2018

PACIFIC PILOTAGE AUTHORITY

ANNUAL REPORT

Pacific Pilotage Authority | Administration de pilotage du Pacifique

Canada

Board Members and Management

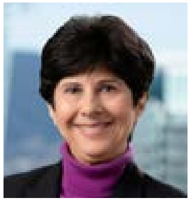
BOARD MEMBERS

Mrs. Lorraine Cunningham
Chair*

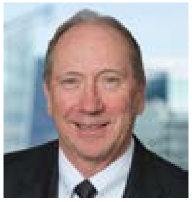
Mr. Peter G. Bernard, Q.C.
Member*

Ms. Victoria Withers
Member*

Mr. James Marshall
Member



Ms. Billie V. Raptis
Member*

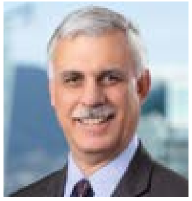


Captain Al Ranger
Member

Ms. Katherine Bright
Member*

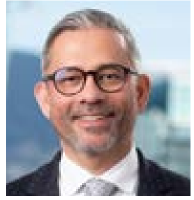
* Member of Finance and Audit Committee

MANAGEMENT



Kevin Obermeyer
CEO

Stefan Woloszyn
Chief Financial Officer



Brian Young
Director of Marine Operations

Alan Wheatley
Manager of Information Technology

Bruce Chadwick
Corporate Secretary

Teresa Lei
Manager of Finance & Administration

Bruce Northway
Manager, Operations and Labour Relations

Paulo Ekkebus
Assistant Director of Marine Operations

Isabelle Forget
Executive Assistant

Alexandra Deffense
Senior Administrative Assistant

Design: Dean McNeill Creative Solutions (Dean McNeill & Darrell Freeman); Translation: Tranductions F. Orvoine; Photography: Dave Roels

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Corporate Information

MANDATE

The mandate of the Authority is to establish, operate, maintain, and administer in the interest of safety, an efficient pilotage service within the region set out in respect of the Authority, on a basis of financial self-sufficiency.

MISSION

The Pacific Pilotage Authority is dedicated to providing safe, efficient pilotage by working in partnership with pilots and the shipping industry to protect and advance the interests of Canada.

VISION

The Authority's vision statement is
'To be a world leader in marine pilotage.'

The Authority has been very thoughtful and deliberate in setting our sights on becoming a world leader in marine pilotage. Our vision is by its very definition bold and ambitious – just like the team members who make up the Pacific Pilotage Authority and our strategic partners. To achieve our vision the Authority must demonstrate:

- An industry-leading safety record that is second to none
- A culture of operational efficiency where customers receive value for fees paid and the Authority is self-sustaining
- A leadership role in the industry – regionally and nationally

Contact

HEAD OFFICE

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Vancouver, BC V6E 4A4
Tel: 604.666.6771
Dispatch Fax: 604.666.6093
Administration Fax: 604.666.1647
Email: info@ppa.gc.ca
www.ppa.gc.ca

DISPATCH OFFICES

1000 - 1130 West Pender Street
Vancouver, BC V6E 4A4

211 Dallas Road, Victoria, BC V8V 1A1

PILOT BOARDING STATIONS

Sand Heads, off Steveston; Brotchie Ledge, off Victoria; Cape Beale, off Port Alberni; Triple Island, off Prince Rupert; Pine Island, off Port Hardy

CORPORATE OBJECTIVES

1. To provide safe, reliable and efficient marine pilotage and related services in the coastal waters of British Columbia, including the Fraser River.
2. To implement sustainable practices within the Authority and contribute to government's environmental, social and economic policies as they apply to the marine industry on the Pacific coast of Canada.
3. To provide the services within a commercially-oriented framework, by maintaining financial self-sufficiency, through a combination of cost management and tariffs that are fair and reasonable.
4. To achieve the highest productivity of the Authority's resources in the interest of safe navigation.
5. To assume a leadership role in the marine industry we serve, by facilitating decisions resulting in improvements to navigational safety and the efficiency of marine operations.

CORPORATE VALUES

Management and Board members review the Authority's corporate values annually to ensure their continued relevance and applicability. The Authority's corporate values are:

1. Honesty/Integrity. We will ensure honesty and integrity in everything that we do. We share responsibility for being effective, accountable and acting appropriately. We consider the outcome of decisions for all those affected before we implement change. We act with visible integrity and openness, and support each other in these actions.

2. Positive Stakeholder Relations. We will work hard to maintain positive relations with all stakeholders including the shipping industry, the pilots and their respective organizations, our employees, the communities in which we operate and all other related individuals and organizations.

3. Service Quality. We strive for excellence in all our activities. We continuously learn, develop and improve. We take pride in our work and in the services we provide to our clients and partners.

4. Accountability/Responsibility. We are accountable, as individuals, team members and as an organization for our actions and our decisions. We make effective and efficient use of the resources provided to us. We adhere to our policies and procedures, our mission and objectives, and to the Regulations governing us. When our commitment to innovation is at odds with existing procedures, we will work within the system to achieve positive change and improvement.

5. Adaptability and Innovation. We value innovation and creativity. We encourage and support originality and diversity of thought. As individuals and as teams, working with our internal and external partners, we welcome new ideas and methods to enhance our service and the use of our resources.

Our success is largely a result of the excellent relationship we enjoy with our shareholders, the industry we serve and the pilots moving the vessels safely on our coast.

Chair & CEO Letter

March 20, 2019

The Honourable Marc Garneau
Minister of Transport
Tower C – Place de Ville
330 Sparks Street
Ottawa, ON K1A 0N5

Dear Minister:

On behalf of the Board of Directors and management of the Pacific Pilotage Authority, we are pleased to submit our Annual Report for the year ended December 31, 2018.

The Pacific Pilotage Authority has managed well through some challenging fronts in fiscal 2018. The marine industry that we serve continues to struggle with ongoing issues of overcapacity, limited cargo opportunities and low charter and freight rates. These challenges in the marine industry we serve are, we believe, the new normal in which we will be required to operate. This has a direct impact on how the Authority operates and as a direct result has pushed us to continually find ways to minimize costs and keep our tariffs at a minimum whilst still maintaining our world class safety record.

We are proud to have worked collaboratively with all of our stakeholders and successfully represented the variety of interests of industry in 2018. We continue to work together with industry and the B.C. Coast Pilots to realise the benefits of a sophisticated internally built traffic, financial, and workforce planning model. The model is being used to guide tariffs and to make effective manpower decisions. The model is also being used to directly address concerns about the Authority's financial exposure to fluctuations in demand for pilots, either through changes in product sector demands or through large industrial project development on the west coast of Canada. The same model was used to gain unilateral support from our industry stakeholders for the 2018 and 2019 tariffs.

We completed 12,234 coastal assignments and 1,130 Fraser River assignments on the west coast of Canada in 2018. This translates to a 1% increase in the number of ships moved as compared to 2017. We have seen significant growth in coal sector assignments in 2018 and some contraction in the forest products and grain sectors.

The two most important factors in meeting our mandate of providing a safe and efficient pilotage operation on the west coast of Canada are our safety record and the number of delays to vessels caused by the Authority. Our safety record on Canada's west coast remains extremely high with only five minor incidents reported in 2018 for a success ratio of 99.96%. With regard to delays, our success ratio was 99.97% with four Authority related delays in the year. We will continue to work with industry and the pilots in order to reach the elusive 100% success ratio both for safety and reliability.

This year we experienced our first year of profit, in accordance with our plans, after five consecutive years of planned losses in order to reduce our surplus and the impact of the tariff on the industry. We posted income of $2.1 million on $93.0 million in revenues. Profits were budgeted in consultation with industry and agreed upon by our Board of Directors in order to assist in re-establishing previously drawn down reserves. In fiscal 2019, we have implemented tariffs which will continue to moderately improve the Authority's financial position so that modest positive cash flows will be achieved. As a result of achieving our budgets, we are proud to report that fiscal 2019 will be the last year in which we will apply our $100 per assignment temporary surcharge. The result will be lower profits in subsequent years and a re-established positive but small margin for our business. These actions were all planned through consultation and support from the industry we serve.

The review of the *Pilotage Act* required a significant amount of our focus at the end of fiscal 2017 and the beginning of fiscal 2018. We consulted with various stakeholder groups and responded to a multitude of consultant requests for information as studies were performed to look at potential and proposed changes to the Act. It is expected that recommendations on amendments to the Act will be brought forward in fiscal 2019, and we will work closely with Transport Canada and our stakeholders to implement legislated changes as a result of this review.

In 2018 we successfully concluded negotiations with two of our unions whose contracts were expiring. We concluded with four and five year contracts, moderate increases in costs (in line with our cost containment philosophy), and eliminated the risks of any stoppage to our business.

In 2018, we commenced a navigational risk assessment for Seymour Narrows and Johnstone Strait for large cruise vessels. We also conducted multiple studies using our in-house simulator.

We continued our outreach program in 2018. We visited ports and communities to share information on the safety of shipping and have actively sought out opportunities to showcase marine safety on the west coast of Canada. We participated in multiple meetings in 2018 regarding the use of anchorages in the Southern Gulf Islands and acted as a continued information source on the operational and financial effects of slowdowns on pilotage in the south coast. In this regard, we continue to build trust and confidence in our world class services.

The Authority will continue to pursue its mandate of providing a safe, efficient and cost effective pilotage operation on the west coast of Canada by meeting its strategic objectives and remaining committed to becoming a world leader in marine pilotage.

Our success is largely a result of the excellent relationship we enjoy with our shareholder, the industry we serve and the pilots moving the vessels safely on our coast. We express our appreciation to our dedicated Board of Directors, the management and staff of the Authority.

Respectfully submitted,

Lorraine Cunningham
Chair

Kevin Obermeyer
Chief Executive Officer

About the Pacific Pilotage Authority

What is the Pacific Pilotage Authority

Commercial vessels of 350 gross tons or larger, while travelling in Canadian pilotage waters, are legally obliged to use the services of a Canadian marine pilot as per the *Pilotage Act*. The Pacific Pilotage Authority is a federal Crown corporation whose mandate is to administer this service in the waters of Western Canada. Our area of jurisdiction encompasses the entire British Columbia coast, extending approximately two nautical miles from every major point of land. This jurisdiction includes the Fraser River and stretches from Alaska in the north to Washington State in the south and is one of the largest pilotage areas in the world. This is a unique feature which brings efficiencies to a coast wide pilotage model by enabling the Authority to quickly respond to the needs of the more remote ports. We will continue to operate this coast wide model as long as we can prove efficiencies and while we have the support of our stakeholders.

Marine pilotage is all about safety as it serves to protect the environment and thus the interests of the Canadian people. We hold ourselves accountable to the Canadian public in this regard.

CORPORATE GOVERNANCE

Corporate governance is the process of establishing and monitoring the policies and procedures which will ensure the appropriate stewardship of the business and affairs of the Authority, including financial viability.

As a Crown corporation, the Pacific Pilotage Authority operates at arm's length from its sole shareholder, the Government of Canada. While the shareholder provides policy direction for the corporation's ongoing operations, as stated in the *Financial Administration Act*, the Pacific Pilotage Authority Board of Directors ensures that the corporation fulfils its mandate by setting the corporation's strategic direction, organizational goals, and monitoring their implementation. The Authority reports to Parliament through the Minister of Transport.

The Chair of the Board is appointed by the Governor in Council on the recommendation of the Minister of Transport, and the Board of Directors is appointed by the Minister of Transport with the approval of the Governor in Council. There are seven members on the Authority's Board of Directors.

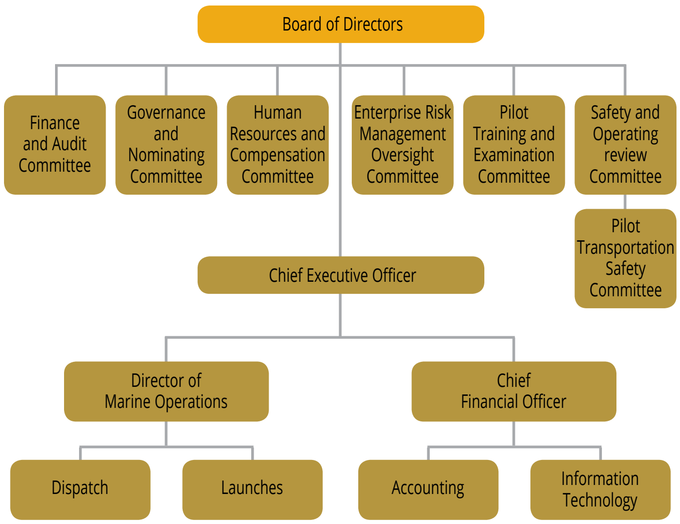
The Authority's Board of Directors has representation from Vancouver and Vancouver Island, with backgrounds in marine services, accounting, law, education, and technology.

The Authority complies with the Treasury Board guidelines on corporate governance practices (guidelines on Board responsibilities, public policy objectives, communications, Board and management relations, Board independence, the position of the CEO, renewal of the Board, education of directors, compensation, and the responsibility for corporate governance). The Board has developed a skills framework to assess the skills of Directors that are currently on the Board as well as those skills that are required for the future. The Board assesses its performance as well as the committees and individual Board members annually.

In addition, the Board has constituted several committees to focus on the major areas of the Authority. These committees are chaired by a Board member, have terms of reference and mandates and report directly to the Board on a regular basis.

The Authority is managed by a CEO who reports to the Board through the Chair. The Authority's organization chart indicates the reporting structure.

Pacific Pilotage Authority Organizational Chart



Committees

Finance and Audit Committee - the Chair and three Board members are designated as members of the Audit Committee. The Audit Committee meets nine times per annum and members are expected to be financially literate. Its mandate includes responsibility for all financial matters, external audit, internal audit and insurance.

Governance and Nominating Committee – this Committee meets four times per annum or at the call of the Committee Chair. Its mandate is to provide a focus on corporate governance, recommend candidates for Board membership as well as the Chair and CEO positions. This Committee also oversees new member Board orientation, the Board's self-assessment process, training and skills requirements, and succession planning of the Authority's management team.

Human Resources and Compensation Committee – this Committee meets on an as needed basis or at the call of the Committee Chair. Its mandate includes responsibility for the CEO's performance management program reporting required by the Minister, executive development planning and management compensation.

Pilot Training and Examination Committee (PTEC) – this Committee meets four times per annum and as required to conduct pilot examinations. Its mandate is to conduct pilot examinations and review ongoing training programs for pilots. It is presently chaired by a Board member and includes members of the Authority's management and BC Coast Pilots. The Committee is joined by one external examiner during annual pilot examinations.

Safety and Operating Review Committee (SORC) – this Committee meets four times per year with a mandate to review and assess pilotage practices and areas of concern and to seek solutions which result in improved safety and efficiency. It is chaired by a director of the Board and comprised of Authority management, BC Coast Pilots and members of the marine industry. The makeup of SORC was adjusted in fiscal 2017.

Pilot Transportation Safety Committee (PTSC) – this sub-Committee of the SORC Committee meets at least twice per annum or more frequently as required. Members of this Committee regularly attend launch stations to observe drills and inspect safety equipment. The Committee is responsible for establishing safety standards and monitoring the safe operation of pilot launches, water taxis, airplanes and helicopters utilized in the transfer of pilots to/from ships. It also ensures that the Authority adheres to regulations and safe practices issued by Transport Canada. It is composed of BC Coast and Fraser River pilots, Authority management and pilot launch personnel.

Enterprise Risk Management Oversight Committee (ERM) – this Committee meets at least semi-annually and is chaired by a director of the Board. The Committee is a function of the Board's role in regards to the risks facing the Authority. The Committee maintains a rigorous and coordinated approach to assessing and responding to all risks that affect the achievement of the Authority's strategic, financial and operational objectives.

The ERM system is designed to:

- Document, categorize and rank the Authority's risks in a risk register
- Ensure every identified risk is owned by a manager and/or Board committee
- Confirm that the risk register is updated regularly in accordance with the review schedule
- Ensure every risk is reported on by the risk owner on an annual basis
- Assist and facilitate the Board of Directors in its strategic risk oversight role
- Assist and facilitate the management team in its operational risk oversight role

The ERM Committee can liaise with the other committees of the Board of Directors to ensure that mitigations are established for each of the identified risks as deemed necessary.

Organizational Structure of the Authority

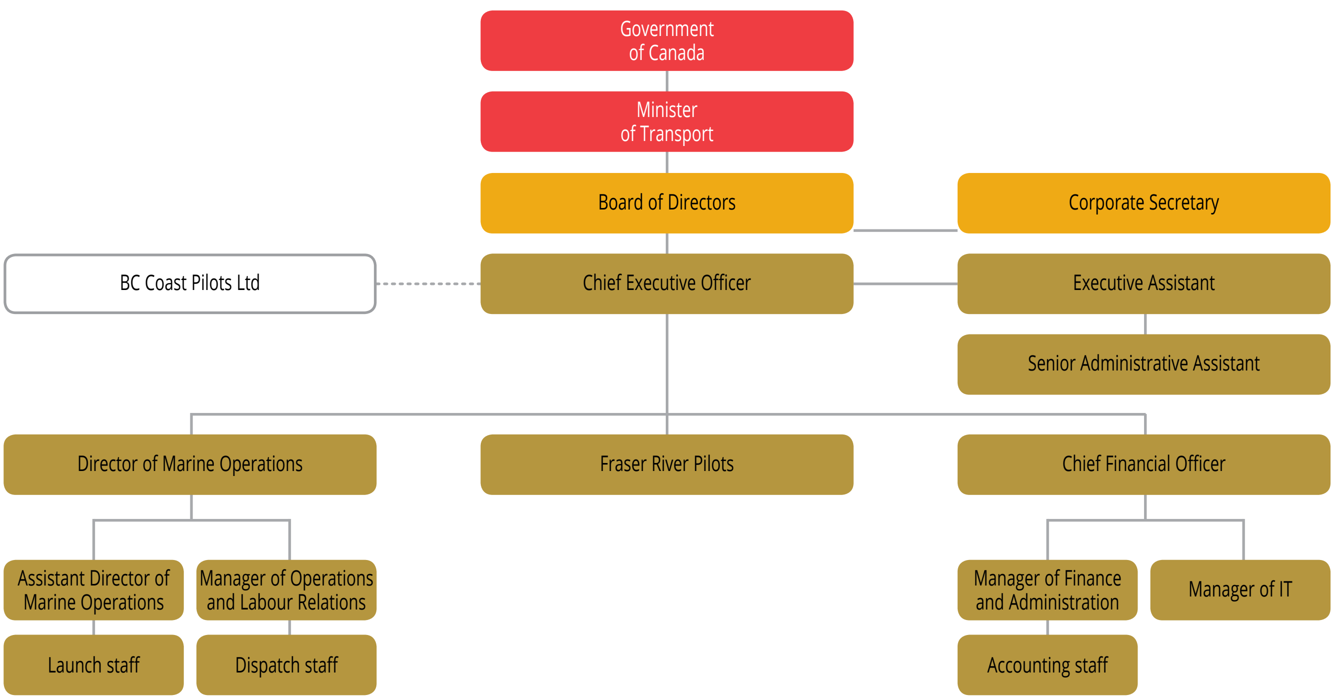
The Authority is managed by a CEO who reports to the Board.

There are nine management employees, eight employee pilots, seventeen dispatchers, six administrative and thirty-eight launch employees.

One hundred and eighteen entrepreneur marine pilots provide coastal pilotage services through their company, The British Columbia Coast Pilots Ltd (BCCP).

The Authority's organization chart indicates the reporting structure.

ORGANIZATIONAL CHART



The Authority has prepared succession plans for the senior management positions. These plans outline the recruitment process, skills criteria and timelines in the event of personnel change.

Overview of Operations — Year of 2018

This has been a challenging year for the Pacific Pilotage Authority. The marine industry that we serve continues its slow recovery which is hampered by ongoing issues of overcapacity, limited cargo opportunities, and low charter and freight rates. However, we also continued to see great potential for the Authority and its stakeholders in many areas.

In 2018, we have seen a number of proposed terminal plans turn into positive financial investment decisions with proponents spending a significant amount of time in dialogue with the Authority on the safe passage of vessels catering to their proposed products. In addition, numerous meetings were held with industry proponents to discuss future plans, terminals and shipping routes through our jurisdiction.

There are still many proposed industrial projects which are in the planning stage, and as such do not contribute to the Authority's overall volumes or that of the industry we serve, but the potential for increased traffic and demand for pilotage services continues to be reflected in our strategies going forward.

From a traffic standpoint, 2018 ended above prior year with 13,364 assignments (12,234 coastal and 1,130 Fraser River assignments). In total this is a 1% traffic increase from 2017.

Assignment traffic gains were noted in the commodity sectors including coal (10%), tankers (6%), containers (1%) and auto (1%), while decreases were noted in the forest products (12%), grain (10%), and cruise (6%) sectors. The coal sector was the most positively affected sector in fiscal 2018 with a 100 assignment increase in traffic as compared to fiscal 2017. The forest products sector was the most negatively affected sector in fiscal 2018 with a 192 assignment decrease in traffic as compared to fiscal 2017.

The Authority's customer base continues to be well diversified and as such, the impacts of significant single sector changes are not as magnified in the Authority's overall volumes. The Authority is very dependent on export of resource commodities to Asian markets and as such, any material effects in these markets will impact future trading volumes.

The Pilotage Act Review was completed in 2018, with recommendations made to the Minister of Transport. We consulted with various stakeholder groups and responded to a multitude of consultant requests for information as studies were performed to look at potential and proposed changes to the Act. It is expected that recommendations on amendments to the Act will be brought forward in fiscal 2019.

The Authority participated in the NEB reconsideration of the Trans Mountain Pipeline expansion as an intervener.

The Authority successfully engaged in various initiatives in 2018 given the nature of the business environment we are operating within. Some of the successes of fiscal 2018 included:

- Concluded two negotiations with our unionized employees (International Longshore Workers Union and the Canadian Merchant Services Guild)
- Manpower and Forecasting model
  - Engaged with the University of British Columbia ("UBC") to upgrade the Authority's advanced traffic, manpower and financial forecasting model. The model allows detailed financial and operational scenarios to be analyzed in real time with industry, our pilots and affected parties.
  - Industry stakeholders have asked for the model to be deployed in other jurisdictions and the Authority will be in a position to showcase the model in fiscal 2019.
  - The new forecasting model has also been embraced by the BC Coast Pilots (BCCP) with multiple presentations of the model to their membership. The model has been the catalyst for a new joint manpower process which is intended to guide future manpower decisions.
  - This is a major step forward from the past way of determining manpower and unprecedented in the Authority's history working with the BCCP.
- Navigational risk assessment commenced for Seymour Narrows and Johnstone Strait (large cruise vessels)
- In-house simulator used for the following (studies):
  - Realignment of English Bay traffic separation scheme into Vancouver Harbour
  - Docking and un-docking ULCC's (ultra large cruise carriers) in Victoria with RCL (Royal Caribbean Lines) and NCL (Norwegian Cruise Lines)
- On the outreach front, the Authority continues to make inroads and build relationships with the communities in which we operate (including municipalities, port authorities, port users, terminal operators, First Nations and local community residents and groups).
- This was the third consecutive year that the Authority obtained a clean audit on our ISO/ISM systems.
- The Authority exercised its purchase option on the Pacific Chinook in 2018, resulting in the vessel being moved to Prince Rupert.

Some of the challenges of fiscal 2018:

- Public complaints on the use of anchorages around the Gulf Islands
  - The Authority continues to engage with effected communities together with Transport Canada and the Vancouver Fraser Port Authority
- Slowdown zone
  - This continues to be a concern for industry and the Authority continues to engage in order to provide insight and evaluation of the financial and operational effects of proposed slowdowns

During the year the Authority's senior management group was asked to attend open houses and discussion groups relating to oil and gas, propane, container and grain terminal proposals. The Authority's CEO was quoted numerous times in both the print and radio media relating to pilotage safety measures and our ability to service the marine industry.

The Authority's financial results are traffic driven and with these assignment levels we recorded $93.0 million in revenues and income of $2.1 million.

The Authority's cash and cash equivalents ended the year at $6.2 million, working capital increased to $1.7 million and we have $1.8 million in debt with $1.1 million of financial reserves held in low risk, short-term Government of Canada issued or guaranteed bonds. As we are self-funded and prohibited from seeking Parliamentary appropriations it is essential we have strategies in place to ensure adequate funds on hand, control debt and maintain our ability to fund capital asset replacement programs.

As in past years, pilot training and skills enhancement remains a major focus for the Authority on which we spent $1.7 million in fiscal 2018. During the year eight coastal apprentice pilots received their licences and another thirteen were started on the apprenticeship program. The training costs associated with apprentice pilots are significant but are weighed against the costs of shortfalls in pilot availability. It is expected that the training of pilots is going to be a significant cost to the Authority for the foreseeable future given the current pace of industrial development on the West Coast as well as the impending retirement of members of the senior pilot group (and the resulting need to bring in replacement pilots).

There are two pilot exam sessions scheduled for 2019 (March and October).

Enterprise risk management (ERM) remains a top priority with the continued involvement of all our employees and contractors as we continue to incorporate these systems into the organization.

In 2018, the Authority continued to use the Kongsberg computer simulator for employee, contract and apprentice pilots trial and practice maneuvers. The Authority sees this training as an essential add-on to our training program in order to maximize safety and coast wide knowledge.

The northern areas of our jurisdiction, Prince Rupert, Kitimat and Stewart, continue to show promise as there are numerous projects, LNG and LPG terminals being discussed or planned for these areas. We do not know if any or all of these projects will be built but given the massive scale and potential of these projects, any positive investment decisions will drive significant changes in our operations.

Prince Rupert showed a 12% increase in overall assignment volumes in fiscal 2018. DP World's terminal expansion had a material impact to assignment levels with a 21% increase in activity in fiscal 2018. In addition, Ridley Terminals realized a 15% increase in coal assignment volumes in fiscal 2018.

In Vancouver we continue to monitor plans to increase container volumes including the Deltaport Terminal, Road and Rail Improvement Project (200,000 twenty-foot equivalent units (TEUs) of additional capacity), the Roberts Bank Terminal 2 Project (2.4 million TEUs of container capacity), and the Centerm Expansion Project (adding 900,000 TEUs of container capacity). There are also major projects being discussed and planned that will increase both coal and petroleum volumes through this port and the Fraser River. The Authority also expects the G3 terminal to add to grain volumes when the terminal comes online.

In fiscal 2018, Vancouver saw assignment increases in sulphur (35%), coal (8%), and tankers (9%). Correspondingly, the Vancouver area saw decreases in grain (12%), forest products (11%) and containers (8%).

We continue to evaluate the risks of increasing ship sizes into the Port of Vancouver. Increasing ships sizes and heights could negatively impact the future opportunities for Vancouver tourism and trade and to this extent, we remain fully engaged to ensure all avenues are explored to mitigate these potential risks. We also continue to evaluate the potential increased service requirement for pilots if the Trans Mountain pipeline expansion moves ahead.

We also continue to evaluate the risks and processes that will be required for a proposed LNG Terminal in Squamish.

Vancouver Island shows potential for a possible LNG terminal and a container terminal that is being explored for the Port Alberni area with continued interest in the concept of short-sea shipping.

As at December 31, 2018, there are 13 proposed LNG projects on the B.C. coast:

Project	Export License	Export Volume Million Tons per annum (Mtpa)	 Billion Cubic Feet per day (Bcf/d)	Cost of the Project ($Billion)
Kitimat LNG	20 Years	10 Mtpa	1.3 Bcf/d	$15
LNG Canada	40 Years	26 Mtpa	3.5 Bcf/d	$25-$40
Cedar LNG Project	25 Years	6.4 Mtpa	0.8 Bcf/d	
Orca LNG	25 Years	24 Mtpa	3.2 Bcf/d	
New Times Energy	25 Years	12 Mtpa	1.6 Bcf/d	
Kitsault Energy Project	20 Years	20 Mtpa	2.7 Bcf/d	
Stewart LNG Export Project	25 Years	30 Mtpa	4.0 Bcf/d	
Triton LNG (On Hold)	25 Years	2.3 Mtpa	0.3 Bcf/d	
Woodfibre LNG	25 Years	2.1 Mtpa	0.3 Bcf/d	$1.6
WesPac LNG Marine Terminal	25 Years	3 Mtpa	0.6 Bcf/d	
Discovery LNG	25 Years	20 Mtpa	2.6 Bcf/d	
Steelhead LNG: Kwispaa LNG	25 Years	30 Mtpa	4.3 Bcf/d	$30
Watson Island				

It takes approximately 7 years to completely train a pilot (only fully trained and unrestricted pilots can be the primary pilot on LNG or crude oil vessels). It will take approximately 5 years for an LNG terminal to start production after they have reached their financial investment decision. As such, developing an expectation for the number of LNG terminals which will actually move ahead (likely far fewer than those proposed), and preparing for and analyzing potential pilot requirements has become an important and ongoing exercise for the Authority. This exercise will ensure that the appropriate numbers of pilots are available to serve the LNG terminals when they move ahead.

Similar to past years, these projects are at different stages of readiness and the Authority continues to monitor their timelines and service needs. It is the responsibility of the Authority to ensure we are ready to service these developments when they become operational.

We remain committed to a positive dialogue with stakeholders, the public and all other interested parties.

Traffic

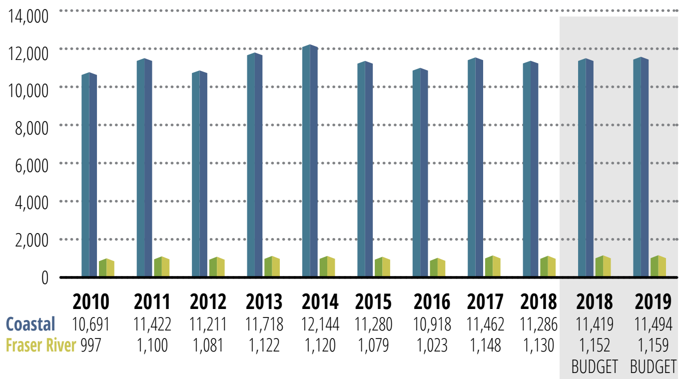
We previously mentioned the diversification within the Authority's customer base and the table below further highlights this. As can be seen, our largest segment is the container sector which accounts for 18% of our business volumes. On the West Coast we find that containers generally come in fully loaded and usually leave empty.

Product Sectors by number of assignments 2018

Anchorage	14%
Auto	6%
Coal	8%
Containers	18%
Cruise	7%
Forest Products	10%
Grain	12%
Petroleum & Tankers	6%
Other	20%

Pilotage trips in excess of eight hours or 105 nautical miles require the services of a second pilot. Safety considerations remain paramount as the pilot is allowed to work a maximum of eight hours before an appropriate rest break is required. Most cruise ships heading north or south fall into this category, along with certain northern assignments, such as Kitimat and Stewart.

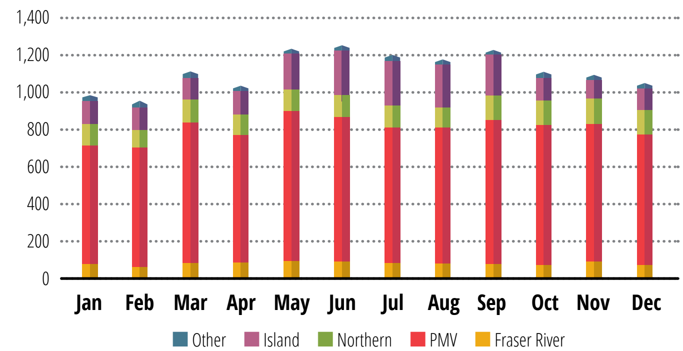
Annual Pilotage Assignments (excluding 2nd pilot assignments) EXHIBIT 1



During 2018, the British Columbia Coast Pilots Ltd. (BCCP), a private company of 118 entrepreneur pilots under contract to the Authority, completed 12,234 coastal assignments (including second pilot assignments). Fraser River assignments were performed by 8 employee pilots who completed 1,130 River assignments.

The Authority's monthly traffic pattern is very consistent year over year. There is a seasonal spike in the coastal assignments mainly due to the cruise ship sector during the months of May through September (particularly on Vancouver Island and the Port of Vancouver (PMV)).

Assignments by month, 2018 EXHIBIT 2



Annual Trips by Commodity Sector – Coastal & River, 2015 to 2018

	2016 Actual	%	2017 Actual	%	2018 Actual	%	2018 Budget	%	2019 Budget	%
Anchorage	1,516	12%	1,730	13%	1,832	14%	1,810	14%	1,810	14%
Auto	740	6%	747	6%	755	6%	805	6%	789	6%
Coal	812	6%	981	7%	1,081	8%	1,115	8%	1,126	8%
Containers	2,224	18%	2,329	17%	2,354	18%	2,336	18%	2,313	17%
Cruise	882	7%	946	7%	885	7%	1,034	8%	1,055	8%
Forest Products	1,429	11%	1,548	12%	1,356	10%	1,105	8%	1,083	8%
Grain	1,736	14%	1,761	13%	1,580	12%	1,531	11%	1,562	12%
Petroleum & Tankers	959	8%	772	6%	836	6%	931	7%	901	7%
Other	2,363	19%	2,583	19%	2,685	20%	2,647	20%	2,734	20%
Grand Total	**12,661**	**100%**	**13,397**	**100%**	**13,364**	**100%**	**13,314**	**100%**	**13,373**	**100%**

The Authority categorizes its assignments into four key traffic areas: Port of Vancouver (PMV/VFPA), Vancouver Island (Island), Northern and Fraser River.

The Port of Vancouver (VFPA (Vancouver Fraser Port Authority)), which includes Roberts Bank and Deltaport, is the largest traffic centre representing 64 percent (65 percent in 2017) of all assignments performed by the Authority. This area represents 51 berths and 34 anchorages that we service on a regular basis. Our PMV 2018 traffic decreased by 150 assignments compared to the prior year and the Authority is budgeting for a small increase in 2019.

Fraser River traffic for 2018 decreased to 1,130 assignments (2017 was 1,148). The River has an automobile terminal and a multi-use terminal handling containers, bulk and break bulk products. The River also requires the services of a coastal pilot for the transit to and from the Sand Heads boarding station which is located at the mouth of the Fraser River. Once inside the Fraser River, an employee pilot is responsible for the pilotage transit to and from the berths. In total this area has 10 active berths and the 2019 budget reflects a slight increase in activity mainly due to an expectation for automobile volumes to return to 2013 levels as well as a forecasted increase in steel and pipe imports.

The Northern area, which includes Prince Rupert, Kitimat and Stewart, accounted for 11 percent (10 percent in 2017) of the Authority's coastal pilotage assignments. Currently this area has 11 berths and 36 anchorages. The bulk of assignments are in the Prince Rupert region which primarily handles containers, grain, coal, logs and wood pellets. The 2018 traffic increased by 138 assignments (10%) compared to the prior year and the Authority is budgeting for similar volumes in 2019.

Financial Commentary

For 2018 the Authority recorded revenues of $93.0 million and income of $2.1 million.

On April 1, 2018, the Authority implemented a 3.75 percent tariff increase (2.90 percent in 2017). The implementation of moderate tariffs will improve the Authority's financial position so that there will be slight cash flow gains going forwards. These actions were all planned through consultation and support from the industry we serve.

The 2018 actual financial results were a combination of a number of factors which resulted in the profit for the year. The most significant variances to budget are explained below:

1. Coastal pilotage revenues in 2018 exceeded the budget by $2.3 million (4% above budget). This was mainly due to an increase in the pilotage units per assignment by 5%.

The favorable coastal revenues noted above has to be adjusted by increased contract pilot fees as the coastal pilots are paid per assignment. Coastal pilotage expenses exceeded by budget by $1.8 million (3% above budget).

Senior pilot training costs were below budget by $166,000 (22%). This segment had fewer training sessions than were originally planned for the year and the shortfall is expected to shift into fiscal 2019 (resulting in a year end expense above budget).

Once the revenues and expenses discussed above are factored into account, this sector's contribution margin ended the year at 5%, largely in line with a budgeted margin of 4%.

2. River pilotage revenues exceeded the 2018 budget by $102,000 (3%). This was mainly due to the same increase in pilotage units as discussed above. The costs of the River pilots were below budget by $248,000 (8%), and were driven by lower assignment volumes coupled with fewer sick days taken than the historical average (resulting in lower overtime/callback costs).

This sector's contribution margin increased to 30% (from a budget of 21%), representing a year end surplus of $1.1 million.

3. Travel revenues fell largely in line with budget for the year. In total this sector's contribution margin ended the year at 21% (versus a budget of 23%) representing a surplus of $1.7 million.

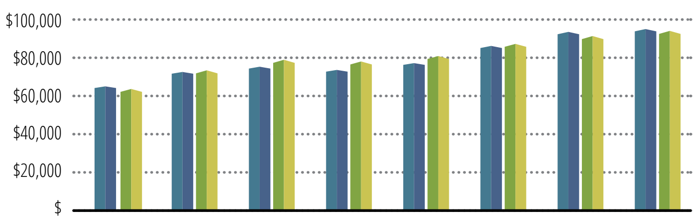
4. In 2018, the employee crewed stations at Brotchie, Sand Heads and Triple Island as well as the contractor crewed station in Port Hardy generated revenues of $88,000 (1%) above budget. The costs of this segment increased above budget by $435,000 (4%), and were primarily driven by increased wages and operating costs.

In total this sector's contribution margin ended the year at 9% (versus a budget of 10%) representing a surplus of $826,000.

5. Total overhead costs ended the year $72,000 (1%) below budget. Overall, this sector generated expenses of $6.8 million or 7% of revenue (versus a budget of 8%). This is as a result of a significant cost containment focus by the Authority, without sacrificing safety.

Exhibit 4 details the comparisons of the major revenue and expense categories for the Authority's unconsolidated (unaudited and excluding Holdco) financial statements along with the 2018 budget and 2017 fiscal period.

Revenue and Expenses by Year (in 000's) EXHIBIT 3



	2012	2013	2014	2015	2016	2017	2018	2019
Revenue	$64,576	$71,959	$74,689	$73,016	$76,552	$85,795	$92,990	$94,251
Expenses	$63,223	$72,251	$78,193	$77,411	$80,330	$86,541	$90,623	$93,305 BUDGET

EXHIBIT 4

Revenue Categories (000's)

	Actual 2018	Budget 2018	Variance To Budget	Actual 2017
Coastal pilotage	67,114	64,837	2,277	61,619
River pilotage	3,801	3,699	102	3,610
Travel	7,974	7,893	81	7,602
Launch	12,048	11,960	88	11,014
Other income	1,677	1,627	50	1,656
Total Revenues	92,614	90,016	2,598	85,501

Expense Categories (000's)

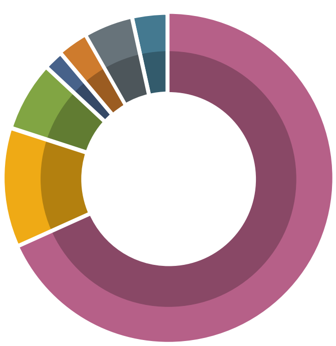
	Actual 2018	Budget 2018	Variance To Budget	Actual 2017
Contract pilots' fees	61,955	60,327	1,628	58,087
Pilot launch costs	10,508	9,959	549	10,219
Transportation and travel	6,277	6,052	225	5,939
Staff salaries and benefits	4,360	4,290	70	4,250
Employee pilots' salaries and benefits	2,666	2,914	(248)	2,857
Other expenses	3,251	3,552	(301)	2,926
Pilot training	1,606	1,867	(261)	2,086
Total Expenses	90,623	88,961	1,662	86,364
Net Income (Loss)	1,991	1,055	936	(863)

Since inception in 1972 the Authority has been financially self-sufficient and continues to structure its finances to maintain this position.

Exhibit 5 compares the major expense categories as a percentage of total expenses for the year 2018.

Similar to prior years, approximately 90 percent of the Authority's total annual expenditures for the year were covered by either a service contract or collective agreements.

Actual Expense Categories 2018 EXHIBIT 5



Pilots Fees (contracts)	**68%**
Pilot Launch Operations (collective agreement)	**12%**
Pilot Transportation and travel (contract)	**7%**
Pilot apprenticeship and training	**2%**
Employee pilots' salaries and benefits (collective agreements)	**3%**
Staff salaries and benefits	**5%**
Other expenses	**3%**

Exhibit 6 provides a historical financial summary of the Authority from 2012 through 2019.

EXHIBIT 6

Historical Financial Summary (in thousands of dollars)

	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Budget	Budget
Financial Results	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2018**	**2019**
Revenues	64,576	71,959	74,689	73,016	76,552	85,795	92,990	90,017	94,251
Expenses	63,123	72,313	78,193	77,411	80,330	86,541	90,890	88,961	93,305
Net Income (Loss)	1,453	(354)	(3,504)	(4,395)	(3,778)	(746)	2,100	1,056	946
Financial Position									
Current Assets	13,696	14,854	12,773	10,260	9,245	11,671	14,049	12,308	12,090
Current Liabilities	7,172	7,759	9,440	9,660	10,506	11,266	12,398	12,147	12,498
Working Capital	6,524	7,095	3,333	600	(1,261)	405	1,651	161	(408)
Net Capital Assets	10,255	9,195	12,577	12,331	11,698	10,614	10,898	10,642	12,512

Operating Indicators (Actual)

Average Number of Pilots									
Coastal	98	100	98	98	103	114	118	117	121
River	7	7	7	8	8	8	8	8	8
Number of Assignments									
Coastal	11,211	12,144	12,144	11,813	11,638	12,249	12,234	12,139	12,214
River	1,081	1,122	1,120	1,079	1,023	1,148	1,130	1,159	1,159
Revenue per Assignment									
Coastal	$ 4,118	$ 4,457	$ 4,465	$ 4,559	$ 4,800	$ 5,031	$ 5,486	$ 5,341	$ 5,566
River	$ 2,339	$ 2,471	$ 2,588	$ 2,794	$ 2,946	$ 3,144	$ 3,364	$ 3,191	$ 3,211

Pilot Vessel – Pacific Chinook

On July 23, 2014, the Authority's Pine Island contractor ("the Contractor") incorporated a company, 1008799 B.C. Ltd. ("Holdco"), with its sole purpose being the purchase, ownership and lease of a pilot vessel called the Pacific Chinook ("the Chinook") to the Contractor under a Bareboat Charter Agreement. The Authority does not control or have significant influence over the Contractor.

The Authority borrowed funds from a Canadian chartered bank in order to provide financing to Holdco for the purchase and additional costs related to refitting the Chinook to Transport Canada standards. Holdco signed a Promissory Note and a Mortgage Agreement with the Authority, guaranteeing to pay back the mortgage on the vessel over an 11 year period and guaranteeing the repatriation of the asset for $1.00 and other good and valuable consideration as determined by the Authority.

A Shareholder's Agreement was signed on September 26, 2014 by the Contractor, which owns all shares of Holdco. The Agreement specified that the Contractor was obliged, in perpetuity, to vote its shares to appoint directors that are nominees of the Authority.

The Authority holds no ownership interest in Holdco and operating risks of the Chinook rested with the Contractor under the conditions of the Bareboat Charter Agreement between the Contractor and Holdco. The Bareboat Charter Agreement enforced requirements on the Contractor regarding the use of the Chinook. The Contractor insured the Chinook and Holdco against breach of warranty with the Authority as a named insured. Failure by the Contractor to act in accordance with the provisions of the Bareboat Charter Agreement enabled the Authority to execute remedies across any and all of these agreements.

All of these actions were performed in order to protect the Authority's interest in the financing it provided to Holdco for the purchase and retrofitting costs associated with the Chinook.

In accordance with International Financial Reporting Standards (IFRS), the protective actions performed by the Authority implied that, from an accounting perspective, the Authority acquired control of Holdco and accordingly the Authority was required to consolidate the financials of Holdco into the Authority. The Authority has prepared and presented its financial statements since the formation of Holdco on a consolidated basis, including the assets, liabilities, equity, income, expenses and cash flows of Holdco.

In 2017, the Authority completed a review of its entire fleet of launch vessels in order to determine the dates at which vessels would need to be replaced. In this evaluation, it was decided that the Chinook would be needed by the Authority in 2018 to help support the provision of launch services in Prince Rupert. As a result, the Authority decided it would acquire the Chinook.

The Authority's management knew the Contractor would need to purchase another vessel to continue service at Pine Island if the Chinook was acquired through an exercise of the Authority's purchase option and if the Contractor continued to provide services at the station. In order to finance the purchase of a vessel, one of two things could happen:

- The Contractor could ask the Authority to provide financing for the purchase of a launch vessel, or
- The Contractor could ask for a contract with a significant enough duration to allow the Contractor to purchase a vessel or lease a vessel and generate a reasonable return on investment.

The Authority had no interest in providing financing for a contractor at Pine Island and decided that, if an extended contract was to be allowed, the opportunity to bid on such work needed to be extended to any company interested and capable of providing the required services at this station. As a result, the Authority issued an RFP on March 28, 2018 for the provision of launch services at Pine Island, asking all interested bidders to bid on providing the Authority with service using their own vessels (and what interim solutions they proposed if they needed to build a new vessel). The Authority received six bids as part of this tender process, and the successful bid was from the Contractor.

On April 5, 2018, the Authority exercised its option to purchase the Chinook, resulting in a change in ownership of the Chinook from Holdco to the Authority. The option price was determined by the Authority to be $1.00 and the outstanding note payable between Holdco and the Authority. Subsequent to the transfer of the Chinook, the Mortgage Agreement, the Bareboat Charter Agreement between the Contractor and Holdco, and the Shareholder's Agreement signed by the Contractor were terminated. Consequently, the Authority lost control of Holdco, and the Authority ceased consolidating its financial statements from April 5, 2018 onwards.

The Authority took possession of the Chinook and brought it to a shipyard where it underwent the improvements necessary for it to perform services in Prince Rupert.

Human Resources

The Authority has collective agreements with three groups of employees:

- the Canadian Merchant Service Guild, representing all employee pilots, expires January 31, 2020
- the Canadian Merchant Service Guild, representing all launch masters and engineers, expires March 31, 2023
- the International Longshore & Warehouse Union, Local 520, representing all deckhands, dispatchers and administrative staff, expires March 31, 2022

Replacement and Training of Pilots

The Authority holds pilot entry exams on a semi-annual basis in order to increase the number of potential candidates and to assess candidates who have the necessary experience and skills to perform the job.

The Authority also promotes and oversees a familiarization program, which is intended to supplement a candidate's coast wide knowledge, prior to writing the pilot exam. This program will allow a candidate to ride along with a senior pilot in an area of the coast the candidate may not be familiar with.

In order to ensure a highly qualified and skilled pilot workforce, the Authority places major emphasis upon selection and training of pilots. The pilot exam process consists of three parts. Firstly, a three-hour written exam on general ship knowledge based on the '500 tonne Master Near-Coastal exam'. Next, a three and one-half hour exam paper on local knowledge. Finally, there is a three and one-half hour oral exam session.

Depending on a candidate's background, the apprenticeship for a coastal pilot takes place over a minimum period of nine and one-half months through to a maximum of twenty-four months.

The Pilot Training and Examination Committee (PTEC) regularly examines and compares training facilities on a worldwide basis to ensure our training standards and the instruction level is relevant, effective and valid.

At present, the cost for training each apprentice is approximately $200,000, which includes remuneration, travel and course fees and is borne entirely by the Authority. The increase to a twenty-four month apprenticeship period will increase the cost to approximately $400,000 per pilot.

The Authority has projected the coastal pilots' demographics through the plan years and is anticipating starting apprentices in each of the plan years to compensate for retirement as well as requirement numbers to maintain an efficient operation.

The Authority is budgeting funds during each of the plan years to continue funding the Skills Enhancement Program for senior pilots. The intent of this program is to provide opportunities for senior pilots at approved training facilities to enhance their skills in ship handling using manned models.

Apprentice coast pilot training during the year included:

- 6 pilots attended model-ship training in Southampton, England
- 6 pilots attended simulator and BRM-P training in Quebec City, Canada
- 4 pilots attended tethered tug training in Vancouver, Canada

Licensed coast pilot training during the year included:

- 5 pilots received training at Port Revel, France, in a model-ship training facility
- 13 pilots received training at Southampton, England, in a model-ship training facility
- 34 pilots received BRM-P training at Vancouver, BC, delivered by an instructor from the Maritime Resource and Simulation Centre (Quebec City)
- 4 pilots received Azipod propulsion systems in the in-house simulator

Licensed River pilot training:

- 1 River pilot received training at Port Revel, France, in a model-ship training facility
- 2 River pilots received training at Southampton, England, in a model-ship training facility
- 1 River pilot received BRM-P training at Vancouver, BC, delivered by an instructor from the Maritime Resource and Simulation Centre (Quebec City)

Qualified Pilot Candidates

During fiscal 2018, eight coastal pilots received their licenses and thirteen more apprentices were started into the program.

With the intake of the thirteen apprentices during the year, there are no candidates on the eligibility list for coastal pilots. The Authority has scheduled the next examination session for March 2019 with fourteen coastal candidates scheduled to participate. Most recently we have had a success rate of 20% - 30% which would translate to four to six pilot candidates being added to our eligibility list. A second examination session in 2019 has also been scheduled for the third quarter.

At December 31, 2018 there are four candidates on the eligibility list for the Fraser River.

The Authority also conducts a Pilot Familiarization Program for interested candidates. This program is limited to forty candidates who participate in order to supplement and upgrade their coast-wide knowledge. At year end there were 33 candidates enrolled in this program for the coast and Fraser River.

Incident Reporting

The Authority categorizes incident and accident reporting into three types of investigations. An incident or accident will not be classified until sufficient facts are available to assess the potential for safety improvements and may require on site evaluation or interviews.

Class "A" Investigations

Defines an investigation that has a high probability of improving navigation safety, in that, there is a significant potential for reducing the risk to persons, vessels or the environment.

Class "B" Investigations

Defines an investigation that has a medium probability of improving navigation safety, in that, there is a moderate potential for reducing the risk to persons, vessels or the environment.

Class "C" Investigations

Defines an investigation that has a low probability of improving navigation safety, in that, there is a limited potential for reducing the risk to persons, vessels or the environment.

Exhibit 7 shows the actual number of incidents the Authority has recorded over the last seven years.

EXHIBIT 7

Year	Incident Free Assignments	Total Incidents	Class A	Class B	Class C
2012	99.946%	7	0	3	4
2013	99.963%	5	0	0	5
2014	99.962%	5	0	2	3
2015	99.992%	1	0	0	1
2016	99.958%	5	0	0	5
2017	99.970%	4	0	0	4
2018	99.960%	5	0	0	5

Enterprise Risk Management

An Enterprise Risk Management (ERM) program has been incorporated as part of the Authority's strategy and is well advanced in 'cultivating a culture of risk awareness' throughout the organization. All areas of the Authority's operations have been incorporated into this program, including contract and employee pilots, launches, dispatch and administration.

Risks are designated by an ERM Committee as either operational or strategic. Operational risks are assigned to the appropriate management staff for mitigation and review. Strategic risks are overseen by the Board, and are actively managed and mitigated by the appropriate Board Committee.

The Authority remains committed to ensuring that all risks have appropriate mitigation measures in place, and are reviewed on a regular basis. Detailed risk descriptions and mitigation measures are kept current by the risk owners and are part of a comprehensive risk review process.

Key strategic risks are summarized below:

- Future recruitment of suitable qualified pilots
- Relations with communities and the general public following an incident
- Changing economic/fiscal conditions that affect vessel traffic
- Recruiting and training of Fraser River pilots
- Financial reserve - tariff

Key emerging risks:

- Legalization of marijuana: how it affects the Authority's drug and alcohol policy
- Political activism and its effects on the Authority
- Cyber security

The Authority considers risk management to be a shared responsibility. Accordingly, members of the Board of Directors, its committees, the CEO, and all employees are accountable for managing risk within their area of responsibility. Risk management policies ensure a consistent, comprehensive and enterprise-wide risk management approach that is integrated into planning, decision making, and operational processes.

The Authority has categorized its risks in order to assist in identification and management of the risk.

- Strategic risk: risks emanating from the Authority's strategy and decision making.
- Financial risk: risks pertaining to liquidity, capital availability, or capital structure.
- Organizational & Human Resource risk: risks emanating from the Authority's management of its human resources including leadership depth and quality, management and labour availability and cost, cultural, etc.
- Operational risk: risks emanating from the Authority's day-to-day operating processes and activities.
- External risk: risks emanating from external sources over which the Authority (although impacted) has little control (e.g. macro-economic volatility; industry structural change; political, etc.)
- Legal and regulatory risk: risks associated with the Authority's compliance with applicable laws and regulations.
- Incident risk: risks emanating from incidents (accidents, near misses, etc.) within the Authority's jurisdiction where a pilot is present on board ship.
- Emerging risks: un-rated risks that the Authority will keep reviewing from time to time in order to be proactive.

Risk Ranking Methodology

The Board of Directors has adopted the following risk profile and tolerance matrix:

		OPERATIONAL				STRATEGIC	
Impacts	**Financial**	**Human**	**Property**	**Vessel(s)**	**Environmental**	**Disruption of Business**	**Reputation**
5 EXTREME	Above $10 million cash impact on the Authority	Multiple deaths And multiple people with serious long-term injury Intensive care	Damage to property is such that it ceases operations for a period of time exceeding one month or financial loss exceeds $10 million	Vessel sinks or sustains so much damage that it is a constructive total loss	Incident causes sustained long term harm to environment (i.e. damage lasts greater than a month)	Threatens long-term viability of Authority (Operational cessation or major operational issues lasting more than one month)	Sustained front page adverse national media coverage International media coverage
4 VERY HIGH	Impact on the Authority between $5 and $10 million	Single death And multiple people with serious long-term injury Intensive care	Damage to facilities is such that operations cease for up to one month or financial loss of $5 - $10 million	Vessel sustains damage significant enough to result in towing to dry dock and loss of operations of up to one month	Incident causes sustained medium term harm to environment (i.e. damage lasts up to one month)	Threatens viability of Authority in the medium term (Operational cessation or major operational issues lasting up to one month)	Front page adverse national media coverage and intermittent international coverage
3 HIGH	$1 - $5 million cash impact	Some people with serious long-term injury and multiple minor injuries	Damage to facilities is such that the operations cease for up to two weeks or financial loss of $1 - $5 million	Vessel sustains significant damage with dry docking and loss of operations for two weeks	Incident causes medium term harm to environment (i.e. damage lasts up to two weeks)	Threatens viability of Authority in the short term (Operational cessation or major operational issues lasting up to two weeks)	Intermittent adverse national media coverage
2 MEDIUM	Between $500,000 to $ 1 million cash impact	One person with serious long-term injury Some minor injuries	Damage to facilities cause operations to cease for up to one week or financial impact of $500,000 -$1 million	Vessel sustains damage resulting in loss of operations for one week	Incident causes short term harm to environment (i.e. damage lasts no greater than one week)	Operational issues lasting up to one week but no cessation of business	Sustained front page adverse local media coverage Board and Ottawa receive complaints from Chamber of Shipping and major clients clients
1 LOW	Up to $500,000 cash impact	Single or multiple minor injuries requiring on site first aid and/or off-site treatment	Damage to facilities cause operations to cease for up to 72 hours or a financial impact up to $500,000	Minor damage with no effect or damage resulting in a loss of operations of no more than 72 hours	Incident causes minimal or intermittent harm to environment over a period of time (i.e. damage lasts no greater than a day)	No operational issues or operational issues lasting up to 72 hours	Intermittent adverse local media coverage Complaints received from Chamber of Shipping and/or clients

Risk Likelihood Ranking Criteria

The Authority categorizes risks on the basis of the following chart. Similar to the risks themselves, these limits are reviewed on a regular basis.

Likelihood	Risks that are ongoing	Risks that are one off
5 EXTREME	We expect that the risk will occur many times a month. The risk is happening.	We fully expect the risk to occur. The risk is already occurring (i.e. It's an issue).
4 VERY HIGH	We expect that the risk will occur at least once a year.	We expect the risk will most probably occur.
3 HIGH	We expect that the risk will occur once in 3 years.	We expect that the risk may occur at some time and we think it more likely than not.
2 MEDIUM	We expect that the risk will occur once in 10 years.	We expect that the risk may occur at some time and we think it less likely than not.
1 LOW	We expect that the risk will occur once in 50 years.	We expect that the risk may occur only in exceptional circumstances but that it is highly doubtful that it will.

Risk Ranking Score Key

To achieve the risk's score, multiply the Impact score by the Likelihood score. The overall rankings are the following:

25	Extreme	20	Very High	15	High	10	Medium	5	Low
24	Extreme	19	Very High	14	High	9	Medium	4	Low
23	Extreme	18	Very High	13	High	8	Medium	3	Low
22	Extreme	17	Very High	12	High	7	Medium	2	Low
21	Extreme	16	Very High	11	High	6	Medium	1	Low

Key Strategic Risks

At present, the key strategic risks identified for the Corporation are:

Title	Risk Category	Impact	Likelihood	Score	Org Level
Future recruitment of suitable qualified pilots	Human Resource Risk	**4** A declining trend in enrolment for maritime jobs could result in insufficient pilots to cater to future demand.	**2** Relatively low likelihood of not being able to find sufficient pilot candidates	**8**	Strategic

Existing Controls –

1. The Authority is now very pro-active within the community in promoting piloting as a career. This includes many First Nations communities in coastal western Canada. Well established recruitment and training/accreditation process. Including:
   - Familiarization program is a minimum of 40 trips
   - Apprenticeships can now be extended up to 2 years
   - Increased participants
   - Mentoring program
2. Coast pilots can be "called back" and paid premium per job.
3. The BCCP offer a seasonal and half-time pilot initiative; flexibility of coastal pilots as they are certified for all of BC coast (not just one localized area).
4. The BCCP have good relationships with industry and regulatory stakeholders continue to be proactive in this regard.
5. The Authority consults with the BCCP before making any regulatory changes

Title	Risk Category	Impact	Likelihood	Score	Org Level
Relations with communities and the general public following an incident	Communication Risk	**4** A communication breakdown after an incident could result in propagation of nonfactual information. Communication breakdown could result in a deterioration of the relationship with the community leading to negative publicity.	**2** Relatively low likelihood of not being able to find sufficient pilot candidates	**8**	Strategic

Existing Controls –

Pollution as a result of an incident:

1. The primary control to avoiding an accident is to ensure that the Authority has a robust pilot examination process, world class training and an active quality performance and risk assessment process in place.
2. Rules in place that govern the petroleum industry ensuring that only double hulled vessels and barges are able to carry petroleum products.
3. Regulations governing required experience for waiver holders.
4. Notices to Industry and Pilots, Standards of Care documents and Guidelines put in place to govern the movement of bulk liquids, vessels under waiver and identified risks on the coast.

Deterioration of relationships as a result of damage and pollution:

1. The Authority works hard on relationship building with all sectors on an ongoing basis.
2. Strong relationships will ensure that the trust needed post incident will already be in place.
3. Open, honest and transparent communication and the sharing of data in a post incident scenario will greatly lessen any negative publicity and court action.

<table>
<tr><th>Title</th><th>Risk Category</th><th>Impact</th><th>Likelihood</th><th>Score</th><th>Org Level</th></tr>
<tr><td>Changing economic/ fiscal conditions that affect vessel traffic</td><td>Financial Risk</td><td>3
1. Economic downturn - A significant economic downturn causing reduced shipping trade could significantly impact on the Authority's revenue.
2. Changes in policy - Relating to: environmental policies (e.g. restrictions in ship emissions, noise and concerns over local impact), offshore oil drilling, forestry, wheat industry etc. may impact the Authority's business forecasts.
3. Trading patterns - Changes in global trading patterns and routes (e.g. widening of the Panama Canal and potential opening of Northwest Passage) as well as foreign exchange fluctuation could affect trade and tourism patterns.
4. New proposed projects relocating to other jurisdictions.</td><td>2
Financial loss low owing to reserves, contingency and forecasting. Structure of contracts allow for low financial exposure (variable contracts with primary service vendor).</td><td>6</td><td>Strategic</td></tr>
<tr><td colspan="6">Existing Controls –
1. Constant monitoring of financial indicators.
2. Diversity helps to protect business from downturns in individual sectors – i.e. not just reliant on one industry (coal, grain, lumber, petroleum, automobiles, containers, cruise).
3. Trend analysis is incorporated into financial planning.
4. Scenario planning now included in risk discussion groups incorporating consideration of financial aspects of possible major developments that could affect the Authority's business.

The Authority's business model is capable of absorbing traffic (revenue) downturns. The Authority has developed a well regarded forecasting model in concert with industry to ensure that the best information is used to predict the effects of expected future conditions on the business. In addition, the Authority has engaged in a rebuilding process on financial reserves and has an available line of credit if needed.</td></tr>
<tr><td>Recruiting and training of Fraser River pilots</td><td>HR Risk</td><td>3
1. Challenges catering to the pilotage demands of industry.
2. Additional stress on existing workforce.
3. Reputation as a service provider could be impacted.</td><td>2
1. Low risk in attracting qualified candidates</td><td>6</td><td>Strategic</td></tr>
<tr><td colspan="6">Existing Controls –
1. Familiarization program and examinations for River pilot candidates scheduled on regular basis.
2. River pilots have provided the Authority with their tentative retirement dates.
3. The Authority initiates and participates is regulatory changes that affect pilotage.
4. Well established training programs that can be amended to compensate for regulatory changes.</td></tr>
<tr><td>Financial reserve - tariff</td><td>Financial Risk</td><td>3
Good relations with industry and a highly inclusive tariff consultations process assist in tariff increase procedures.</td><td>2
Conflict in proposals for tariff increases could cause delays in the tariff approval process, which could necessitate the need to build reserves into the Authority in order to continue as a going concern through objections; which in turn could cause an increased likelihood of objection with the impact of delays in needed increases.</td><td>6</td><td>Strategic</td></tr>
<tr><td colspan="6">Existing Controls –
The tariff is well positioned with adequate margins achievable in each cost center. Future tariff adjustments focus on margin generation to cover overhead.
1. Detailed forecasting of traffic in advance is helping to predict income streams and expenditures.
2. Constant monitoring of financial indicators and traffic patterns.
3. The Authority's coastal costs are directly variable to available work (i.e. the BCCP has ownership of this portion of risk).
4. Diversity helps to protect business from downturns in individual sectors – i.e. not just reliant on one industry (coal, grain, lumber, petroleum, automobiles, containers, cruise).
5. Good communication with industry bodies and clients aids forecasting.
6. Scenario planning now included in risk discussion groups incorporating consideration of financial aspects of possible major developments that could affect the Authority's business.
7. Annual strategic planning sessions held with the Authority's Board, management and invited industry guests fosters planning.
8. The Authority will continue to ensure the tariff generates sufficient funds to cover on-going training and capital expenditure costs.</td></tr>
</table>

Title	Risk Category	Impact	Likelihood	Score	Org Level
Political activism and its effects on the Authority	Emerging Risk	Under development	Under development	n/a	Strategic
Cyber security	Emerging Risk (to be further developed from existing IT risk)	Under development	Under development	n/a	Strategic

During the year eight coastal apprentice pilots received their licences and another thirteen were started on the apprenticeship program.

Key Performance Indicators

The performance of the management of the Authority is regularly reviewed and assessed by the Board of Directors. Part of the assessment is based upon certain key performance indicators (KPIs) which are included below.

RESULTS FOR THE YEAR OF 2018

Safety	Goal	YTD
1. Incidents on vessels under pilotage	0	5
2. Incidents on pilot launches	0	2
Reliability		
3. Number of delays (hours) caused by pilots	0	3(4)
4. Number of delays (hours) caused by dispatch errors	0	0
5. Number of delays (hours) caused by launches	0	1(3)
6. Number of delays (hours) caused by computer downtime	0	0
7. Total hours delayed due to 3 – 6	0	7
Efficiency: General		
8. Unscheduled launch downtime causing delays [Total downtime days causing delays/total days]	0%	0.72%
9. Pollution incidents on pilot launches	0	1
10. Maintain an average of 8 working days to resolve all complaints	8 days	3.85 days
11. Maintain an average of 8 working days to resolve all invoice disputes	8 days	2.28 days
Efficiency: Pilots		
12. Complaints regarding pilot service level [no. of complaints/number of assignments]	0%	0.06%
13. Callbacks as percentage of assignments	2.5%	2.1%
14. Cost of callbacks as percentage of total pilot revenue	1%	1%
15. Annual cost increase compared to CPI Vancouver	First year of measurement – Goals to be introduced in 2019	Net increase over CPI 2%
16. Annual assignments per pilot		107
17. Annual average bridge hours per pilot		5 hours 27 mins
18. Annual average cost per assignment		$6,789
19. Annual utilization of pilots – time working [(time on board + travel time + rest)/1950]		99.6%
20. Annual utilization of pilots – terminal delays [hours delayed at terminal/total hours on assignment]		4%
21. Annual utilization of pilots – travel time to onboard time [hours spent in travel/hours on assignment]		50% assumed
22. Annual utilization of pilots – cancellations [number of cancellations/number of assignments]		10%
Financial		
23. Maintain an adequate contingency fund	$1.075M	$1.103M
24. Maintain an overhead cost of less than 8.5%	8.5%	7.1%
25. Accounts receivable - % of invoices under 30 days	90%	91%

KPI – 1 and 2 - These KPIs relate to the safety record of the Authority. All vessel and launch incidents are tracked and investigated, if warranted. The intent is to improve our safety record wherever possible.

KPI – 3, 4, 5, 6 and 7 - These KPIs are an indicator of the service level provided to the marine industry. Pilotage services are provided on demand, whenever a customer requests them.

KPI – 8 - This KPI measures the Authority's launch operations by tracking unscheduled launch downtime that causes a delay to a vessel. In order to avoid delays the Authority maintains backup launches which can be transferred between stations if the need arises. The Authority also has the opportunity to charter a launch if its backup launches are already allocated.

KPI – 9 - This KPI measures the Authority's sustainability program and environmental impact by tracking any pollution incidents caused by the operation of pilot launches.

KPI – 10 and 11 - These KPIs reflect the Authority's commitment to provide a high degree of service to all pilotage stakeholders. In an average year, approximately 13,000 invoices are issued to industry and it is the Authority's goal to ensure a high level of accuracy and completeness in this process. It is the same with complaints, no matter what they relate to, the Authority takes comments very seriously and responds in a professional timeline and manner.

KPI – 12 - This KPI measures the Authority's service level by tracking any complaints received regarding the provision of pilotage services.

KPI – 13, 14, 15, 23, 24 and 25 - These KPIs are financial in nature and reflect the Authority's philosophy on cost containment. The contingency fund level is set by the Authority's Board and is intended to finance operations for a period of sustained severe issue(s) or force majeure situation.

KPI – 16, 17, 18, 19, 20, 21, and 22 - These KPIs reflect measures of efficiency and utilization within the pilotage operation.

Regular Consultations with Stakeholders

The Authority's management team places a high degree of emphasis on customer contact and feedback each year. Customer surveys and service levels expected of the Authority are measured on a regular basis.

During 2018, the Authority's management team hosted monthly industry meetings in which the issues and concerns of all agencies and terminals are discussed, evaluated and addressed. This enables the Authority and industry to collectively resolve issues as they arise and to present on the current state of financials of the Authority. In addition, the management team holds regular formal meetings with all agencies, terminals and port authorities within our jurisdiction.

The Authority's management team also meets with the Chamber of Shipping, Shipping Federation, International Ship-Owners Alliance of Canada and Cruise Lines International Association representatives on a regular basis, including quarterly meetings in which the Authority's financial position is evaluated in detail and meetings that review safety and operational issues.

The Authority continues to be an active member of the Asia Pacific Gateway Table.

Looking Ahead — 2019 and Beyond

The potential of the projects and terminals proposed for the West Coast continues to show promise every year. We continue to actively monitor and remain aware of all projects proposed in our jurisdiction by analyzing the impact they might have on assignments and pilot numbers. Some of the major projects currently being monitored are:

- Stage II of the Prince Rupert container facility which is projected to triple capacity to 2.0 million TEUs
- A new terminal at Deltaport which would double Port of Vancouver's container volumes
- Expansion of an existing pipeline to increase crude oil shipment capacity in Burrard Inlet
- Various LNG terminals, including a new large terminal proposed in Kitimat and a smaller terminal proposed in Squamish
- Various LPG terminals, including two in construction in Prince Rupert

The Authority is an active participant along with the pilots when new terminals or docks are proposed in our jurisdiction. Our views on design, location and access are regularly sought out prior to construction.

Our monitoring includes many other events, negotiations, legislation and similar that may affect our area of jurisdiction. Many of these events are outside of our control yet they may have implications for our jurisdiction. Some of these major events are:

- The widening of the Panama Canal and its effect on shipping and trade patterns both locally and globally
- The Trans Pacific Partnership and the USMCA;
- Discussions regarding replacement of a major tunnel in the Vancouver area that would affect vessel traffic in and out of the Fraser River

Our efforts in the coming years continue to be directed towards our vision of being 'a world leader in marine pilotage'.

Economic – 2019

The Authority's annual financial results remain linked to the traffic in our ports. Annual traffic levels and thus finances are driven by the economics of the industry we serve. It remains very difficult to forecast exact traffic levels for upcoming years as there are many factors involved, well outside the control of the Authority.

In preparing the 2019 budget, the Authority has analyzed prior year's traffic patterns, industry sectors, commodity associations, the cruise ship industry, port authorities, terminal expansion plans and general financial conditions. The Authority has also reached out to terminal operators and agents across the province in order to solicit feedback on expected 2019 volumes.

In addition, the Authority has held open meetings to solicit feedback from its clients so as to form the most robust estimate possible on the future of shipping in B.C.

As a result of the success of these consultations, with a feedback rate of over 85%, fiscal 2018 volumes ended the year within 0.4% of budgeted volumes.

For 2019 the Authority has based its revenues and expenditures on 12,214 coastal and 1,159 Fraser River assignments.

For 2019, the Authority has budgeted for a net profit of $1 million.

Financial – Tariff Adjustment for 2019

In order to finance its activities, the Authority charges users for its services through a tariff. Consistent with pilotage objectives, the tariff is intended to be fair, reasonable and sufficient to allow for a safe and efficient service. The Authority continues to place great emphasis on the full and comprehensive engagement process by consulting at length with industry prior to a tariff application being initiated.

The tariff adjustment for fiscal 2019 is 3.05% (effective January 1, 2019) for all services and excluding fuel and surcharges. In addition, as a result of running on budget, the Authority is pleased that the $100 per assignment temporary surcharge will be eliminated on December 31, 2019.

Strategy

On an annual basis, the Authority engages in strategic planning sessions involving the Board of Directors and management. The most recent sessions held during the summer of 2018, endorsed the key objectives and strategies for 2015 through 2019 (which are summarized below) and began the 2020 – 2023 strategic process.

STRATEGIC GOALS FOR 2015 – 2019

Mandate, Vision & Mission	Primary Areas of Focus	Strategic Priorities 2015 – 2019
MANDATE The mandate of the Authority is to establish, operate, maintain, and administer in the interest of safety, an efficient pilotage service within the regions set out in respect of the Authority, on a basis of financial self-sufficiency. VISION STATEMENT The Authority's vision statement is 'To be a world leader in marine pilotage'. MISSION STATEMENT The Pacific Pilotage Authority is dedicated to providing safe, efficient pilotage by working in partnership with pilots and the shipping industry to protect and advance the interests of Canada.	WORKING "ON THE BUSINESS" *Building for the future – taking steps today to position PPA for the challenges and opportunities of tomorrow*	1. Develop a national framework that provides a platform to address issues that are common to pilotage in Canada 2. Establish and maintain clear and effective relationships with PPA's key stakeholders 3. Continue to develop the capacity within PPA to identify and take action on emerging issues and opportunities
	WORKING "IN THE BUSINESS" *To enhance safety, efficiency and effectiveness*	4. Embrace a culture of continuous improvement 5. Demonstrate through our actions and investment our commitment to ongoing training as a vehicle to enhance and promote safety 6. Ensure the continuity of PPA's people and knowledge capital

Measurement of Strategic Goals
The Authority measures its strategic goals on an annual basis wherever possible. Certain strategic goals, due to their long-term nature, will be measured over a number of years.

STRATEGIC GOAL #1.A:
Advocate for modifications and improvements to the regulatory and tariff processes.

STRATEGY: Develop thoughtful submissions to Transport Canada and the Treasury Board Secretariat regarding modifications and improvements to the regulatory process.

MEASUREMENT AND ACCOMPLISHMENTS 2015-18
- During 2016 a tariff application for a temporary surcharge was successfully implemented within a 3.5 month period well below the current 8 month average.
- The Authority developed a forecasting model that was used to consult with industry organizations. The end result was written letters of support from two industry organizations for the 2017 tariff application.
- The Authority's management met with Transport Canada representatives who subsequently consulted with the Department of Justice with regard to non-pilotage sources of revenue. During 2017, the Authority was given approval to charge for use of its simulator by third parties.
- During 2017, monthly operations meetings have been initiated with industry (quarterly with customers) that will lead to increased discussion and understanding of the Authority's operations, financial situation and tariff process. As part of this process, industry has accepted the Authority's forecasting model which is used to ensure greater understanding of pilotage finances and traffic projections.
- During 2017, the Authority submitted its written response and recommendations to the *Pilotage Act* Review team. The Authority's CEO and Chair have also participated in roundtable discussions hosted by the review team.
- After the *Pilotage Act* recommendations were released in May 2018, the Authority reiterated its position to the Minister. We indicated full support for thirty-two recommendations, support for a further eight recommendations with further clarification and four recommendations that we cannot support.

STRATEGIC GOAL #1.B:
Develop national world-class marine pilot safety and training programs.

STRATEGY: Promote, develop and implement standardized national training programs and safety management systems.

MEASUREMENT AND ACCOMPLISHMENTS 2015-18
- Pilot competency and training records have been centralized into a database solution as per Authority's Quality Assurance Program for Pilots.
- In 2018 the Authority continued to develop and provide in-house training programs to apprentice and licensed pilots. We are currently working on an initiative to develop a training program for LNG vessels using internal resources. The Authority continues to realize significant cost savings though the development of these in-house courses.
- A Safety Management System standard was developed and shared nationally by the Authority in 2018.
- As part of our standardized national curriculum a Bridge Resource Management for Pilots program was agreed to nationally in 2018.

STRATEGIC GOAL #2.A:

Enhance the relationship with Authority stakeholders.

STRATEGY: Adopt and implement a formal approach to stakeholder management and implement a stakeholder management program within the Authority.

MEASUREMENT AND ACCOMPLISHMENTS 2015-18

- Define and document key business stakeholders completed 2015.
- Stakeholders engaged with, grouped into categories and meeting frequencies by Industry, Terminals, Government and Other.
- A stakeholder management plan was implemented in 2016 and further refined to include a standardized checklist and questions in 2018.
- Industry stakeholder meetings were initiated in 2018 with monthly meetings being held for key industry representatives and quarterly meetings for all other customers.

STRATEGIC GOAL #2.B:

Clarify respective roles and responsibilities of Authority and the BCCP.

STRATEGY: Work with BCCP leadership team members to establish a joint Authority-BCCP working group to define, document and implement a mutually agreed upon relationship management framework and operating model.

MEASUREMENT AND ACCOMPLISHMENTS 2015-18

- Planning framework clarifying roles and responsibilities completed 2015.
- The relationship model continues to work well for both parties as meetings were held in 2018 to discuss certain joint positions on the *Pilotage Act* Review.

STRATEGIC GOAL #2.C:

Promote public awareness of Authority's plans, programs and initiatives related to its mandate.

STRATEGY: Develop and implement a public awareness and outreach program with the primary focus on regional issues and engagement on national matters as required.

MEASUREMENT AND ACCOMPLISHMENTS 2015-18

- Key public and community partners identified in 2015.
- Communication strategy developed in conjunction with stakeholder management plan during 2016.
- Forty-six official meetings held with various public and community partners during 2016.
- Forty-eight official meetings held with various public and community partners during 2017.
- During 2017, the Authority actively participated in initiatives such as the ECHO program, Scott Islands Steering committee and the Southern Gulf Islands meetings.
- During 2017 in response to the *Nathan E Stewart* incident, a PRMM was conducted on changes to the Authority waiver system and the Authority introduced 'Standard of Care' guidelines.
- In 2018 a working group was created and tasked with developing a communications strategy which will be delivered to the Board in 2019.

STRATEGIC GOAL #3.A:

Enhance Authority's ability to anticipate and respond to changes affecting its operating environment.

STRATEGY: Engage stakeholders and networks on a regular basis to help identify changes that could impact Authority and/or the marine pilots in Canada and key stakeholders.

MEASUREMENT AND ACCOMPLISHMENTS 2015-18

- During the year of 2018 Authority management engaged in:
  - Eight meetings with First Nations groups.
  - Twenty-two meetings with industry associations.
  - Fourteen meetings with federal and provincial government departments.
  - Seven meetings with community organizations.
- The Authority executive development program continues into 2018 with regular interaction, mentoring and feedback between Board and management. Certain senior management have enrolled in MBA and Board Director education programs.
- The Authority's management team participated in mental health training during 2018.
- The Authority continues to support Transport Canada and the Oceans Protection Plan (OPP). During 2018 this included working with the Council of the Haida Nation and their request for an exclusion zone off Haida Gwaii, presenting at an OPP session with 60 participants and live streaming to an additional 600, attending public meetings and various other working groups.

STRATEGIC GOAL #4.A:

Advocate for modifications and improvements to the Pacific Pilotage Regulations.

STRATEGY: Develop thoughtful submissions to Transport Canada and Treasury Board regarding modifications and improvements to the Pacific Pilotage Regulations.

MEASUREMENT AND ACCOMPLISHMENTS 2015-18

- Triage, Regulatory Impact Analysis Statement (RIAS) and cost benefit analysis for Authority regulations were completed in 2017-2018 with tariff adjustments approved for April 1, 2018 and January 1, 2019.

STRATEGIC GOAL #4.B:

Continue to improve and enhance Authority's service delivery capabilities in ways that benefit Authority and its key stakeholders.

STRATEGY: Identify and implement improvements to Authority's day-to-day service delivery model and operating capabilities.

MEASUREMENT AND ACCOMPLISHMENTS 2015-18

- Implementation of the ISO system for the Fraser River Pilots completed 2016.
- A number of efficiencies were incorporated into the service agreement between the BCCP and the Authority during the 2016 negotiation process.
- The long-term launch replacement and utilization plan was completed in 2017.
- In 2017 the Authority reviewed their 'key performance indicators' and proposed additional indicators to industry that will be published on a quarterly basis.
- A five year review of compulsory pilotage areas was completed in 2017.
- The Joint Task Force on Pilotage report was reactivated during 2018 with nine of thirty-five tasks being completed. Another sixteen are in progress and five will commence in 2019.
- Helicopter boarding on the North Coast using winching was implemented in 2015 and continued into 2017. The helicopter boarding program was suspended in the second quarter 2017 until a funding model can be agreed with industry. Talks and service option evaluation continued in 2018 with no funding model agreed upon.
- Cost comparisons of service levels and related costs for vessels for the West Coast continued and were expanded to include all of Canada in 2018.
- Information technology enhancements in 2018 included a redesigned public website and recording of vessel information relating to the ECHO slowdown program. An upgrade project to the next generation computer system to address traffic management was started in 2018.
- The forecasting model was further refined in 2018 to include new projects, refined apprentice and manpower forecasting and enhanced financial reporting.

STRATEGIC GOAL #5.A:

Plan and manage the development of training policies and delivery of the pilot training program.

STRATEGY: Continue to develop and deploy relevant training policies and pilot training programs.

MEASUREMENT AND ACCOMPLISHMENTS 2015-18

- The in-house simulator is regularly used for vessel simulations, pilot and apprentice training, feasibility studies, Azipod training and Bridge Resource Management courses for Pilots (BRM-P).
- The criteria defining area currency for pilots was developed in 2017 and will be incorporated into the next generation computer system. In 2018 the pilot assignment data covering a five year period was analysed to provide an area currency report.

STRATEGIC GOAL #6.A:

Develop and implement a framework for actively managing succession planning and knowledge transfer within the Authority.

STRATEGY: Implement a proven succession planning framework and develop and implement a knowledge transfer program.

MEASUREMENT AND ACCOMPLISHMENTS 2015-18

- The short and long-term outlook and analysis for each department including management and staff was completed in 2016 and 2017.
- Dispatch office employee engagement continued, specifically regarding succession planning and a comprehensive plan was completed in 2018.
- The development of an in-depth job description and knowledge transfer manual for all management positions, including the CEO, continued in 2018.
- Recommendations from the Prince Rupert Port Authority manning expectation report were completed in 2018.

YEAR ENDED DECEMBER 31, 2018

Statement of Management Responsibility

These financial statements have been prepared by the Authority's management in accordance with International Financial Reporting Standards, using management's best estimates and judgments, where appropriate. The Authority's management is responsible for the integrity and objectivity of the information in the financial statements and annual report.

Management maintains a system of internal control designed to provide reasonable assurance that assets are safeguarded and controlled, transactions comply with relevant authorities and accounting systems provide relevant and reliable financial information.

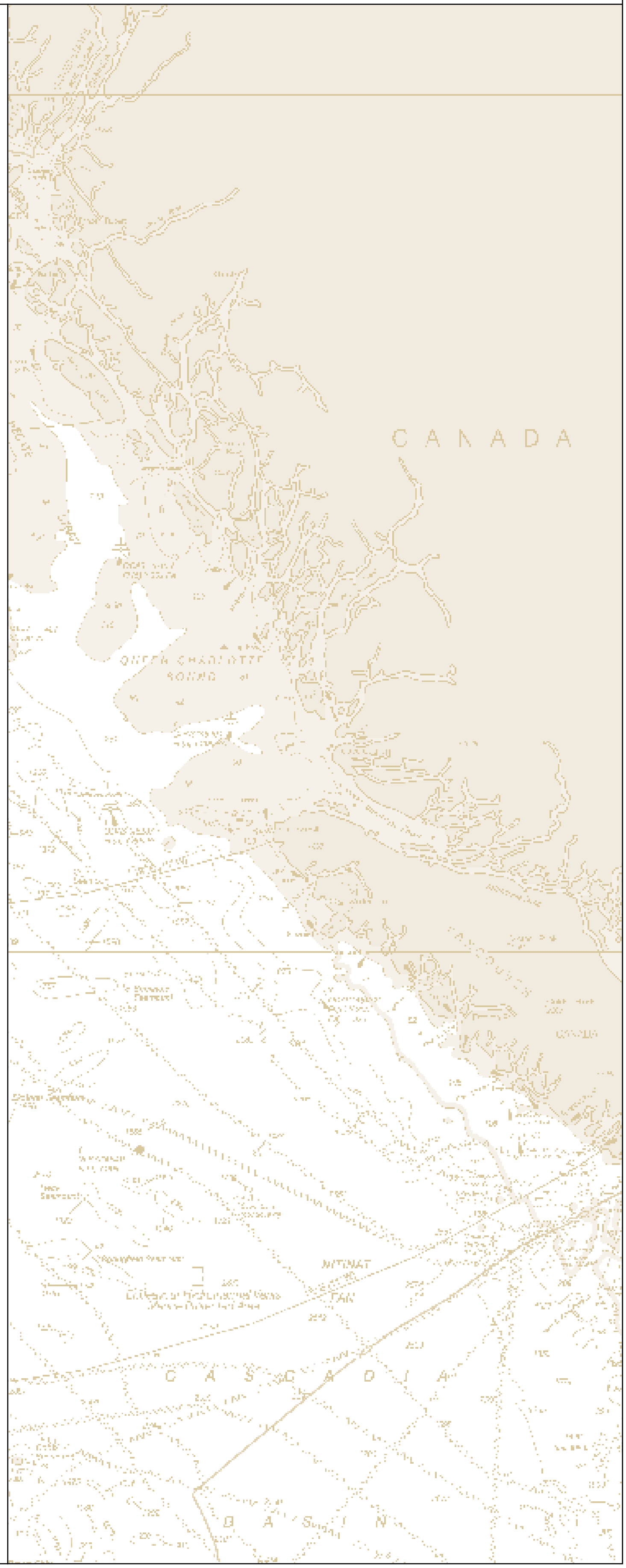
The Board of Directors of the Authority is responsible for ensuring that management fulfils its responsibilities for financial reporting and internal control. The Board exercises this responsibility through an Audit Committee, which meets regularly with management and the auditor. The financial statements and annual report are reviewed and approved by the Board of Directors on the recommendation of the Audit Committee.

The independent auditor, the Auditor General of Canada, is responsible for auditing the transactions and financial statements of the Authority and for issuing his report thereon.

K. G. Obermeyer
Chief Executive Officer

S. G. Woloszyn
Chief Financial Officer

21 March 2019



Office of the Auditor General of Canada

Bureau du vérificateur général du Canada

INDEPENDENT AUDITOR'S REPORT

To the Minister of Transport

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the Pacific Pilotage Authority (the Authority), which comprise the statement of financial position as at 31 December 2018, and the statement of profit and other comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Authority as at 31 December 2018, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs).

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Authority in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

Management is responsible for the other information. The other information comprises the information included in the Annual Report, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with IFRSs, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Authority's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Authority or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Authority's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Authority's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Authority to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Report on Compliance with Specified Authorities

Opinion

In conjunction with the audit of the financial statements, we have audited transactions of the Pacific Pilotage Authority coming to our notice for compliance with specified authorities. The specified authorities against which compliance was audited are Part X of the *Financial Administration Act* and regulations, the *Pilotage Act* and regulations, the by-laws of the Pacific Pilotage Authority, and the directive issued pursuant to section 89 of the *Financial Administration Act.*

In our opinion, the transactions of the Pacific Pilotage Authority that came to our notice during the audit of the financial statements have complied, in all material respects, with the specified authorities referred to above. Further, as required by the *Financial Administration Act*, we report that, in our opinion, the accounting principles in IFRSs have been applied on a basis consistent with that of the preceding year.

Responsibilities of Management for Compliance with Specified Authorities

Management is responsible for the Pacific Pilotage Authority's compliance with the specified authorities named above, and for such internal control as management determines is necessary to enable the Pacific Pilotage Authority to comply with the specified authorities.

Auditor's Responsibilities for the Audit of Compliance with Specified Authorities

Our audit responsibilities include planning and performing procedures to provide an audit opinion and reporting on whether the transactions coming to our notice during the audit of the financial statements are in compliance with the specified authorities referred to above.

Lana Dar

Lana Dar, CPA, CA
Principal
for the Auditor General of Canada

Vancouver, Canada
21 March 2019

Statement of financial position

Pacific Pilotage Authority | Administration de pilotage du Pacifique

As at 31 December *(thousands of Canadian dollars)*	**2018**	2017
Assets		
Current		
Cash and cash equivalents	**$ 6,171**	$ 5,068
Trade accounts receivable	**6,071**	5,203
Investments (Note 5)	**553**	6
Prepaid expenses and other receivables	**1,254**	1,400
	14,049	11,677
Non-current		
Investments (Note 5)	**553**	497
Other receivables	**185**	188
Property and equipment (Note 6)	**10,898**	10,614
	11,636	11,299
	$ 25,685	$ 22,976
Liabilities		
Current		
Accounts payable and accrued liabilities	**$ 11,399**	$ 10,440
Borrowings (Note 7)	**395**	384
Other employee benefits (Note 9)	**604**	442
	12,398	11,266
Non-current		
Borrowings (Note 7)	**1,420**	1,815
Other employee benefits (Note 9)	**584**	712
	2,004	2,527
	14,402	13,793
Equity		
Retained earnings	**11,283**	9,183
	$ 25,685	$ 22,976

Commitments (Note 12)

The accompanying notes are an integral part of these financial statements.

Member

Member

Statement of profit and other comprehensive income

Pacific Pilotage Authority | Administration de pilotage du Pacifique

Year ended 31 December *(thousands of Canadian dollars)*	**2018**	2017
Revenues		
Revenue from contracts with customers		
Pilotage charges	**$ 92,561**	$ 85,382
Other revenue		
Bareboat charter revenues	**91**	350
Interest and other revenues	**338**	63
	92,990	85,795
Expenses		
Contract pilots' fees	**61,962**	58,087
Operating costs of pilot boats	**10,370**	9,936
Salaries and benefits	**7,031**	7,035
Transportation and travel	**6,522**	6,181
Pilots' training	**1,658**	2,111
Depreciation - property and equipment	**1,138**	1,587
Professional and special services	**591**	372
Computer services	**432**	422
Rentals	**367**	371
Utilities, materials, supplies and other	**212**	282
Impairments, dispositions, and other	**168**	3
Repairs and maintenance	**89**	75
Communications	**83**	79
	90,623	86,541
Profit (loss) for the year	**2,367**	(746)
Other comprehensive (loss) income, not to be reclassified to profit or loss in subsequent periods:		
Actuarial loss on other employee benefits (Note 9)	**(270)**	(29)
Investment gain	**3**	—
	(267)	(29)
Total comprehensive income (loss)	**$ 2,100**	$ (775)

The accompanying notes are an integral part of these financial statements.

Statement of changes in equity

Pacific Pilotage Authority | Administration de pilotage du Pacifique

Year ended 31 December *(thousands of Canadian dollars)*	**2018**	2017
Retained earnings, beginning of year	**$ 9,183**	$ 9,958
Profit (loss) for the year	**2,367**	(746)
Other comprehensive loss	**(267)**	(29)
Total comprehensive income (loss)	**2,100**	(775)
Retained earnings, end of year	**$ 11,283**	$ 9,183

The accompanying notes are an integral part of these consolidated financial statements.

Statement of cash flows

Pacific Pilotage Authority | Administration de pilotage du Pacifique

Year ended 31 December *(thousands of Canadian dollars)*	**2018**	2017
Cash flows from operating activities		
Cash receipts from customers	**$ 91,784**	$ 85,850
Cash paid to employees	**(12,404)**	(11,526)
Cash paid to suppliers and others	**(75,828)**	(71,971)
Other income received	**128**	63
Net cash provided by operations	**3,680**	2,416
Cash flows from investing activities		
Purchase of investments	**(1,760)**	(1,826)
Proceeds on disposal of investments	**1,157**	4,053
Acquisition of property and equipment	**(1,589)**	(582)
Net cash (used in) provided by investing activities	**(2,192)**	1,645
Cash flows from financing activities		
Principal repayment of borrowing	**(385)**	(375)
Net cash used in financing activities	**(385)**	(375)
Net increase in cash and cash equivalents	**1,103**	3,686
Cash and cash equivalents, beginning of year	**5,068**	1,382
Cash and cash equivalents, end of year	**$ 6,171**	$ 5,068
Represented by:		
Cash	**6,171**	5,068
Cash equivalents	**—**	—

The accompanying notes are an integral part of these financial statements.

Year ended 31 December 2018
(thousands of Canadian dollars)

1. Authority and objectives

The Pacific Pilotage Authority (the "Authority") was established in 1972 pursuant to the *Pilotage Act*. The objectives of the Authority are to establish, operate, maintain and administer a safe and efficient pilotage service within designated Canadian waters. The Act further provides that the tariffs of pilotage charges shall be fixed at a level that permits the Authority to operate on a self-sustaining financial basis and shall be fair and reasonable.

Coastal pilotage services are provided by the British Columbia Coast Pilots Ltd. under an agreement for services. Pilotage services on the Fraser River are provided by employee pilots.

The Authority is a Crown corporation named in Part I of Schedule III to the *Financial Administration Act* and is not subject to any income taxes.

The principal registered address and records office of the Authority are located at 1000 - 1130 West Pender Street, Vancouver, BC, V6E 4A4.

Regulation of tariffs of pilotage charges

The tariffs that are applied by the Authority to vessels subject to compulsory pilotage are governed by the *Pilotage Act*. With the approval of the Governor in Council, the Authority makes regulations to prescribe tariffs of pilotage charges to be paid to the Authority.

As set out in the *Pilotage Act*, the Authority must first publish the proposed tariffs of pilotage charges in the Canada Gazette. Any person who has reason to believe that the proposed pilotage charges are not in the public interest may file a notice of objection, setting out the grounds therefore, with the Canadian Transportation Agency (the "Agency"), an entity related to the Authority as a federal organization. In such a case, the Agency must investigate whether the proposed charges are in the public interest, including the holding of public hearings. After conducting the investigation, the Agency must make a recommendation within 120 days from the receipt of the notice of objection, and the Authority is required to govern itself accordingly.

The tariffs may come into force 30 days after their publication in the Canada Gazette. However, where the Agency recommends pilotage charges that are lower than that prescribed by the Authority, the Authority is required to reimburse the difference between the prescribed charges and the charges recommended by the Agency, plus interest, to any person who has paid the prescribed charges. The *Pilotage Act* stipulates that the Governor in Council may vary or rescind a recommendation of the Agency.

The tariffs of pilotage charges must be fair and reasonable, and must enable the Authority to operate on a self-sustaining financial basis. Thus, the tariffs are intended to allow the Authority to recover its costs and fund the acquisition of capital assets.

Section 89 directive

In fiscal 2015, the Authority was issued a directive (P.C. 2015-1114) pursuant to section 89 of the *Financial Administration Act* to align its travel, hospitality, conference and event expenditure policies, guidelines and practices with Treasury Board policies, directives and related instruments on travel, hospitality, conference and event expenditures in a manner that is consistent with its legal obligations, and to report on the implementation of this directive in the Authority's next corporate plan. The Authority approved and implemented changes in 2018 and its policies are in alignment effective 1 January 2019.

2. Significant Accounting Policies

2.1 Statement of compliance

The financial statements have been prepared in compliance with International Financial Reporting Standards (IFRS). This is the first set of financial statements in which IFRS 15 *Revenue from Contracts with Customers* and IFRS 9 *Financial Instruments* have been applied. Changes to significant accounting policies are described in Note 2.4.

The financial statements were authorized for issue by the Board of Directors on 21 March 2019.

2.2 Basis of preparation

The financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at fair value at the end of the reporting period, as explained in the accounting policies below.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or liability, the Authority takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these consolidated financial statements is determined on such a basis, except for leasing transactions that are within the scope of IAS 17.

2.3 Basis of consolidation

The financial statements consolidate the financial statements of the Authority and an entity which the Authority controlled until 5 April 2018 (1008799 B.C. Ltd.). Control is achieved when the Authority:

- has power over the investee;
- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power to affect its returns.

The Authority reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

When the Authority has less than a majority of the voting rights of an investee, it has power over the investee when the voting rights and other relevant arrangements enable it to direct the relevant activities of the investee unilaterally. The Authority considers all relevant facts and circumstances in assessing whether or not the Authority's voting rights in the investee and other relevant arrangements are sufficient to give it power, including:

- The size of the Authority's holding of voting rights relative to the size and dispersion of holding of other vote holders;
- Potential voting rights held by the Authority, other vote holders or other parties;
- Rights arising from other contractual arrangements; and
- Any additional facts and circumstances that indicate that the Authority has, or does not have, the current ability to direct the relevant activities at the time that decisions need to be made.

Consolidation of an investee begins when the Authority obtains control over the investee and ceases when the Authority loses control of the investee. Specifically, income and expenses of an investee acquired or disposed of during the year are included in the consolidated statement of profit and loss and other comprehensive income from the date the Authority gains control until the date when the Authority ceases to control the investee.

The Authority ceased control of 1008799 B.C. Ltd. on 5 April 2018. As a result, the Authority ceased consolidating its financial statements from this date onwards. Income and expenses of 1008799 B.C. Ltd. are included in the statement of profit and other comprehensive income until 5 April 2018, when the Authority ceased to control the investee. All intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between the Authority and 1008799 B.C. Ltd. were eliminated in full on consolidation up until 5 April 2018. On that date, the Authority derecognized the assets and liabilities of 1008799 B.C. Ltd., resulting in a gain of $12 which is included in impairments, dispositions and other expenses in the statement of profit and other comprehensive income.

2.4 Changes in significant accounting policies

The Authority initially applied IFRS 15 and IFRS 9 beginning on 1 January 2018.

The adoption and application of IFRS 15 did not result in changes in judgements, nor did it affect the determination of the amount or timing of revenue from contracts with customers. Changes in accounting policies resulting from the adoption of IFRS 15 have been applied retrospectively, and there was no cumulative effect of applying this Standard on the date of initial application.

Changes in accounting policies resulting from the adoption of IFRS 9 have been applied retrospectively, except as described below:

- The Authority has used an exemption not to restate comparative information for prior periods with respect to classification and measurement (including impairment) requirements. Differences on the carrying amounts of financial assets and financial liabilities resulting from the adoption of IFRS 9 are recognized in retained earnings as at January 1, 2018. Accordingly, the information presented for 2017 does not generally reflect the requirements of IFRS 9, but rather those of IAS 39.
- The following assessments have been made on the basis of the facts and circumstances that existed at the date of initial application on 1 January 2018
  – The determination of the business model for managing financial assets.
  – The designation and revocation of previous designations of certain financial assets measured at fair value through profit or loss.
- The adoption of IFRS 9 did not affect the measurement category for the Authority's financial instruments, except for investments which were previously recognized as fair value through profit and loss, and are now required to be recognized as fair value through other comprehensive income effective 1 January 2018.
- The conditions required by IFRS 9 to designate financial assets as fair value through profit and loss are not met. Therefore, the change in measurement category for investments was made in accordance with IFRS 9.4.1.2A because the Authority's investments give rise on specified dates to cash flows that are solely payments of principal and interest, and these investments are held within a business model whose objective is achieved by collecting contractual cash flows and selling investments.
- There were no differences in the carrying amounts of financial assets and liabilities resulting from the adoption of IFRS 9. Therefore, no adjustments to opening retained earnings were required as at 1 January 2018.

2.5 Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, Canadian dollar deposits held at Canadian chartered banks, and short-term, highly liquid investments that are readily convertible into known amounts of cash and subject to an insignificant risk of changes in value.

2.6 Revenue recognition

The Authority recognizes revenue upon the transfer of control of promised services to customers in an amount that reflects the consideration to which the Authority expects to collect in exchange for the pilotage services it provides.

Year ended 31 December 2018 (thousands of Canadian dollars)

The Authority applies a five-step model framework for all of its contracts with customers:
1. Identification of the contract with its customer
2. Identification of the performance obligations in the contract
3. Determination of the transaction price
4. Allocation of the transaction price to the performance obligations in the contract
5. Recognition of revenue when the Authority satisfies its performance obligation

Requests by customers for pilotage services are recognized as contracts in accordance with IFRS 15; in which enforceable rights and obligations are created. The Authority is bound to provide pilotage services through the *Pilotage Act*, and does not have a unilateral enforceable right to terminate a wholly unperformed contract.

When a pilotage assignment is complete and there are no other billable services to the customer as part of the assignment, the performance obligation is considered satisfied and revenue is recognized as a bundle of services promised in the contract (transportation, pilot boat, fuel, pilotage and time charges). The transaction price of each assignment is based on a published tariff and payment terms are 15 days. Contracts with customers do not include non-cash consideration; there are no significant financing components, no refund liabilities and contracts do not include variable consideration.

The Authority satisfies its performance obligations at a point in time as control is only passed once an assignment is complete because regulations prevent a ship from navigating in pilotage waters without a pilot designated by the Authority on board. Receivables related to contracts with customers are presented in the Authority's statement of financial position as trade accounts receivable and are accounted for in accordance with IFRS 9. The Authority has elected to apply a practical expedient that removes the requirement to disclose information about unsatisfied (or partially unsatisfied) performance obligations at year-end where such obligations are part of a contract with an original expected duration of one year or less.

2.7 Interest Income

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Authority and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the asset's net carrying amount on initial recognition.

2.8 Foreign currencies

In preparing the financial statements of the Authority, transactions in currencies other than the Authority's functional currency (foreign currencies) are recognized at the rate of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are translated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Non- monetary items that are measured in terms of historical cost in a foreign currency are not translated.

2.9 Employee benefits

i. Pension benefits

All eligible employees of the Authority are covered by the Public Service Pension Plan (the "Plan"), a contributory defined benefit plan established through legislation and sponsored by the Government of Canada.

Contributions are required by both the employees and the Authority to cover current service cost. Pursuant to legislation currently in place, the Authority has no legal or constructive obligation to pay further contributions with respect to any past service or funding deficiencies of the Plan. Consequently, contributions are recognized as an expense in the year when employees have rendered service and represent the total pension obligation of the Authority.

ii. Other employee benefits

Management, unionized employees, and Fraser River pilots are entitled to sick leave benefits as provided for under collective agreements or employment contracts. Unionized employees are entitled to severance benefits accumulated up to 31 March 2018. The liability for these benefits is estimated and recorded in the financial statements as the benefits accrue to the employees.

The costs and the defined benefit obligation are actuarially determined using the projected unit credit method prorated on service that incorporates management's best estimate assumptions.

Actuarial gains and losses are recognized immediately in other comprehensive income (OCI).

2.10 Property and equipment

Property and equipment are initially recorded at cost, and subsequently carried at cost less accumulated depreciation and any accumulated impairment losses. The cost of assets constructed by the Authority includes design, project management, legal, materials, interest on directly attributable construction loans, and construction costs. Spare engines are carried at cost and will be depreciated when put in service.

Depreciation is recognized so as to allocate the cost or valuation of the assets less their residual values over their useful lives, on a straight-line basis. The estimated useful lives, residual values and depreciation methods are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis. The estimated useful lives of the Authority's assets are as follows:

Buildings and floats	10 - 20 years
Pilot boats	25 years
Pilot boat engines	10,250 running hours
Pilot boat generators	10 years
Equipment	
communication and other	4 - 10 years
computers	3 years
simulators	5 years
Leasehold improvements	shorter of 10 years or remaining term of lease

In addition, the Authority reviews the carrying amount of its non-financial assets, which include property and equipment, at each financial year-end to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows from other assets or groups of assets (the "cash generating unit", or "CGU").

The recoverable amount of an asset or a CGU is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value by applying a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

An impairment loss is recognized if the carrying amount of an asset or a CGU exceeds its estimated recoverable amount. Impairment losses are recognized in comprehensive income.

Impairment losses recognized in prior periods are assessed at each financial year-end for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation and amortization, if no impairment loss had been recognized.

With regard to simulators, the Authority's proportion of costs of software purchased for its own use and which is integral to the hardware (because without that software the equipment cannot operate), is treated as part of the cost of the computer hardware and capitalized to property and equipment.

2.11 Financial Instruments

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit and loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in profit or loss.

Financial Assets

The Authority's financial assets include cash and cash equivalents, trade accounts receivable, certain other receivables and investments.

After initial recognition, the Authority classifies and measures its financial assets at amortized cost, fair value through other comprehensive income, or fair value through profit or loss.

Financial assets are classified at amortized cost when both of the following conditions are met:
(a) the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
(b) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets are classified at fair value through other comprehensive income when both of the following conditions are met:
(a) the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
(b) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

All of the Authority's investments are debt instruments and classified at fair value through other comprehensive income. The investments are initially recognized at fair value and subsequently measured at fair value at each reporting date. Fair value is based on the quoted price of the securities at the reporting date. Purchases and sales of investments are recognized on a settlement date basis. Gains and losses arising from changes in fair values or sales of investments are included in other comprehensive income. Interest and other revenues are presented net of investment expenses.

Trade accounts receivable and certain other receivables that are financial instruments are initially recognized at fair value and subsequently measured at amortized cost using the effective interest method, less a provision for impairment when applicable. Receivables are considered individually for impairment when they are past due or when other objective evidence is received that a specific counterparty will default. Receivables that are not considered to be individually impaired are reviewed for impairment in groups, which are determined by reference to the industry and region of the counterparty and other shared credit risk characteristics. The impairment loss estimate is then based on recent historical counterparty default rates for each identified group.

Financial liabilities

Financial liabilities are recognized when the Authority becomes a party to the contractual provisions of the financial instrument, and subsequent to initial recognition, they are classified and measured at amortized cost, except for financial liabilities at fair value through profit or loss.

The Authority's financial liabilities include accounts payable and accrued liabilities and borrowings and are all classified at amortized cost using the effective interest method. Financial liabilities are removed from the balance sheet when the obligation specified in the contract is either discharged, cancelled or expire.

2.12 Future changes in accounting policies and disclosures

New IFRSs issued but not yet effective

The following is a listing of new IFRS standards that are issued but not effective until annual periods beginning on or after 1 January 2019.

IFRS 16 – Leases

In January 2016, the International Accounting Standards Board issued IFRS 16 *Leases* ("IFRS 16"). IFRS 16 will replace IAS 17 *Leases* and related interpretations. It requires lessees to recognize most leases on their balance sheets as right-of-use assets (representing the right to use the underlying assets), with corresponding lease liabilities (representing the obligation to make lease payments). Generally, the recognition pattern for capitalized leases will be similar to today's finance lease accounting, with interest and depreciation expense recognized in finance costs and other expenses respectively in the statement of profit or loss and other comprehensive income. IFRS 16 is effective for annual periods beginning on or after 1 January 2019. Lessees must adopt IFRS 16 using either a full retrospective or a modified retrospective approach. The Authority plans to apply the modified retrospective approach, under which the cumulative effect of adoption will be recognized in opening retained earnings as at 1 January 2019, with no restatement to the comparative figures.

The adoption of IFRS 16 will change the accounting treatment for operating leases which include the Authority's head office lease, leases of hotel rooms held for pilots, and leases of berthage and moorage space for pilot boats.

The Authority plans to elect to use the following permitted practical expedients:

- Apply a single discount rate to a portfolio of leases with similar characteristics;
- Account for leases with a remaining term of less than 12 months as at 1 January 2019 as short-term leases;
- Account for lease payments as an expense and not recognize a right-of-use ("ROU") asset if the underlying asset is of low dollar value; and
- Exclude initial direct costs from the measurement of the ROU asset at the date of initial application.

The Authority will recognize ROU assets at an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognized in the statement of financial position immediately before the date of initial application. As a result, the Authority expects to account for ROU assets and corresponding lease liabilities of $1,300, with no anticipated material effect on opening retained earnings. The Authority will begin to recognize depreciation expenses related to the ROU assets as well as interest expenses related to lease liabilities in 2019.

IFRS 17 – Insurance Contracts

IFRS 17 is effective for annual periods beginning on or after 1 January 2021. The standard establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts within the scope of the standard. The objective of IFRS 17 is to ensure that an entity provides relevant information that faithfully represents those contracts. This information gives a basis for users of financial statements to assess the effect that insurance contracts have on the entity's financial position, financial performance and cash flows. The adoption of this standard is not expected to have an impact the Authority's financial statements.

3. Critical accounting judgments and key sources of estimation uncertainty

In the application of the Authority's accounting policies, which are described in Note 2, management of the Authority is required to make judgments, estimates and assumptions about carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or the period of the revision and future periods if the revision affects both current and future periods.

3.1 Critical judgments in applying accounting policies

The preparation of financial statements requires management to make judgments that affect the application of accounting policies, and estimates and assumptions that affect the reported amounts of assets and liabilities, and revenues and expenses. Actual results may differ from the estimates and assumptions made by management.

Property and equipment

The significant judgments made by management in applying the Authority's accounting policies include determining the components and the method to be used to depreciate property and equipment.

Control over 1008799 B.C. Ltd.

The Authority's basis of consolidation is described above in the "Basis of Consolidation" section. Judgment is applied in determining when the Authority controls or ceases to control an investee even if the Authority holds less than a majority of the investee's voting rights (the existence of de facto control).

3.2 Key sources of estimation uncertainty

The following are key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

Defined benefit obligations

The estimates and underlying assumptions made by management that may have a significant effect on the financial statements include determining the present value of the defined benefit obligation of the other employee benefits on an actuarial basis using management's best estimates and assumptions. Any changes in these estimates and assumptions, which include the discount rate, will impact the carrying amount of the defined benefit obligation. The discount rate used to determine the present value of the defined benefit obligation is based on the interest rates of high-quality corporate bonds of the same currency and with similar terms to maturity.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised and in any future periods affected.

4. Financial Instruments

(a) Risk management

The Authority, through its financial assets and financial liabilities, is exposed to the following risks from its use of financial instruments: credit risk, liquidity risk, and market risks (i.e. interest rate risk, currency risk and other price risk). The Authority manages these risk exposures on an ongoing basis.

(b) Credit risk

Credit risk on financial instruments arises from the possibility that the issuer of a financial instrument fails to meet its obligation. To manage this risk, the Minister of Finance authorizes the Authority to only invest in bonds or other obligations of, or guaranteed by, Her Majesty in right of Canada or any province, or any municipality in Canada. As a result, credit risk associated with investments is considered to be low.

The carrying amount of cash and cash equivalents, trade accounts receivable, certain other receivables and investments represents the maximum credit exposure.

The Authority's trade accounts receivable had a carrying value of $6,071 and certain other receivables and prepaid travel had a carrying value of $185 as at 31 December 2018 (2017 - $5,203 and $133 respectively). There is no significant concentration of accounts receivable with any one customer. As at 31 December 2018, 0% (2017 - 0%) of accounts receivable were over 90 days past due. Historically, the Authority has not incurred any significant losses with respect to bad debts. The risks of default are considered to be low, as the Authority has the ability to deny pilotage services to a customer who has not paid the Authority for past service. The cost of pilotage services is considered to be insignificant as compared to the value of a vessel, or the costs of delays from denial of pilotage due to lack of payment. The Authority has performed an analysis of 12 month accounts receivable expected credit losses, and the result is an allowance of nil as at 31 December 2018 (2017 – nil).

The credit risk related to cash and cash equivalents is minimized as these assets are held with a Canadian chartered bank.

(c) Liquidity risk

Liquidity risk is the risk that the Authority will not be able to meet its financial obligations as they become due. The Authority's objective is to have sufficient liquidity to meet these liabilities when due. The Authority monitors its cash balances and cash flows generated from operations on a frequent basis to meet its requirements.

The carrying amount of accounts payable and accrued liabilities and borrowings represents the maximum exposure to liquidity risk.

The Authority's accounts payable and accrued liabilities had a carrying value of $6,477 as at 31 December 2018 (2017 - $5,870) and are all due within 60 days. The Authority's wages and employee deductions payable had a carrying value of $4,922 as at 31 December 2018 (2017 - $4,569).

The Authority has credit facilities with a Canadian chartered bank (Note 7).

(d) Market risks

(i) Interest rate risk

Interest rate risk arises because of the fluctuation in interest rates. The Authority is subject to interest rate risk on its cash and cash equivalents and the investments portfolio. Interest rate risk is minimized by managing the duration of the fixed-term investments portfolio and rebalancing on a monthly basis to the Standard & Poor's Canadian Short-Term Composite Index. The interest rates on the investments are fixed. The investments will mature over the next three years.

Cash and cash equivalents held during the year yielded a weighted average interest rate of 1.98% (2017 – 1.00%).

Year ended 31 December 2018 (thousands of Canadian dollars)

As at 31 December 2018, a shift in interest rates of 100 basis points, assuming that all other variables had remained the same, would have resulted in a $64 increase or a $64 decrease in the Authority's profits on cash and investments for the year (2017 - a $48 increase or a $48 decrease).

The Authority has limited exposure to interest rate risk on its borrowings. Borrowed funds are from a Canadian chartered bank and have fixed rates of 2.70% and 2.72% which cannot be changed between maturity dates without financial penalty.

(ii) Currency risk and other price risk

The Authority is not presently exposed to any significant currency risk or other price risk. Accrued payables denominated in foreign currencies at year end were nil (2017 - nil).

(e) Fair values

For financial reporting purposes, fair value measurements related to financial instruments which are measured subsequent to initial recognition at fair value are categorized into Level 1, 2 or 3. These levels are based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety. These are described as follows:

- Level 1 Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2 Inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 Inputs are unobservable inputs for the asset or liability.

The Authority's cash and cash equivalents and investments are measured subsequent to initial recognition at fair value and are Level 1 at all dates presented.

The carrying values of the Authority's trade accounts receivable, certain other receivables and accounts payable and accrued liabilities approximate their fair values due to their short-term to maturity. The fair value of the Authority's borrowings is determined by discounting the future cash flows of these financial obligations using 31 December 2018 market rates for debts of similar terms (Level 2).

As at 31 December 2018, the fair value of borrowings before deferred financing costs, is estimated to be equivalent to its carrying value of $1,815 (2017 - $2,199). The fair value of the borrowings varies from the carrying value when there are fluctuations in interest rates since their issue.

5. Investments and investment revenue

(a) Portfolio investments

As at 31 December	**2018**		2017	
	Fair Value	Face Value	Fair Value	Face Value
	$	$	$	$
Current				
Cash	**—**	**—**	6	6
Government of Canada Bonds	**553**	**551**	—	—
	553	**551**	6	6
Non-current				
Government of Canada Bonds	**553**	**552**	—	—
Canada Housing Trust Bonds	**—**	**—**	497	502
	553	**552**	497	502
Total	**1,106**	**1,103**	503	508

The remaining terms to maturity of the investments as at 31 December 2018 are as follows:

	Remaining term to maturity			
	Within 1 year	**1-3 years**	**4-5 years**	**Total**
	$	$	$	$
Government of Canada Bonds	551	552	—	1,103
	551	552	—	1,103

(b) Investment revenue

Year Ended 31 December	**2018**	2017
	$	$
Interest	**5**	9
Gains and losses		
Realized losses in the year	**(8)**	(37)
Unrealized losses in the year	**—**	(5)
	(8)	(42)
Investment management fees	**(2)**	(4)
	(5)	(37)

(c) Investment performance

The time weighted calendar rate of return during the year on these investments was 0.52% (2017 – negative 1.36%). The return is net of management fees, inclusive of realized and unrealized gains and losses, inclusive of deposit and coupon payments (interest), inclusive of accrued interest received and paid for sales and purchases of bonds and inclusive of accrued interest as at 31 December 2018.

Year ended 31 December 2018 (thousands of Canadian dollars)

6. Property and equipment

	Buildings and floats	Pilot boats	Pilot boat engines	Spare engines	Pilot boat generators	Equipment	Leasehold Improvements	Total
	$	$	$	$	$	$	$	$
Cost								
At 1 January 2017	404	13,817	1,709	83	232	3,548	261	20,054
Asset acquired	—	102	70	88	96	147	—	503
Transfers	—	—	83	(83)	—	—	—	—
Disposals	—	—	(89)	—	(56)	(112)	—	(257)
At 31 December 2017	404	13,919	1,773	88	272	3,583	261	20,300
Assets acquired	193	450	663	—	112	212	—	1,630
Disposals & impairment loss	—	(218)	(543)	—	(76)	(331)	—	(1,168)
At 31 December 2018	**597**	**14,151**	**1,893**	**88**	**308**	**3,464**	**261**	**20,762**
Accumulated Depreciation								
At 1 January 2017	316	4,780	946	—	204	1,969	141	8,356
Depreciation for the year	10	612	186	—	31	730	18	1,587
Disposals	—	—	(89)	—	(56)	(112)	—	(257)
At 31 December 2017	326	5,392	1,043	0	179	2,587	159	9,686
Depreciation for the year	10	591	136	—	13	370	18	1,138
Disposals & impairment loss	—	(216)	(511)	—	(74)	(159)	—	(960)
At 31 December 2018	**336**	**5,767**	**668**	**0**	**118**	**2,798**	**177**	**9,864**
Carrying amounts								
At 31 December 2017	78	8,527	730	88	93	996	102	10,614
At 31 December 2018	**261**	**8,384**	**1,225**	**88**	**190**	**666**	**84**	**10,898**

Year ended 31 December 2018 (thousands of Canadian dollars)

7. Borrowings

The Authority has an operating credit facility of up to $5,000 available at an interest rate equivalent to the bank's prime lending rate. The Authority has not drawn on this facility at all dates presented. The credit facility is available to the Authority as required and has no renewal date or fixed term.

On 22 July 2014, the Authority entered into an unsecured committed reducing term loan facility for the acquisition and retrofitting costs of property and equipment. The $1,700 loan has a term of 8 years and 2 months and bears an annual interest rate of 2.72%. As at 31 December 2018, the principal outstanding is $981 (2017 - $1,209).

On 13 October 2015, the Authority drew on its unsecured committed reducing term loan facility in order to provide a second tranche of financing for the acquisition and retrofitting costs of property and equipment. The $1,300 loan has a term of 8 years and 2 months and bears an annual interest rate of 2.70%. As at 31 December 2018, the principal outstanding is $834 (2017 - $990).

Estimated principal repayments on outstanding borrowings are as follows:

Year	$
2019	395
2020	406
2021	417
2022	428
2023	169

8. Pension benefits

Substantially all of the employees of the Authority are covered by the Public Service Pension Plan (the "Plan"), a contributory defined benefit plan established through legislation and sponsored by the Government of Canada. Contributions are required by both the employees and the Authority. The President of the Treasury Board of Canada sets the required employer contributions based on a multiple of the employees' required contributions.

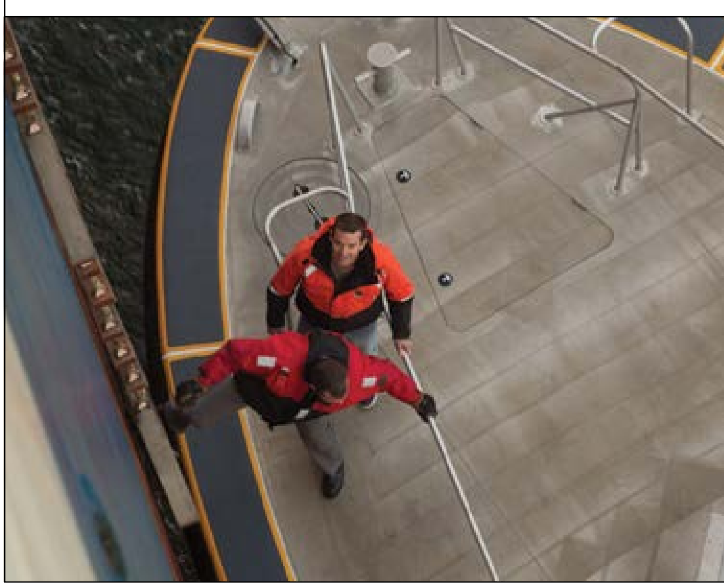
Effective 1 January 2018, the general contribution rate for the year was $1.01 (2017 - $1.01) for every dollar contributed by the employee, and $3.20 (2017 - $7.74) for every dollar contributed by the employee for the portion of the employee's salary above $164 (2017 - $163). For new employees participating in the plan on or after 1 January 2013, the general contribution rate effective for the year was $1.00 (2017 - $1.00) for every dollar contributed by the employee and $3.20 (2017 - $7.74) for every dollar contributed by the employee for the portion of the employee's salary above $164 (2017 - $163).

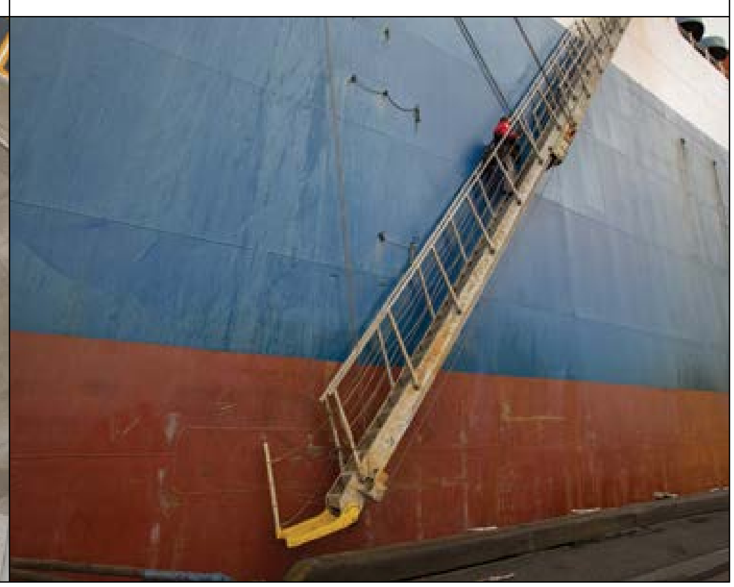
Total contributions of $791 (2017 - $880) were recognized as an expense in the current year. The Authority expects to make employer contributions of $840 during 2019.

The Government of Canada holds a statutory obligation for the payment of benefits relating to the Plan. Pension benefits generally accrue up to a maximum period of 35 years at an annual rate of 2 percent of pensionable service times the average of the best five consecutive years of earnings. The benefits are coordinated with Canada/Québec Pension Plan benefits and they are indexed to inflation.

9. Other employee benefits

Management, unionized employees and Fraser River pilots are entitled to sick leave benefits as provided for under collective agreements or employment contracts. Unionized employees are entitled to severance benefits accumulated up to 31 March 2018. The benefits are fully paid for by the Authority and require no contributions from employees. The plans are funded on a pay-as-you-go basis and no assets have been segregated and restricted to provide for the benefits. The Authority measures the defined benefit obligation of its plans for accounting purposes as at 31 December of each year.





Year ended 31 December 2018 (thousands of Canadian dollars)

Information about the plan is as follows:

Year ended 31 December	2018	2017
	$	$
Reconciliation of defined benefit obligation		
Defined benefit obligation, beginning of year	**1,154**	1,130
Current service cost	**55**	54
Interest cost	**37**	38
Plan amendments	**(92)**	—
Benefits paid	**(236)**	(97)
Actuarial loss	**270**	29
Defined benefit obligation, end of year	**1,188**	1,154
Reconciliation of plan assets		
Fair value of plan assets, beginning of year	**—**	—
Employer contributions	**236**	97
Benefits paid	**(236)**	(97)
Fair value of plan assets, end of year	**—**	—
Components of expense recognized in profit or loss		
Current service cost	**55**	54
Immediate recognition of past service cost	**(92)**	—
Interest cost	**37**	38
Total expense recognized in profit and loss	**—**	92
Analysis of actuarial gain or loss		
Actuarial loss from demographic assumption changes	**13**	—
Actuarial gain from financial assumption changes	**(32)**	—
Actuarial loss from member experiences	**289**	29
Actuarial loss	**270**	29
Reconciliation of funded status		
Defined benefit obligation, end of year	**1,188**	1,154
Fair value of plan assets, end of year	—	—
Deficit	**1,188**	1,154
Liability recognized on statement of financial position	**1,188**	1,154
Classification of defined benefit obligation		
Current portion	**604**	442
Non-current portion	**584**	712
Defined benefit obligation, end of year	**1,188**	1,154

The weighted average of the maturity of the plan as at 31 December 2018 is 6.4 years (2017 – 8.4 years).

Year ended 31 December 2018 (thousands of Canadian dollars)

The significant assumptions used in the actuarial valuation of the defined benefit obligation were as follows:

Weighted-average assumptions for expense

Year ended 31 December	**2018**	2017
Discount rate	**3.25%**	3.45%
Salary escalation rate	**2.00%**	3.00%

Weighted-average assumptions for obligation

As at 31 December	**2018**	2017
Discount rate	**3.60%**	3.25%
Salary escalation rate 2019	**2.00%**	2.00%

A quantitative sensitivity analysis for significant assumptions as at 31 December 2018 is as shown below:

Assumptions	**Discount rate**		**Salary scale**	
Sensitivity level	1% increase $	1% decrease $	1% increase $	1% decrease $
Impact on Defined benefit obligation	(71)	79	72	(66)

The Authority expects to make employer contributions of $105 (2018 - $71) to its defined benefit plan during the 2019 financial year.

10. Capital management

The Authority's capital is its equity, which is comprised of retained earnings. Equity is represented by net assets.

The Authority is subject to the financial management and accountability provisions of the *Financial Administration Act* which imposes restrictions in relation to borrowings and acquisition of investments. On an annual basis the Authority must receive approval of all borrowings from the Minister of Finance. The Act limits investments to bonds or other obligations of, or guaranteed by, Her Majesty in right of Canada or any province, or any municipality in Canada. During the years ended 31 December 2018 and 2017, the Authority has complied with these restrictions.

The Authority manages its equity as a by-product of managing its revenues, expenses, assets, liabilities, and general financial dealings to ensure that its objectives are achieved efficiently. The tariffs of pilotage charges must be fair and reasonable, and must enable the Authority to operate on a self-sustaining financial basis, as required by the *Pilotage Act.*

There were no changes in the Authority's approach to capital management during the year.

11. Related party transactions

Details of the transactions between the Authority and other related parties are disclosed below.

(a) Trading transactions

The Authority is related in terms of common ownership to all Government of Canada created departments, agencies and Crown corporations. The Authority enters into transactions with these entities in the normal course of business, under the same terms and conditions that apply to unrelated parties. The transactions are recorded at the exchange amount, which approximates fair value. The majority of these transactions do not have a material effect on these financial statements.

(b) Compensation of key management personnel

Key management personnel of the Authority include the members of the Board of Directors and senior executives of the Authority. The remuneration of key management personnel included the following:

Year ended 31 December	**2018**	2017
	$	$
Short-term employee benefits, including salaries	**850**	752
Post-employment benefits	**77**	78
	927	830

Year ended 31 December 2018 (thousands of Canadian dollars)

12. Commitments

The Authority has operating lease commitments with differing terms and expiry dates over the next five years. The future minimum annual rental payments for these commitments over the next five years and thereafter are as follows:

Year	$
2019	357
2020	370
2021	362
2022	275
2023	27
2024 and thereafter	nil

Included in the operating lease commitments disclosed above are leases for the Authority's head office space in Vancouver, a commitment to Coast Hotels for specific rooms held for pilots in Victoria, and other operating lease commitments.

The commitment for the head office space also calls for payment of a pro-rata share of annual operating costs and property taxes, estimated at $149 for 2019 (2018 - $146).

The Authority has an agreement with a software vendor to provide licensing for portable pilotage unit (PPU) software charts and maintenance. Payments in fiscal 2019 are expected to be approximately $144 (2018 - $65).

The Authority has an agreement with a PPU manufacturer and developer that calls for a payment of $67 (2018 - $40) on the receipt of eight ARGUS PPU systems for early fiscal 2019.