Skagway Terminal Company refers to the primary MOS Tidelands Lease.

Table 6: Existing Municipality of Skagway Lease Agreements
Source: MOS

Business Name	Start Date	End Date	Land (sq. ft)	Notes
Taiya Marine Services	April 2016	July 2019	within the small boat harbor	No Lease Provided
Skagway Terminal Company	April 1968	April 2023	2,896,304	Lease provided / confirmed
Petro Marine Services	January 1996	December 2022	1,600	Lease provided / confirmed
Ocean Raft Alaska	September 2016	September 2021	2,000	within the small boat harbor
Skagway Smokehouse	May 1993	December 2032	5,500	within the small boat harbor
Skagway Fish Company	December 1996	December 2031	5,400	Lease provided / confirmed

Table 7 provides an illustration of the existing White Pass sub lease agreements under the MOS Tideland Lease. For several of them shown there was no lease agreement provided. All of the sub leases would expire in March 2023 and each would need to be examined as to the value for continuation of the lease agreement. Based upon the Waterfront Vision Plan it is anticipated that the Temsco Helicopters site would need to be relocated to provide for the movement of the ferry terminal / floating berth and construction of the Ferry Cruise Pier.

Table 7: Existing White Pass Sub Lease Agreements
Source: MOS

Business Name	Start Date	End Date	Land (Sq. Ft)	Notes
Petro Marine Services	January 1995	March 2023	86,205	No Lease Provided
National Oceanic and Atmospheric Admin.				No Lease Provided
Cruise Line Agencies of Alaska			81,400	No Lease Provided
Land Area North of Petro & West of AIDEA			34,500	No Lease Provided
Ore Dock Staging Area & Walkway			59,500	No Lease Provided
Broadway Dock Staging Area			110,380	No Lease Provided
AIDEA / Skagway Ore Terminal	July 1990	March 2023	307,969	purchased land $14,274,063 from PARN 1990
Alaska Marine Lines (AML)	January 2001	March 2023	112,500	Lease provided / confirmed
TEMSCO Helicopters	January 2001	March 2023	69,696	Lease provided / confirmed
M&M Tour Sales	January 2001	March 2023	n/a	Lease provided / confirmed

Small Boat Harbor

The Skagway Small Boat Harbor is a full-service marina with moorage for pleasure and commercial vessels up to 150 feet. Harbor amenities include seasonal potable water on all docks, restrooms and showers. There is a pump-out facility for holding tanks and garbage receptacles at each ramp as well as 20-amp power at all docks. A harbor crane with a two-ton capacity is available on the ferry float. Haul-outs for shallow draft vessels up to 20 tons and 40 ft. are possible with a hydraulic trailer, and there is a tidal grid for larger vessels. Upland storage is available adjacent to the harbor, with power and water in some areas.

7. Tariff Assessment

Overview

To determine future tariff ranges to consider for the Port of Skagway an assessment of existing Southeast Alaska cruise tariffs were initiated comparing Skagway, Juneau and Ketchikan. No agreements between cruise brands and destinations were considered as part of the assessment. Table 8 provides a summary of the Port Tariffs by destination for the primary tariff categories. Both Ketchikan and Juneau provide for a port development fee to cover cruise related projects and Juneau also includes a port maintenance fee. The methodology of charging is similar in all cases for dockage and wharfage (Pax fee).

Table 8: Southeast Alaska Key Marquee Port Tariffs

Port	Dockage		Head Tax (wharfage)		Port Development Fee		Port Maintenance Fee		Potable Water	
	Type	Rate	Type	Rate	Type	Rate	Type	Rate	Type	Rate
Juneau	200' +	$3.00 per ft / day	Docking	$5.00 per pax		$3.00 per pax		$0.06 per ton		150% of the CBJ Water Utility Rate
Ketchikan	700' +	$2.54 per ft / day	Docking Tender	$7.00 per pax $4.00 per pax	500'+	$1.90 per ft / service			900'-1,100'	$840 per service
Skagway	400' +	$2.10 per ft / day	Docking *includes $0.65 security fee for (Southeast Stevedoring)	$8.51* per pax						$4.20 per 1,000 gallons

- Electricity Supply: Non-revenue generating fees
- Juneau: Fees for electricity will be assessed in accordance with the fees and charges in effect at the time the electricity is consumed
- Skagway: Vessels using dock shall enter into own contract arrangements with commercial companies for the provision of electrical power, telephone and fuel services.

- Alaska CPV Excise Tax: Municipality of Skagway along with other Alaska ports receives $5.00 per passenger. However these funds are restricted to cruise vessel related investments.

Table 9 provides a tariff summary based upon the variety of vessels that berth at each port. A weighted average based upon the pct. Of vessels is also shown for comparison purposes. This is further broken down on a per call and per passenger basis. As shown Skagway has a weighted average of approx. $9.50 per passenger, while Juneau is $13.15 and Ketchikan is at $9.01 currently. Based upon current events at the Port of Ketchikan it is likely this rate will increase and fall more in line of that shown for Juneau.

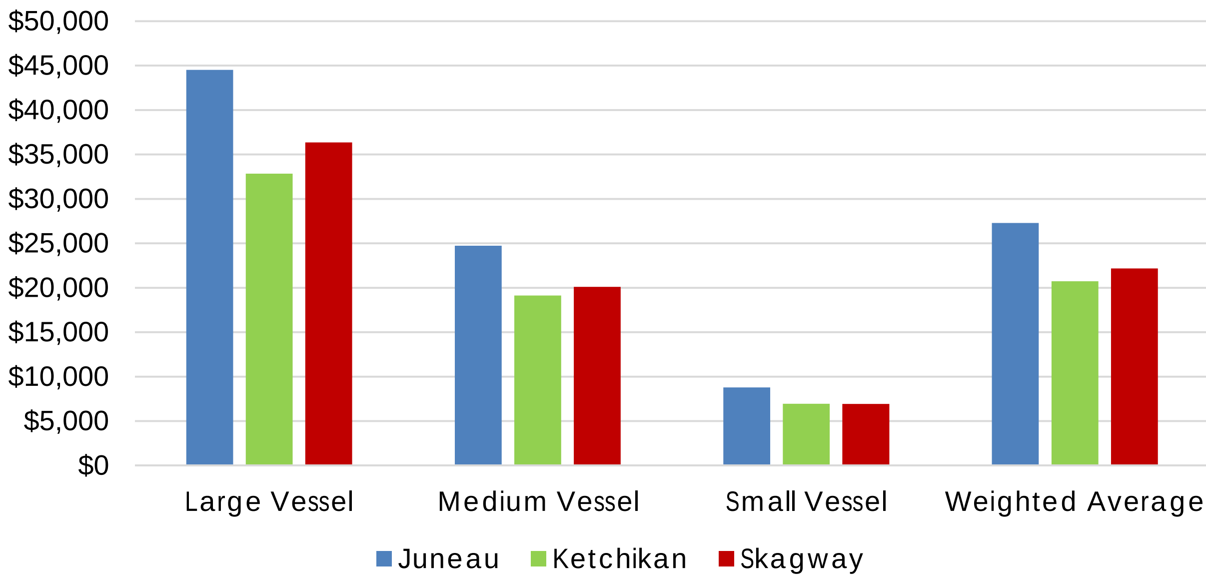
Table 9: Tariff Summary

Port	Large Ship	Medium Ship	Small Ship	Weighted Average
Percent of Ships in Port	**25%**	**60%**	**15%**	
Summary of Revenues per Call				
JUNEAU	$44,520	$24,738	$8,785	**$27,291**
KETCHIKAN	$32,835	$19,129	$6,949	**$20,728**
SKAGWAY	$36,348	$20,090	$6,928	**$22,180**
Summary of Revenues per Pax				
JUNEAU	$11.12	$11.65	$13.15	**$11.74**
KETCHIKAN	$8.20	$9.01	$10.40	**$9.01**
SKAGWAY	$9.08	$9.46	$10.37	**$9.50**

Scenario Assumptions: 1. Calculations presented are based on one vessel visit; 2. Vessel makes seasonal call; 3. Vessel operations occur on a weekday, between 8:00 am and 5:00 pm; 4. Vessel spends 8 hours at the same berth during the visit; 5. No discounts / reductions based on number of visits / agreements considered; 6. All visits are assumed to be docked (no tendering); 7. Utility Charges such as Electricity and Water are not included.

Figure 27 shows the tariff charges per cruise call for each of the ports.

Figure 27: Tariff Charges per Cruise Call



Tables 10 through 12 show the tariff summaries by specific vessels in the large, mid and small categories to show the variance of tariff costs to different vessels deployed to the region, specifically Skagway. Note that smaller vessels pay more on a per passenger basis.

Table 10: Tariff Summary, Large Cruise Vessel

Port	Dockage		Passenger Wharfage		Port Development Fee		Port Maintenance Fee		Total Charges per Call	Total Charges per Pax
	Rate	USD	Rate	USD	Rate	USD	Rate	USD		
Large Sample Ship – Norwegian Bliss (4,004 pax; 168,000 GT)										
JUNEAU	$3.00	$3,248	$5.00	$20,020	$3.00	$12,012	$0.06	$9,240	$44,520	$11.12
KETCHIKAN	$2.54	$2,750	$7.00	$28,028	$1.90	$2,057	$0.00	$0.00	$32,835	$8.20
SKAGWAY	$2.10	$2,274	$8.51	$34,074	$0.00	$0.00	$0.00	$0.00	$36,348	$9.08

Table 11: Tariff Summary, Medium Cruise Vessel

Port	Dockage		Passenger Wharfage		Port Development Fee		Port Maintenance Fee		Total Charges per Call	Total Charges per Pax
	Rate	USD	Rate	USD	Rate	USD	Rate	USD		
Mid Sample Ship – Carnival Spirit (2,124 pax; 88,500 GT)										
JUNEAU	$3.00	$2,879	$5.00	$10,620	$3.00	$6,372	$0.06	$4,868	**$24,738**	**$11.65**
KETCHIKAN	$2.54	$2,438	$7.00	$14,868	$1.90	$1,823	$0.00	$0.00	**$19,129**	**$9.01**
SKAGWAY	$2.10	$2,015	$8.51	$18,075	$0.00	$0.00	$0.00	$0.00	**$20,090**	**$9.46**

Table 12: Tariff Summary, Small Cruise Vessel

Port	Dockage		Passenger Wharfage		Port Development Fee		Port Maintenance Fee		Total Charges per Call	Total Charges per Pax
	Rate	USD	Rate	USD	Rate	USD	Rate	USD		
Small Sample Ship – Pacific Princess (688 pax; 30,277 GT)										
JUNEAU	$3.00	$1,776	$5.00	$3,340	$3.00	$2,004	$0.06	$1,665	**$8,785**	**$13.15**
KETCHIKAN	$1.94	$1,148	$7.00	$4,676	$1.90	$1,125	$0.00	$0.00	**$6,949**	**$10.40**
SKAGWAY	$2.10	$1,243	$8.51	$5,685	$0.00	$0.00	$0.00	$0.00	**$6,928**	**$10.37**

Conclusions

A Tariff Strategy should be tied to the consideration of MOS Ownership / Operator and the subsequent investment level required to support cruise operations. The MOS will need to Develop Rates, Charges, Rules and Regulations and provide for separate fees, - dockage, wharfage, water, etc. As part of the process the MOS may want to consider an allowance for a Bundling option for fees.

MOS Tariffs should be set based upon what the market can bare / competition, an assessment of MOS port and upland infrastructure support neds and development costs for future cruise berths, etc.If a new berth is considered then the New Tariff strcuture should be ready for implementation as of April 2022. The tariffs can either be published on line in conjunction with the existing Small Boat Harbor Fee Table OR New set of Tariffs developed independently and thus they could be filed with FMC. The MOS must advise cruise lines, cargo operators, leaseholders and Port Agents to allow for them to make any pricing changes. For cruise lines the MOS should allow for 18 – 24 months to implement the neew tariffs and pass them through to the consumer via tax.

A Passenger Fee breakdown could provide as follows:

- Increase Wharfage from 2022 by $3.00 over existing tariff for New Pier (approx. $12.00)
- Current $5.00 CPV Excise Tax (on all pax throughput)
- Passenger Port Development Fee / Infrastructure Fee / Port Maintenance Fee
    - Development Fee - Provides for funding of new Broadway Cruise Pier
    - Infrastructure Fee – Provides for port and upland cruise tourism area requirements
        - Roadway, sidewalk, GTAs, walking trails, restrooms, power supply, garbage incinerator, etc.
- Port Maintenance Fee – Provides for 2023 and beyond repair/rebuild of Ore, Broadway Docks and uplands and annual maintenance moving forward
- Identify any new associated cargo / cruise tourism fees
- Vehicle access, rail access, parking fees
    - May be substitute for or in addition to Infrastructure / Maintenance Fees

Additional income for the Port may also include off-season uses, ore and containerized ore hauls, rentals, transportation fees, concessions and others to be identified.

Municipality of Skagway: Strategic Planning & Execution of Cruise-Related Facilities

Appendix A: Cruise Market Assessment

February 22, 2020

Bermello Ajamil & Partners

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DISCLAIMER

Bermello Ajamil & Partners, Inc. ("B&A") produced this report consistent with: (i) the level of diligence ordinarily exercised by competent professionals practicing in the area under the same or similar circumstances; and (ii) the time and budget available for its work, to ensure that the data contained in this report are accurate as of the date of its preparation. This study is based on estimates, assumptions and other information developed by B&A, provided by the seller and other third parties and from its independent research effort, general knowledge of the industry, and information provided via consultations with the client and the client's representatives.

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- This report includes forecasts, projections and other predictive statements that represent our assumptions and expectations considering currently available information.

- Forward looking statements apply only as of the date of this document and are expressly qualified in their entirety by the cautionary statements included in this document.

- These forecasts are based on industry trends, and subject to circumstances involving current users, the economy, political issues, and other factors, and they involve risks, variables and uncertainties. Large variations may occur from year to year as certain vessels join or are withdrawn from the market.

- The actual performance results may differ from those projected, consequently, no guarantee is presented or implied as to the accuracy of specific forecasts, projections or predictive statements contained herein.

- Inevitably, some assumptions will not materialize, and unanticipated events and circumstances may affect the ultimate results. Issues such as accidents, taxes, terrorism and financial markets may have significant impacts on the actual results.

1. INTRODUCTION

Skagway has enjoyed remarkable success with its cruise business as a key port in the Alaska cruise market over the past 20-plus years. Recently, the sale of the railroad and the underlying leases of the berths raise a number of issues as to how the Municipality of Skagway (MOS) needs to best handle the future decisions and investment options for the Skagway waterfront as the overall lease of the facility comes to an end in March 2023. This market assessment is intended to assist in the development of a financial model for the waterfront area and serve as an indication of the infrastructure requirements necessary to support the industry into the future.

This report illustrates the growth of the Alaska market and Skagway over the next 20-year period (2019-2039).

2. ALASKA REGIONAL CRUISE GROWTH

Competition

Vessel deployment is driven by consumer demand. Cruise Lines place their vessels into regions where they get the best return on investment. Essentially they are looking for regions that are in high demand; provide for low operating costs; and, in the final calculations provide the highest level of profit.

The Alaska region inclusive of sailings from and to Seattle, Vancouver, San Francisco and the mainland ports of British Columbia and Alaska provide for strong consumer demand that provides for higher than average ticket pricing and excellent shoreside revenue opportunities from a variety of shore excursion options. The cost of operations is higher overall than comparable summer destinations such as Bermuda and Canada & New England, while it is seen as on par or lower than Northern Europe and the Mediterranean regions.

Thus, deployments are driven by profitability and net yields. The cruise brands provide what the consumer wants (based on vacation patterns) via different itinerary offerings that cater to the desired demographic of the brand. The line crafts an overall product with marquee destinations, shipboard experiences and intrigue with new ports (every demographic may be slightly different) and other attributes to entice the consumer to sail on their ships. It is generally the responsibility of the region or destination to sell themselves to the consumer. The Alaska region does this well through word of mouth and general Alaska branded tourism advertising.

In Alaska, the cruise lines also attempt to limit the balance between the time in port required to deliver the product and provide for revenue production vs. the cost of the port visit and fuel consumption between ports. This is critical on the round trip sailings in the region due to speed and distance parameters and the use of downstream berth infrastructure on critical weekdays. Due to the level of investment the key cruise brands have in the Alaska region (coaches, trains, tour operations, destination infrastructure, hotels, etc.), the brands also work to offer itinerary patterns that take advantage of these investments and amenities. Additionally, strategic ports where they may have an agreement that saves them on cost of operations and / or improves passenger satisfaction are also ports where they will frequent.

Figure 1 provides an overview of the cruise vessel deployments for 2018 based upon passenger capacity placement. As shown, Alaska provides for the fifth highest passenger deployment figures and primarily competes for summer traffic with Northern Europe. Most of today's cruise trafic is built around the North American and European consumer base, but new markets are being built in Asia-Pacific and Australia as well. Other key North American consumer base regions include the West Coast, Caribbean/Bahamas, Canada & New England and Bermuda. Key European regions are shown as the Mediterranean, NW Europe, Trans Atlantic and Canary Islands.

Figure 1: Primary regions based upon passenger capacity, *2018*
Source: Cruise Industry News Annual

For Alaska, the ability to continue to provide for higher than average per diems as compared to competing destinations will offset the higher operating costs within the region. However, the region needs to continually monitor this balance and ensure that the revenue opportunities are strong.

It is important to recognize and address the growth of the European and Asian cruise consumer market into the mid- to long-term as these will be the larger growth markets into the future for all destinations. Alaska will need to establish itself in these markets to ensure continued passenger demand. The region already caters to Asian-demographic based visitors on many of the brands deployed to the region including Princess Cruises and RCI. Preparing for future deployments and cruise visitors from Asia and Europe is critical to long-term regional success in terms of hard and soft infrastructure. Vancouver provides excellent marquee value for this market and access via existing air routes. There is also a cultural preference for the city due to its demographic makeup vs. that of Seattle.

Regional selection criteria

Table 1 outlines the primary cruise line selection criteria for destinations on a regional or port basis for itinerary planning processes. These are separated into four distinct areas. Each is important, but it is necessary to address each of these key components in order to meet the needs and expectations of the cruise industry.

Marketing and Sales is the key deployment driver based upon consumer awareness and demand. Marine operations also play a key role in ensuring the itinerary pattern routing and ports provide a safe and secure environment for the cruise vessel and passengers. All of these areas work together on the formulation of final itineraries.

Table 1: Deployment and itinerary planning selection criteria

Marketing and sales	Marine and operations
• Consumer awareness and education • Access to consumers – sales chains • Marketability for the consumer • Fit with cruise brand philosophies • Fit with consumer holiday patterns	• Marine navigation and access • Security • Berth, apron and terminal features • Ground transportation areas • Provisioning
• Landside – revenue opportunities • Airlift – capacity and cost • Lodging – capacity and cost • Consumer product satisfaction • Destination venue and tour capacities	• Port charges • Labor, fuel and other operating costs • Regulatory and environmental issues • Maritime law • Emission Control Areas
Logistics, air and shore excursions	**Finance and legal**

Lines are focused on cruise itineraries that are easy to sell to cruise consumers (a marquee destination with demand). They also must be profitable (per diem vs. cost of operations) and provide for an up sell to cruise consumers (strong revenue opportunities). This is accomplished through the creation of cruise itineraries that fit within consumer vacation patterns (typically 4-day, 5-day and 7-day patterns) dependent upon the demographic. Deployment of cruise vessels close to base cruise consumer groups is also driving growth of markets. Cruise brands use revenue / yield management tools to identify pricing schemes that fit their demographic.

Cruise lines mix homeports and a majority of ports-of-call that are known commodities to consumers in order to market cruise patterns successfully. What ports qualify as “marquee” or “new” is to a great degree dependent upon the cruise brand and their targeted consumer group. For instance, a HAL passenger may know many more ports worldwide and sailed more often that a first time Carnival Cruise Line passenger. Thus, sailings to the same region would likely be made up of slightly different cruise destinations to meet the demands of each consumer group.

Cruise itinerary composition is an exercise in balance. Ports visited ideally need to offer a balance of shopping, natural, cultural and historical attractions coupled with periods at sea and at ports-of-call. Itinerary planning begins from 18 months to three years before the cruise when “straw itineraries” are developed by the marketing department as placeholders for the cruise brand vessels. Placing the right cruise vessel in the right itinerary is a key to the overall success of a cruise line. Not all cruise homeports or ports-of-call fit every cruise line brand’s philosophy – they cannot be everything to all lines. In the mid-term, itinerary planning will continue to be driven by profitability and net yields. Lines will limit time in ports and yet expect to create valuable experiences.

Cruise lines prefer to utilize ports where they can control the costs and product offerings, such as their private island destinations by example. However, in both cases, the passenger demand for these ports is key and cannot be overlooked. Moving forward, there will be more pressure on regions and ports to keep expenses low and regulatory issues in check.

Based upon cruise line input, the primary Alaska regional issues that affect deployment are the cost of homeport operations, specifically those fees that cannot be passed along to the passengers, such as stevedoring, pilotage, environmental monitoring; weekend homeport berth availability; downstream weekday berth availability; and, passenger satisfaction related to port operations.

Additionally, outside influences also play a role in vessel deployments, such as regional volatility. Primarily in the Asia/Pacific and Mediterranean over the past two years has provided for an impetus to redeploy vessels to more stable and safe cruise areas inclusive of Alaska. Dependent upon the world situation, this will push some ships into the region as cruise passengers demand safe and comfortable holiday experiences.

Alaska region moving forward

- Over the next 5 – 10 years, the cruise industry focus will be on the development of the China and regional Asia consumer markets, unless recent events (Coronavirus) once again derail that effort moving ships back into key regions worldwide. Alaska will need to compete directly for this traffic, albeit at a limited level, due to the primarily captive North American market. The addition of the Asian consumer to Alaska will further increase overall deployment numbers to the region.

- Other competitive regions are pulling cruise vessel deployments to open new consumer markets. The Alaska region must show strength to command consumer demand, higher yields and lower overall costs of operations.

- Alaska is seen as a safe cruise destination by the industry. With any threats, cruise lines will ensure they can use Alaska for vessel deployments.

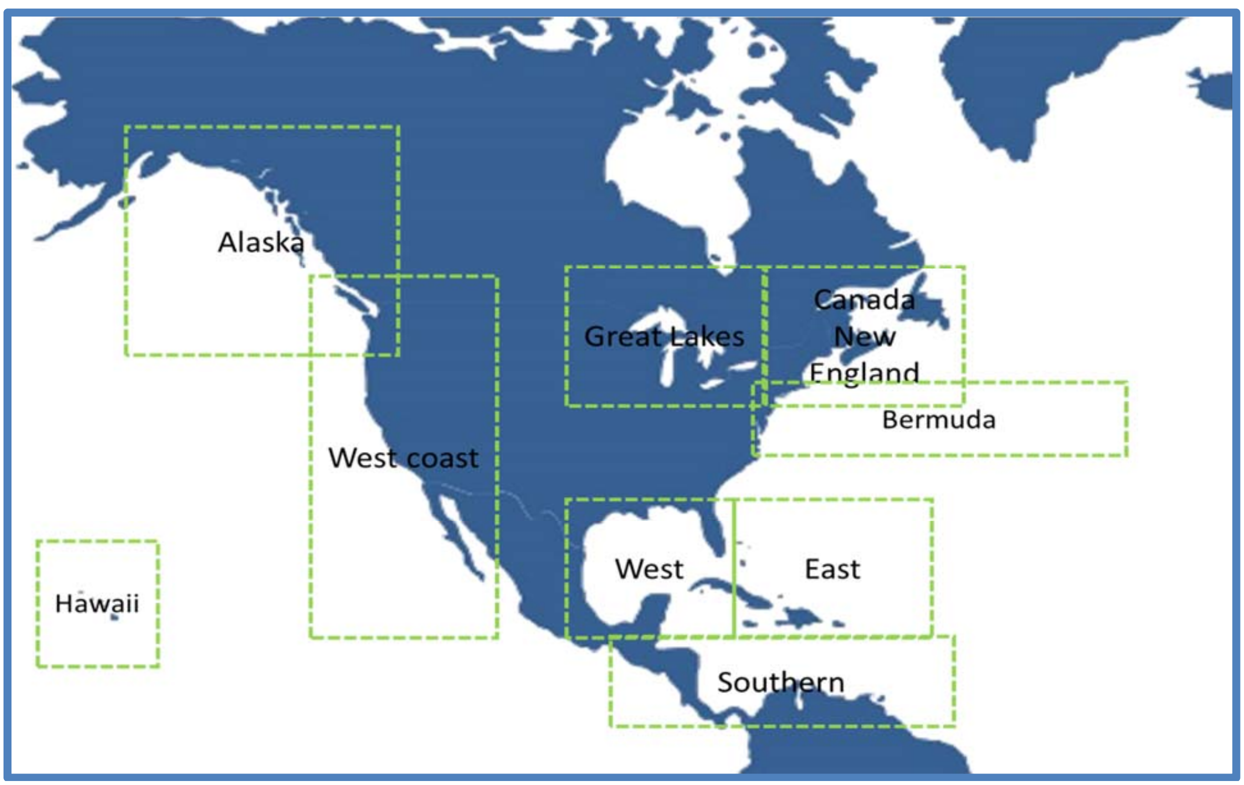
- The expansion of the Panama Canal allows for the larger vessels to easily deploy to the West Coast of the United States and an easy transition to Alaska. This will continue to positively impact the region as cruise brands look to increase Alaska capacity by replacing smaller vessels with larger ships over the next 2 to 5–years.

3. Alaska Market

As shown, Alaska is a significant summer market for the cruise industry that provides excellent revenue opportunities for cruise lines and continues to attract high cruise consumer demand from North American consumers as well as benefitting from increased "discovery" by international customers. According to Cruise Lines International Association (CLIA) of Alaska, Alaska surpassed the 1 million passenger mark in 2016 for the first time since 2009 and set a new record for total passengers (1.3 million) in 2019. For 2020 some 1.4-million cruise passengers (lower berth capacity) is anticipated.

The deployment of newer ships with larger passenger capacities and an extension of the cruise season has spurred this growth. Moving forward, most regional growth will come from the replacement of smaller vessels with larger ships (vs. the deployment of vessels on new itinerary patterns). Instability in larger cruise regions such as Asia and the Mediterranean will also give a competitive advantage to the Alaskan market as the key North American brands look to deploy their assets in safe zones where consumers feel secure and revenues are higher. Alaska is a key North American consumer base. See below for key North American consumer-driven regions in proximity to the core consumer.

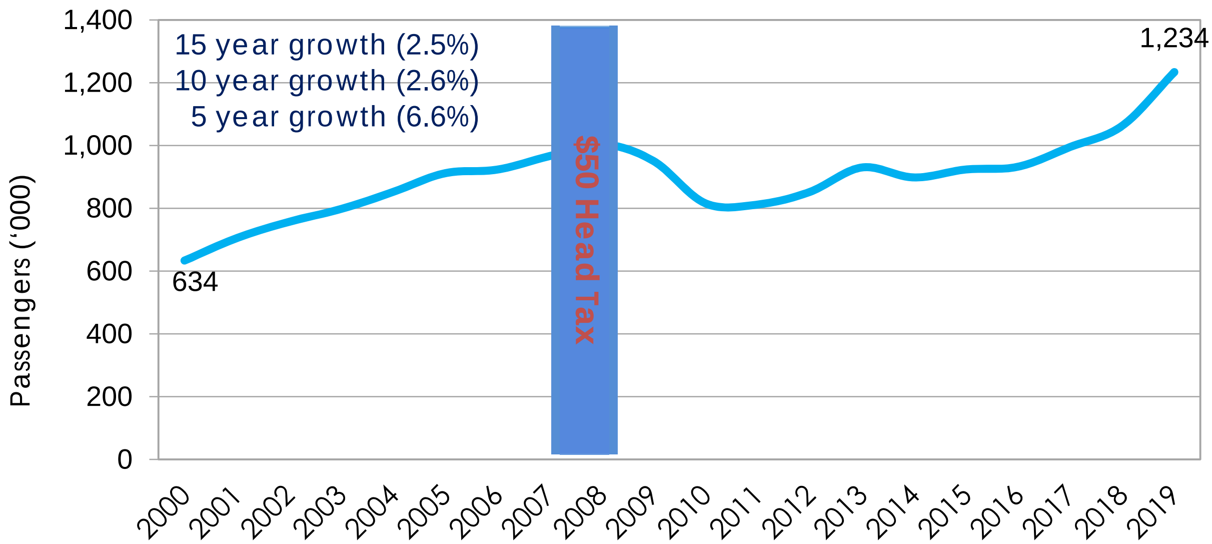
North American Key Regional Markets



The Alaska region dominates the west coast cruising landscape for the North American market. Despite cruise capacity pulled from the region in 2008/2009, sparked by Alaska imposed taxation and regulatory issues, the region is now even more important as a revenue generator to the industry. In the past year, Alaska has seen deployments of the largest vessels to touch the ports, such as the *Norwegian Bliss (4,100-pax)* and then further expanded its cruise market share with the arrival of the RCI *Ovation of the Seas* (sailing from Seattle) and NCL's *Norwegian Joy* in 2019 sailing from the Port of Seattle.

Alaska has seen steady growth over more than 20-years. Vessel deployments and passenger numbers fell from 2009 after peaking in 2008 with more than 1-million passengers (See Figure 2). The region began to stabilize in 2012 and has been growing rapidly from 2016. Despite ECA and other long-term operational cost challenges faced by the cruise industry in the region, it will see growth in the mid-term buoyed primarily by North American passenger demand, but also new cruise arrivals that will come from Asia. Brands such as Dream Cruises, Costa, Aida, P&O and others are looking for deployment options in Alaska over the next 2 – 5 years.

Figure 2: Alaska cruise passengers, 2000 – 2019



The Alaska region consists of itineraries encompassing the Pacific Northwest, Western Canada (BC) and the Alaskan Coast. It is partially influenced by traffic from Hawaii, Pacific Coastal, Trans-Pacific and World cruises that are characteristically single repositioning sailings to, or through, the region. Southeast Alaska, including the primary homeports★; marquee Alaska ports★; and, secondary ports★ are shown below.

Primary vessel cruise patterns include the following:

- **Inside Passage (round-trip cruise):** This cruise itinerary pattern is the primary staple of the Southeast Alaska cruise program for the major North American Cruise Lines operating in the region. This is a typical 7-night cruise pattern that has historically departed from Seattle with larger vessels and feeds the Alaskan region. More than any other pattern, this has become the standard marketing itinerary and has the most consumer recognition. The main Alaskan ports included are Ketchikan, Juneau and Skagway. Victoria is the important far-foreign port required for this pattern to operate;

- **Open-Jaw (one-way cruise):** Cruise itineraries within this sector all originate at present from the homeports of Vancouver in the south and Seward or Whittier in the north of the region for the large North American cruise ships. Due to geographic location, this itinerary provides for limited options in terms of variation on the standard duration and ports in Southeast Alaska. The major cruise lines in this market are Princess Cruises, Holland America and RCI/Celebrity Cruises. Each of these cruise brands also owns, operates and supports infrastructure that offers pre- and post-interior packages from Seward as well as Canadian Rocky Mountain trips from Vancouver;

- **Alaska Coastal / Repositioning (RT):** This market sector is offered by cruise lines to move their cruise ships into place and out of the Alaska region and in particular to the homeports from winter cruise markets or providing for unique longer exploration sailings through the region. To capitalize on the marketing value of Alaska, this cruise sector delivers the key ports of Juneau, Skagway and Ketchikan, as well as other smaller ports.

The standard 7-Night Alaska cruise (8-day) offers a variety of shore excursion products in the ports-of-call as well as extensive land-based pre- and post-programs that provides for added value to the cruise line. The small ship adventure sailings in the past 3 years have also seen a resurgence in the region with a majority of the small pocket cruise vessels sailings in the State of Alaska due to their flagging and ease of access between the primary homeports in Juneau and Ketchikan. Larger exploration / luxury vessels explore the whole of the region including Alaska, British Columbia and the Pacific Northwest.
See the 2020 cruise deployment in Table 2.

Table 2: Cruise deployments by main type, 2020

Cruise Type	Passengers Anticipated (Lower Berths)
Round-Trip	1,040,547
Open Jaw (One-Way)	416,355
Grand Total	**1,456,902**

Table 3 provides the estimated passenger berth capacity for the 2020 cruise season. There are also additional smaller downstream ships sailing in the region that typically total less than 15,000-passengers.

Table 3: Cruise Brand deployment, 2020

Brand	Passengers	Sailings
Norwegian Cruise Line	376,262	134
Princess Cruises	336,168	133
Holland America Line	266,802	117
Celebrity Cruises	155,428	55
Royal Caribbean	137,010	48
Carnival Cruise Lines	67,968	32
Disney Cruise Line	28,064	32
Cunard	23,012	28
Regent Seven Seas Cruises	22,656	21
Seabourn Cruise	12,600	16
Oceania Cruises	9,772	15
Silversea Cruises	8,940	14
Viking Ocean Cruises	7,440	11
American Cruise Lines	2,872	9
Windstar Cruises	1,908	8
Grand Total	**1,456,902**	**673**

Key Alaska ports

With the main itinerary options presented in the region there are 3 “marquee” Alaska destinations – Ketchikan, Juneau, and Skagway. The secondary Alaska options are Sitka, Icy Straits and Seward. The glacier options are Glacier Bay, Hubbard and Sawyer. The strategic “marquee” BC Port-of-call destination is Victoria.

Secondary Ports-of-call include Icy Straits, Sitka and Haines. However, Icy Straits will see a dramatic increase in passenger throughput from 2020 due to the NCL cruise itinerary patterns using this destination moving forward. The primary challenges for the development of new itinerary options in the region, besides consumer demand, are speed and distance, and existing Alaska port competition.

Figure 3 shows the passenger throughput for the marquee Alaska ports of call; key homeports of Seattle and Vancouver; Open jaw homeports of Whittier and Seward; and, the passenger throughput totals for the region. As shown, most passengers visit the three marquee destinations in Alaska with the majority of sailings originating from the Ports of Vancouver and Seattle.

Figure 3: Alaska passenger throughput, 2002 – 2019

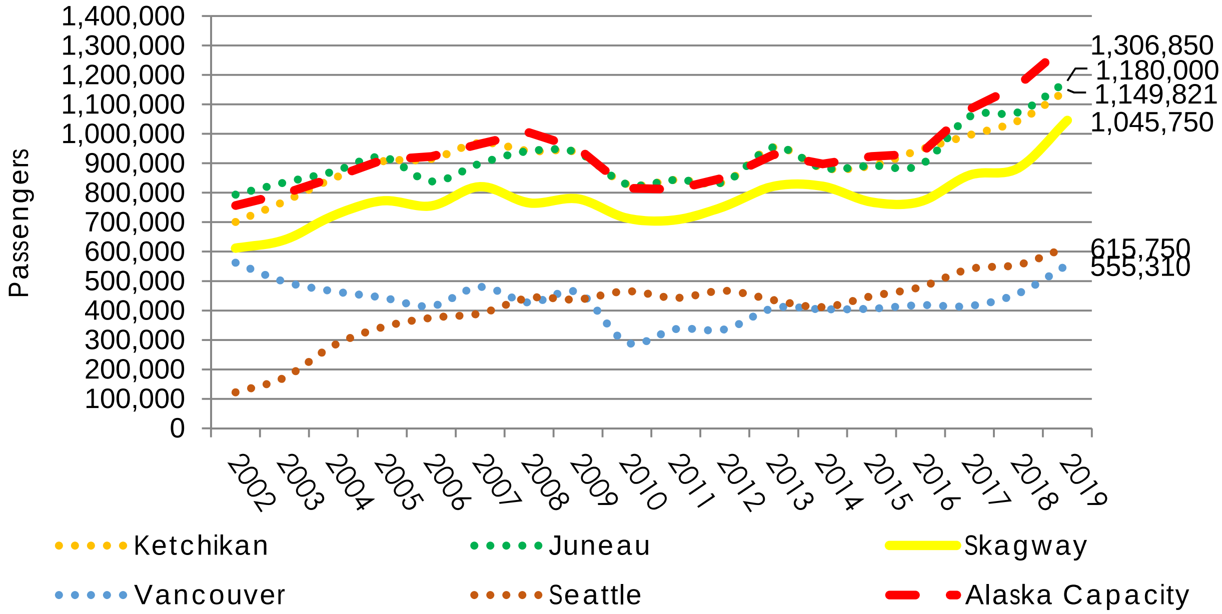


Table 4 shows the current infrastructure in the downstream Alaska ports of call.

Table 4: Downstream Port of Call Infrastructure

Key Downstream Ports of Call	Berth Infrastructure
Ketchikan, AK (4 berths / 1 anchorage)	Berth 1: 960-LF; 2: 1,000-LF; 3 - 1,050-LF; 4 - 960-LF.
Juneau, AK. (4 berths / 1 anchorage)	CBJ (N): 1,000-LF; CBJ (S): 1,000-LF; AJ - 1,100-LF; SFS - 1,000-LF.
Skagway, AK. (4 berths)	Railroad: 1,050-LF; Broadway: 960-LF; Ore (2 berths) - 1,100-LF. ea.
Sitka, AK. (1 berth / 4 anchorages)	Halibut Point: 1,000-LF.
Icy Straits Point (Hoonah), AK. (1 berth)	1,060-LF.
Haines, AK. (1 berth)	1,000-LF.
Victoria, BC (4 berths / 1 anchorage)	A1: 1,000-LF.; A2 - 800-LF.; B (2 berths) - 1,040-LF. ea.
Nanaimo, AK. (1 berth)	1,050-LF.
Prince Rupert, BC (2 berths)	Northland - 960-LF.; Atlin - 250-LF.

Homeport Developments

In August 2015, the ***Port of Seattle*** signed a 15-year lease with Norwegian Cruise Line Holdings, the parent company of Norwegian Cruise Line, Oceania Cruises and Regent Seven Seas Cruises. The agreement included a $30 million investment in Pier 66 to be shared equally by NCLH and the Port of Seattle that was completed for the deployment of the *Norwegian Bliss* in 2018. The Port is undergoing a RFQ/RFP process currently focused on the development of Pier 46 for a single terminal facility. The shortlisted groups are Cruise Industry Leaders Group (Royal Caribbean Cruise Ltd., MSC Cruises, Carnival Corp. and SSA Marine, a subsidiary of Carrix), Global Ports Holding and Civil & Building North America (Likely not in the competition), and Ports America with Jacobs Engineering Group. The terminal is to be built at the northern end of Terminal 46, currently a marine cargo berth, and will be capable of accommodating ships of up to 250,000 GT at a berth up to 1,500 feet. The terminal should accommodate at least 5,400 passengers. This is a $200m project – 50% Port Seattle / 50% from the partner with an initial 22-year term and extensions for up to four five-year terms, at the port's discretion. It is expected to become operational in 2023, but with current timing, it may be 2024.The Port of Seattle expects to announce the winning team in first quarter 2020.

The ***Port of Vancouver*** has three cruise berths available on a daily basis at Canada Place. This does not take into consideration an actual operating capacity of the cruise facilities, which are well below industry standards for length of wait on / off a cruise vessel. The facility is critically undersized and offers logistical challenges. It provides for 3 panamax ship berths with berth lengths of 1,663-ft., 1,060-ft., and 950-ft. This third berth will be obsolete in 3 to 5 years. Due to its inner harbor location, there is an approximate 62-m. air draft limitation due to the Lion's Gate Bridge, which also impacts the potential for growth as it does not consistently accommodate large cruise ships due to pilotage regulations. To date, there has been limited impacts on passenger throughput due to the strength of the Alaska market overall, but as reported by Ceres, a number of brands, specifically Princess Cruises, have had numerous issues with missing the window for departures / arrivals causing downstream missed port calls; additional spending / refunding of air tickets; and other operational issues.

The Port of Vancouver has continued to search for alternative miracles for Canada Place's operational congestion issues over the past ten years. No silver bullet has been found and the issues continue to worsen each cruise season for the larger vessels now trying to homeport in Vancouver. In 2017, the Port issued an RFP for a Cruise Terminal Pre-Feasibility Study to look at sites by the Vancouver International Airport that may include cruise and ferry operations. Although we have not seen the final report to understand where the potential green field site is located, it likely means there will be a long period of environmental and other legal challenges. In summer 2019, a Canada Place Cruise Terminal Flow Study RFP was also issued to once again look for solutions to the challenges of Canada Place.

Providing for a cruise facility to accommodate up to two large vessels for homeport operations on the Fraser River, outside of the Lions Gate Bridge, would greatly assist growth opportunities for Vancouver, as well as Alaska overall.

The ***Victoria Port Authority*** is continuing its efforts to expand its port of call business, as well as capture some level of homeporting into the future. While there are extensive challenges in storing/servicing logistics and costs, airlift, etc. for Victoria homeporting, the effort does place some pressure on Vancouver to solve the homeporting issue in the short-term and not allow it to drag into the future. There is a small P&O homeport operation in 2020 scheduled for Vancouver, but it is not a full turnaround. Victoria also has a faction within the community that does not support cruise tourism and actively works to limit or reduce growth.

In ***Seward, Alaska***, the northern terminus for open jaw sailings departing from the Port of Vancouver, the ownership – Alaska Railroad Corporation – is looking for qualified proponents for the development of a new passenger terminal with an estimated starting cost of ~$60-million. The responses were originally due October 30, 2019. This would provide for a new cruise terminal from 2020 for homeport operations and mixed use activities, replace or refurbish the existing dock and provide for some level of upland commercial development. This agreement with the railroad will cover design, construction, maintenance, operations and funding.

This project is important to the Port of Vancouver due to its northern terminus status for the open jaw sailings and its current lack of capacity for larger cruise ships. To some degree, the open jaw itinerary pattern is being artificially held back from the deployment of larger ships due to issues with both Vancouver and Seward infrastructure. This will allow additional growth for Alaska once this terminus can take multiple, larger vessels.

Ports of Call Developments

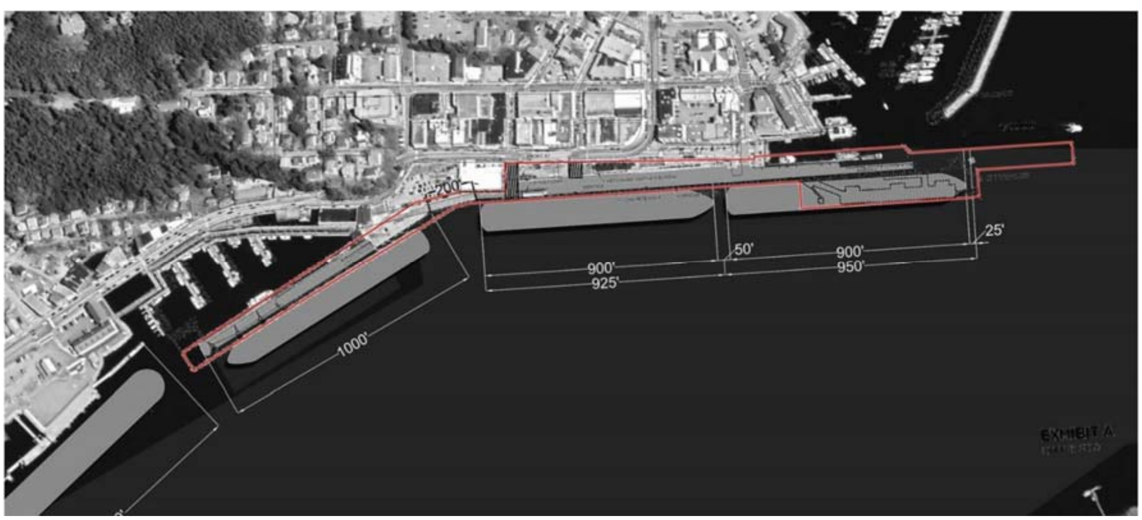
Other significant downstream cruise tourism development that will influence growth of the Alaska region and further enhance the potential for the Port of Vancouver in the mid- to long-term are the following:

- **Juneau** – NCL Bahamas Ltd., which does business as Norwegian Cruise Lines, bought a ~2.9 acre lot in downtown Juneau that is currently zoned for residential for $20-million in a sealed bid process that was announced last month. That was $7 million more than the next highest bidder, Royal Caribbean Cruises, which offered $13 million. The lowest bid offered was from the City and Borough of Juneau, which offered $4,250,049. Survey Point Holdings, Inc., based in Ketchikan, Alaska, and a majority shareholder in the White Pass & Yukon Railroad in Skagway, Alaska offered up the next lowest bid of $5.265 million. Norwegian has said that the company is committed to working with the community to find a mutually beneficial arrangement for its use – likely a berth to accommodate their vessels into the future.

- **Icy Straits Point (Hoonah, Alaska)** NCL has been aggressive outside of Juneau as well, with a long-term commitment with Icy Straits now that a new berth expansion project has been completed that allows for the brand's largest vessels to call. NCL added 130 plus calls in 2019 with Norwegian Joy and Norwegian Bliss (doubled capacity) and will continue using this as a port of call into the future.

- **Ketchikan** – The City of Ketchikan will seek bids to upgrade the city-owned downtown docks through an RFP process - REDEVELOPMENT OF PORT OF KETCHIKAN BERTHS I, II AND III AND OTHER INFRASTRUCTURE WITHIN THE CITY. The RFP went out on October 21, 2019 and is due January 21, 2020. The RFP is intended to allow the City to select a Proponent(s), conduct negotiations with the shortlisted Proponents with the intention to execute an Agreement(s) with the Proponent(s) that offer the Best Value to the City of Ketchikan. *The General Limits of Concession Area are shown below.*

  The City is seeking a Proponent(s) that recognize the on-site and off-site impacts that cruise traffic creates within the City. In this regard, the City is planning specific projects, that when implemented, will mitigate issues and improve passenger and resident experience. The City has established a target budget of $35 million which the Proponent(s) should include as part of its financial proposal to be paid fully by the Proponent(s) as a project cost. It is anticipated, that these moneys will be placed in trust with the City, and be used as part of the City's Capital Program through its normal processes.



- **Ward Cove (Ketchikan, Alaska):** Ward Cove Group is partnering with Norwegian Cruise Lines and Fairbanks-based Godspeed, Inc., to build a two-berth cruise dock at the site of the former Ketchikan Pulp Co. They expect the $50 million first phase of the project to be completed by 2020, which is unlikely at this point. The proposal by the Local Venture with NCL intends to build a two-berth cruise facility in the "Ward Cove" site north of the Port and outside City limits. The partnership, along with Norwegian Cruise Lines (NCL) to bring their ships to the new berths, are actively soliciting other cruise lines to also utilize the facility. This project, if completed, will have a material effect on the number of ships and passengers that will come to the City docks and may also negatively impact the downtown core due to the use of shuttles and coaches to move passengers from Ward Cove to the City Center. The City of Ketchikan is actively lobbying to close down this project, but is likely too late as the US Army Corps has now issued permits for deepening of the basin to accommodate cruise vessels. This facility could be open for summer 2020.

- **Borough of Skagway, Alaska:** The city is currently conducting a Strategic Planning and Execution of Cruise Related Facilities (the Skagway Waterfront) inclusive of cruise, cargo and commercial options. The intent of the exercise is to provide a roadmap for identifying the potential future cruise, freight, fuel and mining markets; evaluate existing marine facilities; develop alternatives; define the cost to implement; provide for feasibility and a business structure; and, outline the implementation strategy for the city to regain control of the waterfront that has been under lease to the White Pass & Yukon Railroad for some 50-years or move to release an RFP to acco0mmodate a new lease option.

To continue with the expansion of the Alaska market infrastructure development it is critical for continued development in not only the hard marine infrastructure and the upland tourism, but the civil soft infrastructure as well. Many of these processes are now addressing these larger tourism and community needs in the ports of call to support tourism long-term and meet the needs of the local community. Larger ships with more passenger are inevitable in the region. These projects will greatly assist the port and future growth options for the Alaska region.

The cruise industry and several key Alaska players such as CLAA, Survey Points Holding, Godspeed, Inc., and more global cruise operators such as Global Ports Holding and SSA, and to a lesser degree Ceres Terminals, Ports America and Metro Stevedoring are looking for key investments in cruise facility operations throughout the region. Cruise brands are forming consortiums, teaming with key operators or working independently to ensure their future berths and upland areas are secured into the future throughout Alaska. This is a critical moment in time for the region as these deals made and infrastructure developed / secured will shape the Alaska market well into the future. Taking advantage of this timing and willingness to partner is important for destinations and cruise lines alike.

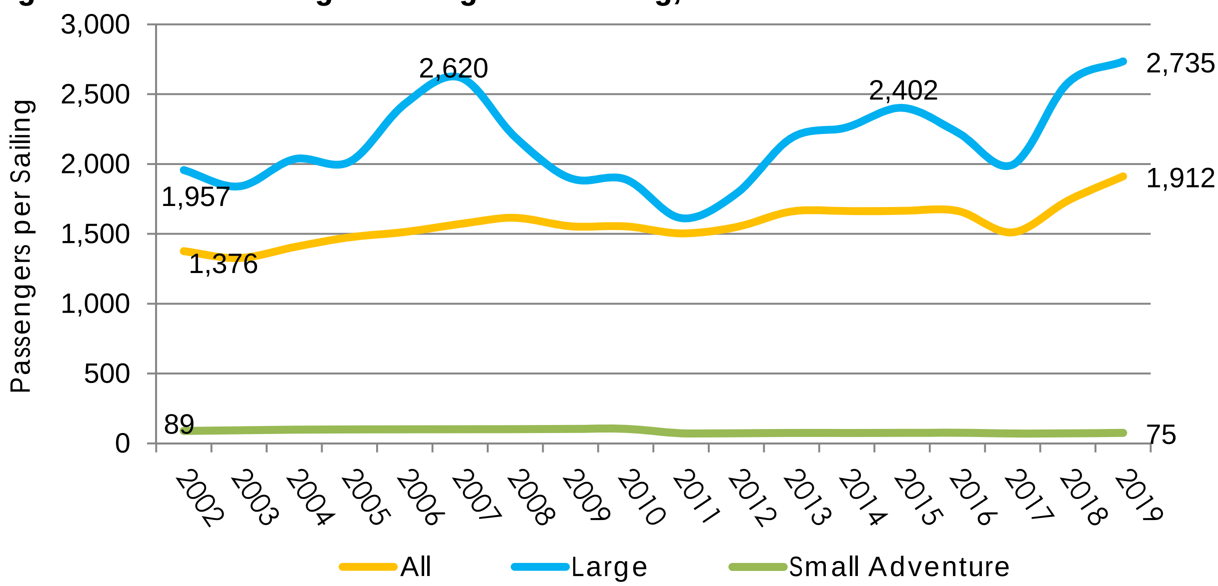
Design Vessel

The current Alaska design vessel must be more than 4,000-passengers plus, a minimum of 150,000-tons and 1,200-ft. such as the Quantum class (pictured).

In the mid-term to long-term the marquee ports will likely need to accommodate Oasis-class and Excel, thus exceeding 6,000-passengers, 220,000-tons and 1,300-ft.

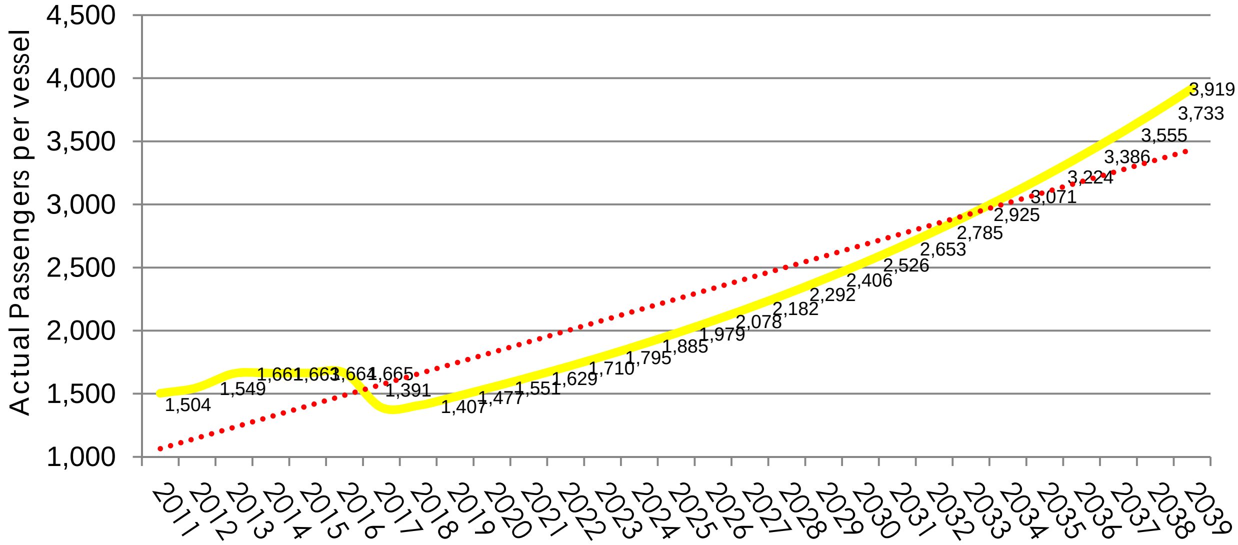
Figure 4 shows the historical growth of cruise vessels in the region. The majority of larger ships sail from Seattle on inside passage round trip cruises, while Vancouver typically has the majority of smaller vessels on round trip sailings and open jaw programs.

Figure 4: Alaska Average Passengers Per Sailing, 2002 – 2019



As part of an indication of the contusing growth of the region through the placement of larger vessels into Alaska the cruise industry continues to assess the options for the larger Oasis and Excel class ships in the region both from a port infrastructure perspective and upland service condition in both the homeports and ports of call downstream. Due to the wide ranging demographics for the region there will continue to be a variety of cruise vessel types and sizes to meet the passenger demand. Figure 5 illustrates the Alaska cruise vessel trend projection for the next 20-years. This does not include the small Southeast Alaska expedition vessels of less than 100-passengers. This projection is used to establish the berth demand for the region and individual ports once the passenger projections are completed. See Figure 5.

Figure 5: Alaska Passengers per Vessel Trend Projection, 2011 - 2039



Future Growth Factors

Alaska is limited by a lack of infrastructure for both Homeport and the downstream marquee Ports-of-call. After years of stable traffic – growth from 2018 forward – there is a push to place larger vessels into the region such as the NCL introduction of the first super-mega in the market – *Norwegian Bliss* (4,100 pax). The introduction is triggering responses by other brands with larger ships and it is certain that Princess and HAL will add more capacity as their ships age out. More and new growth will occur through the introduction of larger vessels such as the *Norwegian Joy* and *Ovation of the Seas* in 2019. Then, new capacity will kick in as the new lines arrive such as MSC (after 2021), Virgin (after 2023), and Genting (after 2020). Figure 5 illustrates the North American market growth over the next 20-years based upon the continuing development and placement of new builds / withdraw patterns foreseen.

Figure 6: North American Cruise Market Forecast, 2019 – 2039

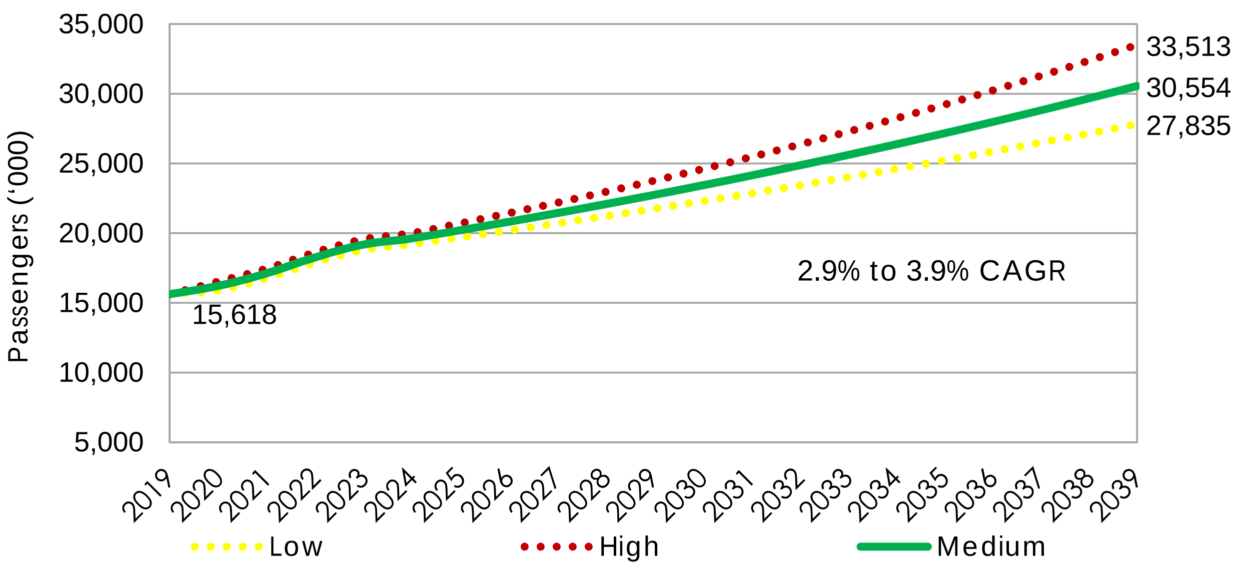
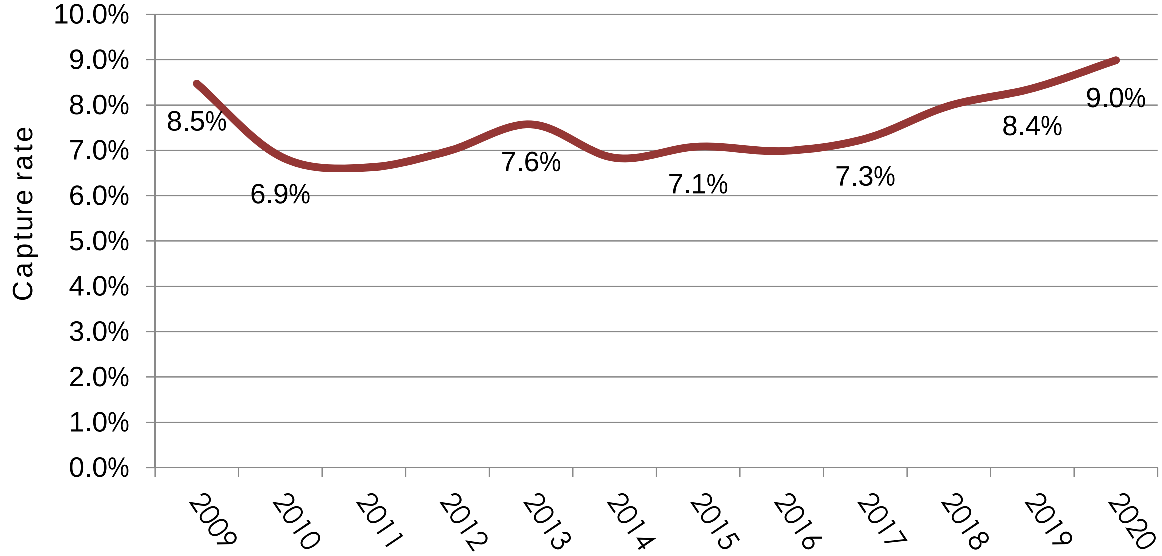


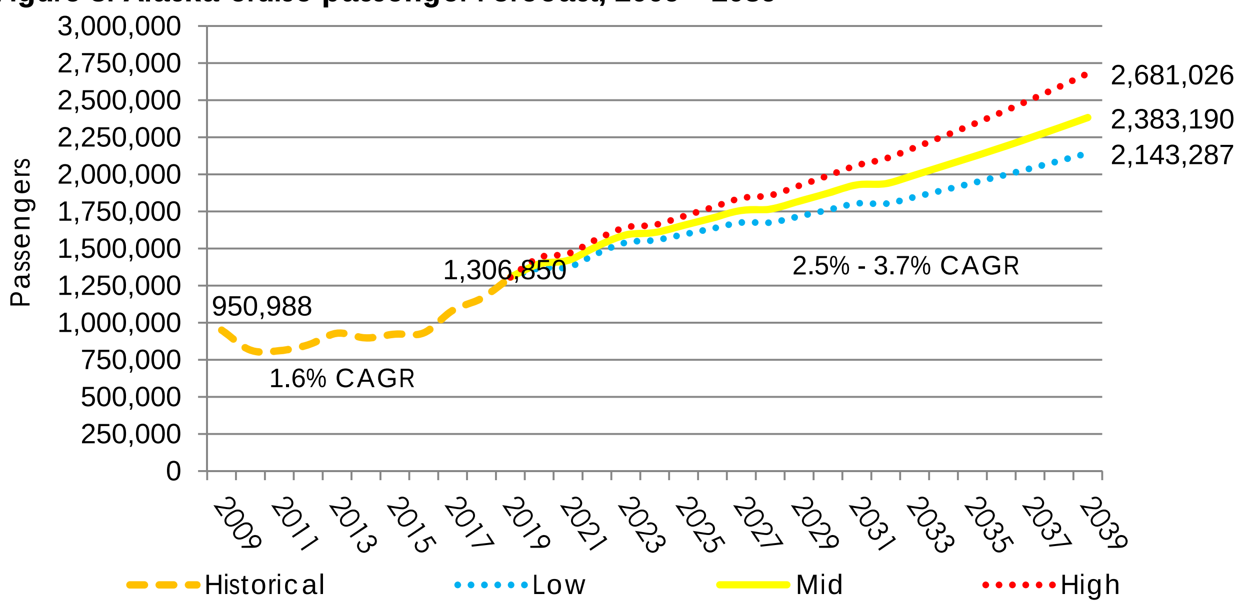
Figure 7 shows the Alaska market share of the primary North American consumer base for the region. Moving forward, the 5 year trend is 9.4% based upon tracking.

Figure 7: Alaska share of North American Market, 2009 – 2020 est.



Based upon the North American market capture rate, cruise brand interviews, and the known impacts of additional deployments to the region over the next 3 – 5 year period, Figure 8 shows the growth of the Alaska passenger market over the next 20 years. The range of growth is from 2.5% to 3.7% moving to between 2.1 and 2.6-million passengers in 2039.

Figure 8: Alaska cruise passenger Forecast, 2009 – 2039



Alaska Growth Drivers

- The Alaska region will maintain a stable base for cruise operations, unless Alaska imposes a cruise tax policy or other item impacting the cruise tourism industry.

- Downstream ports of call will be required to have berths capable of handling up to 1,200-ft. vessels (4 to 5 berths long-term).

- Upland infrastructure needs to accommodate daily loads of between 15,000 – 22,000 visitors per peak day.

- Growth from brands not currently in the market will likely occur in peak season and off peak weekdays allowing for more utilization of downstream berths.

- Limited weekend homeport berths in Vancouver and Seattle coupled with weekday berth congestion in the key downstream ports of Juneau, Ketchikan and Skagway may cause issues if new infrastructure is not brought on line quickly – prior to 2023 season.

- Saturation of the upland support infrastructure in the Alaska communities such as sidewalks, water, and sewer is an issue with so many persons in the community at one time. This must be dealt with as well.

- New homeport and downstream berths are required outside of the marquee ports for growth including Icy Straits, Sitka, Haines, etc.

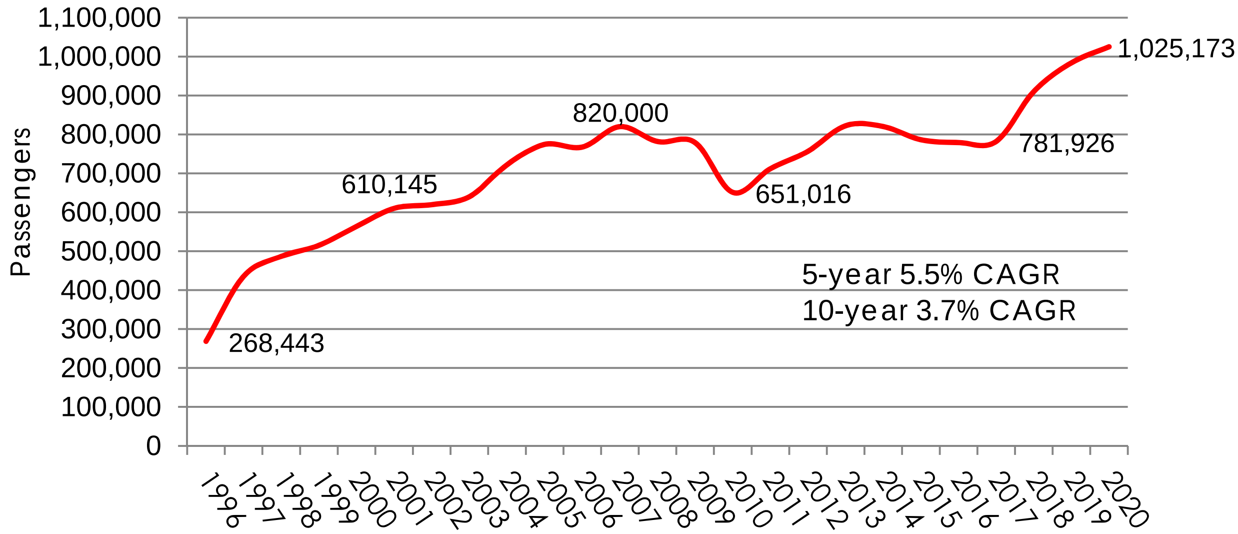
- Alaska is making a significant jump into the +4,000 passenger ships. There must be much effort put into the process of expanding and using infrastructure to its maximum capacity for growth to occur.

4. Skagway

Overview

Skagway represents one of three marquee Alaska ports that serve to draw cruise passengers to the region through the summer months. Figure 9 shows Skagway's historical passenger growth from 1996 through the 2020. Over the past 10 years the Port has seen a CAGR of 3.7%, while over the past five years it has seen an overall growth of 5.5% CAGR. This growth is attributable to the desire of cruise brands to increase their capacity in Alaska.

Figure 9: Skagway Cruise Passenger Throughput, 1996 – 2020 est.



The drop in passenger throughput from 2007 to 2010 was due to the head tax issue in Alaska. Skagway is positioned to cater to more RT sailings which has larger vessels deployed – which is the global trend into the foreseeable future. Any future increase/decline in Alaska cruise activity will impact the key ports of Juneau, Ketchikan and Skagway more-or-less equally since they are more often than not called together as part of a connected itinerary.

Table 5 shows cruise passenger and call contribution by Brand and Vessel to Skagway in 2020. Carnival Corp. has been in the Alaska market with its Princess, HAL and Carnival brands longer than any other corporation and has also made Alaska a more important part of its overall portfolio by way of strategic investment and consistent deployment in the region including the White Pass Railroad and the cruise berths that go with that purchase. RCCL and NCL Holdings have also followed suit with investments into Alaskan infrastructure. For 2020, Carnival Corp with 4 brands and 17 vessels will bring ~582,862-passengers (57.6%) traffic to Skagway followed by RCCL (RCI, Celebrity and Silversea) on 6 vessels with 22.1% with ~223,350-passengers and NCL Holdings with some 173,456 (17.1%

of traffic) with 5 vessels. These brands account for 96.8% of cruise passengers to Skagway in 2020.

Table 5: Skagway Cruise Line Scheduled Calls and Passengers, 2020

Brands and Vessels	Cruise Calls	Lower Berth Passengers
Princess Cruises	**132**	**334,920**
Royal Princess	19	67,640
Ruby Princess	20	61,200
Emerald Princess	19	58,254
Grand Princess	19	49,438
Coral Princess	19	38,000
Star Princess	10	25,960
Golden Princess	8	21,056
Pacific Princess	17	11,356
Sun Princess	1	2,016
Holland America Line	**85**	**165,330**
Koningsdam	21	55,650
Noordam	20	38,480
Westerdam	17	32,572
Volendam	22	31,680
Maasdam	5	6,948
Norwegian Cruise Line	**54**	**157,960**
Norwegian Bliss	22	88,088
Norwegian Jewel	18	42,768
Norwegian Sun	14	27,104
Royal Caribbean International	**45**	**130,644**
Ovation of the Seas	17	71,060
Serenade of the Seas	14	30,044
Radiance of the Seas	14	29,540
Celebrity Cruises	**33**	**83,170**
Celebrity Solstice	17	48,450
Celebrity Millennium	16	34,720
Carnival Cruise Lines	**32**	**67,968**
Carnival Spirit	22	46,728
Carnival Miracle	10	21,240
Disney Cruise Line	**15**	**26,310**
Disney Wonder	15	26,310
Cunard	**7**	**14,644**
Queen Elizabeth	7	14,644
Regent Seven Seas Cruises	**14**	**9,912**
Seven Seas Mariner	14	9,912

Silversea Cruises	**16**	**9,536**
Silver Muse	16	9,536
Oceania Cruises	**8**	**5,584**
Regatta	8	5,584
Viking Ocean Cruises	**5**	**4,650**
Viking Orion	5	4,650
Ponant	**6**	**1,344**
Le Soleal	6	1,344
Grand Total	**452**	**1,011,972**
	101.3% Capacity	**1,025,173**

For Skagway, these larger brands mean the cruise vessels are larger with more passengers per call than other similar regional ports (Juneau and Ketchikan); a smaller overall variety of cruise brands and vessels call in Skagway; and shore excursion programs today and into the future must be able to support a large influx of cruise visitors on a daily basis with the potential of four to five large vessels in port, or perhaps more if berths are double-utilized during the long days of summer.

Skagway sees limited or no cruise traffic in the shoulder seasons of April and October – the upside of which would be additional vessel/passenger volume and so too more revenue – due to its location in the region. Skagway is typically bypassed on repositioning sailings due to its geographic location. Cruise traffic occurs from May-September with the peak calls occurring in July and August. Figure 10 shows the monthly passenger traffic for the years 2015 - 2020. This pattern is typical and reflects the seasonality of Alaska in relation to weather and competition for traffic with other regions worldwide.

Figure 10: Skagway Monthly Passenger Traffic, 2015 - 2020

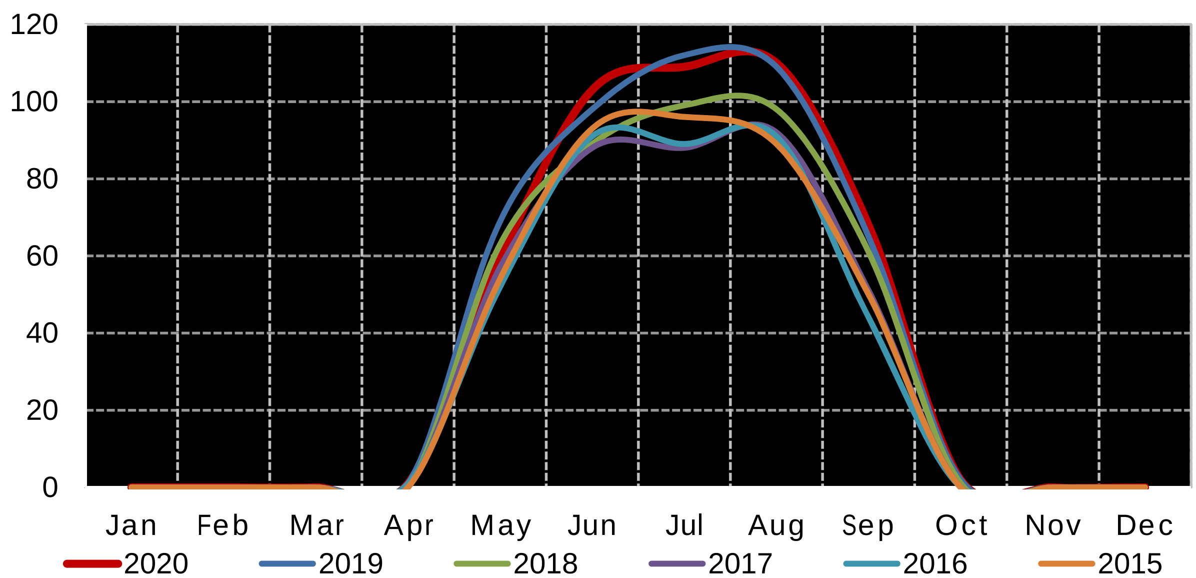
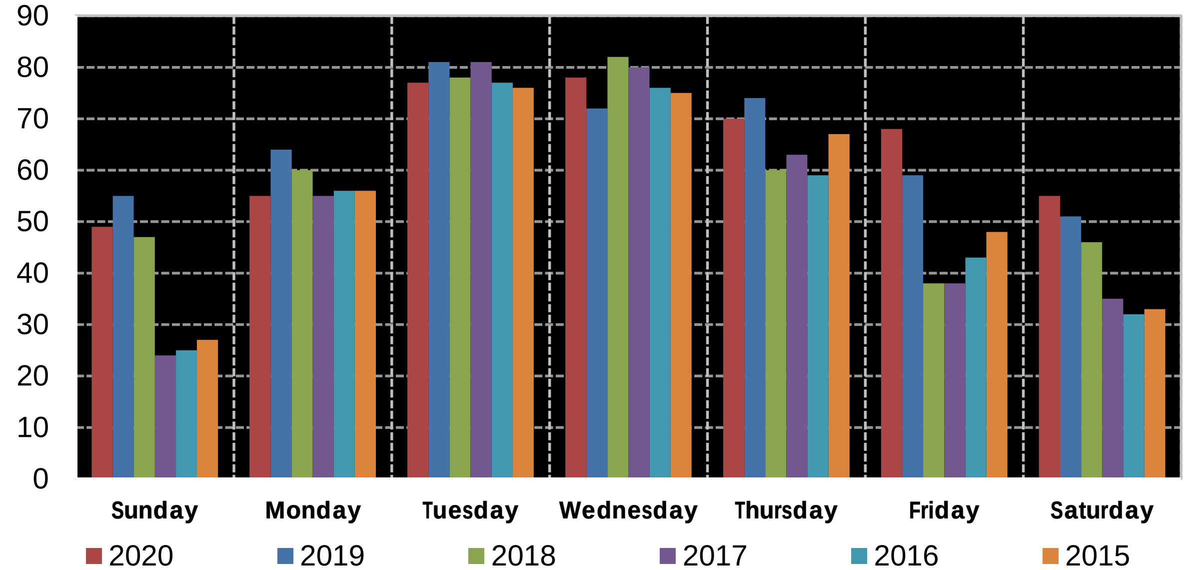


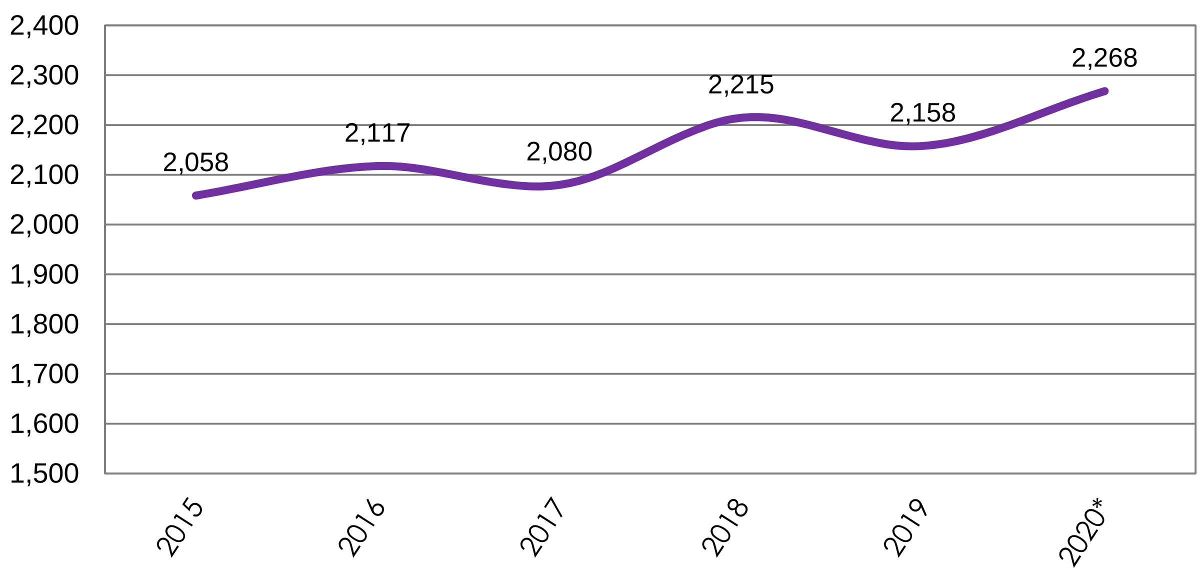
Figure 11 illustrates the daily passenger traffic during the season. While there are potential berths available the patterns typically fit within the homeport departures that occur on weekends (Friday-Monday) for the round trip Alaska sailings.

Figure 11: Skagway Daily Passenger Traffic, 2015 - 2020



The number of passengers per call for Skagway has risen from 2,058 to some 2,268-per call projected in 2020. However, the range of vessel capacity is also significant for Skagway and impacts the berth and upland tourism infrastructure when all berths are full with mid to large vessels. The vessels in 2020 range from 224 (*Le Soleal*) to 4,180 on the *Ovation of the Seas*. See Figure 12.

Figure 12: Cruise Passengers per Call, 2015 - 2020



5. PROJECTIONS

These projections are used as the baseline to determine Skagway's future cruise throughput opportunities. The cruise projections assess the current industry trends impacting future cruise passenger and vessel throughput for Skagway over a 20-year planning period (2019 - 2039).

As it relates to cruise traffic, the projections are based upon an examination of Skagway' s existing position in world and regional cruise deployments, levels and types of cruise operations, and overall traffic patterns based on the most probable range of passenger (first) and vessel (second) throughput. The assessment includes the growth analysis of the regional future trends for the Alaska region affecting Skagway as a marquee destination.

It is difficult to project the cruise lines' growth for a region or Port further than the short-term (3 to 5 years) as for the most part lines themselves rarely know their deployment outside of this time period due to outside forces and market trends. However, in the case of Alaska, the investment into key assets in homeports and port of call destinations, regional per diem and continued consumer demand trends allow for a better path forward over a 20-year period. This exercise does provide a perspective of the potential market over the period should all of the fundamentals be maintained in the industry and region over the period.

Projections anticipate that the cruise industry will continue to follow fundamental positive trends. Our projection methods and various assumptions incorporate our best interpretation of demand and supply conditions in the marketplace. Projection models are un-constrained in nature and do not take into account the potential berth capacity, utilization or other limiting factors of Vancouver or downstream ports. The projections primarily rely on the North American market as the primary feeder. However, in the mid- to long-term, additional consumer markets will also add to the capacity opportunities. They are reflected in the projection assumptions. Our methodology, shown in the adjacent figure, is as follows:

- Understanding of Global forecasts;
- Market capture of North America
    - Mid to long-term Europe / Asia consumer;
- Market share of key market deployments; and,
    - Alaska, repositioning, coastal and World sailings.
- Market share to Skagway;
    - Port of call optional itinerary patterns; and,
    - Expansion or contraction due to global issues and position.

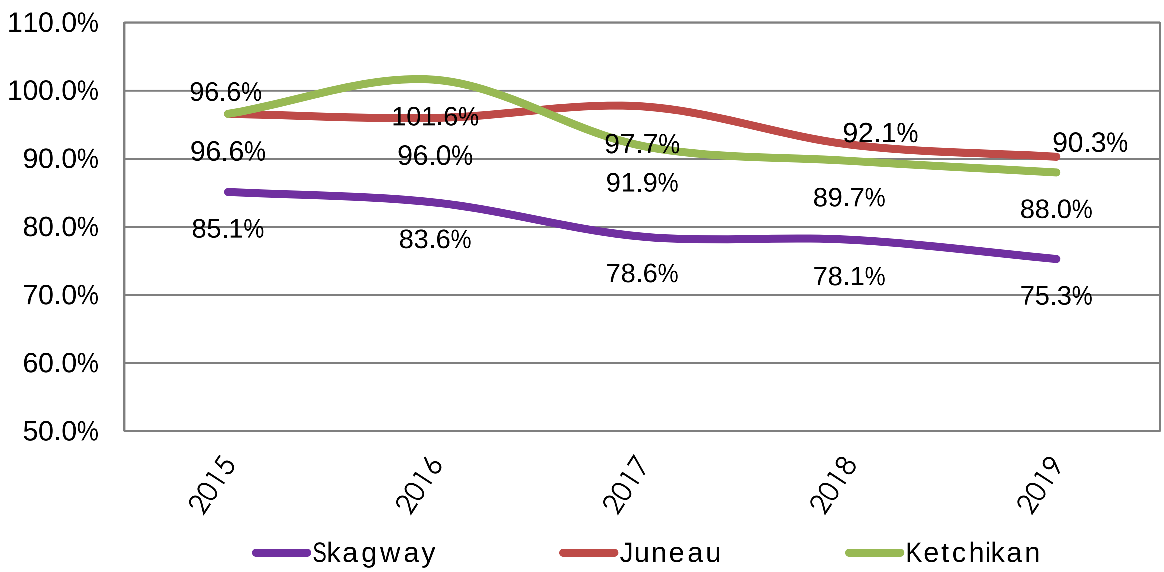
Figure 6 above shows the projected growth of the North American cruise market based upon historical trends and new build deployments. Growth is projected between 2.9% to 3.9% CAGR over the period.

As the passenger market continues to diversify in the region, the projection approach will continue to evolve to further address the impacts on Alaska from consumer markets in Europe and Asia that will certainly enter the market in the mid- to long-term. Additionally, addressing the actual consumer demographic of individual lines no longer applies as in many cases the cruise lines determine deployments and passenger demographics (sales) based upon individual deployment dates and vessels. By example, typically one could ensure that a Princess vessel sailing to Alaska was based upon a North American consumer base. However, now a vessel sailing from Vancouver in July may be sold on an international basis to Asian and European consumer groups with fewer North American consumers.

Skagway Growth

Figure 13 provides a view of the market capture levels of the main Alaska ports from 2015 – 2020 based upon the levels of cruise passengers sailing in the region. There has been a common level of decrease for each port over the period even as traffic overall to each port has increased significantly. The reductions have been from 6% to 10%.

Figure 13: Alaska Cruise Traffic Market Capture, 2015 - 2020



Factors that drive this rate are the continued deployment of larger vessels to the region on RT sailings from the Port of Seattle (positive Skagway influencer) and the development of the OJ and short-cruise market in the region (no Skagway call) that taps into additional source markets. This pattern is common in other markets where multiple cruise lines seek to simultaneously grow existing products (e.g. Seattle 7-night RT cruises that do call Skagway) while also developing new products (e.g. OJ cruises that do not call Skagway). The impact of this approach over time is growth of overall passengers along with a redistribution of passengers across the region.

Skagway will be included in the majority of round trip sailings due to the marquee value of the port and strong overall revenue and guest satisfaction performance. Skagway captures some 95% of the RT sailings to Alaska from the Ports of Seattle, Vancouver and San Francisco. Skagway gets some 5% of OJ sailings from Vancouver as well. It is limited for deployments of small exploration vessels and short cruises in the region.

International brands such as MSC, AIDA and Genting Hong Kong are all looking to enter the Alaska market in the short-term to provide a new product to their target demographic. Skagway, will provide for a key port-of-call on these itinerary patterns. Round-trip sailings would be the easiest pattern for new vessels to develop given the berth demand of the major ports in Alaska.

Figure 8 above, illustrated the Alaska cruise market capacity that impacts deployments to Skagway. Assumptions are that the Alaska region will maintain a stable base for cruise operations.

- These projections were developed irrespective of facility use. It is assumed there will be the ability to berth vessels in the key to continue positive growth trends.

- Key Alaska downstream ports of call will be required to have at a minimum four berths capable of handling 1,200-ft. vessels (4 to 5 berths/anchorages) and upland infrastructure to accommodate daily loads of between 15,000 – 22,000 visitors per peak day.

- Growth from brands not currently in the market will likely occur in peak season on off peak weekdays allowing for more utilization of downstream berths.

Projections

For this exercise we employed a simple market capture formulation to project growth from Low too High for Skagway over the 20-year period based upon the projections for the Alaska region overall. A conservative capture rate of 76.2%, which is the 10-year trend for Skagway was used to show the projection range growing to between 1.634 and 2.044-million in 2039. Growth is 2.6% - 3.7% per annum over the period. See Figure 14.

Figure 14: Skagway range of cruise passenger projections, 2010 – 2039

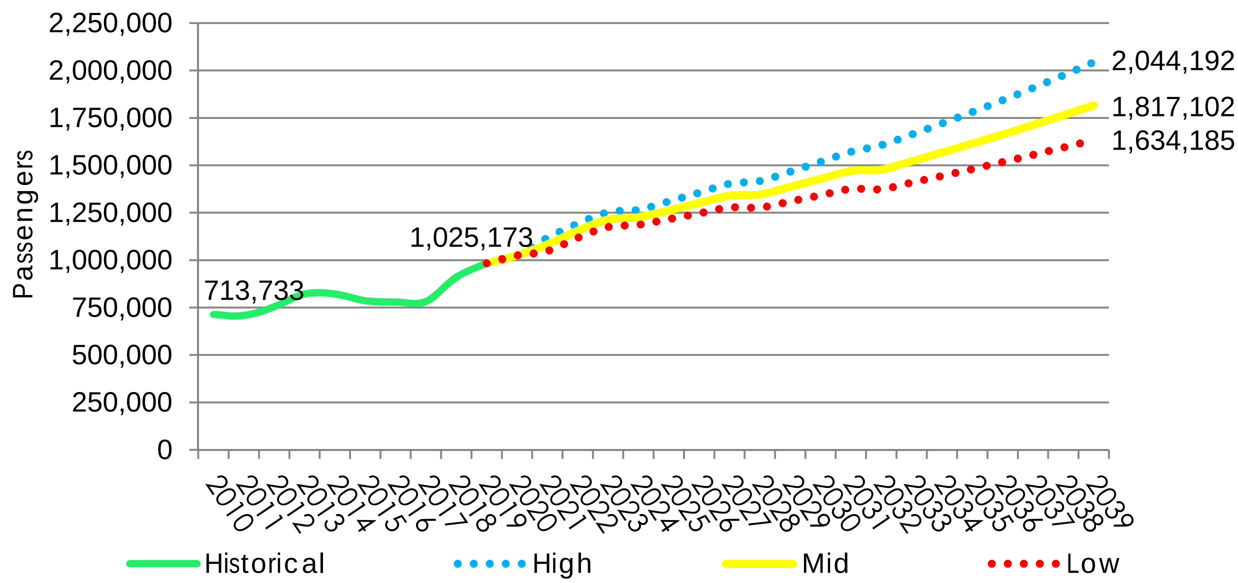


Figure 15 illustrates the anticipated average passengers per call over the period. Using this number one can define the actual calls per annum. It is envisioned the average vessel growth for Skagway will be 2.75% per year, thus moving from 2,268-per call in 2020 to 3,798-per call in 2039. Vessel capacity has grown at 2% per annum over the past 5-years in Skagway, but there are new larger vessels entering the market and older vessels reaching a change out stage as well. Additionally, brands currently not in the market also have larger vessels to deploy to the market.

Figure 15: Skagway cruise passengers per call, 2015 – 2039

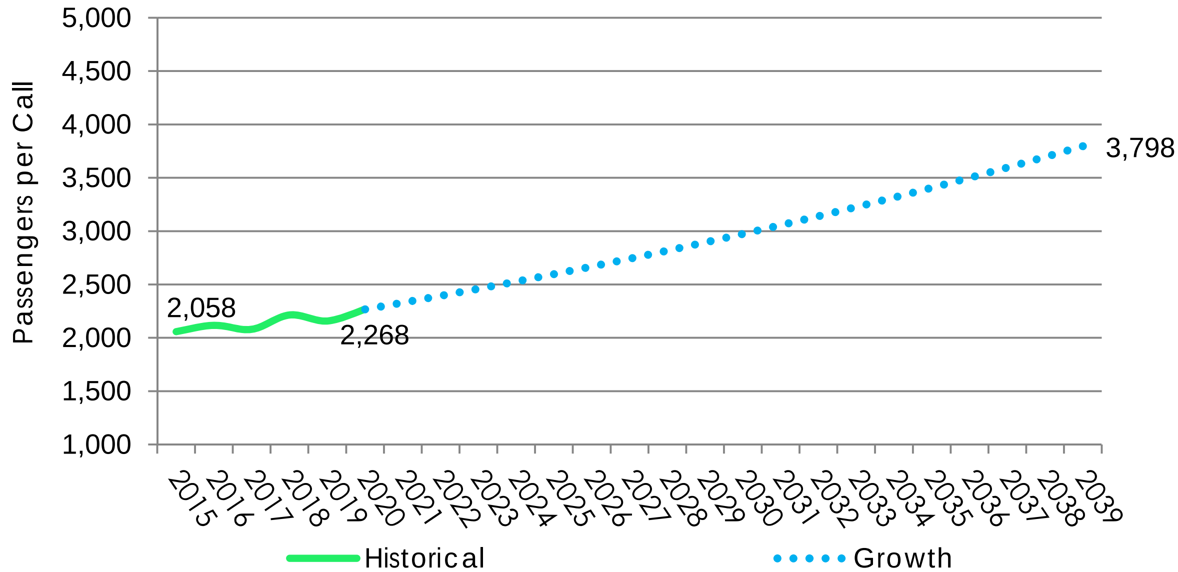
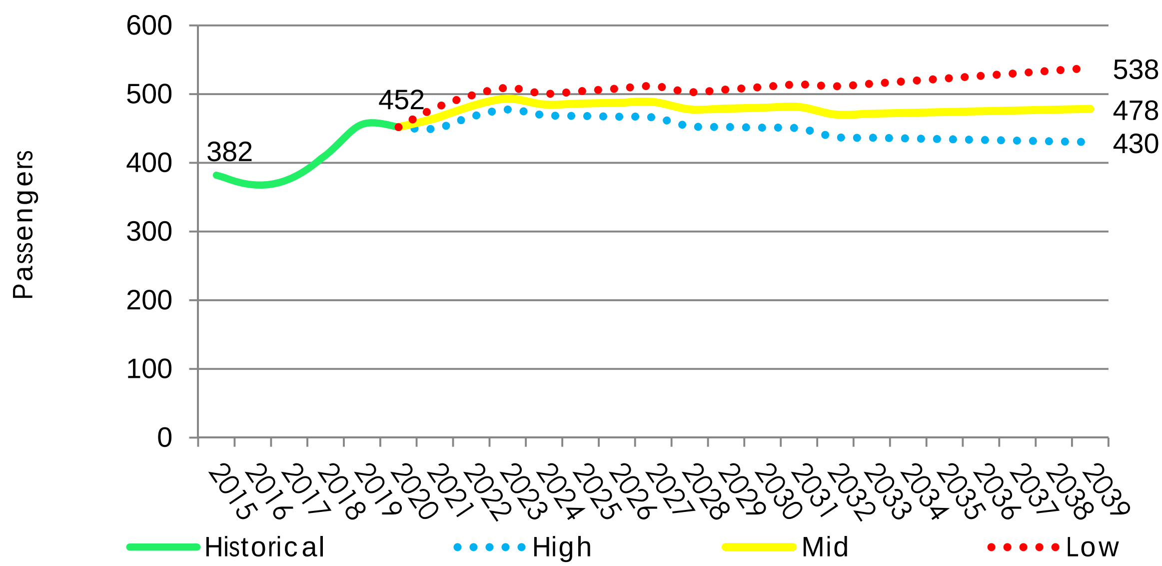


Figure 16 shows the actual number of calls over the period based upon the cruise passenger projections and average passengers per vessel call model.

Figure 16: Skagway range of cruise passenger projections, 2010 – 2039



Some 452 calls area anticipated for 2020 and growth overall will be slow due to the expanded vessel capacities driven by replacement and new entries into the market. Thus the actual cruise call growth rates are -0.3% - 0.8% per annum over the period. Thus, in 2039 the total number of calls for the Alaska season in Skagway will range from 430 (low), 478 (mid) and 538 (high).

6. Berth Demand and Traffic Splits

Berth demand drives berth and upland reception facility and Ground Transportation Area development to the required sizing for upland support infrastructure. The key for berth demand is to understand the patterns of calls and the peak use of berths required in order to meet the demands of the growth over time. Specific questions of berth infrastructure or passenger throughput limitations are not considered in the forecast as they are policy decisions to be made by the community. The peak seasonality demand period for Skagway is 13 weeks from June through August. Our berth utilization models demonstrate this pattern. Table 6 illustrates the monthly cruise traffic distribution from 2015 – 2020. It is not anticipated these will change due to the homeport weekend options and position of Skagway within the primary Alaska RT itinerary patterns into the future. Note the peak months for cruise traffic.

Table 6: Monthly cruise call distribution, 2015 - 2020

	2015	2016	2017	2018	*2019*	*2020*
Total Calls	**382**	**368**	**376**	**411**	**456**	**452**
April	0	1	0	0	*1*	*1*
May	54	52	57	63	*69*	*59*
June	93	91	88	89	*98*	*103*
July	96	89	88	99	*112*	*109*
August	89	91	92	98	*109*	*110*
September	50	44	51	61	*65*	*68*
October	0	0	0	1	*2*	*2*
April	0.0%	0.3%	0.0%	0.0%	*0.2%*	*0.2%*
May	14.1%	14.1%	15.2%	15.3%	*15.1%*	*13.1%*
June	**24.3%**	**24.7%**	**23.4%**	**21.7%**	***21.5%***	***22.8%***
July	**25.1%**	**24.2%**	**23.4%**	**24.1%**	***24.6%***	***24.1%***
August	**23.3%**	**24.7%**	**24.5%**	**23.8%**	***23.9%***	***24.3%***
September	13.1%	12.0%	13.6%	14.8%	*14.3%*	*15.0%*
October	0.0%	0.0%	0.0%	0.2%	*0.4%*	*0.4%*

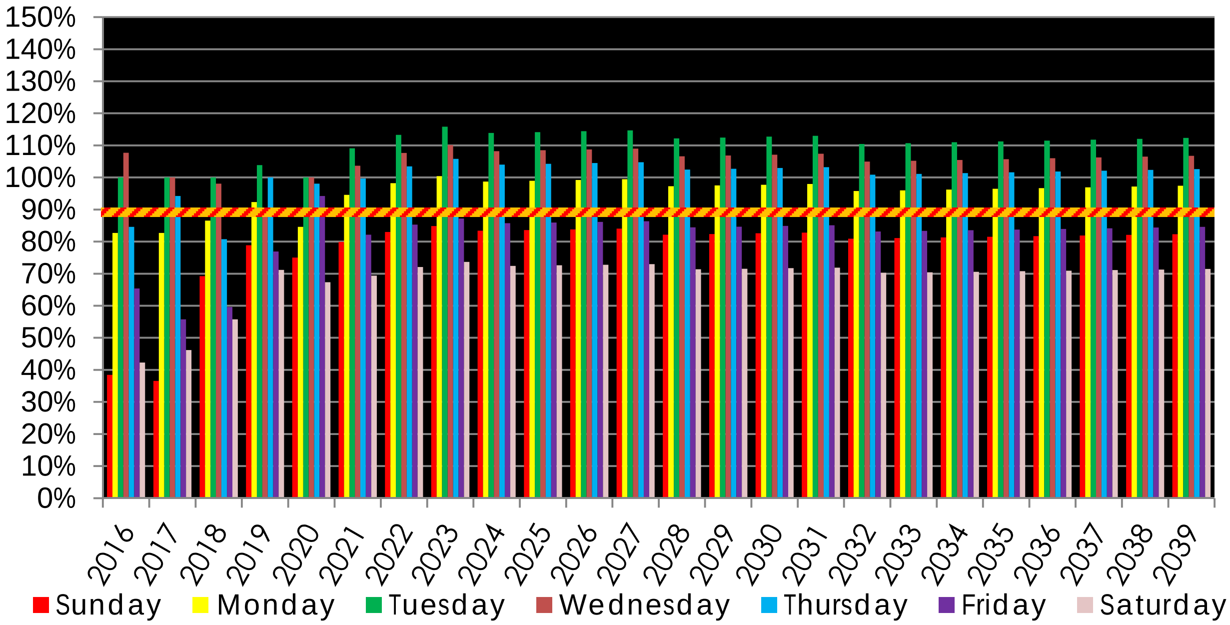
This pattern is used moving forward to show the total cruise calls per month over the next 20-years. Table 7 illustrates the cruise calls per day over the period. As shown Monday thru Thursday calls are the peak call days for Skagway, but calls on weekend days are also growing due to the need for berths and lack of homeport options on weekends forcing brands to use other days of the week in Seattle and Vancouver, and modifying itinerary patterns to accommodate their needs for berths in the downstream ports of call.

Table 7: Daily cruise call distribution in the peak months of June - Aug, 2015 - 2020

	2015	2016	2017	2018	*2019*	*2020*
Total Calls	**278**	**271**	**268**	**286**	**319**	**322**
Sunday	20	20	19	36	41	39
Monday	44	43	43	45	48	44
Tuesday	52	52	52	52	54	52
Wednesday	52	56	52	51	47	52
Thursday	48	44	49	42	52	51
Friday	40	34	29	31	40	49
Saturday	22	22	24	29	37	35
Sunday	7.2%	7.4%	7.1%	12.6%	12.9%	12.1%
Monday	15.8%	15.9%	16.0%	15.7%	15.0%	13.7%
Tuesday	18.7%	19.2%	19.4%	18.2%	16.9%	16.1%
Wednesday	18.7%	20.7%	19.4%	17.8%	14.7%	16.1%
Thursday	17.3%	16.2%	18.3%	14.7%	16.3%	15.8%
Friday	14.4%	12.5%	10.8%	10.8%	12.5%	15.2%
Saturday	7.9%	8.1%	9.0%	10.1%	11.6%	10.9%

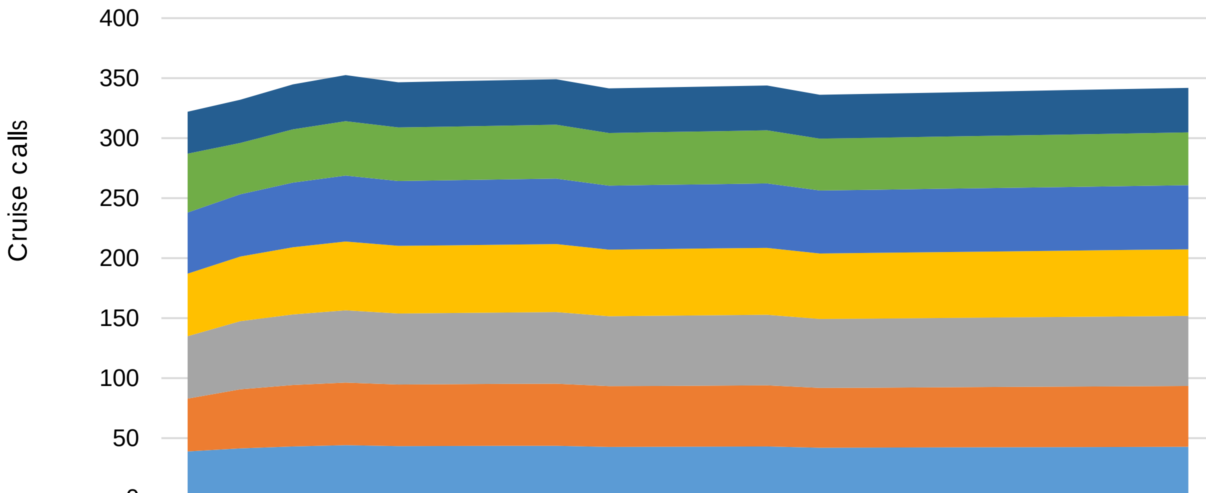
For port of call berth utilization a 90% rate is typically the cap for berth use and indicates the need for an additional berth to accommodate traffic on either peak days or on a combined daily utilization rate. Figure 17 shows the utilization rate for the mid-week days of Monday – Thursday exceeds 90% from 2021.

Figure 17: Daily Peak Berth Utilization, 4 berths Midpoint (Jun – Aug 13 weeks), 2016-2039



Based upon the Mid-Point projection model, as shown in Figure 18, the daily berth utilization from 2020 – 2039 peaks in 2031 with a wide distribution across the entire week.

Figure 18: Daily Berth Utilization Mid-Point (Jun – Aug 13 weeks), 2020 - 2039



	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Saturday	35	36	37	38	38	38	38	38	37	37	37	37	37	37	37	37	37	37	37	37
Friday	49	43	44	45	45	45	45	45	44	44	44	44	43	43	43	44	44	44	44	44
Thursday	51	52	54	55	54	54	54	54	53	53	54	54	52	53	53	53	53	53	53	53
Wednesday	52	54	56	57	56	56	57	57	55	56	56	56	55	55	55	55	55	55	55	56
Tuesday	52	57	59	60	59	59	59	60	58	58	59	59	57	58	58	58	58	58	58	58
Monday	44	49	51	52	51	51	52	52	51	51	51	51	50	50	50	50	50	50	51	51
Sunday	39	42	43	44	43	43	44	44	43	43	43	43	42	42	42	42	42	43	43	43

Figure 19 shows the need for 5 berths from 2022 (there is alrerady a built up mid-week need for a 5th berth). This is sufficient through the projection period.

Figure 19: Peak Berth Utilization, 5 berths Midpoint (Jun – Aug 13 weeks), 2016-2039

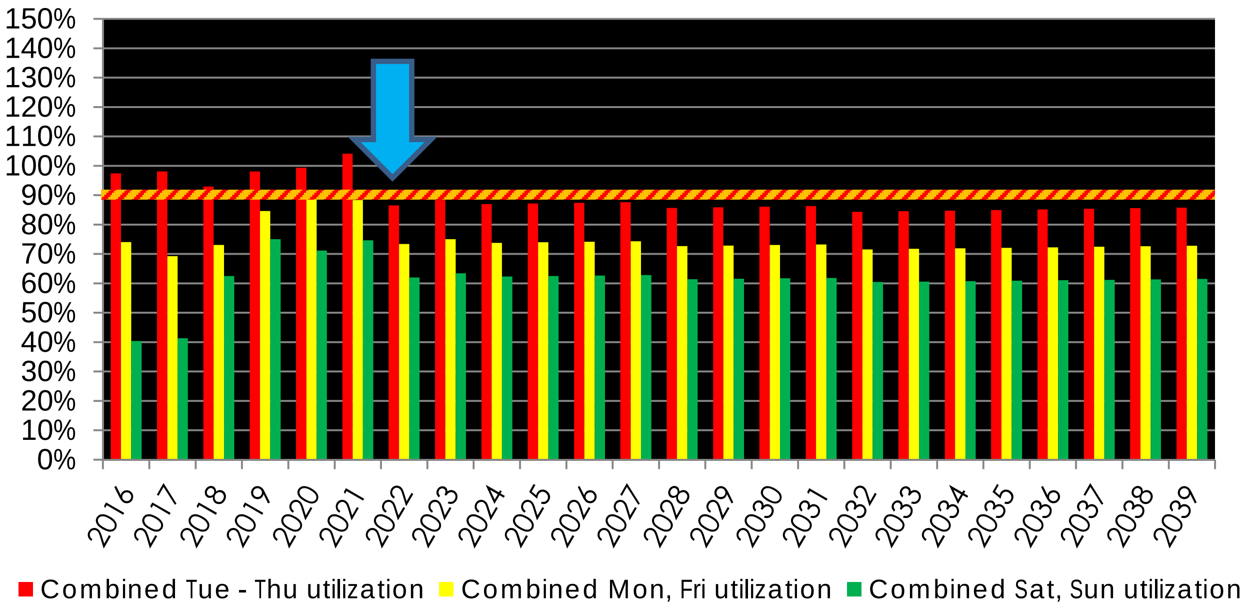


Table 8 provides the daily average passenger load during the peak month period in the years shown. By example the average Tuesday passenger load grows form 10,849 in 2022 to ~17,063 in 2039. This provides a sense of scale in terms of requirements for upland tourism infrastructure (GTA, sidewalks, transportation, tour operations, public services, commercial outlets, etc.) to support the overall tourism growth long-term in Skagway. Based purely on the mix of vessels the Port of Skagway could see into the future with 5 berths the loads could range from 12,500 to more than 20,000 on some key peak mid-days.

Table 8: Daily Passenger Loads Mid-Point (Jun – Aug 13 weeks), 2022 - 2039

	2022	2023	2024	2025	2026	2027	2028	2029	2030
SUN	7,948	8,350	8,435	8,688	8,949	9,217	9,262	9,540	9,826
MON	9,407	9,883	9,984	10,283	10,592	10,909	10,963	11,292	11,630
TUE	10,849	11,398	11,514	11,859	12,215	12,582	12,643	13,022	13,413
WED	10,311	10,832	10,943	11,271	11,609	11,957	12,016	12,376	12,747
THU	9,911	10,412	10,518	10,834	11,159	11,493	11,549	11,896	12,253
FRI	8,169	8,582	8,670	8,930	9,198	9,474	9,520	9,805	10,099
SAT	6,902	7,251	7,325	7,544	7,771	8,004	8,043	8,284	8,533
	2031	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**
SUN	10,121	10,164	10,469	10,783	11,107	11,440	11,783	12,137	12,501
MON	11,979	12,030	12,391	12,763	13,146	13,540	13,946	14,365	14,796
TUE	13,815	13,874	14,290	14,719	15,161	15,615	16,084	16,566	17,063
WED	13,130	13,186	13,581	13,989	14,408	14,840	15,286	15,744	16,217
THU	12,620	12,674	13,054	13,446	13,849	14,265	14,693	15,133	15,587
FRI	10,402	10,447	10,760	11,083	11,415	11,758	12,111	12,474	12,848
SAT	8,789	8,826	9,091	9,364	9,644	9,934	10,232	10,539	10,855

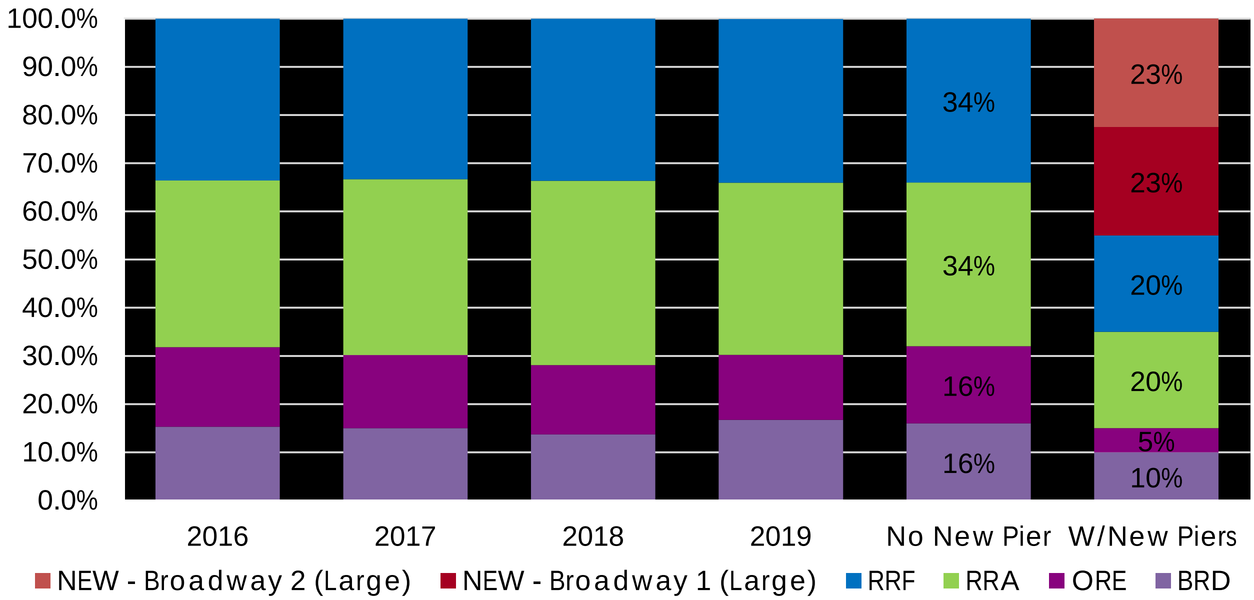
Based upon the berth demand analysis, Skagway requires four 1,200-ft. plus berths and a mid-size berth into the long-term to accommodate the traffic projections.

Cruise Passenger Traffic Splits

As part of the waterfront planning process, based upon the need for 5 cruise berths long-term and the community desire to accommodate cargo/commercial/fuel supplies in a better way, an option was considered to build a floating pier to accommodate two large cruise vessels and allow the Ore Dock to act as the primary cargo berth and secondary cruise facility. In order to determine the potential financial impact of this option a traffic split needed to be considered between the White Pass Railroad Dock (2 large berths) and the Docks that would make up the Skagway Waterfront Lease expiring in March 2023. These include the existing Broadway and Ore Docks, as well as the optional NEW Broadway Pier (2 large berths) that could be built as soon as 2022 to allow the MOS to meet the requirements set forth above in terms of berth demand and use of the Ore Dock.

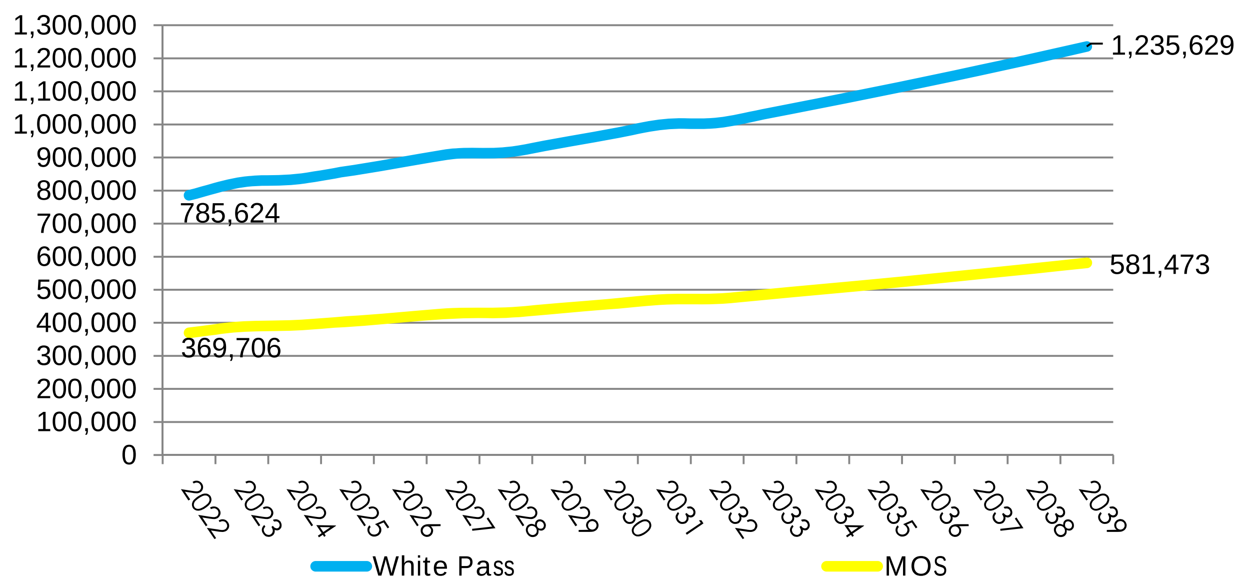
Figure 20 shows the approximate average passenger split by berth from 2016 – 2019 based upon historic figures. In addition, the last two column illustrate the berthing scenarios and splits with a new berth in 2022 or with no new berths over the period. If there was no new berth the split would stay pretty much status quo. With a new berth (for 2 large vessels) the splits would change to reflect the large berth choice, the use of the Ore Dock in a secondary cruise berth role and Broadway for mid-size cruise vessels. While the percentage per berth decreases in the New Pier Scenario, overall traffic grows for all berths over the 20-year period.

Figure 20: Traffic Split Historical & Berth Scenarios



Thus, Figure 21 shows the projected passenger throughput split for Skagway without a new pier. This assumes the MOS will take over the Waterfront lease as of March 2023 and the Broadway Pier and Ore Dock fall under the City. The Railroad Dock is under White Pass.

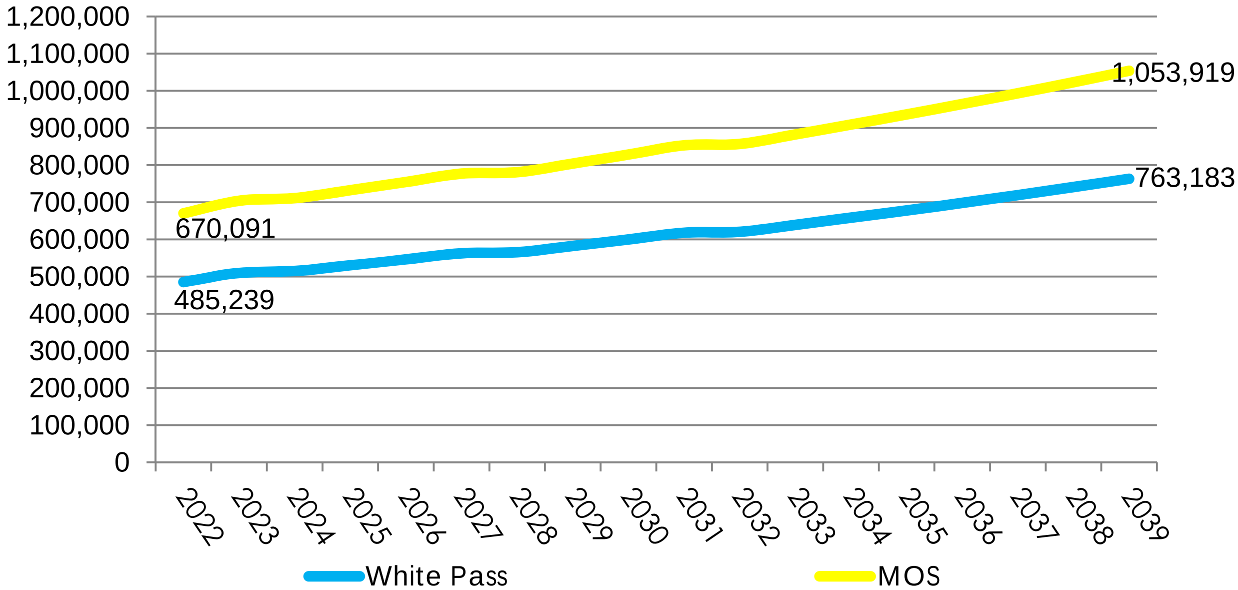
Figure 21: Cruise passenger split – without a new pier, 2022 - 2039



In this case ~68% of the passenger traffic goes to White Pass and 32% to the MOS each year. White Pass cruise passenger traffic moves from 785,000 to 1.235-million in 2039 while the MOS accounts for ~581,000 on its two berths in 2039.

Under Figure 22 the MOS builds a new berth to accommodate two larger vessels and also retains the Broadway Pier and Ore Dock. In this case the MOS receives ~60% of cruise passenger traffic and White Pass would get 40%. Thus, in 2039 the MOS would receive 1.053-million passengers on its berths and White Pass some 763,000.

Figure 22: Cruise passenger split - with new pier, 2022 - 2039



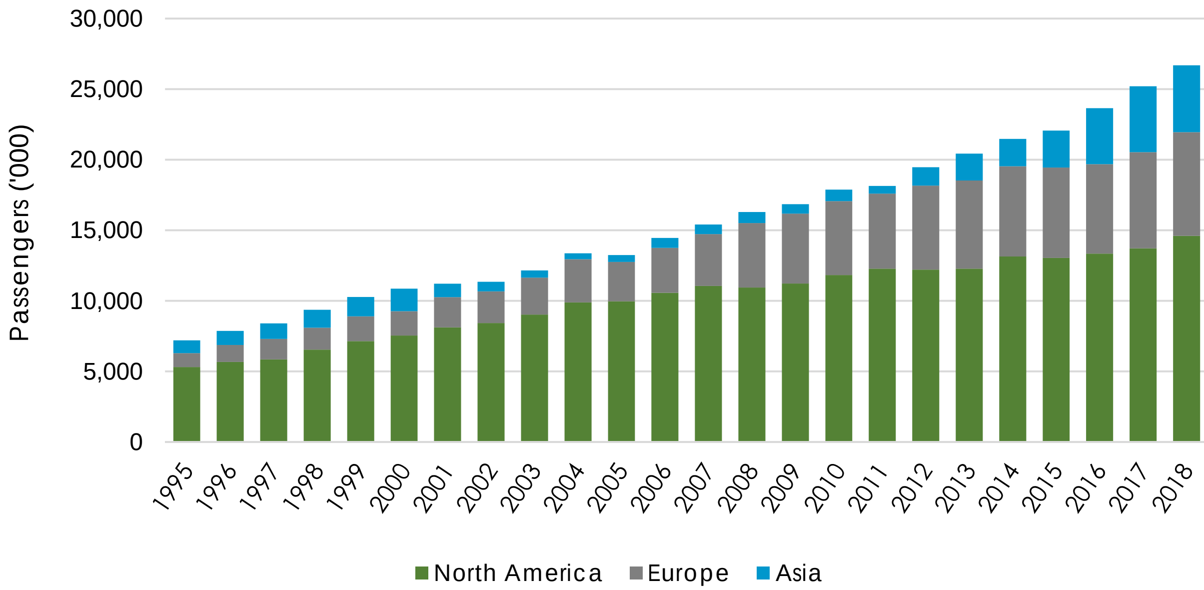
7. GLOBAL CRUISE MARKET

Overview

While small in terms of overall world tourism, the cruise industry has been one of the most successful hospitality sectors over the past three decades. **Error! Reference source not found.** shows the growth of the cruise tourism industry since 1995 by the major consumer regions of the world.

Figure 23: Global Cruise Passengers, 1995 – 2018

Source: Cruise Industry News Annual



The industry has seen steady growth, year after year, irrespective of recession, political turmoil or other factors that have impacted the visitor and travel industry.

As shown, the North American market continues to be the main consumer generating market. However, there has been significant growth in the European market over the past ten years. Asia has maintained a relatively flat growth over the period. However, this past three years has seen a tripling of passenger bed day deployments in the Asia region with the deployment of the *Quantum of the Seas* and pushes by each of the cruise brands to develop the large Chinese consumer market that has an unexhausted growth potential due to its large population base with fast-growing income streams and the desire to travel abroad and within the vast Asian region. It has fallen off slightly due to regional issues, but will be a major growth market into the future.

Europe and North America have very similar population overlays and demographics which allow for an easy growth comparison. In Europe, the lines are focusing their product on each country and population base by creating individual brands such as Pullmantur (owned by

RCCL and in the midst of a sell off of the tour and travel agent arms of the company), AIDA (owned by Carnival Corp) and TUI Cruises (partly owned by RCI) targeting the German market, MSC (privately owned) and Costa Cruises (owned by Carnival Corp) targeting the Italian market; but increasing their presence in other markets as well, P&O (owned by Carnival) and Marella Cruises targeting the UK market, and many other smaller lines specifically targeting national markets to further drive growth in the larger regional market. **Table 9** summarizes the market sourcing for the global cruise industry.

Table 9: Global Cruise Industry Market Sourcing
Source: CLIA

Country / Region	Population (millions)	Global Passenger Share	5-Year Growth Change
USA	320	51.7%	3.75%
United Kingdom & Ireland	61	8.1%	16.4%
Germany	82	7.7%	80.5%
Italy	58	4.0%	26.1%
Australia / New Zealand	22	3.6%	2.70%
Brazil	201	3.4%	1.3%
Canada	33	3.4%	2.42%
Spain	40	2.8%	20.7%
France	62	2.4%	67.7%
Scandinavia & Finland	19	1.6%	184.6%

Major Cruise Market Capacity Distribution

Cruise vessels are deployed based upon consumer demand and by the individual brands focused consumer group. Thus, not all consumers want to do the same itinerary pattern. *Cruise Industry News Annual* breaks down the cruise markets by sailing region and identifies the cruise vessels, number of sailings and the passenger capacity for each year.

Table 10 illustrates the growth and distribution by market sector from 2013-2018. As shown, the major markets are the Caribbean, Asia/Pacific and Mediterranean. In 2019, it is anticipated that the Mediterranean will regain the number 2 spot for cruise capacity due to lower than anticipated market capture in Asia (specifically China) thus ships have been redeployed to alternative markets.

Table 10: Market Share of Global Cruise Passenger Capacity, 2013-2018
Source: Cruise Industry News Annual Report, 2017-2018

	Passenger Capacity	Market Share	Passenger Capacity	Market Share	Passenger Capacity	Market Share
	2013		2014		2015	
Caribbean	8,068,338	39.5%	9,062,478	42.2%	8,803,479	39.9%
Asia/Pacific	1,634,094	8.0%	1,954,231	9.1%	2,294,641	10.4%
Mediterranean	4,003,530	19.6%	3,801,087	17.7%	3,949,430	17.9%
North / West Europe	1,920,060	9.4%	1,932,756	9.0%	1,875,428	8.5%
Australia	592,359	2.9%	493,927	2.3%	661,916	3.0%
Alaska	939,604	4.6%	901,953	4.2%	904,618	4.1%
West Coast	449,376	2.2%	751,627	3.5%	926,682	4.2%
Canary Islands	408,523	2.0%	450,976	2.1%	507,469	2.3%
South America	674,064	3.3%	558,352	2.6%	573,660	2.6%
Trans-Atlantic	326,819	1.6%	300,651	1.4%	308,894	1.4%
Bermuda	224,688	1.1%	257,701	1.2%	264,766	1.2%
Canada / New England	265,540	1.3%	236,226	1.1%	242,702	1.1%
Indian Ocean / Red Sea	285,966	1.4%	214,751	1.0%	220,639	1.0%
Hawaii	245,114	1.2%	214,751	1.0%	220,639	1.0%
Panama Canal	142,983	0.7%	107,375	0.5%	110,319	0.5%
Africa	122,557	0.6%	128,850	0.6%	110,319	0.5%
U.S. Waterways	61,279	0.3%	64,425	0.3%	66,192	0.3%
Antarctica	20,426	0.1%	21,475	0.1%	22,064	0.1%
World	20,426	0.1%	21,475	0.1%	22,064	0.1%
	2016		2017		2018	
Caribbean	9,082,432	38.4%	9,803,555	38.9%	10,247,024	38.4%
Asia/Pacific	3,193,042	13.5%	3,956,705	15.7%	4,029,429	15.1%
Mediterranean	3,807,999	16.1%	3,427,464	13.6%	3,789,264	14.2%
North / West Europe	2,175,999	9.2%	2,268,175	9.0%	2,508,386	9.4%
Australia	1,017,043	4.3%	1,083,684	4.3%	1,067,398	4.0%
Alaska	946,087	4.0%	982,876	3.9%	1,067,398	4.0%
West Coast	875,130	3.7%	831,664	3.3%	880,604	3.3%
Canary Islands	449,391	1.9%	504,039	2.0%	560,384	2.1%
South America	354,782	1.5%	504,039	2.0%	560,384	2.1%
Trans-Atlantic	331,130	1.4%	327,625	1.3%	373,589	1.4%
Bermuda	354,782	1.5%	302,423	1.2%	346,904	1.3%
Canada / New England	236,522	1.0%	302,423	1.2%	320,220	1.2%
Indian Ocean / Red Sea	283,826	1.2%	302,423	1.2%	320,220	1.2%
Hawaii	212,869	0.9%	226,817	0.9%	240,165	0.9%
Panama Canal	94,609	0.4%	126,010	0.5%	106,740	0.4%
Africa	118,261	0.5%	126,010	0.5%	106,740	0.4%
U.S. Waterways	70,956	0.3%	75,606	0.3%	80,055	0.3%
Antarctica	23,652	0.1%	25,202	0.1%	53,370	0.2%
World	23,652	0.1%	25,202	0.1%	26,685	0.1%

Cruise Industry Penetration Rates

As this data indicates, cruising is a well-established vacation sector in the North American and European markets, while it is still a developing sector in several other emerging markets. However, looking more closely at the figures, the industry's overall market penetration rates are still low. **Table 11** details industry market penetration rates for North America, Europe and Asia/Pacific computed based on the number of annual cruise guests as a percentage of the total population.

Table 11: Market Penetration Rates, 2009-2018
Source: RCCL Annual Report

	North America	Europe	Asia/Pacific
2009	3.00%	1.00%	n/a
2010	3.10%	1.10%	n/a
2011	3.30%	1.20%	0.03%
2012	3.33%	1.21%	0.04%
2013	3.32%	1.24%	0.05%
2014	3.46%	1.23%	0.06%
2015	3.47%	1.24%	0.08%
2014	3.46%	1.23%	0.06%
2015	3.36%	1.25%	0.08%
2016	3.43%	1.23%	0.11%
2017	3.56%	1.28%	0.15%
2018	3.59%	1.31%	0.19%

Based on these figures, less than 4% of the most established cruise source market's population has taken a cruise. There was no market penetration in the Asia/Pacific market less than ten years ago. Today, it's grown to 0.19%. The low penetration, coupled with the overall industry's growth trend presents an opportunity for sustained long-term growth and a potential for increased profitability.

Cruise Industry Growth Factors

The major underlying growth factors and trends for the cruise industry are outlined below:

- Since its inception, the cruise industry is constrained by ships (supply) and not by the availability of passengers (demand). As a result, ships of all the major lines sail at nearly 100% capacity year-round. As ships are introduced and capacity increased, the lines have been able to increase its market penetration within the consumer base. Lines also use supply to increase yields by constraining supply. However, there is still a large market opportunity as the industry is still very small in comparison to worldwide tourism with a penetration rate of less than 4%, thus continued expansion is likely.

- Repeat clientele are a major asset of the industry. This high level of repeat business requires that the industry provide different products and destinations to keep interest and continue to attract the same client.

- Cruise lines are expanding in several cruise regions or providing new destination products to provide new varieties of merchandising to their repeat clientele and to establish new market bases.

- There is a saturation of traditional ports and regions which has motivated the industry to branch out into new regions and add new ports. However, there are still limited opportunities in existing markets due to the desire of passengers to visit marquee destinations and the cruise lines to provide those destinations in demand to promote cruise sales and create additional shore side products that provide revenue opportunities to the brands.

- In its early years, the industry was predominately marketed to US consumers. Today, non-US passengers are taking more cruises, with the European market (particularly the UK and German) growing rapidly, as well as the Asian sector.

- The cruise industry has consolidated into a handful of profitable operators which necessitate ports to market to a limited number of companies / decision-makers.

- Cruise lines try to limit their commitments to regions or ports in order to preserve their ability to move ships and modify their operations quickly to reflect changes to demand, economic and global geo-political issues.

- The industry has done an excellent job of shifting land based vacationers to cruise guests due to the all-inclusive value perception of the cruise product.

- Two major factors that weigh heavily in the determination of ship deployment are:
    - Passenger satisfaction/demand – cruise lines use survey tools, travel agents and passenger feedback as a key indicator for future deployments; and,
    - Yields – lines place vessels into itinerary patterns with high demand, high revenues and lower operating costs to maximize passenger spending per day (meaning onboard and shore side spending such as shopping, bar, casino, spa and shore excursion revenues).

- Currency exchange rates play a major role in shipbuilding and deployment patterns that define the timing and deployment patterns of cruise brands.

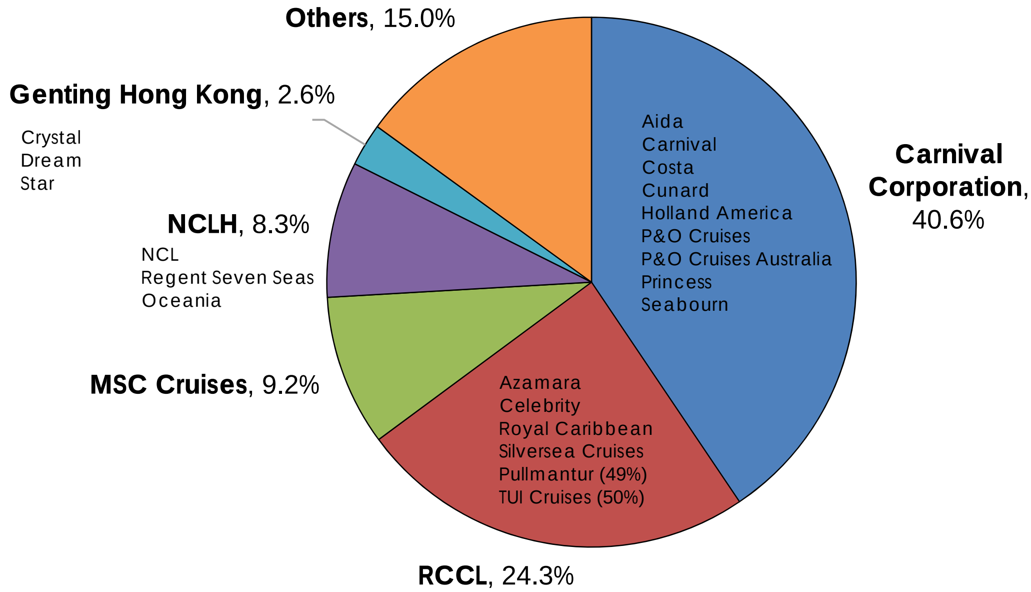
- Weather patterns, consumer demand and cruise line operations have influenced deployments in many regions extending seasonality into non-traditional time slots – such as Northern Europe. These same issues have limited the ability of destinations such as Alaska and Canada & New England to extend seasonality.

- The industry has shown itself to be generally recession resistant by controlling and reducing costs, shifting capacity between longer and shorter cruises, developing vessels with more outside cabins, on-board amenities, re-fitting vessels for year-round cruising in specific regions and allowing for discounting on cabin fares to pick up the potential for on-board revenue spending in order to stay profitable.

Major Cruise Brands

As of October 2019, there are five major cruise corporations that control the majority of the worldwide cruise capacity (85%). These five corporations have 22 brands, 216 active ships. Carnival Corporation is the largest with nine cruise brands ranging from luxury (Cunard and Seabourn) to the contemporary mass market (Carnival Cruise Lines). See **Figure 24**.

Figure 24: Major Worldwide Cruise Corporations' Passenger Capacity, 2019
Source: B&A



RCCL is half the size of Carnival Corporation in terms of passenger capacity with six brands, followed by the fleets of Norwegian Cruise Line Holdings and MSC Cruises (a privately held company). Genting Hong Kong has 2.6% of the world's capacity with three brands.

Cruise Market Segmentation

Table 12 provides an overview of the cruise brand consumer demographics for the major cruise brands. As shown, each brand targets a demographic, or range of consumers. With the deployment of larger cruise vessels with more outside cabins, balconies and suites that derive higher ticket pricing, there is now not such a clear-cut demographic for each of the cruise brands. They are now differentiating themselves to a greater degree via on-board products and services.

Each of the cruise brands shown, and the many others in the worldwide fleet, compete for consumers in many different market sectors. They must differentiate themselves and provide a value proposition to the consumer that ranges from budget to super luxury. Different cruise brands in a given region target different demographics. It also shows the primary consumer demographic for each brand. However, individual vessels carry varying demographics based upon cabin type (suite vs. inside cabin), destination (Caribbean vs. Europe) and other factors. Even individual sailings may consist of highly mixed and very different demographic profiles. As the world's largest market, the Caribbean is popular with a wide variety of demographics, which is why it appeals to so many different brands and consumers. (All have major deployments in the Caribbean). This broad appeal is unlikely to change which is a strength of the region and a positive indicator for future growth.

Table 12: Major North American and European Cruise Brand Demographic Profiles
Source: B&A and Cruise Industry News Annual, 2017-2018

Cruise Brand	Nationality Source Market	Age Range	Income Range	Market Sector	Core Geography (ranked by capacity)	Notes
Carnival Cruise Line	Primarily US	25 +	Avg.	Contemporary 3, 4, 5, 7-day sailings	Caribbean, West Coast Aus, Alaska	**Younger middle class, couples & families**
Celebrity Cruises	Primarily US & Canadian	35 +	USD $100,000	Premium 7-day plus sailings	Caribbean, Alaska Med, NWE, Aus Asia/Pacific	**Couples & families**
Holland America Line	Primarily US	45 +	USD $75,000	Premium 7-day plus sailings	Alaska, Caribbean NWE, CNE, Med Transcanal	**Couples & retired singles**
Norwegian Cruise Line	Primarily US	35 +	Avg.	Contemporary 7-day plus sailings	Caribbean Med, Asia/Pacific, Alaska	**Younger couples, singles & families**
Royal Caribbean International	US & Intl. (50% goal)	30 +	Avg. to high	Contemporary/ Premium	Caribbean, Asia/Pacific, Med, Aus, NWE, Alaska	**Couples, families & singles**
Disney Cruise Line	US & Intl. mix	35 +	Avg. to high	Contemporary/ Premium	Caribbean, Alaska West Coast, NWE Med, CNE	**Families & couples**
Princess Cruises	Primarily US	35 +	Avg. to high	Contemporary/ Premium	Asia/Pacific, Alaska, Caribbean, Aus, West Coast	**Predominantly couples & singles**
Crystal Cruises	US & Intl. mix	55 +	High	Luxury 7-day plus sailings	NWE, Alaska, SA, Caribbean, CNE, Med, Asia/Pacific	**Couples & retired singles**
Silversea Cruises	US & Intl. mix	55 +	High	Luxury 7-day plus sailings	Med, NWE, Asia/Pacific, SA, Caribbean, Alaska	**Small ship experience Couples & retired singles**
Seabourn Cruise Line	US & Intl. mix	55 +	High	Luxury 7-day plus sailings	Med, Caribbean, Asia/ Pacific, Alaska, Aus, NWE	**Small ship experience Couples & retired singles**
Regent Seven Seas	US & Intl. mix	45 +	Mid to high	Affordable Luxury 7-day plus sailings	Med, Alaska, Caribbean, NWE, SA, Asia/Pacific, CNE	**Small ship experience Couples & retired singles**
Oceania Cruises	US & Intl. mix	45 +	Mid to high	Affordable Luxury 7-day plus sailings	Med, Caribbean NWE, SA, Alaska, Transatlantic, Bermuda, CNE	**Small ship experience Couples & retired singles**
MSC Cruises	Primarily European mix	30 +	Avg.	Contemporary 7-day plus sailings	Med, Caribbean, NWE, SA, Asia/Pacific	**Couples, singles & families**
Costa Cruises	Primarily European mix	35 +	Avg.	Contemporary 7-day plus sailings	Asia/Pacific, Med, NEW, SA, Caribbean	**Couples, singles & families**
Cunard Line	UK & Intl. mix	50 +	Mid to high	Premium/ Luxury 7-day plus	Transatlantic, NWE, Med, Canaries, CNE, Caribbean	**Couples & retired singles**
Hapag-Lloyd Cruises	Primarily German	50 +	Mid to high	Premium/ Luxury 7-day plus	NWE, Asia/Pacific, Med, Aus, Caribbean	**Couples & retired singles**
AIDA Cruises	**Primarily German**	**25 +**	**Avg.**	**Contemporary 3, 4, 5, 7-day plus sailings**	**NWE, Med, Canaries Red Sea, Caribbean**	**Couples, singles & families**

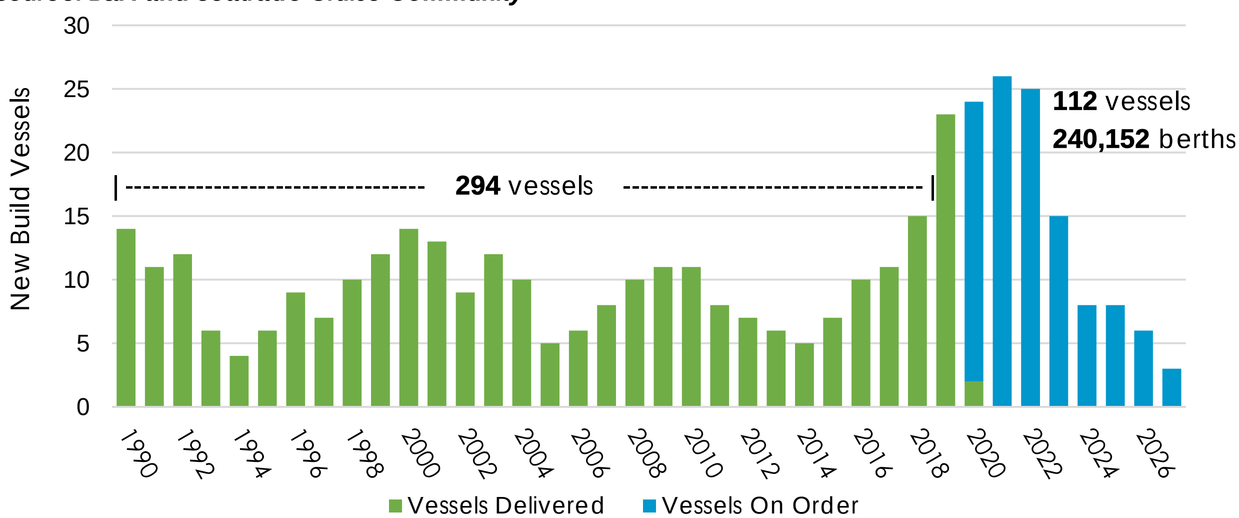
Cruise Vessel Trends and New-Build Program

To be able to grow, cruise lines have been highly successful in introducing new vessel inventory and developing on-board products that generate sustained interest in cruising. Cruise brands continually work to improve the quality and quantity of on-board experiences with diverse food and beverage venues, entertainment activities, meeting, conference facilities and recreation areas.

Among the largest of their efforts is the creation of larger and more lavish vessels furnished with veranda-style outside cabins, grand central atriums, health spas and other amenities found in the best land-based resorts. This trend became the norm in the mid-1990s and has continued as cruise brands introduce innovative products and services on the newest vessels to further differentiate themselves from the competition and generate renewed public interest in cruising. Consumers meet each new vessel launch with enthusiasm, and ultimately, increased passenger bookings.

Error! Reference source not found. shows the cruise vessel new build deliveries from 1990 through 2027. As of January 29, 2020 there were 112 cruise vessels on order with a total capacity of 240,152 berths scheduled for delivery over the next eight years (2020 through 2027). For comparison purposes, in spring 2006, the forward cruise vessel order book contained 29 vessels with a berth capacity of approximately 85,000. This supply propels the industry forward. The deliveries for 2023 and beyond are still preliminary as negotiations are underway for new builds for those years but are not yet confirmed.

Figure 25: Cruise Vessel Deliveries and On Order, 1990 – 2027
Source: B&A and Seatrade Cruise Community



The potential development of shipyards with the technical capabilities to build and deliver cruise vessels in China and Asia would provide for added capacities in a relatively short timeframe once the industry accepts the standards of the vessels. The cyclical nature of shipbuilding is driven more by economics, shipyard competition, and cost of capital and availability of government support or subsidies than by consumer demand. Most of these factors are external to passenger issues. Figure 26 illustrates the increasing size of the cruise vessel which has significant impacts on port marine, upland and tourism infrastructure.

Figure 26: Avg. Passengers per Ship by Year of Construction, 1999 – 2019
Source: B&A

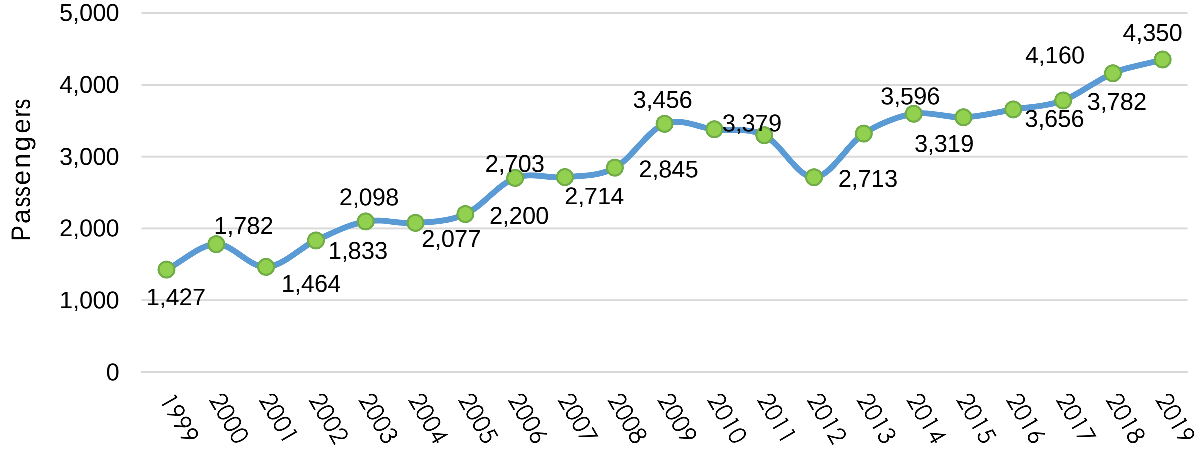
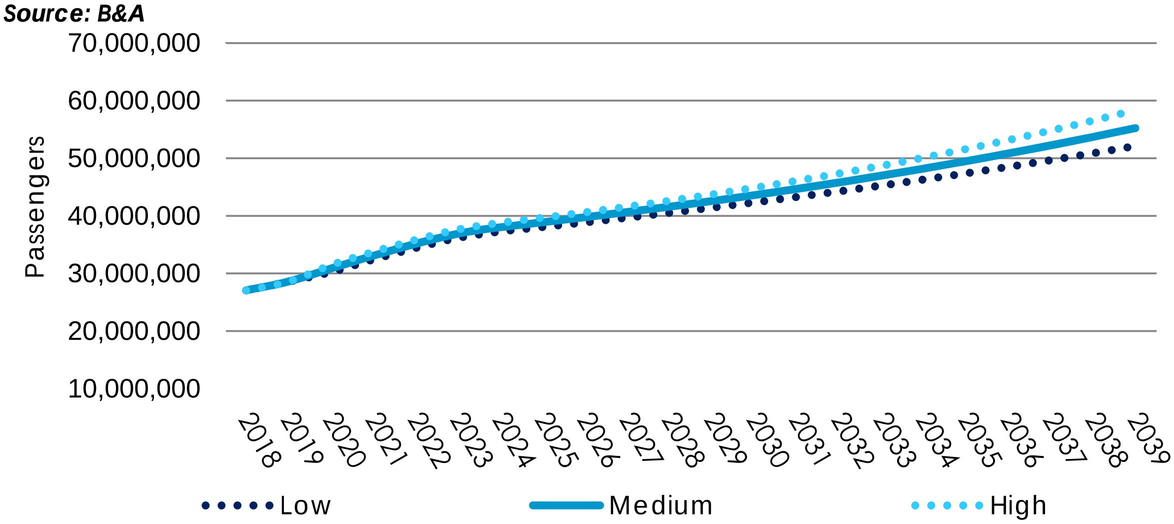


Figure 27 shows the potential worldwide passenger growth through 2040 estimated to be between 52 and 58-million passengers. This pace is generated by the continuing adding of new builds to the market over the period. Consumer markets such as India, China, South America and the Middle East remain to be tapped into to any substantial degree, thus the large opportunity moving forward.

Figure 27: Conventional Cruise Worldwide Growth Projections, 2018 – 2040
Source: B&A



This forecast is based upon the additional market supply (cruise vessels) placed into the consumer market and a minimal withdrawal factor[1] of 5% for older ships being taken out of the conventional cruise fleet on an annual basis over the 20-year period. A cruise vessel has a 20- to 25-year life before being removed from the major fleets. In addition, the new vessels being placed into the fleet are larger overall thus creating more overall capacity in the

[1] This is the amount of cruise vessels that leave the worldwide fleet each year due to being scrapped, sunk, sold or used in the secondary markets.

marketplace. The low, medium and high are the differences in the number of cruise vessels placed into the fleet and withdrawn on an annual basis.

Opportunities and Conclusions

Based upon the assessment of the industry moving forward there will be higher growth rates of the overall market due to the number of new builds on order. Big ship introductions are maturing along with a renewed interest in small ship exploration / luxury cruising which provides for a unique opportunity for small destinations. Growth has to occur through additional capacity worldwide and will require massive development, or redistribution of growth. There will also likely be less seasonality and more weekday homeport operations in places such as Alaska. Homeport and Port-of-call development are critical.

- The world cruise tourism is a supply-led industry that is expanding rapidly, but small in terms of worldwide tourism products. It impacts each continent and is fed by the development of regional itinerary patterns that attract consumer demand, which is the key growth driver.

- Cruise tourism has done well during socio-political conflicts, economic instability, and recession amongst others. This is accomplished through the ability of cruise brands to move their vessel assets to locations passengers want to go that are free from conflicts and where the consumer feels secure.

- World growth is propelled by the development of larger cruise vessels with greater passenger capacities providing for better overall economies of scale for the cruise brands. There are still smaller exploration and luxury vessels being built and introduced to the market, but they drive a small part of the overall growth and are targeted toward a particular demographic niche(s).

- The industry is constrained by the ability to build new ships at a faster pace (2 – 3 years on average); the overall number of new build slots (approx. 15) larger vessels per annum; and, regional homeport berth and downstream berth and upland tourism infrastructure to support growth.

Municipality of Skagway: Strategic Planning & Execution of Cruise-Related Facilities

Appendix B: Freight & Ferry Traffic Analysis

Prepared by the McDowell Group

February 22, 2020

Bermello Ajamil & Partners

Appendix B: Skagway Freight & Ferry Traffic Analysis

This report considers the long-term outlook for movement of freight and fuel through the Port of Skagway (POS). Past, present, and projected future tonnages are assessed for mineral concentrates, refined fuel products, and general cargo. This report also profiles the Alaska Marine Highway System traffic to and from Skagway.

Mineral Concentrates

The Skagway Ore Terminal (SOT) is owned by the Alaska Industrial Development and Export Authority (AIDEA) and sits on land owned by the Municipality of Skagway. The SOT includes enclosed materials handling loadout conveyors and a ship loader, a 98,000 square-foot 16-inch thick concrete pad, a 42,000 square-foot concentrate storage building, and a .37 acre adjacent lot which contains a fueling facility (two 10,000 gallon day tanks) and tank farm (four 30,000 gallon storage tanks).[1] An ore terminal user agreement with Capstone Mining, which in 2019 was assigned to Pembridge Resources, goes through March 2023.

Past Tonnages Moved through SOT

The best available estimates of recent mineral concentrate tonnages shipped through Port of Skagway (POS) are Minto Mine production data. That data indicates annual average production of 48,000 dry metric tons (dmt) of concentrates over the 2010 to 2017 period. The mine operated for nine months in 2018 before closing.

Ore concentrate export data is also available from USACE Waterborne Commerce data, however that data is not consistent with mine production data. USACE reports copper and (mis-classified) iron ore concentrate exports through POS. Minto Mine production data and USACE export data are presented in Table 1.

Table 1. Mineral Concentrate Exports through POS, 2010 to 2018

Year	Minto Production (dmt)	USACE WC Data Copper Concentrates (Short tons)	USACE WC Data Iron Ore (Short tons)
2010	47,065	9,775	478
2011	49,159	61,216	20,696
2012	43,423	26,834	20,834
2013	46,303	46,095	13,912
2014	50,246	39,665	35
2015	45,703	13,020	-
2016	70,348	26,687	-
2017	37,372	-	12,663*
2018*	27,383	na	na

*9 months of production. Na: not available. dmt: dry metric tons. The 2017 USACE value was classified as "non-ferrous ore not-elsewhere classified. Source: Pembridge Resources and USACE Waterborne Commerce Statistics Center.

[1] http://www.aidea.org

Mineral Development Outlook

This outlook for mining-related shipping through POS focuses only on projects with a realistic potential to produce concentrates for marine shipment to foreign smelters within the foreseeable future. These base metal projects, and other precious metal mining projects, also have potential to generate substantial in-bound Skagway freight traffic through transport of materials and equipment for construction and at production startup. In-bound freight for mine operations; fuel, mine and mill consumables, other materials and equipment may also be transported through POS.

Some projects, also discussed briefly below, show production potential but are currently not at a stage of exploration or development to realistically include in an economic production forecast in the next 20 years.

MINTO MINE (CENTRAL YUKON; 265 MILES FROM SKAGWAY), PEMBRIDGE RESOURCES

The Yukon's only recent concentrate-producing mine was Capstone Mining's Minto Mine, which was placed into temporary closure October 2018. Poor copper prices resulted in the termination of an arrangement to sell the mine to Pembridge Resources earlier that year, however, a purchase agreement was completed in the summer of 2019 with plans for Pembridge to reopen the mine in 2020. At the time of closure, Capstone had a life-of-mine plan of four years. Pembridge is working to identify operational optimization as well as additional reserves to extend the mine's life. Capstone averaged approximately 1,000 truckloads of concentrate to SOT annually, at 40-45 tons each. Indications are Pembridge is planning a slightly lower production rate to support an extended mine life. Pembridge re-started the mill in October 2019 and produced 1,734 mt of concentrates that month, according to news reports.[2] The mill is being operated on a two-week on, two week-basis until sufficient ore is available to support full-time operations.

CASINO PROJECT (WESTERN YUKON WITH ACCESS TO KLONDIKE HWY; 360 MILES), CASINO MINING CORPORATION

The Casino Project is a copper, gold, molybdenum and silver deposit that has been described as among the largest copper-gold deposits in the world. Casino completed a positive feasibility study in 2013 with a total reserve of 1.12 billion metric tons and a 22-year mine life at a production rate of 120,000 tons per day (tpd).[3] Casino is currently undertaking adequacy work to complete the permit application process with an anticipated permit approval for the mill in 2023 and construction beginning shortly thereafter. Over the life-of-mine, an average of 275,000dmt of copper concentrate would be produced per year, moved at a rate of about 22-23 truckloads per day (~50 tons per load, transported in bulk); there is an anticipated peak during production years 1-4 of 395,000dmt per year, equaling 26-28 truckloads per day. There will also be a molybdenum concentrate produced (12,000-13,000dmt per year) which will likely be stored in sacs on site and transported as needed, though current indications are these may be backhauled overland and not through any port facilities.

The proposed Casino Mine will also be an importer of a significant amount of mine- and processing-related supplies, particularly to support an estimated usage of 120tpd of grinding media and 250tpd of lime. These materials will likely be sourced from southern British Columbia or overseas, in either case marine transport

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[2] North of 60 Mining News, https://www.miningnewsnorth.com, 11/8/2019

[3] https://casinomining.com/_resources/YESAA_Project_Proposal/Volume2/4B_Freegold_Road_Report.pdf

would be the most favorable economic decision. There would also likely be the need to transport other materials and heavy equipment via barge, with a large quantity shipped prior to beginning operations and as needed thereafter.

The development of the mine will also require importing materials and heavy equipment to support the construction phase, anticipated to last three years. Approximately 12,000-15,000 tons of fabricated steel, 20-30 kilometers of steel pipe, and 10,000 tons of cement will be required, as well as associated heavy equipment including roughly 30 oversized loads. The majority of this material will be sourced from locations requiring marine transport, including the oversized loads where the relatively short haul from Skagway would require less overland transportation and less restrictive regulations compared to overland transport through British Columbia.

The feasibility study examined port options and "determined that the Skagway port provides the most advantageous port for both concentrate exports and mine supply imports." It is worth noting the existing SOT facilities have, with some modest upgrades, the capacity to support the proposed Casino Mine in addition to future mines that may come on-line.

Keno Hill Silver District (North Central Yukon; 380 miles from Skagway), Alexco

Keno Hill Silver District is a past producer, with most recent production in 2011-2013. A pre-feasibility study completed in 2019 shows a 1.2 million metric ton (Mt) reserve, which could support an 8-year mine life at 400-430tpd. This suggests a total life-of-mine production of 58,200 metric tons (mt) of lead-silver concentrate and 67,800mt of zinc-silver concentrate, equal to annual concentrate production of 15,750mt, or about 43tpd. A quick ramp-up to production is anticipated as some of the deposits have existing mining permits in place from previous production. Past and planned transportation of concentrates includes trucking to Skagway in concentrate pots, which are loaded on barges bound for Seattle.

Other Base Metal Projects

The Kudz Ze Kayah (KZK), operated by BMC Minerals, completed a pre-feasibility study in 2019 indicating annual average volumes of 401,200dmt of copper concentrate, 377,000dmt of lead concentrate and 1,515,600dmt of zinc concentrate at a production rate of 2Mt tons per year.[4] As currently planned, concentrates will be hauled 565 miles from KZK to the Port of Stewart (Skagway has been considered as a potential concentrate shipping port). The project is located about 160 miles northwest of Watson Lake.

The proposed Selwyn Project, located 175 miles north of Watson Lake, is operated by Selwyn Chihong Mining Ltd., and would be a surface zinc-lead mine with a projected life of more than 10 years. The mine would produce 2,500tpd of zinc concentrates and 600tpd of lead concentrates. As now planned, the concentrate would be trucked to the Port of Stewart for export.[5]

[4] http://bmcminerals.com/wp-content/uploads/2019/08/BMC-KZK-DFS-Feasibility-Summary-Bk-FINAL.pdf
[5] http://selwynchihong.com/pro

OTHER PROJECTS WITH DEVELOPMENT POTENTIAL

The projects below are currently in a stage of advanced exploration and have promising results, however, they cannot realistically be included in a SOT forecast. These projects' economics are based on mineral resources, rather than reserves, which by nature do not have demonstrated economic viability. These projects should be monitored for news releases, resource updates or permitting or development decisions, which could better demonstrate probability of development and operations.

Nickel Creek Platinum's Nickel Shaw project, based on a 2018 resource update, has a Measured and Indicated resource of 323Mt containing 1.9 billion pounds of nickel, 5.8 million ounces of Platinum Group Metals and gold, 1.1 billion pounds of copper, and 107 million pounds of cobalt.[6] The resource estimate bases preliminary studies on a 45,000tpd production rate, which could produce approximately 389,000mt of concentrate per year, on average, over a 25+ year mine life. Assuming production of 1,110tpd of concentrate, between 22 and 28 truckloads per day (40-50mt/truck) would be required.

MacMillan Pass is a lead-zinc-silver deposit with a 2018 preliminary economic assessment indicating a 11.2Mt resource. At the proposed production rate of 5,000tpd, 2.6Mt of zinc concentrate and 1.4Mt of lead concentrate would be produced over the 18-year mine life,[7] equal to 226,000mt of concentrate annually, or approximately 650tpd, requiring 16 truckloads/day (40mt per truck). These concentrates could be moved either through Skagway or Stewart, B.C, with Skagway currently as the favored option. No transportation studies have been conducted since the PEA, which was favorable and recommended the project proceed to pre-feasibility studies with a recommendation to "Review existing port facilities at Prince Rupert and Stewart, BC, and at Skagway, Alaska, and determine suitability, future availability, and the CAPEX and OPEX of bulk ore and container loading."

OUTLOOK SUMMARY

Preliminary assessment of projects with potential to commence or recommence production in the foreseeable future suggests tonnages as high as 400,000 tons annually at some point prior to 2040. The low-case forecast assumes Minto Mine will restart in 2020 and operate for five years. The high-case forecast assumes Minto produces for ten years before closing, while the Casino Project is brought into production during the 20-year outlook period; Casino Project within the next ten years.

Table 2. Potential Bulk Concentrate Shipments through SOT, 2020 to 2040 (Metric Tons Per Year)

Period	Low Case	High Case
2020 to 2024	40,000 – 50,000	40,000 -50,000
2025 to 2029	0	40,000 -50,000
2030 to 2034	0	350,000 - 400,000
2035 to 2039	0	275,000 - 400,000

Source: McDowell Group estimates.

[6] https://s21.q4cdn.com/491660439/files/doc_downloads/2018/181109_Nickel_Shaw_43-101-Resource-Upate.pdf
[7] https://www.fireweedzinc.com/_resources/presentations/FWZ_MacPass_PEA%20Report_20180709.pdf

There is a high level of uncertainty around the timing and magnitude of future mine development in Yukon and the volume on concentrates that might move through SOT. Tonnages could be higher than indicated in the high case if, for example, both the Casino and Nickel Shaw projects were developed. Global economic conditions, metal prices, availability of investment capital, technical characteristics of the mineral deposits, new discoveries, and a myriad of other factors will factor into mine development decisions.

Refined Petroleum Products

Petro Alaska Marine Services (Petro 49) serves Southeast Alaska with seven bulk fuel plants and marine fuel docks including the port of Skagway. A significant volume of fuel arriving in Skagway is transported to Yukon. Fuel is barged to Skagway from U.S. ports with barges arriving in Skagway about every 20 days carrying about 1.4 to 1.6 million gallons of fuel products. Total fuel storage capacity at the Port of Skagway is about 4 million gallons in 14 tanks that hold various combinations of jet fuel (ULSD #1), #1 and #2 diesel, aviation gas, regular unleaded gas and super premium unleaded gas. Aviation and unleaded gasoline are only sold in the local Skagway market. The vast majority of #1 and #2 diesel and all the jet fuel is sold into the Yukon market.

All of the fuel trucked north from Skagway is sold to North 60º, a Canadian subsidiary of Petro Marine with storage and distribution facilities in Whitehorse, Dawson City, and Watson Lake. All fuel from Skagway arrives in Whitehorse and is then distributed to the other facilities or directly to consumers. The vast majority of this fuel is consumed in Yukon, but a small amount of diesel fuel is distributed into northern British Columbia through its Watson Lake facility. North 60° sells fuel directly to consumers through four commercial card-lock facilities and three aviation key-lock depots. It also serves mining, construction, transportation, government, and forestry trades.

An estimated 90% of the fuel trucked from Skagway to Yukon is either #1 or #2 diesel; about 10% is jet fuel destined for the Whitehorse airport. Due to the extremely cold winter temperatures in the Yukon, demand from drivers of diesel vehicles switches from #2 to #1 during the coldest months of the year.

Yukon's low Sulphur jet fuel requirements result in the need treatment prior to entering the Yukon. When sulfur is removed it reduces the "slickness" of the fuel and can be damaging to engines. An additive that increases the lubricity of jet fuel is added in Skagway prior to transport into the Yukon.

Gasoline quality standards are more restrictive in Yukon than in the U.S., likely the main reason gasoline is not shipped into the Yukon from Skagway.

There are several reasons why shipping fuel through Skagway is economically viable for Yukon distributors. First, is convivence. Fuel trucked to the Yukon from refineries in Edmonton, Alberta requires a 4-day round trip while tankers can make the round trip from Skagway in a little over three hours carrying about 15,000 gallons each trip. During peak seasons, tankers will make two trips daily. Fuel truck traffic from Skagway to Yukon is estimated at approximately 1,100-1,200 trips annually. A Yukon wholesale fuel distributor stated that fuel shipments from Skagway are more convenient and competitively priced when compared to transporting fuels from Edmonton or elsewhere. Also, the company relationship with North 60º provides stability in the volume of fuel shipped to Yukon through POS.

Delta Western also supplies fuels to Yukon through the port of Haines. Delta Western reportedly ships #1 diesel, jet fuel, gasoline and some kerosene into Yukon. Volume data by type of product is unavailable, though the total annual volume is likely in the 10 to 12-million gallon range. In total, its estimate that 40% to 50% of Yukon's refined fuel needs are met through either Skagway or Haines.

Past Volumes of Fuel Shipments into and through POS

The only publicly available information on fuel shipments into Skagway are contained in USACE Waterborne Commerce data. While the total volume data may be reasonably accurate, that product-type data is not always reliable and should be interpreted with caution.

USACE data indicates that, though highly variable year-to-year, an annual average of 42,000 short tons of petroleum products were barged to Skagway over the 2010 to 2017 period (2017 data is the latest available from USACE). The 2017 total was approximately 51,000 tons, or approximately 17 million gallons.[8] Unofficial but reliable estimates place the current total volume of refined petroleum products off-loaded in Skagway at about 23 million gallons annually.

Table 3. Total Fuel Shipments through POS, 2010 to 2017, Short Tons

Year	Gasoline	Distillate Fuel Oil	Kerosene	Petroleum Products NEC and Other	Totals
2010	5,440	2,670	-	9,478	17,588
2011	6,601	18,438	-	-	25,039
2012	21,166	13,280	-	-	34,446
2013	7,601	63,877	-	-	71,478
2014	17,900	10,254	-	-	28,154
2015	23,395	11,958	-	-	35,353
2016	22,250	42,819	5,809	-	70,878
2017	6,079	22,429	15,708	6,790	51,006

Source: USACE Waterborne Commerce Statistics Center. NEC: Not elsewhere classified.

Petroleum Product Outlook

Forces that will drive the volume of fuel shipped to Skagway include:

- Growth in the local economy and population
- Growth in Yukon's economy and population
- Mine development activity in Yukon

SKAGWAY AND YUKON POPULATION GROWTH

Skagway's economy is likely to continue growing in parallel with cruise industry growth. Skagway's resident population, estimated at 1,088 in 2018, has been growing at an annual rate of about 1.5% since 2010. Though no seasonal data is available, Skagway's population may more than double in the summer, and growth in the

[8] Jet fuel is also shipped to Skagway, and may be recorded as kerosene in 2016 and classified elsewhere in previous years.

non-resident workforce population has likely been growing at a faster rate than the resident population. According to Alaska Department of Labor and Workforce Development (ADOLWD) data, Skagway employment increases from about 500 in the November through February period to over 1,000 in the May through September period.

ADOLWD makes long-term population projections for all boroughs and census areas in Alaska.[9] The most recent projection, prepared in 2018, has Skagway's population increasing to 1,185 by 2025, to 1,249 by 2030, 1,302 by 2035, and 1,332 by 2040. The projected annual rate of growth over the 2018 to 2040 period is 0.9%.

Trends in Yukon's population are a more important indicator of future transshipment of fuel through Skagway. Since 2010, Yukon's population has grown at an annual rate of 1.8% and as of 2018 total 40,483 residents. Yukon Bureau of Statistics' latest projection for Yukon shows an annual population growth rate of 1.6% to 2030 (reaching 49,040 residents) and a slight slower growth rate of about 1.3% from 2030 to 2040, when the population is project to total 55,570.[10]

Table 4. Skagway and Yukon Population, 2010 to 2018

Year	Skagway	Yukon
2010	968	34,984
2011	964	35,459
2012	957	36,283
2013	982	36,571
2014	1,038	37,190
2015	1,044	37,745
2016	1,071	38,594
2017	1,089	39,667
2018	1,088	40,483
2010-18 Ann. Growth Rate	1.47%	1.83%

Source: ADOLWD and Yukon Bureau of Statistics.

Table 5 provides low-case and high-case long-range forecast for fuel shipments to and through Skagway. The low case forecast is framed on annual growth of 1.5% while the high case is framed on an annual growth rate of 2%, through the forecast period to 2040. The high case encompasses new demand related to mine development in the Yukon (the Casino project specifically). As currently planned, the Casino mine would rely on LNG as its primary energy source (which would be trucked from Fort Nelson, B.C., at a rate of 11 trucks per day), though there would still be substantial requirements for diesel fuel. Project planning documents indicate 7 million gallons of diesel will be required annually during mine construction and 8.5 million gallons annually during mine operations. An average of about two truckloads daily would be required to meet the mines needs for diesel.[11]

[9] http://live.laborstats.alaska.gov/pop/projections.cfm
[10] http://www.eco.gov.yk.ca/stats/pdf/Projections2018.pdf
[11] Casino Mine Project Description, page 4-79.

Table 5. Potential Refined Petroleum Product Shipments to Skagway, 2020 to 2040 (Millions of Gallons Annually)

Period	Low Case	High Case
2020 to 2024	20 - 25	25 - 30
2025 to 2029	25 - 30	30 - 35
2030 to 2034	30 - 35	35 - 45
2035 to 2039	30 - 35	35 - 45

Source: McDowell Group estimates.

General Freight

Alaska Marine Lines, a subsidiary of Lynden, Inc. provides weekly year-round barge service to Southeast Alaska communities including Skagway, carrying groceries, vehicles, construction materials, equipment, household goods, and other types of freight in container load, less than container load, reefer container, dry container, and bulk container. A Canadian Lynden company provides trucking services between Skagway and Yukon.

The barge typically arrives in Skagway between Monday afternoon and Tuesday afternoon, depending on several factors such as tides, weather, loads, etc. Offloading the barge involves a pass-pass procedure off the stern of the barge, where a forklift on the barge places a container, and a forklift on the dock picks the container, backs off the dock, and places the container within the yard. The Skagway dock can support roll-on/roll-off, however, the deck height of the barge and dock must be equal, either through timing of the tide cycle or use of barge ballast. Three to five hours are usually required to unload and load the barge in Skagway. Scheduling adjustments are occasionally required due to conflicts in dock access.

AML's yard is on subleased land. The 3-acre facility is appropriately sized for current freight volumes, according to a company representative. Though on leased land, all of the investment in the barge facility is AML's, including the existing dock, yard fencing, lighting, an office, and an enclosed cargo handling/equipment maintenance area.

Approximately 10,000 to 15,000 tons of freight are barged to Skagway annually for local consumption. In-bound tonnages destined for Yukon are highly variable from year to year but often exceed local volumes. It has not been possible to verify data published data by USACE, which indicates a total of just under 120,000 tons of non-fuel freight shipped to Skagway in 2017 (the latest available data). In addition to the categories show in Table 6, 39,500 tons o sand and gravel were reported to have been shipped in-bound to Skagway in 2017 as well as 2,422 tons of lumber and 1,100 tons of salt.

For the five-year period from 2013 through 2017, an annual average of 133,000 tons of inbound freight were received at POS, excluding fuel products, according to USACE data. Two large categories of reported freight include alcoholic beverages and cement; neither category has been verifiable.

Table 6. Port of Skagway Inbound Freight Tonnages by Key Category (non-fuel) 2010 to 2017, Short Tons

Year	Cement	Fab Metal Products	Alc. Beverages	Groceries	Food Products NEC	Machinery	Manufact. Wood Products	Manufact. Products, NEC	Total Non-Fuel Tonnage
2010	6,639	245	7,489	1,515	3,533	559	911	2,905	40,915
2011	7,014	342	7,352	1,562	3,308	1,372	951	11,519	43,117
2012	24,054	2,187	19,162	4,473	7,485	2,321	3,354	9,252	86,060
2013	28,077	4,603	38,875	23,362	12,732	7,725	4,568	10,391	157,644
2014	28,566	2,864	33,955	22,068	13,368	4,432	2,717	8,162	136,411
2015	23,730	2,375	32,993	24,896	13,730	4,603	3,986	6,274	127,473
2016	28,723	5,983	33,847	9,357	12,798	1,370	6,201	6,998	124,496
2017	*	3,510	31,431	8,092	14,639	1,349	5,149	5,800	118,868

Source: USACE Waterborne Commerce Statistics Center. No cement shipments were reported for 2017, though 39,500 tons of sand and gravel was reported that year.

The volume of out-bound cargo is small (other than mineral concentrates). USACE data indicates a total of 12,100 tons of out-bound freight in 2017, the largest component being "manufactured products not elsewhere classified" at 4,686 tons. Table 7 provides out-bound tonnage data by category. Categories of out-bound freight (in 2017) not specifically noted in the table include 598 tons of asphalt material, 516 tons of vehicles and parts, 439 tons of sand and gravel, and 322 tons of primary wood products. The balance is spread across 18 other categories of freight.

Table 7. Port of Skagway Out-bound Freight Tonnages by Key Category (Excl. concentrates) 2010 to 2017, Short Tons

Year	Cement	Fab Metal Products	Alc. Beverages	Groceries	Explosives	Machinery	Manufact. Wood Products	Manufact. Products, NEC	Total Tonnage
2010	-	210	1	2	2	281	-	772	3,338
2011	-	93	1	42	-	527	-	801	1,975
2012	1,702	775	220	928	836	1,072	201	4,171	17,384
2013	4,748	675	350	429	1,657	1,461	190	4,201	18,061
2014	397	247	460	541	2,084	1,124	104	2,806	11,297
2015	237	358	364	312	1,860	1,126	105	2,492	10,774
2016	541	444	409	498	2,083	2,131	215	2,414	13,438
2017	-	534	336	705	1,497	552	936	4,686	12,106

Source: USACE Waterborne Commerce Statistics Center.

Truck Traffic

U.S. Bureau of Transportation Statistics data includes counts of border truck "container" traffic, including the number of full and empty containers moving from Canada to Alaska on the Klondike Highway. Full containers are likely to be ore concentrate carriers while empty containers are likely to be fuel trucks, though this data has not been verified.

Table 8. Klondike Highway Truck Container Border Crossings (into U.S.), 2010 to 2018

Year	Containers Full	Containers Empty
2010	1,835	1,534
2011	1,998	2,171
2012	2,582	2,721
2013	1,737	1,392
2014	2,698	1,192
2015	2,438	1,234
2016	3,175	2,484
2017	2,774	2,586
2018	1,783	2,581

Source: U.S. Bureau of Transportation Statistics and U.S. Customs and Border Protection.

U.S. Customs and Border Protection data for 2019 shows 1,352 trucks coming into the U.S. via Klondike Highway through August. This data suggests the annual total will be about 2,000 trucks, though reduced fall ferry service may have some bearing on this total. There were no concentrate shipments out of Skagway in 2019, so this measure of truck traffic is associated with transport of general freight and fuel only.

General Freight Outlook

It is difficult to predict with any degree of certainty the volume of general freight that will be shipped to and through Skagway over the next 20 years, particularly in the absence of reliable historical baseline data. Tonnages shipped for the local market should grow slowly, in parallel with the local economy. The volume of freight destined for Yukon will depend on resource development activity (mainly mining), U.S./Canadian dollar exchange rates, and shifting economic trade-offs between trucking materials via the Alcan into Yukon and barging/trucking through Skagway.

Table 9 provides forecasted in-bound and out-bound general freight volumes through 2040. These figures should be viewed as very high-level forecasts, with actual tonnages potentially varying significantly in any given year. The in-bound volume estimates factor in an assumption that USACE in-bound data for recent years has significantly overstated actual tonnages.

The high-case in-bound forecast includes the assumption that the Casino Mine is developed, with a two to three-year construction phase beginning in the 2025 to 2030 period and operations commencing in the 2030 to 2034 period.

Table 9. Forecast of General Freight Shipments Through Skagway, 2020 to 2040, (Short tons annually, excludes mineral concentrates and petroleum products)

	In-Bound		Out-Bound	
Period	Low Case	High Case	Low Case	High Case
2020 to 2024	30,000 -40,000	50,000 – 60,000	10,000 – 12,000	12,000 – 15,000
2025 to 2029	40,000 – 50,000	100,000 – 150,000	12,000 – 15,000	15,000 – 20,000
2030 to 2034	50,000 – 60,000	75,000 – 125,000	15,000 – 20,000	20,000 – 25,000
2035 to 2039	60,000 – 75,000	100,000 – 150,000	20,000 – 25,000	25,000 – 30,000

Source: McDowell Group forecasts.

Alaska Marine Highway

In 2018, 23,777 passengers and 8,163 vehicles boarded AMHS ferries in Skagway. That same year, 26,074 passengers disembarked in Skagway, along with 9,335 vehicles. AMHS traffic had been trending up since 2015, however 2019 will likely be well below 2018 due to budget cut-driven service reductions and a nine-day ferry workers' strike.

The outlook for ferry service in Lynn Canal and elsewhere in Alaska is uncertain, due to budget cuts. That notwithstanding, the demand for ferry travel, including resident and nonresident travelers, is expected to be steady or trending up slightly.

Table 10. AMHS Skagway Embarkations and Disembarkations, 2010 to 2018

Year	Passenger Embarkations	Passenger Disembarkations	Vehicle Embarkations	Vehicle Disembarkations
2010	22,482	22,836	6,880	7,361
2011	21,295	21,064	6,384	6,879
2012	21,880	22,949	6,730	7,572
2013	22,814	23,898	6,799	7,655
2014	20,701	22,031	5,966	7,112
2015	20,197	20,765	6,384	6,716
2016	20,966	21,640	6,821	7,309
2017	21,446	22,962	7,488	8,247
2018	23,777	26,075	8,163	9,335

Source: Raw data from AMHS. Compiled by McDowell Group. Numbers are based on link volume data and therefore may differ slightly from on/off data published in AMHS annual traffic volume reports.

In 2015 (the most recent available data), AMHS carried a total of 62 vans to Skagway from Juneau, including 53 in the summer and 9 in the fall/winter/spring period. That same year, AMHS carried 75 vans southbound from Skagway to Juneau, including 42 in the summer and 33 in fall/winter/spring. There is also van traffic between Skagway and Haines, though a complete count is not available.

Municipality of Skagway: Strategic Planning & Execution of Cruise-Related Facilities

Appendix C: Summary of Community Comments

February 22, 2020

Bermello Ajamil & Partners

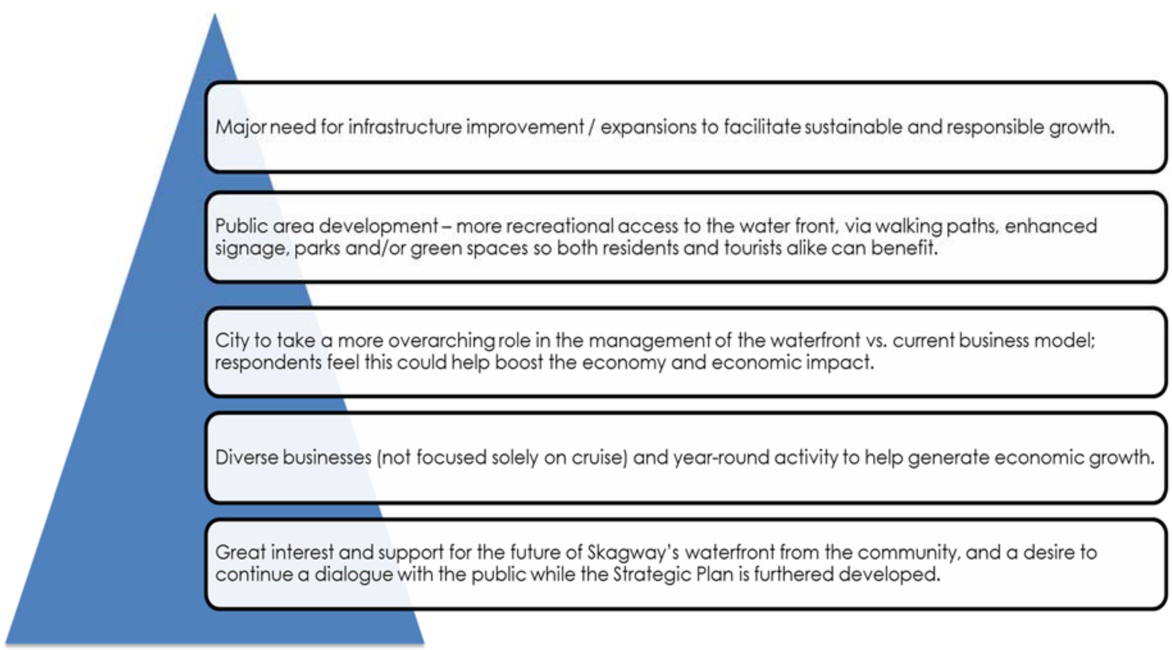
Public Feedback Process

The Municipality of Skagway's public communication for the Strategic Planning and Execution Project for its cruise and waterfront-related activities (freight, fuel, ferry, and mining) began with a community introductory meeting. This meeting took place in the Assembly Chambers at City Hall on September 24, 2019, from 4:30 p.m. – 5:30 p.m.

The meeting introduced the Bermello Ajamil & Partners team, as well as provided an overview of the project and timeline to the public. A link to an online feedback form was provided after the meeting which allowed members of the community to communicate their input related to the future of the waterfront of the Municipality of Skagway. Additional public outreach was done via the MOS at local events to allow for greater participation over the past several months. A total of 177 online feedback forms were received (157 from residents of Skagway, 20 from other individuals). The information garnered was used in the development of principles, ideas and guiding alternative options for the strategy of Skagway's waterfront.

A copy of the public meeting notification, as well as the online feedback form, can be found attached to this document.

General observations from the public feedback are as follows:

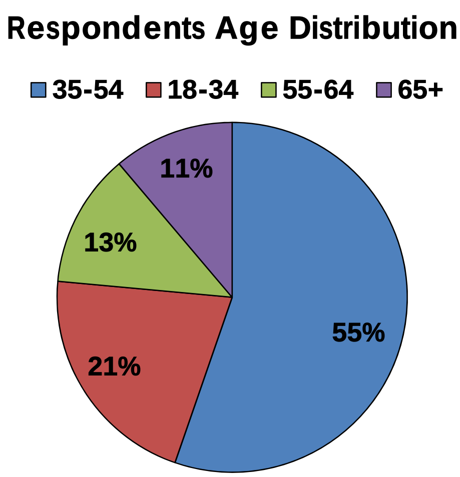


Summary of Respondents Interest and Demographic

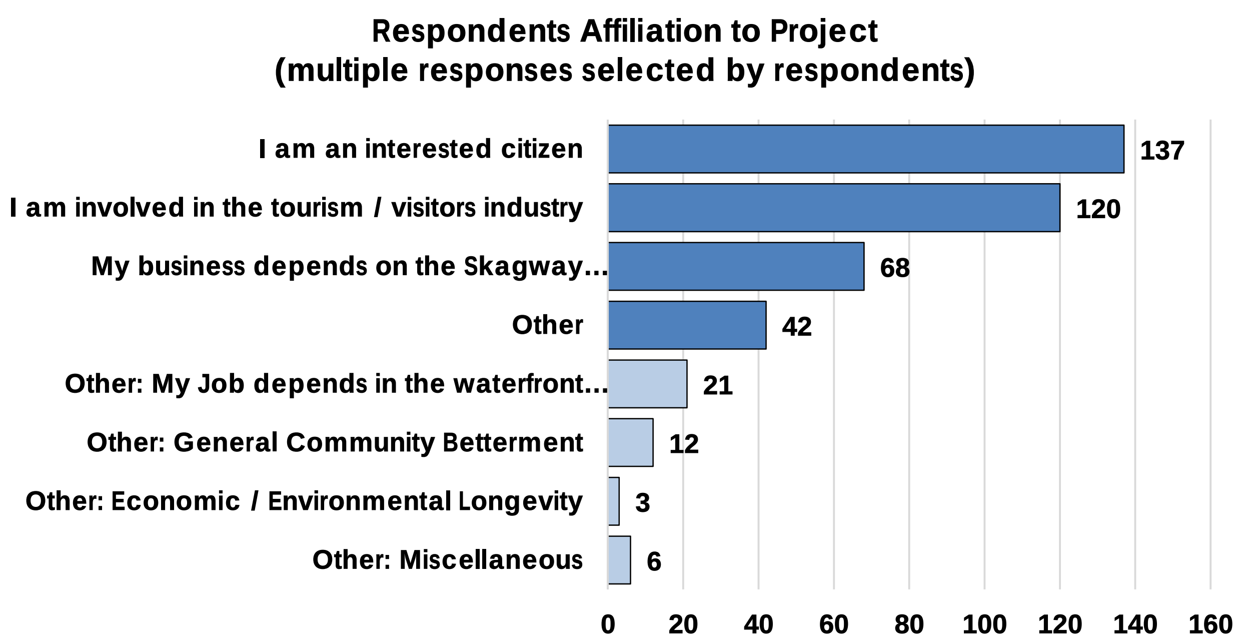
The questionnaires asked respondents details about themselves as well as included an area for additional comments, which asked them to share what opportunities, concerns, and what their overall vision was for the future of Skagway's waterfront.

A general picture of the audience who completed the public feedback form was established, along with their high-level interests and preferences for the future of Skagway's waterfront.

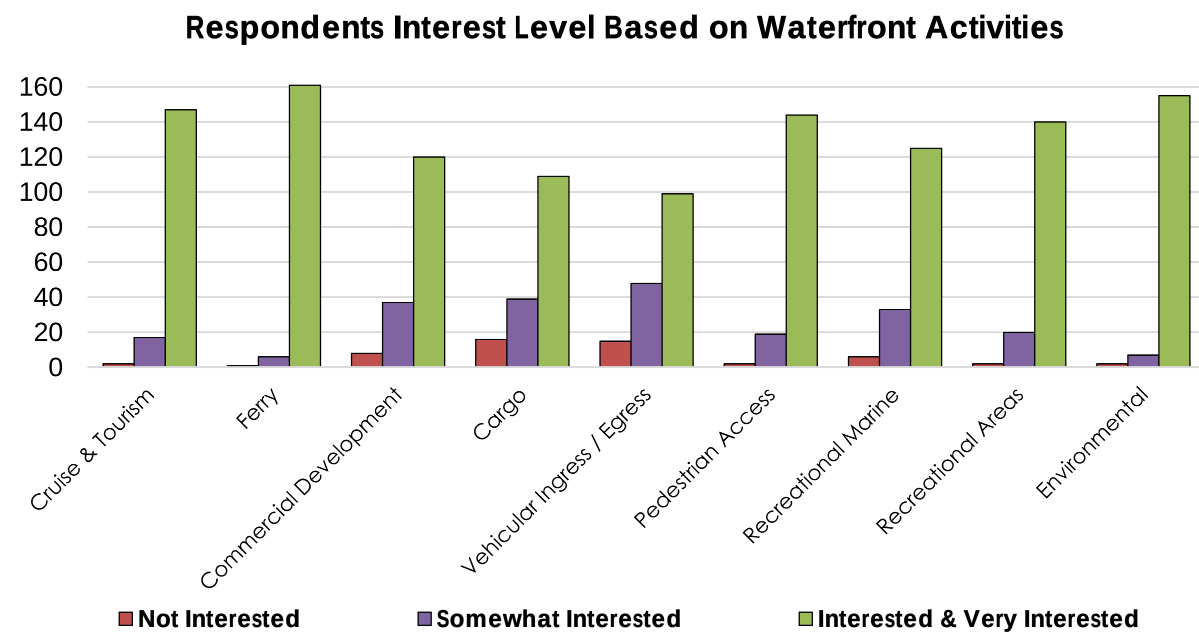
Respondents ranged in age, with the majority falling in the 55-64 year age range.



The primary interest in the Skagway waterfront project comes from interested citizens. 81% of respondents identified as an interested citizen. Outside of this affiliation, the respondents were primarily involved through business or tourism interests with 42 of the respondents provided more detailed responses via the "other" category, as can be seen in the Figure below. The responses were grouped into general categories based on the sentiment of the response. The detailed responses can be found in the report attachment.



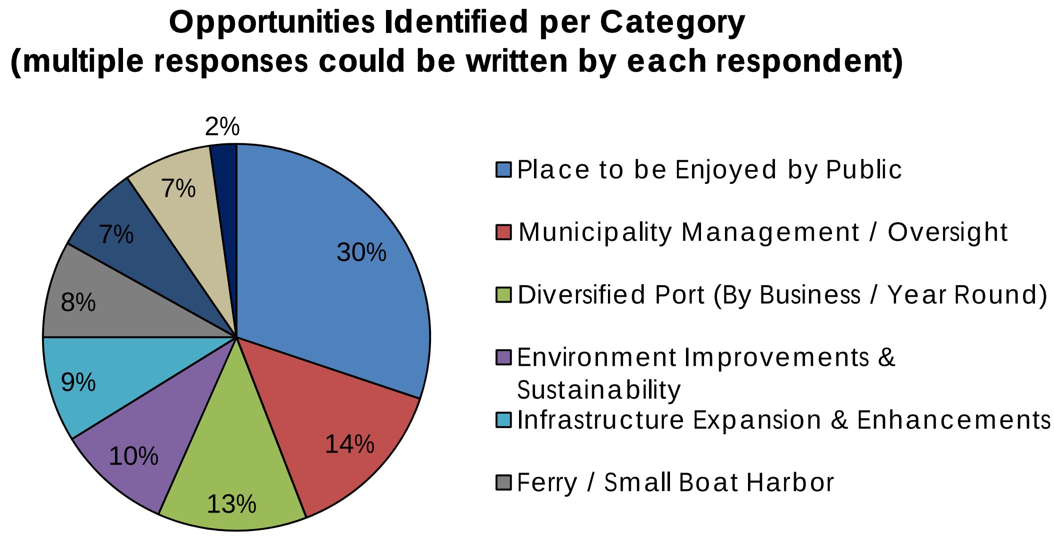
Respondents' overall interest was high across the board in the different categories involving Skagway's waterfront. *Ferry* and *Environment* received 161 and 155 "Very Interested" or "Interested" responses, respectively. Very few respondents reported "Not Interested" or "Somewhat Interested" for any of the nine categories. Cargo and Vehicular Ingress / Egress received the most "Not Interested" responses with 16 and 15 respectively. A breakdown of all respondents' interest level by category is shown in the Figure below.



In addition to the nine categories provided on the form (Cruise & Tourism, Ferry, Commercial Development, Cargo (Freight, Fuel, & Mining), Vehicular Ingress / Egress, Pedestrian Access, Recreational Marine, Recreational Areas, and Environmental), respondents had the opportunity to write in other waterfront activities that were of interest. 32 respondents added "other" categories, which were grouped in the following categories: Safety & Environment, Holistic Vision of the Waterfront, and Fishing. The detailed responses can be found in the report attachment.

Summary of Respondents Areas of Opportunities for Skagway's Waterfront

Respondents were asked, "What areas of opportunities do you see for the city of Skagway's waterfront?" One respondent summarized it as follows: "The current situation of Skagway's waterfront is nothing but opportunities." The comments have been grouped into categories of opportunities that the respondents identified. Most respondents felt that the plan had an opportunity to make the waterfront an area that could be improved through green spaces, parks, etc. Multiple comments on forms were categorized in different areas of opportunities, as needed. Specific comments for each category are included below.



Place to be Enjoyed by Public

- Expanded Pedestrian Access.
- Creating better walking areas. Visually, a more welcoming port. Updating existing infrastructure. Improving congested vehicle áreas.
- Tourism and Recreational Areas Expanded - but NOT CAMPSITES- day use only.
- I have lived in Skagway, year-round, for 20 years. I love this community and the life I have built here. I feel that planners must consider the quality of life when planning for the future of the waterfront. Skagway is a very precious place. Millions of visitors would not arrive annually if it wasn’t. Skagway would not continue to exist if it weren’t for its year-round population of citizens that keep it running.
- I dream of the entire area being remediated and made into a green zone/park/retail combination. It would soften the industrial look of the waterfront and encourage a connection with outdoor recreation, while providing more retail locations (small businesses) that can not afford the rental prices on Broadway. It would be a wonderful place to encourage play and enjoyment of the natural surroundings. A place to incorporate art and public gardens. A place for a food truck, for art installations and for community fun. A complete 360 from what it is now.
- Walking paths with well-defined directions to downtown, bathrooms at all docks.
- We need to develop more welcoming "entrances" off the docks. There are nice green areas coming off the Railroad and Broadway Docks. We need to make the Ore dock more welcoming. There could be little shops and a better path between AML and Petro for visitor traffic.

- Improve and increase visitor services located along the waterfront. Create and maintain an open and welcome waterfront for all users but especially the community members of Skagway.
- Increased pedestrian routes to spread out the crowds, more green spaces with tables and benches. Perhaps a waterfront park that allows for water views.
- More developed green space and clearer pedestrian wayfinding paths.
- More pedestrian walkways and public areas.
- Open park with food stands, entertainment areas like gazebos stages and other facilities that encourage social interaction.
- Retail, dining, more green space, and a more welcoming environment in general.
- Port beautification.
- I'd love to see a park for people to stop and rest in the shade, to look at flowers and see a bit of our history. No jewelry stores allowed down there! Maybe a local business or two, selling food and drink.
- Make Skagway a BETTER experience, not just more people, more money.
- The flow of pedestrian traffic needs to be addressed badly. Better sidewalks with simple signage. Develop more attractive walking paths especially from the Ore Dock. Don't put lots of vegetation lining the sidewalks as this would make a line of sight difficult and lots to maintain. Moving the Southeast Stevedoring building and using that area, or the staging area across the road from there, to develop a green waterfront area for locals and tourists. Develop the open lot south of the depot with an attractive but simple garden and make the rest a grass field. There could be multiple sitting areas along the path. Some covered and some not.

Municipality Management / Oversight

- Docks more influenced by the municipality and the voting members of the community.
- A waterfront that the citizens of Skagway can enjoy and utilize.
- For the town to gain control.
- The municipality (or state) - not private companies - receiving revenue generated from waterfront activities.
- The opportunity for the City to have more control of the waterfront.
- I also feel that we cannot allow ourselves to be taken advantage of when it comes to the future of the waterfront. I believe that the Municipality should call the shots and not leave it in the hands of the cruise companies or conglomerates that only care about dollars.
- I see a need for the municipality to be directly involved in the oversight of their parks and recreational areas and in the regulation of products moved through the port. They need to take control of the fuel transfer, freight and ore transfer facilities to insure that tourism interests don't overwhelm the interests of the population.
- Return control and management of waterfront to MOS.
- More oversight or control by the Municipality.
- I think white pass is doing a good job but should be leased at fair market value.
- No longer leased to one private tour company.

- Reduce monopolies.
- The City should have more control over the waterfront.

Diversified Port (By Business / Year-Round)

- Diversification.
- Get a balanced multi-use waterfront.
- Increased use of port during the fall/winter months.
- It must stay diversified, Skagway as the gateway to the Yukon is not just a cruise ship port.
- Seasonal opportunities seem virtually limitless, but unless there's a way to balance the cost of the area with the lack of income during the offseason, I fear whatever property would be developed would be vacant for seven months out of the year.
- To continue to serve as a major cruise port while still servicing our ferry, barge/cargo, and recreational waterfront needs.
- Increase in Marine trades (boat repair, mechanical & fiberglassing).
- Cruise ship support operations (hull cleaning, baggage ops, Dive repair).
- I see an opportunity for the Municipality to put limits on how many ships are coming, what type of off-season activities are available to happen on the docks, the possibility of getting the ore dock going again but only if it brings jobs to the citizens of Skagway.
- An industrial park to encourage multiple port user tenants.

Cohesive Vision to Improve Waterfront

- Continuing with the status quo is rapidly going to become a detriment. projected increases in tourism I think are feasible, but the Municipality must treat in in a holistic manner, taking into account infrastructure, the types of businesses we allow, housing, and most importantly traffic flow.
- Better use of waterfront spaces for all concerned residents, businesses, and guests. There is a lot of "dead space" that is currently unused or used for storage or things that could be accomplished elsewhere.
- Currently, it seems that waterfront planning in regards to tourism has been incidental at best. I would like to see more care and thought put into what has been our main source of income, historically, since the gold rush.
- Good use of underused land.
- Skagway has a huge opportunity and responsibility at this time to assess current port use and to consider future potential and plan management accordingly. Our economy is heavily reliant on tourism and we talk about the need to diversify but the port actually is already quite diverse with freight, fuel and ore movement. But is it located and integrated as well as it could be to fully and efficiently operate each type of use?
- Reconfiguration of uses to more efficiently utilize the port area.
- Phase 2 has tons of options and potential to re-create the basin and separate out cruise/tourism and more industrial uses.

Environment Improvements & Sustainability

- Environmental improvements & general maintenance.
- Cleaning up pollution.
- A town that sets an example of cleaning up areas that were once polluted under an era with few regulations.
- It is the opportunity to do what we already do better and make it more sustainable for the long-term.
- For mining: confirmation of "best practices" at mining locations, as well as a transport route, and offloading.
- Better environmental protection.

Economic Impact

- An income for the town that is fair and just and can actually help this community instead of White Pass' unfair payments.
- I think the waterfront has been largely treated as an incidental. I strongly feel that taking more of a 'Disneyland' approach to both the waterfront and the business historic district will increase both our revenue, and our rating as a cruise ship destination.
- Opportunities to diversify the economy, generate revenue and enhance the environment.
- The waterfront is Skagway's primary asset to generate economic growth. We need to regain control of the docks and ensure that we can capture more of the money generated here.

Infrastructure Expansion

- Ore/Broadway docks can be expanded/improved in the short-term to accommodate current vessels requesting to call in Skagway.
- Skagway is in need of a roll on - roll off cargo area for freight and equipment. A floating dock is also needed for not only large ships but smaller 225'ships/Motor yachts.
- Dock expansión.
- Replace ore dock.

Small Boat Harbor

- I would like to see the small boat harbor expansion continue.
- Larger Small Boat Harbor.
- Expansion of the small boat harbor is needed for additional commercial traffic as well as recreational vessels.

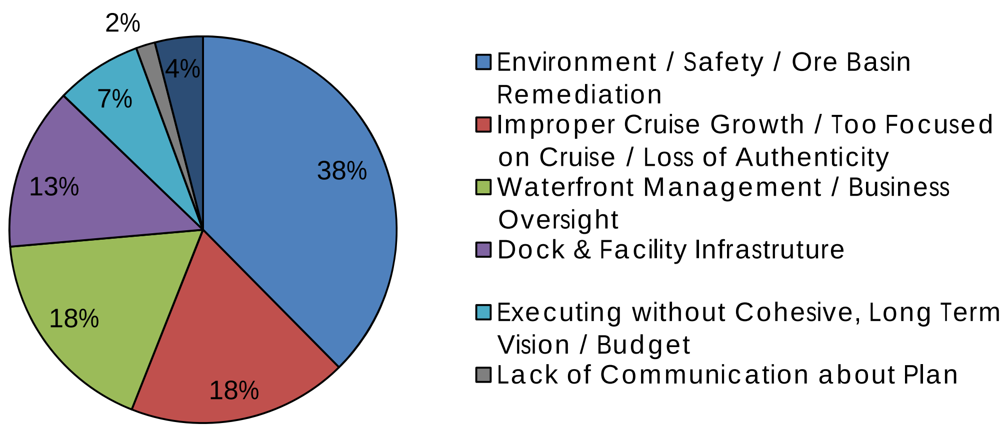
Ferry

- Ferry Service Expanded- perhaps MOS Run.
- Since we cannot count on a good ferry schedule, then the city and other communities must lease or create their own ferry services.

Summary of Respondents Concerns for Skagway's Waterfront

Respondents were asked, "Do you have specific areas of concern for the city of Skagway's waterfront?" The comments have been grouped into categories of concerns that the respondents identified. A large number of respondents were concerned over the ore docks and the remediation required. Multiple comments on forms were categorized in different areas of concerns, as needed. Specific comments for each category are included below.

Concerns Identified per Category
(multiple responses could be written by each respondent)



Environment / Ore Basin Remediation

- I'd like to see the Ore dock area cleaned up and rebuilt; it is currently dilapidated.
- Ore dock clean up and replacement.
- Clean up the Ore basin.
- Remediation around the Ore dock.
- Hazards and pollution at the ore dock.
- The main concern at the moment is ore basin remediation and uplands development.
- More contamination if we continue to use the ore terminal.
- Ore dock improvements (dredging & replacement).
- Pollution from ore shipment.
- Get the Ore cleaned up from the Ore Dock.

- Mitigation of contamination along Ore dock
- The un-remediated pollution of the ore dock.
- Waterfront contamination of the ore dock.
- I would like to see contamination fully remediated and the Ore terminal modernized.
- The Ore Dock basin contamination cleanup and subsequent remediation must happen as soon as possible.
- Environmental.
- How any changes may affect the harbor seals, whales, salmon...all the ocean life that lives there.
- Pollution.
- Frequent reports of pollution and waste. People fishing and shrimping in these areas of pollution.
- The landslide is a huge concern. I see some work being done down there, so hopefully, it'll be a safer environment there.
- Would like to see the estuary area at the mouth of the Skagway River be maintained and protected as an estuary and non-commercial recreation area (i.e. not developed as a site for an additional dock).

Dock / Facility Infrastructure

- Creating a new modern cruise ship docking facility capable of berthing breakaway class ships.
- Improving guest access and signage between docks and town.
- Overall dock infrastructure.
- Skagway is in need of a roll on-roll off cargo area.
- Adequate restroom facilities for Cruise Pass.
- Additional dredging and expansion in the small boat harbor.
- State ferry float replacement and adequate service.
- The barge needs to be able to dock even if there are cruise ships in port. Freight coming a day late is NOT ACCEPTABLE!
- AMHS ferry schedules.
- We need our ferries back!
- There should be a limit on cruise ship dockings. The saturation of visitors is affecting the quality of life in town. We don't have the infrastructure to support the number of people we have arriving daily. Until our poop plant and incinerator situations (Public Works Depts) are upgraded and we have more public bathroom facilities and waste removal/ recycling practices in place, we should NOT be increasing ship numbers.
- Additional restrooms for the railroad dock-immediate, as well as other docks.
- I believe we are getting close to our saturation point with seasonal visitors. Without upgrades to our existing infrastructure, we will not be able to accommodate many more visitors each year. At some point, this is going to affect the visitor experience and have a negative impact on our community.

- Unchecked expansion of cruise ship numbers without a corresponding update of infrastructure.

Cruise Industry Focus / No Diversification

- Way too many tourists already & the push by business interests to get even bigger boats & even more tourists.
- There is, to some degree, the perception that many communities are owned by the cruise lines. It is my hope that as development, improvements and new tenants move onto the waterfront those changes do not encourage this perception.
- Cruise docks and small boat harbour.
- Cruise Industry Focus.
- I am concerned about the cruise industry controlling the waterfront as well as egress to and from town.
- I am concerned the cruise ship industry has too much control and pull on the city's management of the waterfront. I am concerned that WPYR was sold to Carnival Corporation and the relationship between the cruise ship industry concerning our docks, ships, railroad, and overall general access can be manipulated more than people may realize. We should not let the cruise ship industry dictate how we run our town.
- I think it is inevitable, unless we take definitive action, that corporate retail establishments (many owned by cruise lines) will gain a foothold on the waterfront. This will result in a scene that is typical of most cruise ports. Jewelry and Watch store chains that monopolize the waterfront and deter passengers from exploring downtown.
- I would hate to see Skagway put in a floating dock to accommodate another ship in town.
- Maybe not specifically waterfront, but related to tourism: I'm concerned that the city of Skagway may be looking at a possible "bubble," in that much of what helps visitors enjoy Skagway will be lost if we have continued growth.
- I worry about the plethora of ships and how they are constantly increasing in size and quantity per day/week. I think that should be limited so as not to overwhelm not only our port but also our town.
- That it is not an empty soul-less touristy ghost town in the Winter.

Waterfront Management

- Municipality is not able to gain some sort of control / oversight to the waterfront, which leads to missed opportunities and mismanagement.
- A conglomerate cruise ship company running a multi-use port. As well as the MOS not being prepared to take on this oversight.
- As I understand it, White Pass built our docks. They deserve consideration for this, be it compensation or a new lease.
- Mainly concern for Skagway in general. We have a very professional and very good mayor and team right NOW. But HOW do we lock in this momentum with

each election cycle? Praying for civility on how we proceed with White Pass Company.

- Moving away from White Pass' monopoly on control of the docks & their unfair monetary payment for the docks.
- Outside entities/ Corporations taking over any of our lands.
- RFP process could introduce outside, third-party interest or management of 1/2 of the port creating a less efficient model in which Skagway as a whole loses out.
- That Skagway's municipality will get in way over their heads and not know how to take care of it properly.
- Too much municipal involvement.
- We need to manage it better, having more oversight and no longer lease it out to White Pass.

Executing without Cohesive Vision

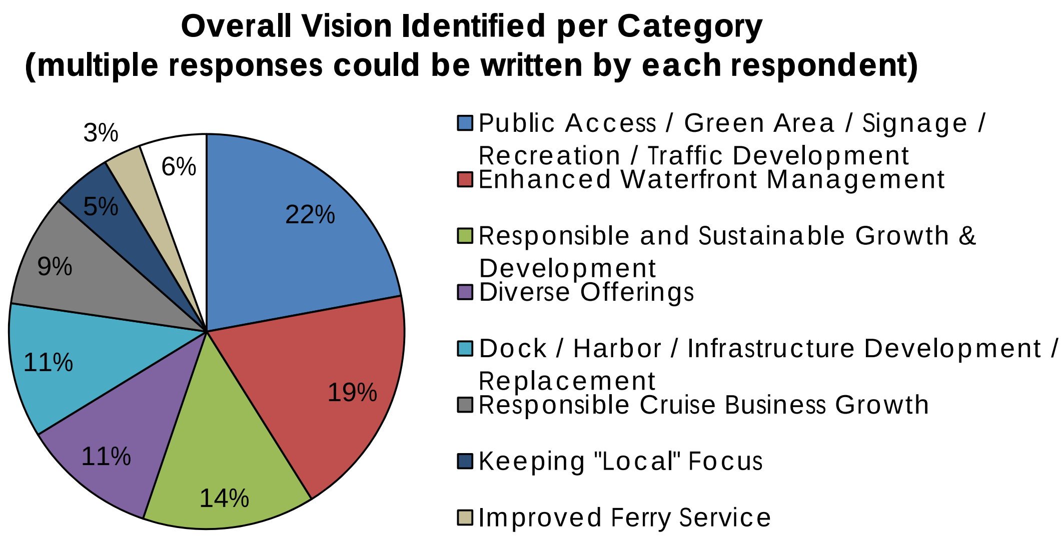
- Huge potential, small space-- developing any one area will impact the other.
- Developing any one area will impact the other; plan needs to be as forward-looking as possible to ensure long term sustainability.
- Consider implementation and maintenance costs to ensure waterfront can run in an efficient and profitable manner now and into the future.
- I would like to see the freight/petrol/mining & AML moved to the far west side of the port, separate from the cruise/passenger areas. This area might be where Temsco has it's helicopter base. Temsco could move to an unused area of the airport just east of the airport terminal inasmuch as their helicopter tours do not require waterfront access. In addition, the helicopters are very loud, making it uncomfortable for cruise passengers at dock.
- Issues with competing for waterfront uses and how to find solutions agreeable to all users.
- Rapid expansion that could potentially lead to accelerated erosion.
- The vision needs to be as forward-looking as possible 25+ years to ensure long term sustainability. The development needs to be in line with our history and aesthetics of our community.
- Vast amounts of wasted land at the ore terminal and small boat harbor staging area.

Miscellaneous

- Public Safety for the residents and increasing number of passengers that visit.
- Safety and security for the public and traffic flow.
- We are a tourist town and cruise ships should have priority (when it comes to our economy) when we think about our future and long term planning.
- Pedestrian safety.
- Improved design.
- Railroad dock rock wall instability.

Summary of Respondents Preferred Vision for Skagway's Waterfront in 20 Years

Respondents were asked, "What is your preferred vision for the city of Skagway's waterfront in 20 years?" The comments have been grouped into categories of overall visions that the respondents identified. Multiple comments / visions on forms were categorized in different areas, as needed. Specific comments for each category are included below.



Enhanced Waterfront Management

- Municipality takes larger role in the management of the waterfront.
- Municipality receives larger portion of the revenue waterfront generates.
- Mixed responses (Municipality operates vs. oversees a third-party operator).
- Continuation of White Pass management of waterfront in partnership with Municipality. Phase I starts now and improves/expands Ore/Broadway dock and then Phase II with the preferred alternative being a new T-Berth off of current Ferry uplands with the reconfiguration of the port to accommodate all current users.
- I would like to see the Municipality have more control over the docks. The docks should be a much greater source of income for the Municipality. Partnering with another entity would be a good idea.
- Mixed usage as it has been, with the city taking more responsibility and garnering more revenue from the port by sharing control of the waterfront (taking a more active role).
- It could be managed by the MOS with a 3rd party to assist in the ship scheduling.
- Waterfront access and berthing areas controlled and managed by the MOS, with a dedicated port manager or contracted management firm.
- City is managing (could be by third party management) our waterfront.
- Skagway takes greater control of its waterfront.

- The municipality managing the docks or hiring an entity to do so, moving away from the current unreasonably cheap lease(s).
- More direct management of waterfront through use agreements; more flexibility to make changes to waterfront infrastructure and uses.
- Municipal Control.
- For the community of Skagway to have and hold the control of the waterfront
- Take control of it.
- The city must retain control over the development and usage of the waterfront.
- The City has its waterfront back and it's not leased out to a private commercial company.
- The city should be operating it...
- The municipality has control over the waterfront. The cruise ships adhere to the city's desires, if the ships would like to continue to come to SE communities they need to maintain the waterfront (upkeep/repairs) but not control it.
- We should take a larger roll in the development and oversight of our waterfront.

Public / Green Area / Signage / Traffic Development

- More pedestrian-friendly pathways and signage.
- Beautification of waterfront – pedestrian access, walkways, more green spaces, better wayfinding signage, dining options, and traffic congestion solutions.
- Better traffic flow for pedestrians and vehicles around the train tracks.
- I dream of the entire area being remediated and made into a green zone/park/retail combination. It would soften the industrial look of the waterfront and encourage a connection with outdoor recreation.
- A clear view down the canal still. Clean areas. A green belt. Pedestrian access all year.
- Attractive accessible multipurpose clean tree-lined dynamic nice place to hang out.
- Developing and maintaining an aesthetically pleasing and inviting corridor to town that has clear signage and directions.
- I would like it to be aesthetically pleasing, not that it isn't now.
- I would like to see more pedestrian walkways and public areas along the waterfront.
- Improved signage/traffic control measures to make it easier for visitors to make it back to their correct docks. The current signage and traffic flow patterns are terrible.
- Pedestrian Access; tourism- esthetically welcoming; clean up the clutter.
- Recreational access to the waterfront, walking paths, parks and/or green spaces, etc.
- Whatever it may be, I hope that trees and foliage are the first entities to greet visitors instead of high rises and commercial buildings. Countless visitors compliment the scenery of Skagway, let's not lose that effect.

- A park with a few vendors selling food and drink and places for people to sit in the shade and people watch. Some trails connecting it to town. Give people a place to get out of the crowds of Broadway. Live music there would be awesome!
- Easy access for passengers to downtown, better access for tour buses and increased parking for tour buses. Less bus/tour traffic on Broadway.
- I would like to see a better transition from the docks to the city. It feels very separated right now and unwelcoming. Also, it makes it difficult for guests to find their way back to the ship.
- Efficient and seamless traffic flow for vehicular and pedestrian traffic.
- Clear concise signage and travel corridors for visitors to and from the waterfront.

Dock / Harbor / Infrastructure Development / Replacement

- Increased visitor amenities in the waterfront area- water and sewer service extended to all docks.
- Up-to-date on necessary infrastructure improvements.
- Modern / safe infrastructure to benefit citizens, cruise ships, and other industries that drive economy.
- Expanded small boat harbor, replacement / remediation of the ore dock, a roro facility, and a new dock to support large cruise vessels.
- An expanded small boat harbor with a preference for slips given to Skagway community members.
- I would like to see an expanded small boat harbor.
- Harbor Expansion.
- Dedicated industrial use on the West side of the harbor.
- Dual berth floating dock in place of relocated Ferry terminal capable of docking two mega-size cruise ships.
- Build a new dock that can accommodate 2 of the largest cruise ships and also be used for loading ore when ships aren't present.
- Dredge and replace ore dock.
- I'm not opposed to continuing the transshipment of ore but would like to see a more modern facility (containers) with a low possibility for re-contamination.
- Roll on -Roll off facility.
- Floating dock with Ro-Ro capability.
- Increase use with neighbors to the North (freight, mining, trucking, cargo & LNG?).

Diverse Offerings

- Skagway needs to be more economically diverse.
- Serving a variety of year-round businesses / tenants.
- A conscious and better "balance" between the cruise industry and other commercial industries.
- Year-round active multi-use port for multi-tenants.
- Consistent port use and activities throughout the entire year through a public-private partnership.

- Economic/Industry versatility.
- Harmonious industries and thoughtful communication amongst all players.
- Increase in Marine trades; Balance between Commercial and Cruise industry trades.
- My vision for the Skagway waterfront would include a BALANCE of cruise-ship visitors and independent visitors that arrive at the improved railroad and broadway docks.
- The ability to have a diversified year-round economy.
- Keep the diversity; research Yukon/Canadian/Alaska highway corridor needs and barriers to partnerships.
- I'd like to see the port continue to be able to service 4 large cruise ships at a time, without giving up the ability to ship cargo and service recreational users.

Overall Responsible and Sustainable Growth & Development

- Less emphasis on economic growth, more emphasis on quality of experience. Planning that addresses possible pollution and climate change adaptations (i.e. cruise ship plugin to Skagway hydro-electric grid).
- Environmental cleanup.
- I hope that in the next 20 years the waterfront is remediated (Ore Dock area), and that the port is upgraded in a measured way to handle whatever the community decides is a sustainable amount of visitors.
- Developed thoughtfully, professionally, and with the city's well being and environment top of mind (sustainable and smart growth).
- Sufficient infrastructure in place before growing traffic.
- Pollution and climate change technologies (i.e. shore power, LNG, etc.).
- New dock facilities, move the ferry terminal and dock to the west, reimagine tourist flow and traffic flow to make more sense. It's just a jumbled mess now.
- Sustainable improvements that benefit the town.
- I want to see Skagway's waterfront welcoming tourism & other industry that does not harm coastal and marine life, that is free of pollutants.
- I would like to see improvements/restorations to the current waterfront, but feel that adding additional docks/extensions would be detrimental overall.
- To keep it from getting too commercialized.

Responsible Cruise Business Growth

- The continued growth of the cruise industry and evenly spread the ships out more.
- Understand importance of cruise industry, but want it developed responsibly.
- Sufficient docks / facilities to accommodate increased cruise visitors.
- Emission / pollution regulation and technologies.
- In 20 years if cruise ships still exist, I would hope they are completely non-polluting. If not, they should not be allowed here. Cruise ships are one of the #1 polluters. Let's not follow corporate greed & keep our water & air clean.

- To make the cruise ships feel welcomed here and to have them invest in our community.
- The citizens and the city should decide what happens and how many ships/visitors we have in town. We are at carrying capacity already, I can't imagine how overrun we may be in 20 years if there are no measures put in place in the near future.
- Capping the allowed number of visitors via cruise ship.
- Less pollution (cruise ships & ore dock) NOT more cruise ships! 12,000+ people are enough!

Local Business Development

- I would like to see an expanded small boat harbor and possibly more locally owned businesses along the waterfront.
- More locally owned business along the waterfront.
- Provide more retail locations (small businesses) that cannot afford the rental prices on Broadway.
- Improved waterfront benefits local residents / retains culture & “charm”.
- More locally owned businesses along the waterfront.
- Local culture (food, arts, entertainment) encouraged to flourish.
- I'd like to build and protect an extended shoreline walk-way where local fare (food, arts, entertainment) are encouraged to flourish. Skagway is home to boundless talent in these areas and building a platform for their success would ensure the healthy growth and development of our community. Large, corporate, businesses, often owned by cruise lines or giving kickbacks to cruise agencies, could be steered to our downtown buildings with the use of zoning restrictions or other regulatory measures.

Improved Ferry Service

- Ferry service out of Skagway improved / expanded.
- An improved Ferry Terminal (that has had all the upgrades it requires).
- Develop public marine transport (ferry).

Miscellaneous

- An enhanced version of what it is now.
- For Skagway citizens to benefit Skagway citizens.
- Restrooms on the piers.
- Additional restrooms.
- No high-rises. Keep the 1898 theme going.
- Intertie of docks to each other and the downtown area. Separation of passenger and industrial operations.
- I think more development on the uplands to support current and projected levels of cruise traffic is important.

- I'd like to see the small boat harbor yard and boat shop continue to be utilized by the fisherman of the Upper Lynn Canal.
- No more ore shipping that does not benefit the community directly.
- This may be more detailed than wanted but the small boat harbor expansion should be completed to a degree (keep the pullen creek RV park), dredged material from this expansion should go to extend the southern tip of the ore dock parking lot as well as part of the eastern side. The ferry terminal and parking lot should then be moved to off the southern part of the ore terminal parking lot, a double floating dock should be built off the end of the old ferry terminal location with that parking lot becoming the Skagway cruise port, the existing broadway dock should be removed (could consider keeping for small luxury cruise ships such as Viking), the existing broadway dock parking lot should have a second set of train tracks installed in it and serve as a staging location for buses. the Ore terminal should be reduced in size and the remaining western side of the port (AML to Petro) should be turned into an industrial park. The existing ore dock should be completely removed and rebuilt to be a heavy capacity dockable to load and unload different barges or vessel types, with a priority of industrial/ non cruise ships but it would also serve as a 5th cruise berth for emergencies such as a rockslide preventing docking at railroad (not to be mistaken with encouraging for 5 large cruise ships). AML should remain in its location as well as Temsco. Last, new docks should be designed with ships being able to plug into the local power grid in mind, if this technology isn't ready for Skagway yet, we should be prepared for when it will be.

Observations

General observations suggest most respondents would like the waterfront to be a place that the Municipality of Skagway citizens can benefit from economically through diverse business offerings, but also where the citizens and visitors can enjoy the area through pathways and park development along the water. In general, the respondents would like to see more recreational access to the waterfront, via walking paths, enhanced signage, parks and/or green spaces so both residents and tourists alike can benefit.

To achieve this, the respondents saw a major need for infrastructure improvement / expansion. Many also would like to see the City take a more overarching role in the management of the waterfront versus the current business model. They feel this could help boost the economy and economic impact to the community for improved infrastructure and services which the waterfront facilitates.

Finally, the vision of diverse businesses (not focused solely on cruise) and year-round activity to help generate economic growth was commented upon as well. Sustainable growth and a holistic vision to improve the waterfront was echoed throughout the responses.

Overall, it is clear that there is great interest and support for the future of Skagway's waterfront from the community, and a desire to continue a dialogue with the public while the Strategic Plan is furthered developed and as implementation proceeds over the short to mid-term.

Thoughtful input was provided on all areas of interest. It will be beneficial to continue the dialog and share updates with the public as the plan progresses into the next phases.

Appendix

Notice of Public Meeting

NOTICE TO THE PUBLIC

MUNICIPALITY OF SKAGWAY

COMMUNITY INTRODUCTORY MEETING ON "THE STRATEGIC PLANNING AND EXECUTION OF CRUISE RELATED FACILITIES" PROJECT FOR SKAGWAY, ALASKA

This meeting will be held in the Assembly Chambers at City Hall on September 24, 2019 from 4:30 p.m. – 5:30 p.m.

PLEASE JOIN US FOR AN INTRODUCTION OF THE BERMELLO AJAMIL & PARTNERS, INC. TEAM AND OVERVIEW OF THE PROJECT and TIMELINE

A LINK TO ALLOW FOR MEMBERS OF THE COMMUNITY TO HAVE A DIRECT PORTAL TO COMUNICIATE THEIR INPUT RELATED TO THE FUTURE OF THE WATERFRONT OF THE MUNICIPALITY OF SKAGWAY WILL BE POSTED ON THE EVENING OF SEPT. 24, 2019.

POSTED SEPTEMBER 18 2019

Online Feedback Form

Bermello Ajamil & Partners

Municipality of Skagway: Strategic Planning & Execution of Cruise-Related Facilities - Waterfront Feedback

The Municipality of Skagway has retained Bermello Ajamil & Partners to develop a Strategic Planning and Execution Project for its cruise and waterfront-related activities (freight, fuel, ferry, and mining). Your feedback is important to us. Please use this form to provide your thoughts or suggestions on the future of Skagway's waterfront.

Name:

First Name   Last Name

Are you a resident of Skagway?

- Yes
- No

Age:

- 18-34
- 35-54
- 55-64
- 65+

Check all that apply:

- I am an interested citizen
- My business depends on the Skagway waterfront
- I am involved in the tourism / visitors industry
- Other (please fill in description below)

Other involvements with the city of Skagway's waterfront not specified:

What is your area of interest?

	Not Interested	Somewhat Interested	Interested	Very Interested
Cruise & Tourism	○	○	○	○
Ferry	○	○	○	○
Commercial Development	○	○	○	○
Cargo (Freight, Fuel, & Mining)	○	○	○	○
Vehicular Ingress / Egress	○	○	○	○
Pedestrian Access	○	○	○	○
Recreational Marine	○	○	○	○
Recreational Areas	○	○	○	○
Environmental	○	○	○	○

Other areas of interest not specified:

What areas of opportunities do you see for the city of Skagway's waterfront?

Do you have specific areas of concern for the city of Skagway's waterfront?

What is your preferred vision for the city of Skagway's waterfront in 20 years?

Respondents Affiliation to Project – "Other" Responses

My job depends on the waterfront activities
My job has a primary interest in economic and community development that will enhance opportunities to increase Skagway's resilience
Longshoreman, former Port Manager, former Mayor of Skagway, current chairman of Skagway Port Commission
Also an assembly member
City Manager
I am Harbormaster for the City of Skagway. My job is directly related to tourism, and commercial operations
I am the borough clerk for the Municipality of Skagway.
On harbor advisory board
I am on Planning and Zoning, I am also the water and wastewater superintendent. The wastewater plant location will play a role in any future development on the waterfront.
I am the Harbormaster for Skagway's Small Boat Harbor. Boat Haul outs, Marine trades, Storage, Freight, Charter boats, Ferry traffic, Cruise Passenger operations (restrooms, staging, vessel availability, signage, and accessibility
I work for the water/wastewater department. I'm also on Planning and Zoning.
Small Boat Harbor User
Have kept a boat at the small boat harbor.
I own a boat and use the waterfront.
General Community Betterment
The development of the waterfront is critically important to every aspect of Skagway. I'm very interested in being involved and informed in the process
I like looking at the scenery, critters, and happy people
I like walking there
My grandchildren are going to grow up here
Law enforcement
Public Safety
Economic / Environmental Longevity
I would like to see Skagway thrive, with such limited resources available it seems imperative that Skagway utilize what resources it possesses to their fullest potential
I'm concerned about the environmental longevity of Skagway's waterfront as well as the economic longevity
Our port infrastructure has been dominated by railroad decisions and the railroad interests have come first. The Alaska Marine Highway System shares a dock with the Municipality of Skagway. It is a critical transportation link. The Muni used to move barge freight across this dock. Also not mentioned is the ecological impact which has clearly been ignored by WP&YR.

Respondents Interest Level Based on Waterfront Activities – "Other" Responses

Safety & Environmental
Pollution remediation, environmental hazards to existing docks
Increasing Public Safety
Tidal power generation in conjunction with development. Possible expansion of waterfront area through infill
What about the boulder and consistent erosion taking place along the cliffside East of the railroad dock? It seems folly to me to expand the area with such a devastating potential landside in the foreseeable future
Holistic Vision of the Waterfront
Creation of a cohesive greenbelt buffer zone between industrial and upland commercial or residential zones.
I am interested in the big-picture part of the development. How the pieces will work together as well as work with any upland improvements to help the long-term viability and opportunities for our port.
Port oversight & management
Fishing
Fishing which I guess is under the category of Recreation Marine
Walking access to fishing and shrimping (without a boat)