Atlantic Pilotage Authority
ANNUAL REPORT 2018

Atlantic Pilotage Authority
Administration de pilotage de l'Atlantique

Canada

Mandate

The mandate of the Atlantic Pilotage Authority is to establish, operate, maintain and administer, in the interest of safety, an efficient pilotage service in the Atlantic region.

Mission

To deliver safe, effective and self-sustaining marine pilotage services in Atlantic Canada.

Vision

The Vision of the Atlantic Pilotage Authority (APA) is to be a respected leader in marine pilotage safeguarding people, property and the environment.

To achieve the vision, the Authority must demonstrate:

- An industry-leading safety record
- Operational efficiency where customers receive tangible value for the tariff they pay
- Marine expertise where APA pilots are viewed as leaders in the field of marine navigation and safety
- A self-sustaining business model that allows the Authority to provide services and be financially self-sufficient

Core Values

SAFETY
The Authority will emphasize safety over any competing goals or pressures to ensure the protection of people and safeguarding of property.

ENVIRONMENT
The Authority will strive to protect and conserve the natural environment and local communities.

SERVICE
The Authority is dedicated to being a trusted partner in providing effective and efficient marine pilotage services and expertise in marine navigation.

RELATIONSHIPS
The Authority will build and maintain long-term respectful relationships with employees, customers, contractors, and suppliers.

ACCOUNTABILITY
The Authority will be accountable to the Federal Government, the public, and to its customers for actions taken and the results of its operations.

CORPORATE HEADQUARTERS

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ISO 9001
Quality

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LETTER FROM THE Chair & CEO

Captain Sean Griffiths
Chief Executive Officer

Captain Jack Gallagher
Chair

March 13, 2019

The Honourable Marc Garneau, P.C., M.P.
Minister of Transport
Tower C – 330 Sparks Street
Ottawa, ON
K1A 0N5

Dear Minister:

Pursuant to Section 150 of the *Financial Administration Act*, it is our pleasure to present the Atlantic Pilotage Authority's Annual Report for 2018.

Safety is paramount to the Authority and we are pleased to report that the Authority has completed 8,720 assignments during 2018 where 99.95% were without a reported pilotage incident. There were no injuries or environmental contamination due to any of the incidents reported.

The Authority aims to provide pilotage service within one hour of the confirmed ordered time on 100% of its assignments. In 2018, the Authority provided a pilot within this time frame on 99.2% of the assignments. The number of assignments completed without a registered complaint was 99.7% of the total assignments.

The Atlantic Pilotage Authority had a third consecutive strong financial year in 2018. Traffic levels across the Authority have remained steady and our customers continue to cooperate in agreeing to tariff adjustments where necessary. This included tariff reductions in targeted areas for 2018 and for 2019. These factors have contributed to an operating profit of $1.746 million. This profit includes $176 thousand in revenue raised through a surcharge intended to recapture most of the operating losses incurred in previous years. Due to the recent growth in traffic, and the recent financial performance of the Authority, this surcharge was removed on July 1, 2018, nine months earlier than planned.

These strong financial results have allowed reserves to be replenished, capital investments to be made, and substantial savings be put aside for future requirements and obligations. The capital investments made during the year include additional work on the two vessels that had been purchased from the Netherlands to increase their ability to operate in North American winters. It also includes investments in Portable Pilotage Units that have allowed the Authority's pilots to provide a more effective service.

Pilotage assignments during the year decreased by 1% from 2017 but were 4.8% over budget. The corresponding revenues were 8% above budget. Total expenses were 5% over budget due to an increase in operating costs, driven primarily by the increase in pilotage activity and pilot boat repair costs, as the Authority continued to invest in its fleet. Administration and dispatch costs were controlled at budgeted levels throughout the year.

A notable accomplishment of the Authority in 2018 was achieving an ISO 9001-2015 designation in early October. This took an extensive effort on behalf of the CEO and his management team to be a part of this internationally recognized and approved management system.

Management's regular consultations with its Atlantic Region stakeholders continues to provide vital input on the service levels, operational issues, and pilotage tariffs within each of its major ports. These stakeholder meetings provide open dialogue with customers and allows the management of the Authority to stay connected to actual or potential developments in its region.

The Authority's relationship with its stakeholders remains strong as management and pilots are actively engaged in multiple projects in various districts. Some developments include upgrading or enhancing existing infrastructure, assessing the risk of new operations or planning for larger vessels at existing terminals.

In late 2018, the Authority conducted its third Customer Satisfaction Survey which is used as a formal mechanism to collect feedback from stakeholders, customers, service providers and ship masters regarding their level of satisfaction with our pilotage service. This feedback is one of the most important ways in which we learn how to continuously improve as an organization that strives for excellence in our operations. We are pleased to report that 93.9% of the respondents were satisfied with the Authority's commitment to safety while 81.8% were satisfied with the efficiency of the pilotage service provided.

It is once again our pleasure to report that the Atlantic Pilotage Authority continues to provide an exemplary service, in the safest and most economical manner, to the satisfaction of its users, and within the obligations of the *Pilotage Act*.

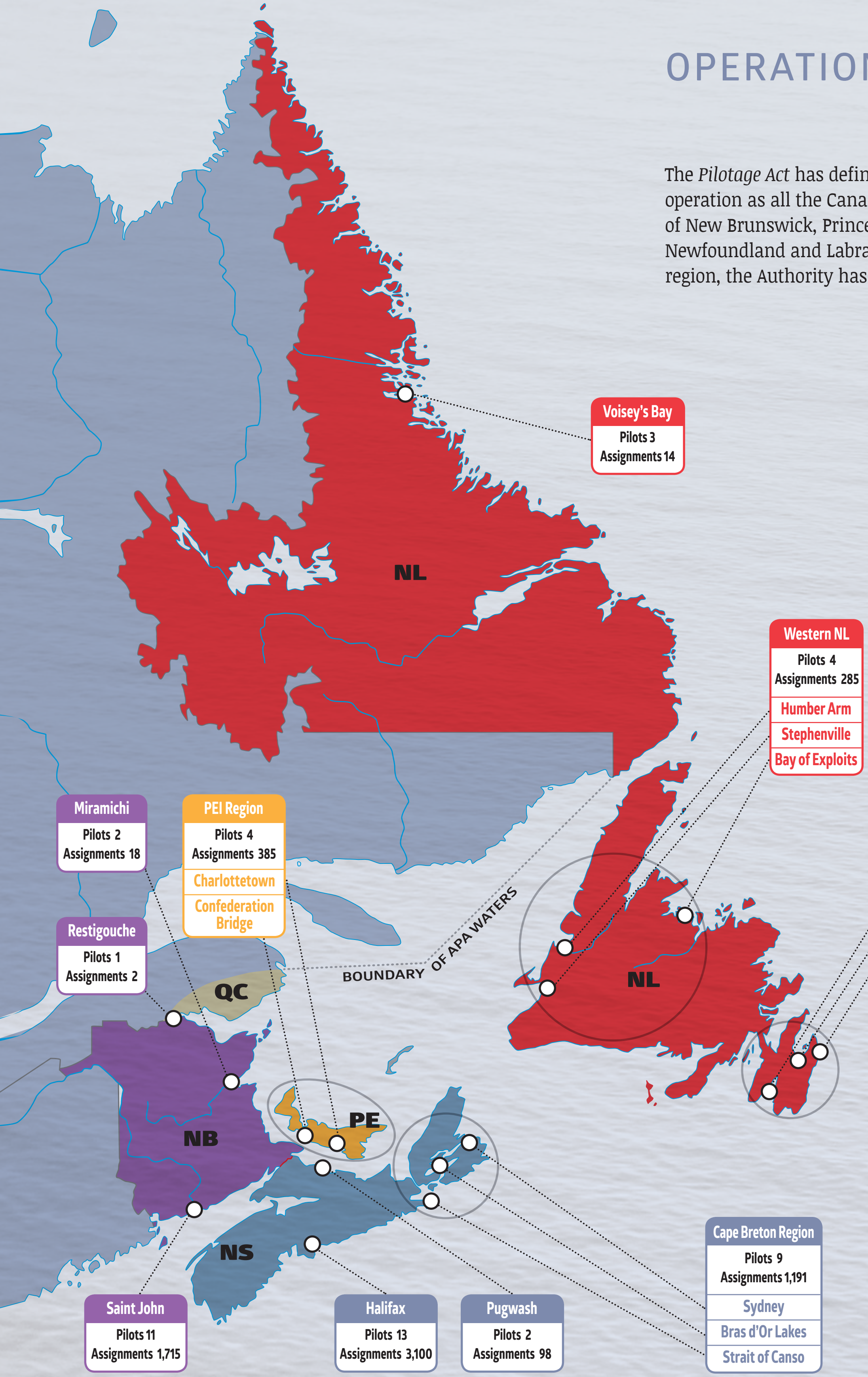
Respectfully submitted,

Captain Sean Griffiths, MM, MBA
Chief Executive Officer

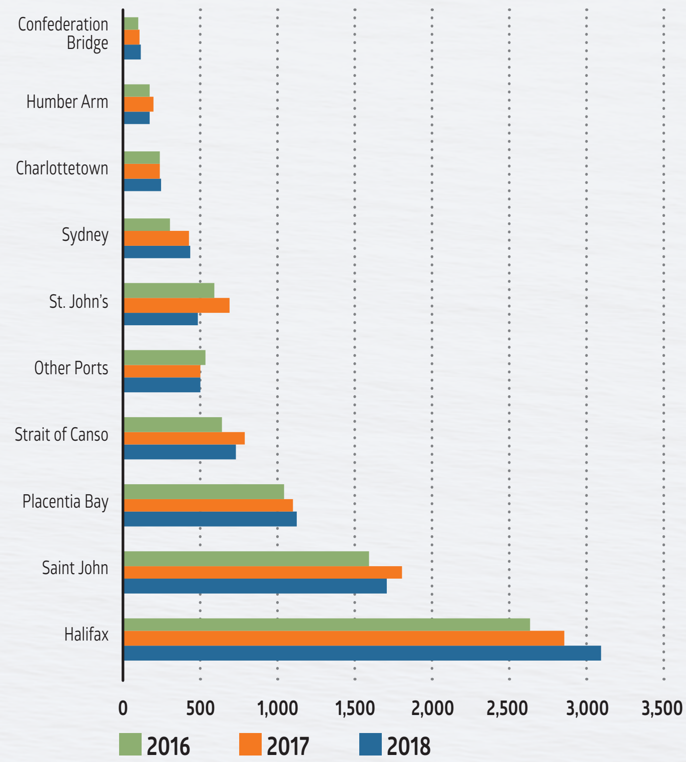
Captain Jack Gallagher
Chair

OPERATIONAL AREA

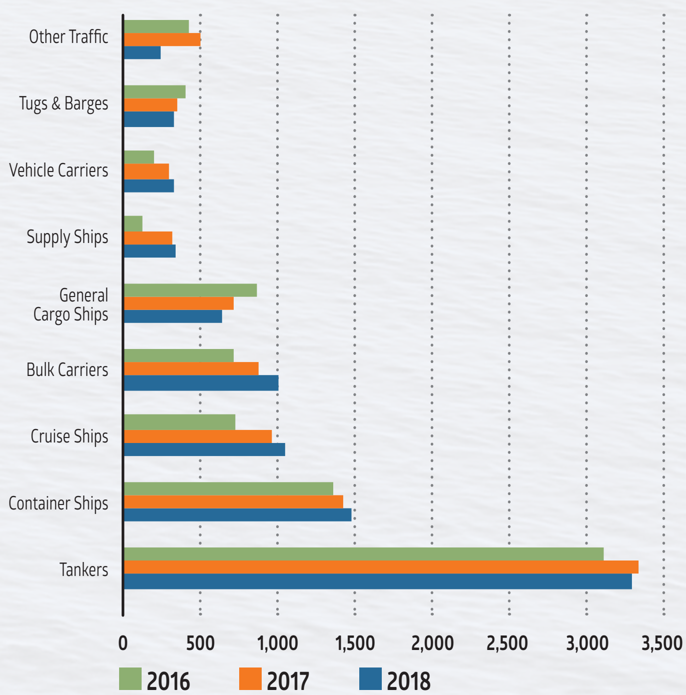
The *Pilotage Act* has defined the Atlantic Pilotage Authority's area of operation as all the Canadian waters in and around the provinces of New Brunswick, Prince Edward Island, Nova Scotia, and Newfoundland and Labrador, as indicated on the map. Within this region, the Authority has designated 17 compulsory pilotage areas.



Total Pilotage Assignments



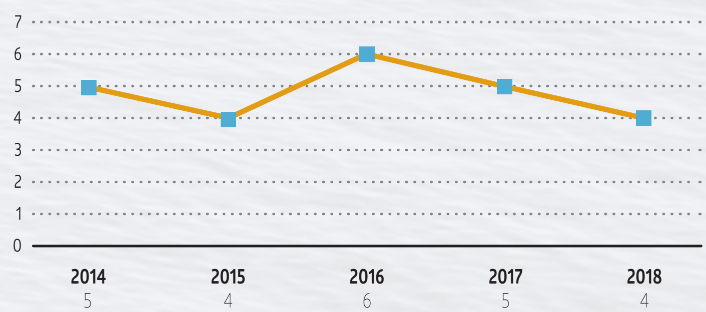
Assignments by Class of Vessel



Pilotage Assignments

Assignments	Pilots	2016	2017	2018
New Brunswick				
Saint John	11	1,604	1,816	1,715
Miramichi	2	11	16	18
Restigouche	1	4	9	2
Newfoundland and Labrador				
Eastern NL	13			
St. John's		598	700	498
Holyrood		38	39	36
Placentia Bay		1,053	1,110	1,137
Western NL	4			
Humber Arm		184	207	187
Stephenville		9	12	18
Bay of Exploits		104	89	80
Voisey's Bay	3	14	6	14
Nova Scotia				
Halifax	13	2,644	2,863	3,100
Cape Breton Region	9			
Strait of Canso		651	796	739
Sydney		314	434	448
Bras d'Or		4	6	4
Pugwash	2	80	90	98
Prince Edward Island	4			
Charlottetown		252	247	261
Confederation Bridge		112	121	124
Non-Compulsory Areas		283	248	241
Total		**7,959**	**8,809**	**8,720**

Total Shipping Incidents



8,720
PILOTAGE ASSIGNMENTS
Down 1% from 2018

99.95%
ASSIGNMENTS
INCIDENT FREE

0
ZERO
ACCIDENTS
that Caused Injury or Environmental Damage

93.9%
CUSTOMER SATISFACTION
with APA's Dedication to Safety

99.20%
ASSIGNMENTS
without Delay

99.66%
ASSIGNMENTS
without Customer Complaint

81.8%
CUSTOMER SATISFACTION
with APA's Efficiency

1.746m
INCOME IN 2018

ABOUT THE **Atlantic Pilotage Authority**

The Atlantic Pilotage Authority (APA) is a Federal Crown Corporation responsible for providing marine pilotage service to Atlantic Canada. The APA was established in 1972 by the *Pilotage Act*, with the following objective:

> "to establish, operate, maintain and administer in the interests of safety an efficient pilotage service". (*Pilotage Act*, Section 18)

The APA provides licensed pilots to ships that enter Atlantic Canadian Ports to ensure that these ships travel within the pilotage area as safely as possible. This responsibility includes examining qualified mariners and issuing pilotage certificates to successful candidates to enable them to navigate their ships within designated compulsory areas without a licensed pilot on board.

Operations are organized according to geographic location, and seventeen areas have been designated as requiring compulsory pilotage, with one further area in the regulatory process to become compulsory. The Authority also endeavors to provide pilotage service to other areas, referred to as non-compulsory areas, upon request.

The Authority is a Crown Corporation as defined by the *Financial Administration Act* (FAA) and is listed in Schedule III, Part I to that *Act*. The Authority is not an agent of the Crown.

The Authority has not received parliamentary appropriations since 1995 and, under provisions of the *Pilotage Act*, is not eligible for future appropriations.

The Board of the Authority consists of a part-time Chairperson and not more than six other members, all appointed by the Governor in Council.

The Chief Executive Officer (CEO) has the direction and control of the day-to-day business of the Authority. The Authority is administered and controlled at its headquarters, which is located in Halifax, NS.

The APA works with ports, the shipping industry, and other stakeholders to provide the safest and most efficient marine pilotage service possible to Atlantic Canada.

Throughout history and up to the present day, the diverse and challenging coastline and waters of Atlantic Canada have defined the character and development of the region. Marine pilots have played a major role in this development in the past, and continue to do so today.

The Authority provides a valuable and necessary service to the marine community in Atlantic Canada. The highly skilled marine pilots, boat crews, dispatchers, and office staff employed by the APA make vital contributions to the protection of the environment, to safeguarding the lives of mariners, and to preserving and promoting the economic wellbeing of ports in Atlantic Canada.

Powers

To carry out its responsibilities, the Authority has established regulations, approved by the Governor in Council pursuant to the *Pilotage Act*, in order to:

- Establish compulsory pilotage areas;
- Prescribe ships or classes of ships subject to compulsory pilotage;
- Prescribe classes of pilot licences and pilotage certificates that may be issued;
- Prescribe pilotage charges payable to the Authority for pilotage services.

In addition, the Authority is empowered under the *Pilotage Act* to:

- Employ such officers and employees, including licensed pilots and apprentice pilots, as are required for operations;
- Establish internal regulations for managing its operation;
- Purchase, lease or otherwise acquire land, building, pilot boats and other equipment and assets deemed necessary, and to sell any assets thus acquired;
- Borrow, if necessary, in order to defray the Authority's expenses.

Corporate Governance

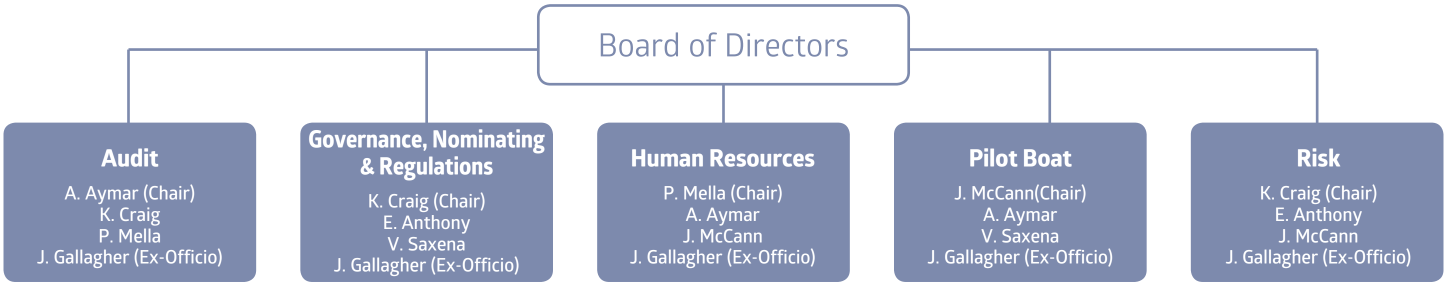
Corporate governance refers to the process and structure for overseeing the direction and management of a corporation so that it carries out its mandate and objectives effectively.

The Authority is composed of a Chair, and not more than six members, referred to herein as the Board of Directors. The Board is appointed by the Governor in Council and is accountable to the Minister of Transport. The Board has a very active committee structure, and new Board Members are provided with an orientation to the Authority, and training in corporate governance upon appointment. Through this process, the Board has built an effective structure for overseeing the direction and management of the Authority so that it fulfills its mandate. Policies regarding the stewardship of the Authority and the functioning of the Board are under continual review, and where necessary, changes are implemented.

The Board has created five committees that focus on the major areas of governance for the Authority. The committees are chaired by a Board member, have terms of reference, and report directly to the Board on a regular basis. Each committee is responsible to identify, document and mitigate their risks on a regular basis.

Audit Committee

The Audit Committee is a core committee of the Authority's Board of Directors. The *Financial Administration Act* (FAA) specifically requires the Authority to establish an audit committee. There are three members on this committee. Its responsibilities include providing financial oversight for the Authority, improving the quality of financial reporting, and increasing stakeholder confidence in the credibility and objectivity of the corporate performance.



Governance, Nominating and Regulations Committee

There are three members on this committee and they meet at the call of the committee chair. Its mandate includes defining roles and responsibilities for the Board and management, as well as consulting with the Chair regarding the structure of Board committees. This committee recommends candidates for the Board as well as the Chair and CEO positions and critically reviews management recommendations amending any regulations associated with the *Pilotage Act*, General Pilotage Regulations, and Atlantic Pilotage Authority Regulations.

Human Resources Committee

This committee meets as needed and is made up of three members. The committee's responsibilities include the CEO's performance evaluation, reviewing significant changes to the organizational structure, reviewing the mandate for collective bargaining, and monitoring succession planning for management and pilot resources.

Pilot Boat Committee

This committee has three members. The committee meets as needed and its responsibilities include the critical review of management reports associated with the operation of pilot boats and technology and monitoring the fleet renewal strategy.

Risk Committee

This committee has three members and its responsibilities include the active solicitation of information regarding significant risks and exposures while reviewing the adequacy of mitigations of those risks identified. This includes the monitoring of the Enterprise Risk Management Framework and the progress achieved in mitigating the identified risks. This committee is also responsible for oversight of the process, financial and management control and practices relating to a specific Pilotage Risk Management Methodology (PRMM) critically reviewing facilitator's, stakeholders' and management reports associated with a PRMM ,and then making a recommendation to the Board to accept, reject or amend the recommendation(s).

Internal Audit

During the year, the Authority had internal audits performed on its Cyber Security policies and structures as well as on its critical spare strategy for the pilot boats. Both of these reports were received late in 2018 and will be presented to Board in the first quarter of 2019.

Risk Management

The Authority has developed its risk-assessment practices to allow it to undertake a complete assessment of risk factors, by implementing a formal comprehensive risk management framework that covers the entire organization and supports the realization of the Authority's mandate, business goals, and objectives.

The following table presents the 10 items with the most residual risk as determined by senior management in 2018.

Red items are graded as having very high residual risk that require detailed research, planning and decision making at senior levels of management.

Items in orange are deemed to have high residual risk that require further attention and action of management.

Blue items require that management specify control responsibility.

Finally, items with residual risk identified in yellow indicate low risk that management has deemed acceptable.

Top 10 Risk Matrix

Rank	Risk	Inherent	Residual
1	The risk that a pilot/crew member suffers an injury while transferring from or to a vessel. These transfers are done thousands of times annually in all types of weather conditions involving many types of vessels. It is this activity that exposes employees to the greatest danger.	!	!
2	The risk that economic conditions outside of the Authority's control will lead to actual traffic levels or mix and/or costs being materially different than that forecasted by the Authority.	!	!
3	The risk that the Authority is unable to attract and retain pilots to meet demand.	!	!
4	The risk that the Authority loses launch service, severely disrupting operations.	!	!
5	The risk that the Authority has a disruption in service due to the loss of a contractor who provides crewing for a pilot boat or crewing and pilot vessel.	!	!
6	The risk that an accident occurs that is caused by the human element.	!	!
7	The risk that tariffs will not cover operating costs due to: a) Operating costs exceeding the amount budgeted when tariffs are determined. b) Tariff amendments being delayed by the regulatory process.	!	!
8	The risk that there are not enough assignments in a port to allow pilots to become proficient or remain proficient in the area leading to the service to not be provided or not provided safely.	!	!
9	The risk that labour relations may deteriorate resulting in shutdown, work slowdowns, or the inability to implement change.	!	!
10	The risk that improper decision making will be caused by; · governance, including the makeup of the Board; or · organizational structure; or · poor succession planning for key management positions	!	!

Strategic Direction

Corporate Objectives

On an annual basis, the Authority engages in strategic planning sessions involving the Board and management. Five corporate objectives were set in 2016 for a period of 5 years but are reviewed annually.

The Authority's corporate objectives are the following:

1. *To deliver safe and effective marine pilotage services in Atlantic Canada.*
2. *To maintain financial self-sufficiency by exercising effective cost management and establishing tariffs that are fair and reasonable.*
3. *To provide a reliable and self-sustaining service by safeguarding the Authority's people and assets while planning for succession and asset replacement.*
4. *To assume a leadership role in marine navigation by providing an expertise in navigational safety and marine operations.*
5. *To contribute to the Federal government's environmental, social, and economic policies as they apply to the marine industry in Atlantic Canada.*

Safe and Effective Service

Consultation

The Authority conducts frequent meetings with stakeholders throughout the region to determine their requirements, report our financial results, discuss operational issues, and exchange information. During 2018, the Authority attended consultation meetings in New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador. Meetings were held for the areas of Saint John, NB; Halifax, NS; Cape Breton, NS; St. John's, NL; Stephenville, NL; and Placentia Bay, NL. Meetings were also held with the Shipping Federation of Canada in Montreal to discuss the overall APA operation. In total, the Authority held 15 consultation meetings during the year over the four provinces. In addition to these meetings sponsored by the Authority, management and pilot representatives attended many other meetings held by stakeholders throughout the region.

During the year, the Authority held an Annual Public Meeting in Charlottetown, PE. The Authority gave a presentation of the 2017 financial results and strategic direction to attendees and interested stakeholders.

Pilot Staffing

The Authority continued to make long-term investments to improve the quality of service it provides. Pilot numbers are monitored closely in combination with service levels to determine the appropriate workforce necessary to provide a safe and effective service. The current goal is to reach and then maintain a steady workforce of 50 fully effective employee pilots, an increase over a low of 42 employed at the beginning of 2014. This goal is dependent on future traffic levels and is reevaluated continuously throughout the year. There were 50 pilots employed at the end of 2018, but the Authority has received notices from seven pilots of their intention of retirement within the next two to three years.

Pilot Boats

Due to the nature of pilotage in the Atlantic Region, which is primarily port pilotage, a large part of operations is related to the provision of pilot boat services. Virtually every port serviced by the Authority has to have a reliable boat and service to transport pilots to and from each assignment. A total of 23 vessels are used to deliver service for the Authority with each one inspected annually to assure the safety of the pilots who are being transferred. The Authority owns 11 of these vessels with the remainder provided by contractors

Of the 11 vessels owned by the Authority, 6 have been built within the last 12 years. The remainder are much older with several built in the 1970's. A long-term strategy is being developed for asset replacement and continued renewal of the fleet. The Authority continues to monitor pilot boat operations in all areas to determine whether improvements can be made.

Technology

The Authority has been deploying portable pilotage units (PPUs) that are beneficial to the specific port pilotage done in the Atlantic region. The PPU's are brought onboard by the pilot and are setup before the pilot takes conduct of the vessel. The PPU consists of independent reference systems that remotely connect to a tablet preloaded with Canadian charts. The unit receives digital information from the ship, other ships, the shore, cellular transmissions, and satellite. It allows the pilot to independently verify ship information, track and predict ship movements, and record/play back the assignment. It is used by pilots to provide the specific information in real-time and is a decision support tool which also assists with training. The full deployment and training for these units began in 2016 and were deployed to all the Authority's employee pilots early in 2018.

The Authority is promoting the deployment of weather buoys in several key strategic areas to provide more accurate and timely information on weather and sea conditions for pilots, other mariners, and industry. This initiative has been spearheaded jointly by the Authority and the Canadian Marine Pilots Association, with support from Port Authorities, educational institutions, federal and provincial governments, the Canadian Coast Guard, and private industry. This initiative has resulted in buoys being launched and made operational in Halifax and in Saint John.

Key Service Indicators

The Authority consults with its customers to determine the level of service required in each port. In some ports, the pattern of vessel traffic contains numerous spikes of activity, creating a need for more pilots than the overall average number of assignments may indicate. The Authority determines the staffing levels for each compulsory pilotage area based on the customer requirements and the expected activity in each port. Occasionally, if traffic levels peak too high, delays may be incurred. Staffing for these rare peaks would be too costly for the customers of the port. The Authority works with individual ports to deal with peak periods and may include the addition of a retired pilot under a short-term contract to help cover the peak in traffic during this relatively brief period.

Non-Compliance reports

The Authority developed a structured methodology for handling complaints that is designed to be as user friendly as possible, and the goal of the Authority is to ensure that timely feedback is provided to the complainant. The most common reason for a complaint to be submitted was due to a delay in an assignment. In some cases, the delay is caused by factors beyond the control of the Authority, such as cargo operations on the vessel or the non-availability of port services such as tugs.

The Authority received 30 (17 in 2017) complaints out of a total of 8,720 (8,809 in 2017) assignments during 2018. The remaining 99.7(99.8% in 2017) of assignments were performed without receiving a complaint from the customer. All complaints received are included in the above total. Of the 30 received in 2018, 33% were caused by pilot boat conflicts in Placentia Bay With the increase in activity and anchor jobs in the area, there has been an increase in delays caused by the pilot boat not being able to service an arrival and an anchorage assignment at the same time. The Authority has reduced the impact of these conflicts through changes in pilot pick-up points, but to eliminate these delays would require continuous operation of a second pilot boat. At this point it has been deemed too costly to constantly crew the second boat to eliminate these relatively short delays.

Customer Survey

In late 2018, the Authority conducted its third Customer Satisfaction Survey to collect feedback from stakeholders, customers, service providers and ship masters regarding their level of satisfaction with the pilotage service. When asked to grade the Authority's commitment to safe pilotage operations, 93.9% (92.8% in 2017) of respondents were satisfied or very satisfied. The efficiency of marine pilotage services provided by the Authority received 81.8% (87.8% in 2017) satisfaction grades.

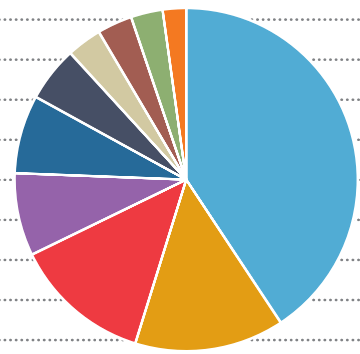
Delay Analysis

During 2018, 96.4% (96.7% in 2017) of all assignments commenced within one hour of the firm order time. Most of the delays were caused by circumstances outside the control of the Authority, such as weather, or vessel delaying sailing due to cargo, labour, or tug issues. When weather is removed, vessel delays comprised 61.5% of all delays in 2018 (67.3% in 2017). For the remaining 38.56% of delays (32.7% in 2017), the primary contributing factor was a shortage of pilots or non-availability of pilot boats. The average length of all delays that were not weather related was 2.63 hours, with the corresponding time in 2017 being 1.90 hours.

The chart below indicates the category of delay for the 270 assignments that were not commenced on time for reasons other than weather.

Delays by Cause 2018

Ship - Cargo Ops	40.7%
Pilot Availability	14.1%
Ship - Other	13.0%
Ship - Mechanical	7.8%
Pilot Boat Conflict	7.4%
Tugs	5.2%
Pilot Boat Mechanical	3.3%
Other Non-APA	3.3%
Berth Availability	3.0%
Agent	2.2%
Total	100.0%

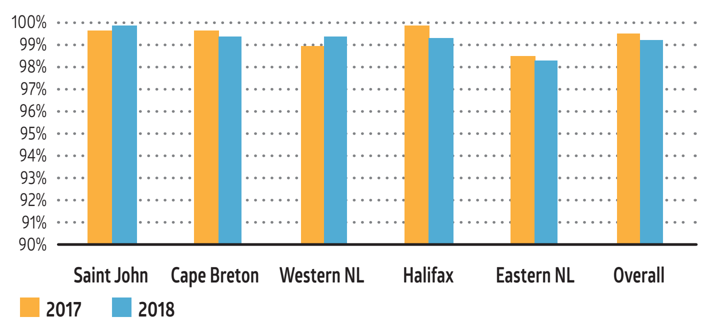


The Authority aims to provide service within one hour of the ordered time on 100% of assignments (excluding delays caused by factors beyond the Authority's control).

In 2018, a pilot was provided within this time frame on 99.2% of the assignments (99.5% in 2017). Performance is also measured for each individual district or port. During 2018, Eastern Newfoundland was the only area that fell below 99% with pilots delivered within one hour on 98.3% (98.6% in 2017) of the assignments. These results were negatively impacted by the pilot boat conflicts in Placentia Bay described earlier.

The following chart provides the results for each port or district. The average length of a pilotage caused delay was 3.21 hours in 2018 (2.65 in 2017).

Percentage of Pilotage Assignments without Pilotage Delays 2018



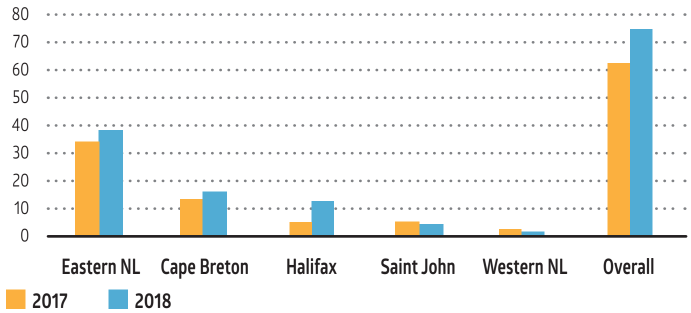
Weather Closures

Climate change is impacting the marine industry and the Authority with more intense storms of a longer duration. In 2018 the Authority was required to suspend pilotage operations due to weather for 74.5 combined days through its 17 compulsory ports.

This was an increase from the 62.9 days in 2017. The largest impact has been on Halifax with more than double the number of days of suspended pilotage.

The chart below shows the number of days pilotage was suspended due to weather conditions.

Number of Days Pilotage was Suspended Due to Weather 2018



2018 Shipping Incidents

During 2018, there were 4 shipping incidents reported by the Authority's pilots.

There were no injuries or environmental contamination associated with any of these incidents, which are categorized below:

Shipping Incidents, 2014-2018

	2014	2015	2016	2017	2018
Damage to equipment					
Contact with wharf	2	3	3	3	3
Contact with port equipment	1	1	2	1	1
Contact with lock	1	0	0	0	0
Contact with sea bed	1	0	1	1	0
Total shipping incidents	**5**	**4**	**6**	**5**	**4**
Environmental contamination	0	0	0	0	0
Injury to people	0	0	0	0	0
Year end total	**5**	**4**	**6**	**5**	**4**

The Authority endeavours to provide a safe and efficient pilotage service in the Atlantic region. The total number of occurrences indicates 99.95% of the 8,720 pilotage assignments were pilotage incident free. In 2017, 99.94% of 8,809 pilotage assignments were pilotage incident free.

The Authority had no occurrences in 2018 where its pilot boats made unintended contact with and caused damages to port infrastructure or other vessels. (4 in 2017) These pilot boat issues did not cause any injuries or environmental contamination.

ISO 9001 – 2015 Certification

The findings of the 2016 Special Examination caused the Authority to focus on the documentation of policies and procedures and document tracking practices. In 2018 a project was completed that resulted in the Authority becoming ISO 9001-2015 certified.

Financial Self-Sufficiency

The *Pilotage Act* requires that pilotage tariffs be fixed at a level that permits the Authority to operate on a self-sustaining financial basis, and that the tariffs set are fair and reasonable. To achieve self-sufficiency, tariff adjustments are made based on the financial and operational issues within each port, rather than overall tariff increases that impact all areas. The goal is to have each area become financially self-sufficient to eliminate cross-subsidization among ports. The Authority relies on projections of future traffic levels and the corresponding revenue and expenses to determine the financial health of the individual ports. All aspects of an area's operation are monitored to determine whether cost cutting measures are more appropriate to achieve a positive result before tariff increases are considered.

The Authority amended tariff charges for the beginning of 2018 in twelve compulsory pilotage areas. Further adjustments were made during the year, including the early removal of a surcharge that is estimated to save industry approximately $260 thousand over 2018 and 2019. The amended tariffs were intended to allow the Authority to remain financially self-sufficient while providing the quality of service requested by the Authority's clients.

Strong traffic levels and the increase in tariffs resulted in the Authority finishing the year with income of $1.746 million. This has allowed the cash reserves to be maintained while making investments in capital and servicing the current debt payments. Substantial savings continue to be put aside for future obligations and capital replacement. The Authority has three annual goals to evaluate financial self-sufficiency:

- Maintain a reserve fund measured as a 2:1 ratio of current liquid assets to current liquid liabilities – this was achieved in 2018.
- Contribute a minimum of $200 thousand to savings for future capital asset replacement – this was achieved in 2018 with an increase in savings of $600 thousand for this purpose.
- Contribute a minimum of $200 thousand to savings for future severance liability payments – this was achieved in 2018 with $400 thousand contributed to savings for this purpose.

The revenues of the Authority are influenced by the amount of marine traffic, and the composition of that traffic in terms of size and types of vessels. The annual traffic levels are mainly driven by the economics of the marine industries of the Atlantic region.

The assignments and size of vessels for the Authority in 2018 was similar to the previous year, but traffic levels fluctuate from port to port. Of the major ports, Halifax had the largest increase in activity while Placentia Bay also had solid growth. Saint John and the Strait of Canso had significant declines in assignments from the previous year. Combined assignments decreased by 1.0% from 2017, but tariff adjustments and increased revenue due to a rising fuel recovery charge increased revenues by 3.7%.

The Authority has been investing in additional pilots, pilot boats, pilot boat upgrades, technology, and pilot training. These investments in the pilotage service, along with increased fuel costs, have increased total expenses by 8.8% over 2017. A plan had been presented to stakeholders for the Authority to increase its operating staff while also preparing for pending retirements. This plan was executed in 2018. A target has been set to maintain these administrative costs at a level that will be no higher than 9% of total revenues (less the surcharge). In 2018, administration costs increased but were 8.0% of revenues.

Comparative 5-year Statement of Income

(in thousands of dollars)	2014	2015	2016	2017	2018
Revenue	$ 22,562	$ 22,673	$ 24,093	$ 27,793	$ 28,831
Expenses	23,180	23,224	22,896	24,880	27,085
Income (loss) for the year	**$ (681)**	**$ (551)**	**$ 1,197**	**$ 2,913**	**$ 1,746**
Working Capital	$ 2,138	$ 1,382	$ 2,829	$ 4,997	$ 5,254
Balance of Dedicated Savings	$ –	$ –	$ –	$ 2,300	$ 3,300
Retained Earnings	$ 7,146	$ 6,555	$ 7,749	$ 10,642	$ 12,415

Reliable and Self-Sustaining Service

Staffing

Annually, the Authority determines the required pilot strength for each port or district based on forecasted activity, service requirements, succession planning, and consultation with industry. To support this annual strategy, the Authority executes a resource plan, which in 2018, accounted for planned retirements. The Authority also brought back two retired pilots on a temporary basis in Halifax to provide additional resources during a record setting cruise season.

Early in the year, the Authority had one pilot retire in Halifax. The Authority has also had seven pilots give notice of their planned retirements. Four pilots have given notice for Saint John, and one for each of Halifax, Cape Breton, and Western Newfoundland. These seven pilots have a combined 168 years of service with the Authority. Resource forecasting led to the hiring of pilots to backfill for these planned retirements and to ensure continued support for service requirements in these ports or districts. There are also five mariners on the eligibility lists for two areas and the eligibility lists will be filled for the remaining three areas in 2019.

The Authority's target is to have at least one candidate on the eligibility list for each applicable notice of retirement received. At the end of 2018, the Authority had received the seven notices of pending retirement, had already hired three trainee pilots to backfill and had an additional five mariners on the eligibility lists as discussed above.

Number of Employees, 2014-2018

	2014	2015	2016	2017	2018
Employee Pilots					
Class A Licence	41.0	39.0	44.0	44.0	45.0
Class B Licence	2.0	8.0	1.0	2.0	4.0
Class C Licence	2.0	0.0	1.0	1.0	1.0
Apprentice	2.0	0.0	1.0	2.0	0.0
Total Employee Pilots	47.0	47.0	47.0	49.0	50.0
Pilot Boat Crew	18.0	18.0	18.0	17.0	18.0
Officers and Administrative	9.5	9.5	9.5	11.0	10.0
Dispatch	6.0	5.0	5.0	6.0	6.0
Total Employees	**80.5**	**79.5**	**79.5**	**83.0**	**84.0**
Entrepreneurial Pilots	9.0	11.0	11.0	10.0	11.0

Training

Training is planned by the Authority based on the need for exposure to new technologies, staged training required by new pilots, the need for refresher courses for senior pilots, and new regulatory requirements that may come into force from time to time. The training for the Authority is a progressive program that is determined with the input of pilot representatives from each area. Apprentice and junior pilots learn through senior pilot mentorship. All pilots attend training courses in manned models or simulators early in their careers, followed after some further experience by a more advanced course. Refresher courses are offered periodically to senior pilots. Other courses, such as Bridge Resource Management, are offered to all pilots as well. In addition, the Authority has worked with industry and the pilots to develop customized courses in such specialized areas as the use of tractor tugs for tanker escort and the characteristics of azipod propulsion systems on cruise ships. For 2018, the Authority had planned for 37 total pilot attendees across 7 different courses. The actual training results were 38 attendees at 7 unique courses provided.

Training for all employees may be requested, or suggested, based on their performance reviews. The pilots are assessed at least once every three years. The Authority performed 12 assessments in 2018 and at year-end every employee pilot had been assessed within the three-year period. The remainder of Authority employees had their annual performance reviews completed within the year.

Workplace Safety

One of the ways the Authority maintains a reliable and self-sustaining service is through a strong emphasis on safeguarding its employees. This core value is supported through the Occupational Health and Safety Committee (OHS).

The Occupational Health and Safety Committee has annual objectives to maintain a high level of safety and well-being for all parties involved in executing a safe and efficient pilotage operation. Annual OHS objectives are established in compliance with the internal APA OHS system, the Canada Labour Code Part II, Marine Occupational Health and Safety Regulations, and other relevant legislative

The Authority uses the number of hours of case management time associated with work related injuries as a measure of the effectiveness of these efforts. In 2018, 12.3 hours were accumulated for these cases (2.5 hours in 2017) with the annual goal being zero. At year-end the Authority was in the process of adding an experienced Quality, Health, Safety and Environmental Manager (QHSE Manager) as part of its administrative staffing plan to ensure the safety of its employees and contribute to the effectiveness and efficiency of the service.

Pilot Boats

The pilot boat services are essential to the operation of the Authority as these vessels are used to transport pilots to and from their assignments in each of the seventeen compulsory ports.

The APA has three models for pilot boat operations:

- In two of the major ports, Halifax and Saint John, the Authority owns and operates pilot boats, with the crew being employees of the APA.
- In Placentia Bay and Sydney, NS the Authority owns the vessels, with the crewing contracted out to a local company.
- In the Strait of Canso, and in minor ports, a contractor provides both boat and crews.

To minimize the possibility of service interruption, spare equipment and spare vessels are kept for quick replacement when required. The Authority's most recent purchases were the addition of two used vessels in 2017. This brings the number of Authority owned boats to eleven. These two jet boats increased the redundancy and reliability of the service.

The Authority targets zero delays caused by unplanned maintenance issues. There were 9 delays caused by maintenance issues in 2018 (3 in 2017). Six of the delays were due to one issue on a single day in Halifax early in the year. Total downtime caused by unplanned maintenance that doesn't cause a delay is to be kept under 1% of the total time the vessels are available. For 2018, downtime represented 1.46% (0.47% in 2017) of the total time available.

Leadership

Consultation

The Authority and its pilots are keenly interested in ensuring that safety is not compromised when new facilities are built or a change in traffic patterns is expected in a port. The Authority makes its pilots available to assist industry and communities with various marine projects. On many occasions, ports and industry request the input of the Authority and its pilots during the planning stage of new projects. This advice may involve the positioning of new berths, the feasibility of bringing larger ships to a facility, analysis of required air draft under fixed structures, or the programming of simulators used for marine training. Recent projects on which the Authority provided consultation and assistance include the following:

Newfoundland

- The Authority and its pilots participated in ship-to-ship oil transfer simulation training in Newcastle, UK, as part of the Hebron project, which supports BWTTS (Basin Wide Transportation & Transshipment System) contingency planning to ensure no interruptions in getting their products to market.

Nova Scotia

- As part of the Port of Halifax's long-term strategy, the Authority and its pilots provided input and consulted with Port and Terminal representatives as the Port plans for berthing two Ultra-Large Container Ships simultaneously at one terminal.
- Discussions with the Halifax Port Authority also took place regarding expanding cruise ship facilities to the Dartmouth side of the harbour, adding to the economic benefit that visiting cruise ships bring to the city. Simulations also took place in Florida in 2018 regarding the maximum vessel size that can be accommodated at existing berths in Halifax.
- Simulations have been conducted in the UK and marine support provided in anticipation of a future LNG export terminal in Goldboro, NS.

New Brunswick

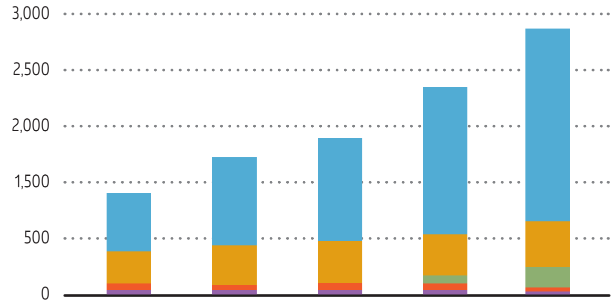
- The Authority, the Saint John Port Authority, and a local pilot met with potash representatives in Saskatoon to discuss vessel size, navigation and tidal windows for Saint John, for safety and efficiency.
- The Authority was involved in several meetings regarding a new bunkering operation in Saint John, which is currently in operation.
- Pilots performed simulations to aid the Port of Saint John to determine the feasibility of bringing in larger cruise vessels to Long Wharf. While there, the pilots tested various scenarios to determine weather, current and tide limitations.
- For the Miramichi, NB the Authority has been involved in assessing the area for year-round Navigation of the river, including the possibility of dredging and Coast Guard support for the breaking of ice in the river.

Prince Edward Island

- The Authority has been involved in consultations regarding the proposed berth extension project in Charlottetown to increase cruise ship traffic in the port.

The Authority is cognizant of the costs of pilotage and the operational needs of the ship operators. The Authority offers pilotage certificate exams in each of its areas two times per year if there are candidates interested in pilot certification. Ship masters who have the required experience, and have passed a certificate examination, have the ability to pilot their own vessels in their designated areas. There are many vessel movements being handled by these certificated masters, that otherwise would have been pilotage assignments for the Authority. There is a significant amount of these movements in the ports of St. John's and Halifax. In 2018, there were a total of 2,829 movements that were conducted by certificated masters, an increase from 2,221 in 2017. These movements by certificated masters saved industry an estimated $6.4 million in pilotage fees in 2018 ($4.8 million in 2017).

Movements by Certificated Masters, 2014-2018



	2014	2015	2016	2017	2018
St. John's	612	946	1,109	1,582	2,044
Halifax	345	413	461	439	494
Placentia Bay	–	–	–	82	214
Saint John	64	56	80	89	59
Other	42	50	28	29	18

Government Priorities and Direction

The Authority strives to contribute to the Federal Government's policies and initiatives. The Board and management are responsible for complying with legislative and other authorities that govern the Authority, including Part X of the *Financial Administration Act* and regulations, the *Pilotage Act* and regulations, the by-laws of the Atlantic Pilotage Authority and the directive issued pursuant to section 89 of the *Financial Administration Act*.

Directive on Travel, Hospitality, and Conference Expenses

This directive instructed the Authority to align its travel, hospitality, conference and event expenditure policies, guidelines and practices with the Treasury Board policies, directives and related instruments on travel, hospitality, conference and event expenditures. The Authority finalized its implementation of this directive in July 2017 and confirms that the requirements of the directive have been met.

The Atlantic Pilotage Authority's area of operation is defined as all the Canadian waters in and around the provinces of New Brunswick, Prince Edward Island, Nova Scotia, and Newfoundland and Labrador, including the waters of Chaleur Bay in the Province of Quebec. Within this region, the Authority has designated 17 compulsory pilotage areas. Each one has its unique industries and are serviced by licenced pilots and the required infrastructure such as pilot boat services.

Conducting regular pilotage operations requires travel by the Authority's pilots and boat crew. These costs are recovered directly from the customers for whom the services were delivered. Travel costs are also incurred for training of operational personnel as much of the training is done in Europe and Quebec City. These costs are included in the Authority's training budget. Included in the Pilot boats, operating costs category of the Authority's financial statements are travel costs associated with vessel maintenance personnel performing their regular duties.

Travel of board members and management is required to meet the needs of stakeholders in each area and manage the Authority's resources effectively. Periodic travel outside of the Authority's area of operation is also required to meet with Government representatives, industry associations, and the other pilotage authorities. Conferences include port specific marine business conferences and pilotage specific conferences. Board travel and hospitality costs are captured with all other Board costs under *Professional and special services* in the Authority's financial statements.

The Authority hosts many meetings annually with stakeholders, employees, and board members. Due to the expansive area of operation, many of the attendees are travelling from areas outside of meeting location. Hospitality is provided at these meetings as they extend outside of normal working hours and having people disburse during the meeting would not be practical or cost saving.

The table below shows the travel, hospitality, and conference expenses for the Authority.

Travel, Hospitality, and Conference Expenses

As at December 31

(in thousands of dollars)	**2017**	**2018**
Operations	677	765
Training	73	75
Engineering	20	32
Total Travel for Operations	**770**	**872**
Administration	79	110
Board	34	40
Total Administration Travel	**113**	**150**
Hospitality	32	31
Conference Fees	15	22
Total Hospitality and Conference Expenses	**47**	**53**

Results Linked to Government Priorities

The Government of Canada's priorities aim to strengthen the middle class, open and transparent governance, a clean environment and a strong economy, strength through diversity, and security and opportunity.

The Atlantic Pilotage Authority is facilitating reliable and efficient trade, contributing to the economic growth of Canada while being essential to protecting the environment. The Authority delivers on the commitment for open and transparent governance through increased proactive disclosures on its website and frequent consultation meetings with stakeholders.

Transparency and Open Government

The Authority supports the Government's priority for openness and transparency by using its public website to post the following:

- Increased Proactive Disclosures
- Financial reporting (Annual and Quarterly)
- Corporate Plan Summaries
- Special Examinations Reports
- Information on InfoSource
- Forward Regulatory Plan
- Service Performance Measures
- Procurement Practices
- Completed *Access to Information Act* inquiries
- Live Feed of Current Assignments

In addition to the public website, the Authority provides secured pages for customers, stakeholders, and employees that allows for more targeted information to be provided to the marine community and to facilitate effective and efficient operations. This access is provided upon request with some stakeholders given direct data feeds for incorporation into their operations or technology.

The Authority also has frequent stakeholder meetings in each of its ports or regions for direct consultation and discussion. The Authority aims to respond to all information requests, as well as reasonably address their associated concerns, in a timely manner.

There have been no requests received under the *Access to Information Act* and the *Privacy Act* in either 2017 or 2018.

Gender-Based Analysis / Diversity and Employment Equity

Under the guiding principles of Treasury Board, the Public Service Commission Diversity, and Employment and Social Development Canada programs, the Authority is committed to developing an inclusive, barrier-free work environment in which all persons have equal access to opportunities within our organization as a federal Crown Corporation. This includes, but is not limited to, ensuring all recruitment, selection, and appointments are based on merit, all terms and conditions of employment, including training, career development and performance management, are equitable, and overall ensuring that all employees feel included and valued.

The Workplace Equity Division of the Canada Labour Program within Employment and Social Development Canada has deemed the Authority as exempt from the Employment Equity due to having less than 100 permanent full-time or permanent part-time employees. However, the Authority will uphold the spirit of Employment Equity Program in its related policies and procedures.

The Authority's staffing levels are on average less than 100 full-time equivalent personnel and thus prevents a statistically significant analysis for diversity. The Authority has a visible and equitable representation of women on its Board of Directors and within its management team. The challenge remains in two key personnel segments, Pilots and Pilot Boat Crew (Launchmasters and Deckhands). In total across the Atlantic districts, these job positions represent nearly 80% of our overall full-time workforce. The recruitment and hiring statistics for these positions reflect the demographics of the greater Canadian maritime industry. The Canadian maritime industry has historically seen a lack of equity and diversity of those individuals with senior navigation credentials. Although there is a shift towards greater equity and diversity in the nautical schools, it will be several years before these individuals will receive the required sea time, pass the required Transport Canada examinations for their certification and diversify their senior marine experience to meet the basic requirements for employment at the Authority. The Authority is committed to continuing to work with its industry and government partners to ensure it has a pulse on the best practices for recruitment, selection and retention of the maritime labour force to diversify the Authority's resources.

Mental Health

The Authority continues with its commitment to promoting a healthy workplace and focusing on supporting the Federal Public Service Workplace Mental Health Strategy. The Employee and Family Assistance Program provides confidential and immediate assistance for any work, health or life concern to all employees with the costs borne by the Authority. This year, the Authority contracted a third-party communication program that allows employees to confidentially report sensitive work-related issues. This includes the ability to report incidences of violence, harassment, or discrimination as described in the Authority's Prevention of Discrimination, Violence and Harassment in the Workplace Policy.

BOARD OF DIRECTORS, EXECUTIVE & MANAGEMENT

Board of Directors

Jack Gallagher, Chair, Halifax, NS

Captain Gallagher, a Master Mariner, enjoyed a twenty-two year career with the Canadian Coast Guard gathering a broad range of operational and management experience. For the past nineteen years Captain Gallagher has run an international maritime consulting practice based in Halifax. The spectrum of work has included high level policy and legislation development, program management, auditing against international standards, development and delivery of bespoke training and operational level guidance. Captain Gallagher has been an adjunct instructor at the Center for Marine Simulation and a guest lecturer at several universities and maritime schools in Canada, Taiwan, United Arab Emirates and the Philippines.

Patricia Mella, Vice-Chair, Stratford, PE

Ms. Mella has been the Vice-Chair of the Board since February 2015 and is Chair of the Authority's Human Resources Committee. Ms. Mella previously served as Minister of various departments in the Prince Edward Island legislature and prior to that was a teacher and university lecturer for more than 15 years.

Captain Edward Anthony, St. John's, NL

Captain Anthony has served on the Authority's Board for 5 terms and was a Southeast NL marine pilot with the Authority for 12 years. Captain Anthony has also held various marine-related positions in the federal government, private industry and academia.

Alisa Aymar, Meteghan River, NS

Ms. Aymar has served on the Board since 2008 and is Chair of the Authority's Audit Committee. Ms. Aymar is also Manager of financial services at Comeau's Sea Foods in Saulnierville, NS and has also served with various other organizations in NS.

Kathryn Craig, Saint John, NB

Ms. Craig has served on the Board since December 2017 and is Chair of the Authority's Governance and Risk Committees. Residing in Saint John, NB, Ms. Craig was the CEO of Fundy Linen and has served on a variety of Boards in the Saint John area.

John McCann, Dartmouth, NS

Captain McCann has served on the Board since December 2017 and is Chair of the Authority's Pilot Boat Committee. Captain McCann is also a manager for the Halifax Harbour Ferry System. He is involved in various other organizations in NS and previously in Saint John, NB.

Vivek Saxena, Antigonish, NS

Captain Saxena has served on the Board since December 2017. Captain Saxena is a Master Mariner with over 20 years of experience at sea and is currently the Academic Chair at the Nautical Institute at NSCC Port Hawkesbury, NS.

The Authority is composed of a Chair, and not more than six members, referred to herein as the Board of Directors. The Board is appointed by the Governor in Council and is accountable to the Minister of Transport.

Executive & Management

Sean Griffiths, Chief Executive Officer

Captain Griffiths began his career at sea with the Canadian Coast Guard and obtained his Master Mariner certificate with foreign and domestic command 12 years later. After a further 2 years, he came ashore and spent several years gaining local and international experience as a Marine Superintendent and Vessel Manager for both private and publicly traded companies. He joined the Authority in 2014 as its Chief Operating Officer and was appointed by the Board to CEO in July 2015. Captain Griffiths holds a Master of Business Administration (MBA) from Middlesex University School of Business in the UK, with Merit in Oil and Gas.

Jennifer Campbell, Director of Human Resources

Ms. Campbell holds a Master of Business Administration (MBA) and is a Chartered Professional in Human Resources (CPHR), with her experience rooted in the maritime industry. Jennifer joined the Authority in 2014.

Rufus Percival, Fleet Technical Manager

Mr. Percival is a licensed second-class marine engineering officer. He holds a Bachelor of Communications degree and recently completed two certificates in drydock planning & management and naval architecture from Lloyd's Maritime Academy. He spent the last 8 years working in the offshore oil and gas sector before joining the Authority in 2018.

Julie Harvey, Dispatch Manager

Ms. Harvey joined the Authority in 2006 as a Dispatcher. Since then she has held several positions within the Dispatch Center, including Billing Clerk and Dispatch Supervisor. Ms. Harvey holds a Certificate in Business Management from Saint Mary's University School of Business and was promoted to Dispatch Manager in 2018.

Brian Bradley, Chief Financial Officer

Mr. Bradley is a Chartered Professional Accountant and holds a Master of Business Administration (MBA) degree from Laurentian University. He joined the Authority in 2004 and was named the Chief Financial Officer in 2018.

Gary Joyce, Director of Operations

Captain Joyce began his seafaring career with the Canadian Coast Guard. After graduating with a Degree in Nautical Technology, he spent a number of years working as a Watchkeeeping Officer prior to moving into subsea construction. He worked as Master with IT International Telecom conducting subsea cable installations worldwide prior to moving into an Offshore Installation Manager position for Siem Offshore Contractors/Subsea 7 constructing windfarms in Western Europe. Captain Joyce joined the Authority as Director of Operations in 2018.

Brent Carroll, Pilot Boat Manager

Mr. Carroll holds a Bachelor of Science degree from St. Mary's University. He joined the Authority in 2009 and has worked in pilot boat maintenance since 2011.

Gregg Davis, QHSE Manager

Mr. Davis holds certificates in OHS & Environmental Management from Dalhousie University. He is an accomplished Health, Safety & Environmental professional, with over 20 years of international safety leadership experience, overseeing field and corporate project execution in offshore Marine Service, Oil & Gas Production and Rail & Tank Facility Operation. Mr. Davis joined the Authority in 2019.

MAJOR PORT Summaries

Of the Authority's seventeen compulsory pilotage ports, the four largest provide more than 80% of the compulsory port revenue.

HALIFAX, NS

PILOTAGE ASSIGNMENTS

	2016		2017		2018	
	Assignments	%	Assignments	%	Assignments	%
Container Ships	1,113	42.1%	1,227	42.9%	1,260	40.6%
Cruise Ships	277	10.5%	360	12.6%	407	13.1%
Tankers	315	11.9%	271	9.5%	352	11.4%
Vehicle Carriers	200	7.6%	301	10.5%	332	10.7%
General Cargo Ships	431	16.3%	365	12.7%	257	8.3%
Bulk Carriers	143	5.4%	129	4.5%	222	7.2%
Supply Ships	20	0.7%	27	0.9%	125	4.0%
Other	145	5.5%	183	6.4%	145	4.7%
Total Assignments	2,644	100.0%	2,863	100.0%	3,100	100.0%

13 Pilots

8 Boat Crew

2 APA Owned Pilot Boats:
Nova Pilot – in service since 2017
Scotia Pilot– in service since 2017

PORT DESCRIPTION AND NAVIGATIONAL CHALLENGES

As Atlantic Canada's most diverse shipping port, Halifax has many marine facilities in the port, including two container terminals, an auto carrier terminal, an oil terminal, a gypsum dock, cruise ship berths, bulk cargo docks, shipyard facilities, naval docks, offshore supply ship facilities, and several others.

Pilots must become familiar with each facility and with the various types of vessels calling at Halifax. There are also two harbour bridges and the Narrows to navigate through to reach some facilities.

2018 FINANCIAL SUMMARY

Revenues for the area finished 6% over budget with the number of pilotage assignments increasing by 8% over 2017. There was an increase in pilotage assignments across most of the vessel classes that visit the port. Cruise traffic continues to grow throughout the Maritimes, including Halifax. Expenses were 8% over budget with the increased pilotage activity and an increase in pilot boat repairs. The area finished with a $364 thousand profit, when the surcharge is excluded. This is down from a $557 thousand profit in 2017. Excess funds are used for debt payment and for future capital asset replacement.

PLACENTIA BAY, NL

PILOTAGE ASSIGNMENTS

	2016		2017		2018	
	Assignments	%	Assignments	%	Assignments	%
Tankers	1,023	97.2%	1,079	97.2%	1,109	97.5%
Other	30	2.8%	31	2.8%	28	2.5%
Total Assignments	1,053	100.0%	1,110	100.0%	1,137	100.0%

Placentia Bay is part of a district that shares pilot resources among three ports, that also includes St. John's and Holyrood, NL.

13 Pilots in district
8 Boat Crews provided by Contractor

2 APA Owned Pilot Boats:
Atlantic Pilot – in service since 2007
Avalon Pilot – in service since 2007

2018 FINANCIAL SUMMARY

Placentia Bay traffic remains very strong. Activity in the port finished 19% over what was budgeted, with larger vessels than planned. Revenues surpassed budget by 23% as activity at the refinery and oil transshipments from the Hebron field have been greater than anticipated. Total expenses in the port were 6% over the budget with the increased activity and fuel prices. With the surcharge revenue excluded, the area finished 2018 with an $1.461 million profit. This is an increase from the $800 thousand profit in 2017. This has allowed for funds to be saved for future capital asset replacement while also making payments on the debt for the pilot boats that are currently in service. Tariffs in the area are being reduced in 2019.

PORT DESCRIPTION AND NAVIGATIONAL CHALLENGES

The two primary facilities in the Bay are an oil refinery at Come-by-Chance and an oil transshipment terminal at Whiffen Head. The transhippment terminal receives oil from the Hibernia, Terra Nova, Hebron, and White Rose oil fields through large shuttle tankers, and exports the oil in smaller tankers that call in ports that do not have the deep draft available in Placentia Bay. The oil refinery is capable of refining many grades of crude oil and sources feedstock from the Gulf of Mexico and offshore Newfoundland, as well as other sources.

Along with the two primary facilities in Placentia Bay, there are other facilities such as the nickel smelter at Long Harbour, an asphalt facility at the head of the Bay, and fish processing plants.

Some of the largest ships afloat call at Placentia Bay, with APA pilots conducting the navigation and berthing of these ships with great precision and skill. Pilots must be constantly aware of weather conditions in the area, with powerful prevailing winds at the pilot boarding station, and very unpredictable winds as they proceed up the Bay. The use of tugs to escort and berth ships must be handled with exceptional co-ordination and teamwork.

PILOTAGE ASSIGNMENTS

	2016		2017		2018	
	Assignments	%	Assignments	%	Assignments	%
Bulk Carriers	219	33.6%	294	36.9%	309	41.8%
Tankers	338	51.9%	379	47.6%	301	40.7%
Tugs & Barges	61	9.4%	62	7.8%	65	8.8%
Other	33	5.1%	61	7.7%	64	8.7%
Total Assignments	651	100.0%	796	100.0%	739	100.0%

The Strait of Canso is part of a district that includes Sydney and Bras d'Or that shares pilot resources among all three ports.

9 Pilots in district
Pilot Boats and Boat Crews provided by Contractor

STRAIT OF CANSO, NS

PORT DESCRIPTION AND NAVIGATIONAL CHALLENGES

The Strait of Canso has one of the best deep-water ice-free ports on the eastern coast of North America. The Strait is home to several facilities, including an oil transshipment terminal, a paper products terminal, a coal terminal to provide fuel to a power plant, a general bulk and breakbulk terminal, and an aggregate facility.

The Strait of Canso has exposure on the eastern side to North Atlantic weather, which can cause unpredictable meteorological conditions for the pilots. The oil transshipment terminal receives some very large crude vessels, which requires skill and co-ordination with the tugs to dock these ships.

2018 FINANCIAL SUMMARY

Bulk Carrier vessels have remained strong in 2018 after they rebounded in the area with a return of regular coal transshipment activity in 2017. These vessels are some of the larger revenue assignments in the strait for the Authority. The number of larger tankers decreased in the area in 2018 causing traffic in the area to decline by 7% from the previous year. A more severe decline in traffic had been budgeted as coal transshipment activities were not guaranteed to continue.

The changes in vessel traffic has resulted in pilotage revenues being 10% over budget. Total expenses were 4% over budget due to the increase in expected traffic. The area finished 2018 with a $281 thousand profit, when the surcharge is excluded. The area previously had a $406 thousand profit in 2017. A planned tariff increase for 2019 is being removed.

PILOTAGE ASSIGNMENTS

	2016		2017		2018	
	Assignments	%	Assignments	%	Assignments	%
Tankers	993	61.9%	1,160	63.9%	1,076	62.7%
Container Ships	215	13.4%	152	8.4%	198	11.5%
Cruise Ships	127	7.9%	131	7.2%	145	8.5%
Tugs & Barges	168	10.5%	156	8.6%	119	6.9%
Bulk Carriers	54	3.4%	134	7.4%	109	6.4%
General Cargo Ships	33	2.0%	52	2.8%	61	3.6%
Other	14	0.9%	31	1.7%	7	0.4%
Total Assignments	1,604	100.0%	1,816	100.0%	1,715	100.0%

11 Pilots   8 Boat Crew   2 APA Owned Pilot Boats:
Captain E. T. Rogers – in service since 2012
Captain A. G. Soppitt – in service since 2013

SAINT JOHN, NB

2018 FINANCIAL SUMMARY

Saint John moves approximately 28 million metric tonnes of cargo annually. The city is home to the largest oil refinery in Canada, an LNG import terminal, a container terminal, and two cruise ship terminals. There are several other terminals providing service to forest products, project cargo, dry bulk cargoes such as potash, and liquid bulk such as molasses.

The port of Saint John has several challenges that Pilots must take into consideration. Firstly, the tidal range in the port can be as much as 28 feet (9 metres) from low to high tide. There are also currents caused by the outflow of the Saint John River, which becomes even more challenging in spring with the freshet caused by snow and ice melt. The combination of fresh water from the river mixing with the denser sea water causes an effect known as a density current. The physical configuration of the harbour, including a narrow gorge at Reversing Falls, contributes to the complex and somewhat unpredictable currents and eddies.

PORT DESCRIPTION AND NAVIGATIONAL CHALLENGES

Due to an incident at the refinery in Saint John, pilotage assignments in the area fell from 2017 levels as tanker traffic slowed in the final quarter of 2018. Potash exports through the port remained strong. Container traffic rebounded as a new weekly service began operating in August 2017. These changes resulted in a 6% decline in pilotage assignments from 2017, a portion of which was budgeted to occur. This left the port 2% under budget in pilotage revenues. Expenses in the port were 3% over budget with additional costs in pilot salaries and benefits as the Authority prepares for scheduled retirements. Pilot boat costs have also increased with unplanned repairs and an increase in fuel prices. With the surcharge revenues excluded, the area finished with a $277 thousand loss. This follows an extraordinary 2017 where a $623 thousand profit was recorded.

MANAGEMENT ANALYSIS

Operating Environment

The primary business activity of the Authority is to provide a safe and efficient pilotage service. The Authority charges the user, or customer, for the service. An ideal performance would be one in which the service provided was completely safe; i.e. without shipping incidents, and without injury or damage to individuals, vessels, port facilities, or the environment. Historically, the Authority has maintained a low level of shipping incidents; however, it is recognized that the Authority has inherent risks associated with the industry, and the potential for an accident is always present.

Within that operational context, the key strategic issues faced by the Authority include:

The Economy

The Authority is impacted by the state of local and broader international economic conditions in a number of ways. These include effects derived from commodity pricing, employment and productivity, and currency exchange rates that have a large impact on tourism that drives cruise vessel traffic.

Peak and Inconsistent Traffic Volumes

The Authority faces periods of higher than usual volumes due to cruise season, daily variances, and weather closures. It would be too costly to staff to handle these short peaks with pilots on duty so the Authority relies on pilots to make themselves available on their off-time to work these peaks on an overtime basis.

Desired Service Levels and Industry's Need for Flexibility

The Authority responds to its users needs by offering great flexibility in ordering a pilot and no special nighttime order rules. This results in having to provide a pilot for a moving target at all hours of the day. This requirement is in competition with the need to keep costs as low as possible. The Authority has to be flexible and nimble to meet these requirements with a limited workforce.

International Trade Agreements

The outcome of trade negotiations (including NAFTA) as well as the imposition or removal of nationalistic trade barriers and tariffs on import/export dependent businesses could positively, or negatively, impact the amount of cargo flowing into and out of our ports.

Technology

Industry demands that pilotage authorities adopt new technologies to make the service more effective and more efficient. There are many tools in development to assist with navigation including automated ships and dockings. The Authority must stay current with these technological changes and adopt those which would benefit the port pilotage it conducts.

Climate Change

Due to changes in winter weather patterns, the Authority is dealing with severe marine conditions more frequently. This is causing longer port closures and delays. It is also adding risk to pilot transfers under these severe conditions. Infrastructure like wharves and breakwaters are also at risk to damages due to changing environmental factors.

Aging Pilot Boats

Doing primarily port pilotage means that virtually all areas require the service of a pilot boat to transfer the pilot to and from a pilotage assignment. As these vessels age the Authority has to maintain them to keep them as safe a platform as possible while also planning for their eventual replacement. This challenge is also impacted by the changes in weather and marine conditions, as heavier and more robust vessels may be required in more of the ports.

Pilotage Act Review

The Authority provided input for the Government's review of the *Pilotage Act*. Any Government decisions concerning amendments to the *Act* will have an impact on operations and the Authority is prepared to support the implementation of potential changes in legislation as determined by the Government.

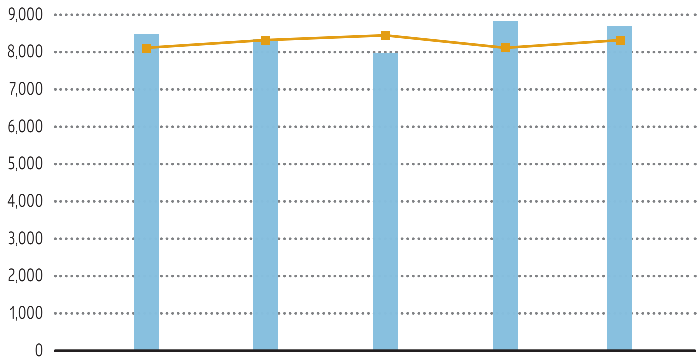
Most of the strategic issues affecting the Authority are external and not under the direct influence of the organization. These issues are impacting the Authority's financial health, its service delivery, and the safety of its employees.

Traffic

The following discussion regarding the amount of activity in individual ports is referring to pilotage assignments only, and not the level of cargo or vessel traffic experienced by a port. There are several factors that may result in a difference between the activity reported by the Authority and that reported by another body such as a port authority. These factors include ships not subject to compulsory pilotage, ships utilizing mariners who have pilotage certificates, and the amount of cargo carried on a ship. The Authority reports on pilotage assignments performed by its pilots, but does not track the amount of cargo being carried on a vessel.

The total number of assignments, 8,720 for 2018, were down slightly from the 8,809 in 2017. The amount of activity in ports serviced by the Authority can vary significantly due to factors that are beyond its control. In 2018 the Authority received assignments from projects or events that were not anticipated. The coal transshipment activities in the Strait of Canso were not expected to continue into 2018, but they are now expected through 2019. The number of oil transports generated by the Hebron project have increased more quickly than expected in Placentia Bay. An incident at the oil refinery in Saint John caused a reduction in tanker traffic for the port later in the year. Traffic has also been impacted negatively by an increase in certificated masters. These are masters who have passed a certification exam that allows them to pilot their own vessels without the services of an Atlantic Pilotage Authority pilot. There were 2,829 movements lost to certificates for the Authority in 2018. This represents an increase of over 600 certificated movements from the previous year.

Budgeted and Actual Pilotage Assignments 2014-2018



	2014	2015	2016	2017	2018
Budget	8,093	8,316	8,464	8,119	8,323
Actual	8,472	8,348	7,959	8,809	8,720

Cumulatively, over the past five years, the actual assignments have been 102.4% of the budgeted assignments.

Foreign flagged vessels provide the great majority of the Authority's business. This fact has become even more pronounced after offshore supply vessels were exempted in 2006, as these vessels are predominately Canadian flagged ships. The foreign vessels represent approximately 80% of assignments and revenue.

The oil and gas industry accounts for approximately 38% of the Authority's overall assignments, and contributes 50% of the overall revenue, based on current trends. The Authority performed pilotage duties on tankers in twelve of the seventeen compulsory areas.

The following table provides details on assignments provided by the various classes of vessel with comparisons to previous two years:

Number of Assignments 2016-2018

	2016		2017		2018	
	Assignments	%	Assignments	%	Assignments	%
Tankers	3,114	39.1%	3,338	37.9%	3,294	37.8%
Container Ships	1,363	17.2%	1,422	16.1%	1,476	16.9%
Cruise Ships	733	9.2%	966	11.0%	1,055	12.1%
Bulk Carriers	718	9.0%	884	10.0%	1,004	11.5%
General Cargo Ships	869	10.9%	722	8.2%	640	7.3%
Supply Ships	130	1.6%	322	3.7%	338	3.9%
Vehicle Carriers	200	2.5%	301	3.4%	332	3.8%
Tugs & Barges	406	5.1%	352	4.0%	330	3.8%
Other Traffic	426	5.4%	502	5.7%	249	2.9%
Total	7,959	100.0%	8,809	100.0%	8,720	100.0%

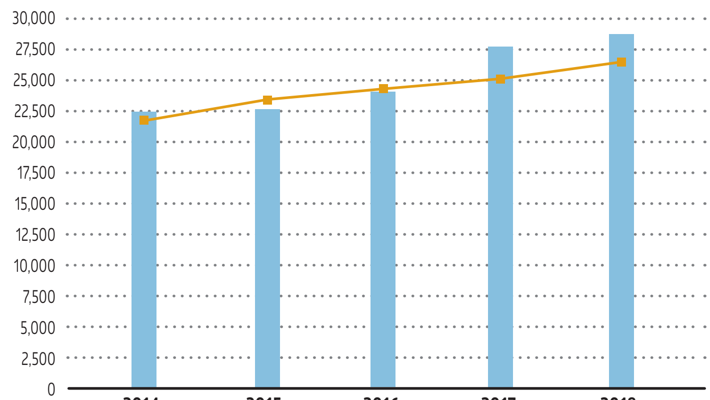
Financial Overview

The Atlantic Pilotage Authority continued its strong financial performance with income surpassing what was planned for the third consecutive year. The Authority budgeted a 3.8% profit margin on expected income of $26.6 million for 2018. Due to traffic being greater than plan in three major ports or districts, the Authority finished 2018 with a 6.1% profit on $28.8 million of income. A $1.7 million profit in 2018 has allowed the Authority to generate an increase in cash provided through these operations of $4.1 million. This allowed for a cash investment of $1.3 million in pilot boats, equipment, and software upgrades, without additional financing. A portion of the generated cash, $665 thousand, is required for debt payments for previously financed capital additions. The remainder has been targeted for future capital asset replacement and severance liability payments, or increased reserves.

Revenues

Traffic levels across the Authority increased from the previous year and exceeded budget by a significant amount. Revenues surpassed expectations by 8.4%, or $2.2 million, with pilotage activity being 4.5% over budget. The following chart indicates the budgeted and actual revenue for each of the last five years. During this period, the cumulative actual revenue has been 103.8% of cumulative budgeted revenue.

Budgeted and Actual Total Revenue 2014-2018 (in thousands of dollars)



	2014	2015	2016	2017	2018
Budget	21,882	23,436	24,283	25,155	26,599
Actual	22,562	22,673	24,093	27,793	28,831

The average size of vessels remained consistent from the previous year for the Authority as a whole, but larger vessels benefited specific areas like Strait of Canso and Placentia Bay when compared to plan. The largest component of the Authority's tariff revenue is based on the size of vessels, as measured in pilotage units, and the impact varies from port to port based on their individual tariff structure.

A variation in tanker assignments has the largest impact on revenue of all vessel types. These vessels tend to be much larger than average, and therefore attract higher average revenue than other ships. In some ports that rely heavily on tanker activity, such as Strait of Canso and Placentia Bay, the pilotage is more challenging in terms of the distance, the length of time under the conduct of a pilot, and the requirement to have more robust pilot vessels. Activities in Placentia Bay and, to a lesser extent, Halifax drove the increased revenues for the Authority for this sector, offsetting declines in tanker revenue in the Strait and in Saint John.

Pilotage Charges 2016-2018 (in thousands of dollars)

	2016		2017		2018	
	Revenues	%	Revenues	%	Revenues	%
Tankers	12,409	51.6%	13,709	49.4%	14,426	50.3%
Container Ships	3,676	15.3%	4,067	14.7%	4,243	14.8%
Bulk Carriers	2,084	8.7%	2,716	9.8%	3,082	10.7%
Cruise Ships	1,760	7.3%	2,567	9.3%	2,787	9.7%
General Cargo Ships	1,703	7.1%	1,420	5.1%	1,294	4.5%
Vehicle Carriers	523	2.1%	828	3.0%	993	3.5%
Tugs & Barges	751	3.1%	683	2.5%	692	2.4%
Supply Ships	274	1.1%	695	2.5%	670	2.3%
Other Traffic	887	3.7%	1,037	3.7%	519	1.8%
Total	24,067	100.0%	27,722	100.0%	28,706	100.0%

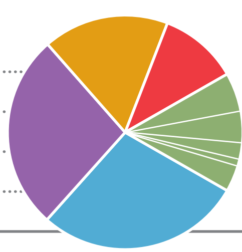
Halifax provides a large majority of the container ship traffic for the Authority, followed by Saint John. Both ports benefited by increased activity in this sector. Coal ship activity in the Strait of Canso and Sydney grew the category of bulk carriers. The growth in the cruise industry in the region continued in 2018 with increased pilotage revenues for the ports of Halifax, Charlottetown, PE, Saint John, and Sydney.

Compulsory Port Revenue

The Authority provides pilotage service in 17 compulsory ports. These compulsory ports provide 98.4% of the pilotage revenue, with the remaining revenue provided by non-compulsory ports. Four major ports provided 83.4% of the revenue from compulsory ports in 2018. The largest revenue contribution came from Placentia Bay at 28.3%. Halifax was the next largest contributor with 27.0%, while Saint John had 17.3%, and Canso 10.9% of the total compulsory revenue. The remaining thirteen compulsory ports provided the residual 16.5% of revenue, with Sydney having the largest share of these ports. The following chart provides a graphic illustration of the revenue contribution of ports.

Percentage of Compulsory Pilotage Revenue by Port 2018

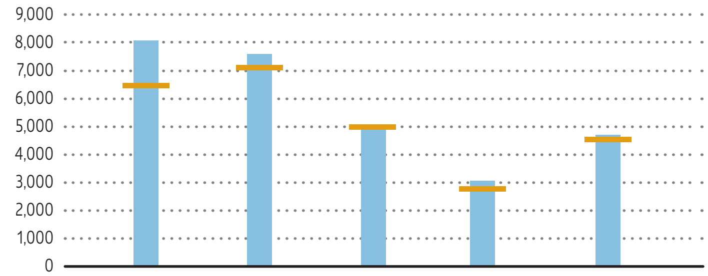
Placentia Bay	28.3%
Halifax	27.0%
Saint John	17.3%
Canso	10.9%
Other	16.5%
Total	100.0%



Sydney	5.5%
St. John's	4.1%
Humber Arm	2.2%
Bay of Exploits	0.8%
Other Compulsory	3.9%

The chart below illustrates the actual and budgeted revenue in compulsory areas for 2018.

Comparison of Budgeted and Actual Revenue in Compulsory Areas 2018 (in thousands of dollars)



	Placentia Bay	Halifax	Saint John	Canso	Other Compulsory
Budget	6,475	7,169	5,026	2,782	4,592
Actual	8,011	7,628	4,902	3,071	4,687

Expenses

The Authority had expenses grow to 5.6% over budget with the increase in pilotage activity over that planned, and an increase in pilot boat repairs. Administration and dispatch costs were equal to budget for the year.

The increase in pilotage assignments increased costs in operations through several categories. This included overtime costs for pilots, part-time pilot costs, travel costs, and fuel costs.

Pilots' fees, salaries, and benefits includes all costs associated with the remuneration to employee pilots, as well as shares paid to entrepreneurial pilots who service smaller ports with inconsistent traffic levels. The entrepreneurial pilots receive a portion, or share, of the pilotage revenue in their ports thus limiting the Authority's exposure to traffic pattern changes.

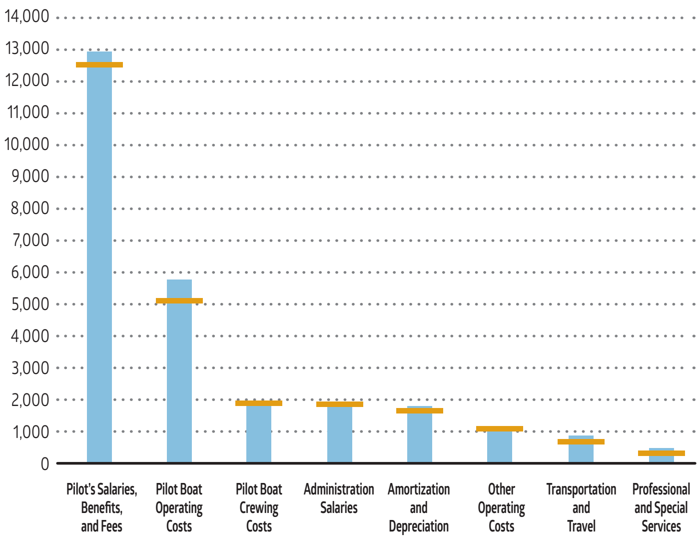
The Authority has an agreement in place with its employee pilots that encourages them to provide a firm retirement date. This allows the Authority to hire replacement pilots where necessary and minimize the impact on service. While there is a short-term cost for this in carrying more salary, in the long term it allows the Authority to have the right number of pilots to provide the service required by its customers. Due to the level of hiring recently, and pilots having been off injured in 2017, the Authority had the fulltime equivalent of 49.5 pilots in 2018, an increase of 3 over 2017. The number of recent additions and new training required has led to increased training costs. Training courses are mostly triggered as pilots reach certain levels of experience and more of these targets were achieved in 2018 causing an increase over budget.

The Authority had a high number of pilot boat repairs as investments continued to be made to the most recent additions to the fleet. Due to this volume of maintenance, the repair costs were $441 thousand over budget and $100 thousand over 2017 levels. The Authority estimates the amount of work required at planned dockings and uses historical experience to estimate the remainder of costs, but there were items discovered during inspections and operations that required additional repairs. Fuel costs were 32.2%, or $366 thousand, over budget with the increase in pilotage activity and fuel prices. The Authority has a fuel charge in place that recovers these costs directly.

There were several crew members off work due to long-term illness in 2018. These positions were covered temporarily by casual employees and fulltime employees brought back on overtime. Amortization and depreciation was over budget due to the additional investment in pilot boat upgrades and repairs. Transportation and travel costs were also over budget in 2018. These costs are primarily driven by more pilotage assignments in ports with larger travel demands and the costs associated with pilot training travel. The costs associated with pilot travel required to conduct assignments are recovered directly through a travel charge on each assignment. The timing of pilot training is determined primarily by when pilots achieve certain benchmarks of experience and licence progression. There was more manned model training required in Europe based on these achievements than originally planned for the calendar year.

The following chart indicates the budgeted expenditures against the actual expenditures for 2018, expressed in thousands of dollars.

Comparison of Budgeted and Actual Expenses 2018 (in thousands of dollars)



	Pilot's Salaries, Benefits, and Fees	Pilot Boat Operating Costs	Pilot Boat Crewing Costs	Administration Salaries	Amortization and Depreciation	Other Operating Costs	Transportation and Travel	Professional and Special Services
Budget	12,551	5,087	1,889	1,922	1,679	1,094	745	370
Actual	12,913	5,816	1,931	1,841	1,750	1,084	875	466

Capital Investment

The Authority has $23.972 million in capital assets that have to be replaced or upgraded over the long-term. It is a large portion of the financial capital of the Authority that is needed for this purpose. These expenditures are primarily for pilot boats, but also includes investments in wharves and structures, a maintenance vehicle, leasehold improvements, and computers and office equipment.

The Authority budgets for projects that are planned, but under IFRS, there are unanticipated repairs that also must be capitalized. An allowance is assumed for these items, but depending on the components that fail, the Authority can be well over, or well under, budget on the capital portion of these repairs. The Authority had a budget for capital additions of $1.162 million for 2018.

Over the first year of operation of the *Nova Pilot* and the *Scotia Pilot* a number of items were discovered that required improvement to operate effectively for the Authority. These upgrades began in 2018 and will continue as the vessels are equipped to operate in a harsh North American winter climate.

As reporting requirements increase and stakeholders are requesting more accurate and timely information, the Authority increased its investment in its Dispatch and Billing System and website. Much of this is due to the increased frequency of pilotage services being suspended due to a worsening climate and the Authority's desire to better track these events and provide improved communication to stakeholders. The actual capital expenditure in 2018 was $1.412 million.

The capital expenditure budget and actual expenditures for 2018 are indicated in the following chart.

Budgeted and Actual Capital Expenditures, 2018 (in thousands of dollars)

	Budget	Actual
Pilot boat refit and equipment	878	1,086
Portable Pilotage Units	166	153
Computer software	18	70
Wharves, operating structures and vehicles	65	53
Computer equipment and furniture	35	50
Year end total	**1,162**	**1,412**

ON THE HORIZON
2019 and Beyond

Business Prospects

The Authority actively monitors economic developments for the region as proposed new projects or adjustments to current operations greatly affects the finances of the Authority and the resources required to serve the stakeholders.

The trend of increasing container ship traffic in Halifax is continuing. As well as an increase in the number of ships, larger vessels are being deployed for the area. It is expected that this trend will continue in the foreseeable future, as the Port of Halifax readies itself for the next generation of container vessels. Cruise traffic grew to over 200 ships in 2018 and is budgeted to be similar in 2019.

Cruise traffic in Saint John continues its pattern of growth, with an increase in passengers coming from more vessels and of a larger size. Container traffic in the port rebounded in 2018 and should continue at these stronger levels. The West Side Modernization Project is a $205 million investment in the container handling capacity in the port and is expected to grow this sector of traffic in the years to come. An incident at the oil refinery slowed tanker traffic in the fourth quarter of 2018 and is expected to have a negative impact on the Authority's revenues for a period in 2019.

On the Chaleur Bay, the APA has recommended that Belledune, NB become compulsory. On the south coast of the Gaspe peninsula, the APA is monitoring the development of a cement plant at Port Daniel to determine whether a PRMM is required in that area to determine whether compulsory pilotage is warranted.

In Placentia Bay, NL, the oil refinery in Come-by-Chance continues to improve its efficiency and production while also launching a bunker vessel operation. The transshipment terminal at Whiffen Head began receiving oil from the Hebron field late in 2017 with traffic from the field being stronger than expected. This provided a large boost in shipping for the area and will provide an ongoing supply when output from other fields taper off.

The dredging of the harbour in 2012 provides Sydney with the opportunity to attract larger ships. There is interest in developing a container terminal in the port and a proposal to develop expanded cruise ship berthing to allow accommodation of two large cruise ships alongside. The cruise industry in Sydney is expected to remain strong in 2019 with approximately 109 calls.

There are two proposals for LNG export facilities in Nova Scotia, one at Goldboro on the Eastern Shore, and the other at Bear Head in the Strait of Canso. The APA is monitoring the development of both projects.

Plans are proposed for a new container terminal at the Strait of Canso. It is estimated that the terminal could be operational within 26 months of the beginning of the construction period. NuStar renewed a long-term contract for storage capacity in Point Tupper. Pilotage traffic related to the product stored at the facility is influenced greatly by world oil markets and prices. The coal transshipment (vessel to vessel) operation in the area is highly sensitive to the global demand and corresponding world market prices for metallurgical coal. This operation has stopped for the winter months but is expected to return for the remainder of 2019. The interruption will negatively impact the Authority's revenues for the area.

Economics

The revenues of the Authority are influenced by the amount of marine traffic, and the composition of that traffic in terms of size and types of vessels. The annual traffic levels are mainly driven by the economics of the marine industries of the Atlantic region. Forecasting the traffic for future years is very challenging as there are many factors involved, all of which are well outside the Authority's control.

When creating the Corporate Plan for 2019-2023, the Authority used several sources of information to predict traffic levels. The traffic patterns of previous years were combined with changes within individual business sectors, announced or expected expansions or contractions, and general financial conditions. The Authority also reached out to stakeholders, including the marine industry and port authorities, during consultation meetings and direct communications, to solicit feedback on projected changes to future volumes or activity.

Changes in the energy sector, especially oil, and other commodities have the largest effect on the Authority's activity. With almost fifty percent of the revenues generated by the oil industry, fluctuations in demand, or any changes in the methods of crude oil delivery, can greatly affect the financial results of the Authority. The container business is highly competitive and cost sensitive. In anticipation of the opening of the expanded Panama Canal, these factors have led to container industry consolidation and a shift to larger vessels. Ports that can accommodate these larger vessels are expected to have growth from this sector. A weaker Canadian dollar has meant growth in tourism and expected growth in cruise activity in several ports for the Authority.

Based on recent traffic levels, the Authority has estimated activity based on 8,726 assignments. For 2019, the Authority is budgeting a profit of $1.067 million, or a 3.7% return on revenue. The plan for 2020 is for a $1.121 million profit, or a 3.8% return on revenue.

Tariff Adjustments for 2019 and 2020

After reviewing the performance of each port, the Authority has had tariff amendments approved for 2019 and 2020. The rates are set on a port-by-port basis, with fifteen compulsory ports affected in 2019 and ten affected in 2020. Combined, the changes are estimated to increase the overall tariff rates by 0.94% in 2019 and 1.84% in 2020. The approved rates for 2020 will be reviewed later in 2019 to determine if they should be adjusted further. The Authority continues to review the service requirements of customers in each major port to determine the operational requirements in relation to the number or availability of pilots and pilot boats. The customers have indicated that service is paramount, and they have requested that the workforce be maintained or increased to provide the level of service they require. The APA has taken the requirements of the customers into account in determining its tariff requirements. These increases are intended to support the costs associated with the desired pilot strength, pilot technology, and the costs related to the addition of two pilot boats.

Pilotage Act *Review*

On May 31, 2017, the Government of Canada announced a Chair for the Review of the *Pilotage Act*. In 2018, a final report was created with recommendations on how the *Pilotage Act* should be modernized in regard to 1) Governance; 2) Safety; 3) Labour models; 4) Tariff setting process; 5) Economic and public policy considerations; 6) Enforcement and emerging issues. The Review's findings will inform the Government's decision-making regarding the future of pilotage in Canada.

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

The accompanying 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. Management is responsible for the integrity and objectivity of the information in the financial statements and annual report.

Management is also responsible for developing and maintaining a system of internal control which is designed to provide reasonable assurance that assets are safeguarded and controlled, transactions comply with relevant authorities and accounting systems provide timely, accurate financial information.

The Authority's management is responsible for conducting its affairs in compliance with the *Pilotage Act* and regulations, Part X of the *Financial Administration Act* and regulations, the by laws of the Authority, and the directive issued under section 89 of the *Financial Administration Act*.

The Members of the Authority are responsible for ensuring that management fulfils its responsibilities for financial reporting and internal control. These responsibilities are delegated to the Audit Committee. The Audit Committee meets with management and the auditors to satisfy itself that its responsibilities are properly discharged and to review the financial statements. The financial statements and annual report are reviewed and approved by the Members of the Authority on the recommendation of the Audit Committee.

The Auditor General of Canada conducts an independent audit of the transactions and financial statements of the Authority in accordance with Canadian generally accepted auditing standards, and expresses his opinion on the financial statements. He has full and free access to the Audit Committee of the Authority, and his report follows.

Sean Griffiths
Chief Executive Officer

Brian Bradley, CPA, CGA
Chief Financial Officer

Halifax, Canada
March 13, 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 Atlantic Pilotage Authority, which comprise the statement of financial position as at 31 December 2018, and the statement of 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 Atlantic Pilotage 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 Atlantic Pilotage 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 Atlantic Pilotage 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 Atlantic Pilotage Authority or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Atlantic Pilotage 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 Atlantic Pilotage 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 Atlantic Pilotage 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 Atlantic Pilotage 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 Atlantic 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 Atlantic Pilotage Authority, and the directive issued pursuant to section 89 of the Financial Administration Act.

In our opinion, the transactions of the Atlantic 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 Atlantic Pilotage Authority's compliance with the specified authorities named above, and for such internal control as management determines is necessary to enable the Atlantic 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.

Heather McManaman, CPA, CA
Principal
for the Auditor General of Canada

Halifax, Canada
13 March 2019

STATEMENT OF FINANCIAL POSITION

As at December 31, 2018
(in thousands of Canadian dollars)

	2018	2017
Assets		
Current		
Cash	**$ 6,089**	$ 3,938
Trade and other receivables (Notes 6 and 7)	**3,763**	3,712
Prepaid expenses	**103**	94
	9,955	7,744
Non-current		
Intangible assets (Note 8)	**225**	188
Pilot boats and equipment (Note 9)	**12,368**	12,964
	12,593	13,152
	$ 22,548	$ 20,896
Liabilities		
Current		
Trade and other payables (Notes 6 and 7)	**$ 2,462**	$ 2,030
Bank loans (Notes 7, 10, and 12)	**1,979**	640
Employee severance benefits (Note 14)	**201**	35
Deferred lease inducements (Notes 11 and 12)	**59**	42
	4,701	2,747
Non-current		
Bank loans (Notes 7, 10, and 12)	**3,612**	5,591
Employee severance benefits (Note 14)	**1,381**	1,488
Deferred lease inducements (Notes 11 and 12)	**439**	428
	5,432	7,507
	10,133	10,254
Equity		
Retained earnings	**12,415**	10,642
	12,415	10,642
	$ 22,548	$ 20,896

Commitments (Note 18)

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

Approved by the Members of the Authority and authorized for issue on March 13, 2019:

Alisa A — Member

K Craig — Member

STATEMENT OF COMPREHENSIVE INCOME

For the year ended December 31, 2018
(in thousands of Canadian dollars)

	2018	2017
Revenues		
Pilotage charges (Note 16)	**$ 28,760**	$ 27,722
Other income	**71**	71
	28,831	27,793
Expenses		
Pilots' fees, salaries and benefits	**12,913**	11,608
Pilot boats, operating costs	**5,816**	5,588
Pilot boat crews' salaries and benefits	**1,931**	1,879
Staff salaries and benefits	**1,841**	1,736
Amortization and depreciation (Notes 8 and 9)	**1,750**	1,537
Transportation and travel	**875**	757
Utilities, materials and supplies	**494**	507
Training	**466**	337
Professional and special services	**409**	354
Rentals	**297**	292
Finance costs (Note 10)	**148**	141
Communications	**145**	144
	27,085	24,880
Income for the year	**1,746**	2,913
Other comprehensive gain (loss)		
Amounts not to be reclassified subsequently to net income:		
Actuarial gain (loss) on employee severance benefits	**27**	(20)
Other comprehensive gain (loss)	**27**	(20)
Comprehensive income	**$ 1,773**	$ 2,893

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

STATEMENT OF CHANGES IN EQUITY

For the year ended December 31, 2018
(in thousands of Canadian dollars)

	2018	2017
Retained earnings, beginning of the year	**$ 10,642**	$ 7,749
Income for the year	**1,746**	2,913
Other comprehensive gain (loss)	**27**	(20)
Total comprehensive income	**1,773**	2,893
Retained earnings, end of the year	**$ 12,415**	$ 10,642

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

STATEMENT OF CASH FLOWS

For the year ended December 31, 2018
(in thousands of Canadian dollars)

	2018	2017
Operating Activities		
Receipts from customers	**$ 28,745**	$ 26,854
Payments to and on behalf of employees	**(16,206)**	(15,047)
Payments to suppliers	**(8,335)**	(7,567)
Finance costs paid	**(148)**	(141)
Other income received	**48**	59
Net cash provided by operating activities	**4,104**	4,158
Investing Activities		
Purchases of intangible assets	**(70)**	(51)
Purchases of pilot boats and equipment	**(1,218)**	(5,082)
Net cash used in investing activities	**(1,288)**	(5,133)
Financing Activities		
Proceeds from lease inducements	**—**	381
Proceeds from bank loan	**—**	3,000
Repayment of bank loans	**(640)**	(551)
Repayment of lease inducements	**(25)**	—
Net cash (used in) provided by financing activities (Notes 10 and 12)	**(665)**	2,830
Increase in cash	**2,151**	1,855
Cash, beginning of the year	**3,938**	2,083
Cash, end of the year	**$ 6,089**	$ 3,938

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

December 31, 2018

(in thousands of Canadian dollars)

1. Objectives and Activities

The Atlantic Pilotage Authority (the "Authority") was established in 1972 pursuant to the *Pilotage Act*. The principal registered address of the Authority is 1791 Barrington Street, Halifax, Nova Scotia. The objects of the Authority are to establish, operate, maintain, and administer a safe and efficient pilotage service within designated Canadian waters. The *Pilotage Act* provides that pilotage tariffs shall be fair, reasonable, and sufficient to permit the Authority to operate on a self sustaining financial basis. Under the *Pilotage Act*, no payment to the Authority may be made under an appropriation by Parliament to discharge an obligation or liability.

The Authority is a Crown corporation listed in Schedule III, Part I of the *Financial Administration Act* and is not subject to the provisions of the *Income Tax Act*.

In July 2015, the Authority was issued a directive (PC 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 the 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 finalized its implementation of this directive in July 2017. The Authority confirms that the requirements of the directive have been met.

2. Regulation of Pilotage Charges

The approval process for setting tariffs for pilotage charges is set out in the *Pilotage Act*. The Authority, with the approval of the Governor in Council, makes regulations prescribing tariffs. The Authority must publish proposed tariffs in the *Canada Gazette* and any interested party who has reason to believe that a proposed tariff is prejudicial to the public interest may file a notice of objection, setting out the grounds therefor, with the Canadian Transportation Agency (CTA) within thirty days following publication of the proposed tariff.

The CTA must investigate the proposed pilotage charge set out in the notice of objection. Once its investigation is complete, the CTA must make a recommendation within 120 days following the receipt of the notice of objection, and the Authority must govern itself accordingly.

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

3. Significant Accounting Policies

(a) Basis of presentation

These financial statements have been prepared by management in accordance with International Financial Reporting Standards (IFRS), as issued by the Accounting Standards Board (AcSB).

(b) Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and demand deposits, together with short-term, highly liquid investments that are readily convertible to a known amount of cash, and that are subject to an insignificant risk of changes in value. The Authority had nil cash equivalents as at December 31, 2018 (2017 - nil).

(c) Financial instruments

Trade and other receivables and trade and other payables, classified as other financial liabilities, are measured at amortized cost using the effective interest method. Due to their short-term nature, the cost of these financial instruments approximates their fair value.

Bank loans are classified as other financial liabilities and are initially measured at fair value. After initial recognition, bank loans are measured at amortized cost using the effective interest method.

The Authority is not party to any derivative financial instruments or hedges.

(d) Intangible assets

The Authority's intangible assets are comprised of purchased software. When the software does not form an integral part of the machinery or computer hardware to which it relates, it is separately accounted as an intangible asset. Intangibles are carried at cost less accumulated amortization and impairment losses.

Any impairment is recognized as an expense in comprehensive income and is measured as the amount by which the carrying amount exceeds its recoverable amount.

(e) Pilot boats and equipment

Pilot boats and equipment are recorded at cost. The cost of pilot boats under construction includes design, project management, legal, material, direct labour, and interest on construction loans. Amounts included in pilot boats under construction are transferred to the appropriate pilot boat classifications upon completion, and depreciation commences.

Any impairment is measured as the amount by which the carrying amount exceeds its recoverable amount and is recognized as a loss for the year. Gains or losses arising on the disposal of pilot boats and equipment are determined as the difference between the disposal proceeds and the carrying amount of the assets and are recognized in profit or loss. Gains are recognized in other income, while losses are recognized as a loss for the year in pilot boats, operating costs or utilities, materials and supplies depending on the assets that were disposed.

(f) Deferred lease inducements

The Authority received a cash inducement for tenant improvements which is presented as a liability. The Authority also benefited from a free rental clause that extended from June 1, 2017 to May 31, 2018 in its lease for its head office premises. This free rent is considered a lease inducement and is presented as a liability for the expired portion as at December 31, 2018.

These inducements are amortized on a linear basis over the lease duration. The term of the lease expires May 31, 2027

(g) Employee severance benefits

Employees are entitled to specified severance benefits as provided for under collective agreements or employment contracts, based on their years of service and final salary. The liability for these payments is estimated and recorded in the accounts as the benefits accrue to the employees.

The costs and the benefit obligation are actuarially determined using the projected unit credit method prorated on service that incorporates management's best estimate of the rate of employee turnover, retirement age, future salary and benefit levels, and other actuarial factors.

Actuarial gains and losses are recognized in other comprehensive income in the period in which they occur and flow into retained earnings.

(h) Pension plan
Substantially all of the employees of the Authority are covered by the Public Service Pension Plan (the "Plan"), a 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.

(i) Revenue recognition
Revenues from pilotage charges are recognized when pilotage services are provided.

4. Accounting Standards and Amendments
(a) Accounting standards and amendments issued and effective
Effective January 1, 2018, the Authority adopted the amended IFRS 9, "Financial Instruments". The adoption of this amended standard resulted in an adjustment in the method used to calculate expected credit losses. The Authority is applying the simplified approach for trade receivables that is available in the new standard to measure expected impairment, rather than the incurred loss model used in prior years. This standard did not have a significant impact on the financial statement.

The Authority also adopted IFRS 15, "Revenue from Contracts with Customers", effective January 1, 2018. Due to the nature of the Authority's revenues, this standard did not have an impact on the financial statements.

(b) Accounting standards and amendments issued but not yet effective
In January 2016, the IASB issued IFRS 16, "Leases", which sets out the principles that both parties to a contract apply in order to provide relevant information about leases in a manner that faithfully represents those transactions. IFRS 16 requires all leases to be reported on the lessee's balance sheet. There are also changes in accounting over the life of the lease. For lessees the total periodic expenses will generally have a front-loaded expense recognition pattern. Leases that are less than 12 months in duration, or that are for low dollar value items, are not required to be capitalized. Lessors' accounting treatment remains similar to current practice. They will continue to classify leases as finance and operating leases. The mandatory effective date of IFRS 16 is January 1, 2019. The Authority has not early adopted this new standard, but has determined that accounting for its head office lease will be impacted. The Authority intends to use the full retrospective approach to apply the new standard. This will require a restatement of comparative amounts for the year prior and the likely impact is currently estimated to be an increase in capital assets valued at $805 and an increase in its lease liabilities of $855.

5. Use of Estimates and Judgments
The preparation of financial statements requires management to make judgments, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, and revenue and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgments about carrying values of assets and liabilities that are not readily apparent from other sources. 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.

(a) Critical accounting estimates
Critical accounting estimates are estimates and assumptions made by management that may result in material adjustments to the carrying amount of assets and liabilities within the next year. Management has made the following critical accounting estimates or assumptions in preparation of these financial statements:

Amortization and depreciation rates

All the intangible assets have finite useful lives. Amortization of intangible assets is charged on a straight-line basis over the estimated useful lives of the assets. The useful lives used in the calculation of amortization for purchased software is 5 to 10 years.

Depreciation of pilot boats and equipment is calculated on a straight line basis and is based on the estimated useful life of the assets as follows:

Pilot boat hulls and structures	10 to 25 years
Pilot boat equipment	5 to 10 years
Pilot boat generators	5 years
Pilot boat engines	5 to 10 years
Pilot boat inspections	4 to 5 years
Furniture and equipment	2 to 10 years
Leasehold improvements	10 years

Useful lives are based on management's estimates of the periods of service provided by the intangible assets and the pilot boats and equipment. The useful lives of these assets are reviewed annually for continued appropriateness. Changes to the useful life estimates would affect future amortization or depreciation expense and the future carrying value of the assets.

Employee severance benefits

The Authority engages an external actuary to assess the fair value of its employee severance benefits. The Authority assesses this obligation at December 31 each year. The plan is sensitive to significant actuarial assumptions, the discount rate, the estimate of salary rate increases, and the assumed age at retirement.

(b) Critical accounting judgments
Critical accounting judgments are accounting policies that have been identified as being complex or involving subjective judgments or assessments.

Impairment test for non-financial assets

The non-financial assets with finite useful lives are required to be tested for impairment only when indication of impairment exists. Management is required to make a judgment with respect to the existence of impairment indicators at the end of each reporting period. Some indicators of impairment that management may consider include changes in the current and expected future use of the asset, external valuations of the assets, and obsolescence or physical damage to the asset.

6. Financial Risk Management

Overview

The Authority has exposure to the following risks from its use of financial instruments:

- credit risk
- liquidity risk
- interest rate risk

This note presents information about the exposure to each of the above risks, including the Authority's objectives, policies, and processes for measuring and managing risk. Further quantitative disclosures are included throughout these financial statements.

The Members of the Authority have overall responsibility for the establishment and oversight of the risk management framework. The Members are responsible for developing and monitoring the Authority's risk management framework.

The Members of the Authority have overall responsibility for the establishment and oversight of the risk management framework and established a Risk Committee to identify and analyze the risks faced by the Authority, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management is reviewed regularly to reflect changes in market conditions and the Authority's activities. The Authority, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

Credit risk

Credit risk is the risk of financial loss to the Authority if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Authority's receivables from customers.

The carrying amount of cash and trade receivables represents the maximum exposure to credit risk.

There is no significant credit risk with trade receivables as the *Pilotage Act* stipulates that the owner, master, and agent of a ship are jointly and severally liable for pilotage charges, and the *Act* provides a mechanism to withhold customs clearance if pilotage charges are unpaid.

The Authority's trade and other receivables had a carrying value of $3,763 as at December 31, 2018 (2017 – $3,712). The trade receivables had a carrying value of $3,596 as at December 31, 2018 (2017 – $3,418). There is no concentration of trade receivables with any one customer. As at December 31, 2018, approximately 72% (2017 – 69%) of trade receivables, net were current, whereas 28% (2017 – 31%) were greater than 30 days outstanding. The Authority recovered $33 (2017 - nil) in trade receivables that had previously been recorded as a loss to bad debts. Incurred losses with respect to bad debts in 2018 were $28 (2017 – $46). The Authority's allowance for doubtful accounts was $27 at December 31, 2018 (2017 – $42). The Authority's other receivables had a carrying value of $167 as at December 31, 2018 (2017 – $294).

Cash is held with a Canadian chartered bank. There has been no assessed change in level of risk exposure of the financial instruments held by the Authority.

Liquidity risk

Liquidity risk is the risk that the Authority will not be able to meet its financial obligations as they fall due. The Authority's approach to managing liquidity risk is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without unacceptable losses or risking damage to the Authority's reputation.

The Authority monitors its cash balances and cash flows generated from operations on a frequent basis to meet its requirements. As part of this plan, the Authority maintains an operating credit facility of $2,500 that is unsecured and available at an interest rate not to exceed the prime lending rate. The carrying amount of trade and other payables, bank loans, and employee severance benefits represents the maximum exposure to liquidity risk.

The Authority's trade payables had a carrying value of $1,318 as at December 31, 2018 (2017 – $1,287) and are all due within 60 days. The Authority's accrued liabilities had a carrying value of $1,144 as at December 31, 2018 (2017 – $743).

The Authority has loans with Canadian chartered banks. At December 31, 2018, these bank loans totalled $5,591 (2017 – $6,231) as disclosed in Note 10.

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market interest rates. The Authority has limited exposure to interest rate risk as the bank loans have a fixed interest rate which cannot be changed between maturity dates without financial penalty.

7. Fair Value of Financial Instruments

Trade receivables and trade payables are incurred in the normal course of business and are respectively due and payable on demand. The carrying value of these financial instruments approximates fair value because of their short term to maturity.

Financial instruments that are measured subsequent to initial recognition at fair value are grouped into a hierarchy based on the degree to which the fair value is observable. Level 1 fair value measurements are derived from unadjusted, quoted prices in active markets for identical assets or liabilities. Level 2 fair value measurements are derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability directly or indirectly. Level 3 fair value measurements are derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data.

The fair value of the bank loans disclosed in Note 10 is a Level 2 fair value measurement. No Level 1 or Level 3 financial instruments are held by the Authority.

8. Intangible Assets

The Authority's intangible assets, which consist of purchased software, at December 31 are:

		2018		2017
Cost, beginning of the year	**$**	**636**	$	604
Additions		**70**		51
Disposals		**—**		(19)
Cost, end of the year		**706**		636
Accumulated amortization, beginning of the year		**(448)**		(420)
Amortization of disposals during the year		**—**		12
Amortization for the year		**(33)**		(40)
Accumulated amortization, end of the year		**(481)**		(448)
Carrying amount, end of the year	**$**	**225**	$	188

There is no impairment of intangible assets at December 31, 2018 (2017 – nil).

9. Pilot Boats and Equipment

2018	Pilot boat hulls and structures	Pilot boat equipment	Pilot boat generators	Pilot boat engines	Pilot boat inspections	Furniture and equipment	Leasehold improvements	Total
Cost, beginning of the year	$ 12,246	$ 5,255	$ 413	$ 2,203	$ 515	$ 1,370	$ 543	$ 22,545
Additions	128	613	19	251	75	256	—	1,342
Disposals	(88)	(258)	—	(68)	(125)	(82)	—	(621)
Cost, end of the year	12,286	5,610	432	2,386	465	1,544	543	23,266
Accumulated depreciation, beginning of the year	(4,083)	(2,543)	(283)	(1,595)	(253)	(781)	(43)	(9,581)
Depreciation of disposals during the year	67	65	—	63	125	80	—	400
Depreciation for the year	(537)	(517)	(37)	(244)	(138)	(191)	(53)	(1,717)
Accumulated depreciation, end of the year	(4,553)	(2,995)	(320)	(1,776)	(266)	(892)	(96)	(10,898)
Carrying amount, end of the year	$ 7,733	$ 2,615	$ 112	$ 610	$ 199	$ 652	$ 447	$ 12,368

2017	Pilot boat hulls and structures	Pilot boat equipment	Pilot boat generators	Pilot boat engines	Pilot boat inspections	Furniture and equipment	Leasehold improvements	Total
Cost, beginning of the year	$ 9,729	$ 4,548	$ 392	$ 2,147	$ 650	$ 1,186	$ 174	$ 18,826
Additions	2,574	866	24	438	313	325	531	5,071
Disposals	(57)	(159)	(3)	(382)	(448)	(141)	(162)	(1,352)
Cost, end of the year	12,246	5,255	413	2,203	515	1,370	543	22,545
Accumulated depreciation, beginning of the year	(3,663)	(2,256)	(248)	(1,708)	(560)	(762)	(174)	(9,371)
Depreciation of disposals during the year	41	138	3	362	448	133	162	1,287
Depreciation for the year	(461)	(425)	(38)	(249)	(141)	(152)	(31)	(1,497)
Accumulated depreciation, end of the year	(4,083)	(2,543)	(283)	(1,595)	(253)	(781)	(43)	(9,581)
Carrying amount, end of the year	$ 8,163	$ 2,712	$ 130	$ 608	$ 262	$ 589	$ 500	$ 12,964

There is no impairment of pilot boats and equipment at December 31, 2018 (2017 – nil).

10. Bank Loans

The Authority's outstanding bank loans at December 31 are:

	2018	2017
Non-revolving term facility, payable in monthly instalments including interest at 1.80%, amortized over 15 years, term ending on May 12, 2022, unsecured.	**$ 2,721**	$ 2,898
Non-revolving term facility, payable in monthly instalments including interest at 2.96%, amortized over 15 years, term ending on January 12, 2019, unsecured.	**1,445**	1,566
Non-revolving term facility, payable in monthly instalments including interest at 3.28%, amortized over 10 years, term ending on September 21, 2022, unsecured.	**929**	1,158
Non-revolving term facility, payable in monthly instalments including interest at 2.93%, amortized over 10 years, term ending on January 21, 2023, unsecured.	**496**	609
	$ 5,591	$ 6,231
Current portion	**$ 1,979**	$ 640
Non-current portion	**3,612**	5,591
	$ 5,591	$ 6,231

Interest expense on loans amounted to $148 (2017 – $141). As at December 31, 2018, the fair value of the bank loans is estimated at $5,492 (2017 – $5,904).

The estimate is based on the valuation technique of discounting future cash flows. Expected future interest and principal payments are discounted using Level 2 inputs such as current interest rates for similar loans that are available from Canadian chartered banks at December 31, 2018.

The remaining minimum principal payments required are:

	2018
2019	$ 1,979
2020	548
2021	563
2022	2,491
2023	10
	$ 5,591

The Authority has an operating credit facility of up to $2,500 available at an interest rate not to exceed the prime lending rate. No amount had been drawn down on the credit facility at December 31, 2018 (2017 – nil). The credit facility is available to the Authority as required and has no renewal date or fixed term.

Subsequent to this December 31, 2018, the Authority renegotiated the non-revolving term facility that matured on January 12, 2019 with another financial institution and it remains a non-revolving term facility, payable in monthly instalments, including interest at 3.14%, amortized over 10 years, with a term ending on January 14, 2024.

The Minister of Finance has authorized all of the Authority's borrowing.

11. Deferred Lease Inducements

The Authority received lease inducements from its landlord of $381 in the form of reimbursements for leasehold improvements. The Authority has also received a period of free rent totalling $70 in 2018 (2017 - $98). The benefit of the free rent incentive is recognized as a reduction of rental expenses on a straight-line basis over the term of the lease. A total of $17 has been recognized as a reduction of rental expenses in 2018 (2017 – $9).

12. Reconciliation of Liabilities arising from Financing Activities

The Authority's liabilities from financing activities is borrowing in the form of its bank loans and tenant inducements for its head office space.

	2018	2017
Finance liabilities, beginning of the year	**$ 6,612**	$ 3,782
Cash provided by additional borrowing	**—**	3,000
Cash provided by lease inducement	**—**	381
Cash used for debt payments	**(640)**	(551)
Cash used for deferred lease inducement payments	**(25)**	—
Finance liabilities, end of the year	**$ 5,947**	$ 6,612

13. Pension Plan

Substantially all of the employees of the Authority are covered by the Public Service Pension Plan (the "Plan"), a 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 contribution. The general contribution rate effective at December 31, 2018 was 1.01 to 1 of employee contributions (2017 – 1.01 to 1) to a defined salary threshold for all existing plan members contributing to the Public Service Pension Plan on or before December 31, 2012. The general contribution rate effective at December 31, 2018 was 1 to 1 of employee contributions (2017 – 1 to 1) to a defined salary threshold for all new plan members who joined the Public Service Pension Plan on or after January 1, 2013. On the portion of salaries above the defined threshold, the Authority is required to contribute on a ratio of 3.2 to 1 of employee contributions (2017 – 7.74 to 1). Total contributions by the Authority of $1,040 (2017 – $972) were recognized as an expense in the current year.

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 two percent of pensionable service times the average of the best five consecutive years of earnings. The benefits are coordinated with the Canada/Québec Pension Plan benefits and are indexed to inflation.

Contributions to the Public Service Pension Plan consisted of:

	2018	2017
Contributions by the Authority	**$ 1,040**	$ 972
Contributions by employees	**$ 1,025**	$ 953

14. Employee Severance Benefits

The post-employment severance benefit was provided to all employees under various collective agreements and employment contracts. As of 2012, this benefit is no longer offered to employees recruited by the Authority, but liabilities remain for employees who did not choose to have the benefit curtailed immediately. The severance benefit is measured at its actuarially determined amount. This benefit plan is unfunded and thus has no assets, resulting in a plan deficit equal to the accrued benefit obligation.

The projected unit credit method of funding was used for the valuation. Under this method the accrued benefit obligation is equal to the actuarial present value of all future benefits, taking into account the assumptions described below, multiplied by the ratio of an employee's service at the valuation date to total service at the assumed termination date. The current service cost for a period is equal to the actuarial present value of benefits attributed to employees' services rendered in that period. These costs, along with the interest cost, and experience loss due to settlement are included in the statement of comprehensive income for the year ended December 31, 2018 with $123 (2017 – $120) under pilots' fees, salaries, and benefits. The cumulative amount of actuarial losses recognized in other comprehensive income is $390 at December 31, 2018 (2017 – $417).

Information about the plan, measured at December 31, is as follows:

		2018		2017
Reconciliation of accrued benefit obligation				
Accrued benefit obligation, beginning of the year	**$**	**1,523**	$	1,469
Current service cost		**73**		72
Interest cost		**50**		48
Benefits paid during the year		**(37)**		(86)
Actuarial (gains) losses		**(27)**		20
Accrued benefit obligation, end of the year	**$**	**1,582**	$	1,523
Components of expense recognized in profit and loss				
Current service cost	**$**	**73**	$	72
Interest cost		**50**		48
Total expense recognized in profit and loss	**$**	**123**	$	120
Analysis of actuarial gain or loss				
Cumulative actuarial losses, beginning of the year	**$**	**417**	$	397
Change in discount rate		**(35)**		17
Experience loss		**8**		3
Cumulative actuarial losses, end of the year	**$**	**390**	$	417
Classification of accrued benefit obligation				
Current portion	**$**	**201**	$	35
Non-current portion		**1,381**		1,488
Accrued benefit obligation, end of the year	**$**	**1,582**	$	1,523
Key assumptions used in the actuarial valuation				
Discount rate		3.50%		3.15%
Estimated salary rate increase		2.75%		2.75%
Age at retirement		33% at age 60, remainder at age 65		

Assumed discount rates have a significant effect on the amounts reported for the accrued benefit obligations. A decrease in the discount rate of 1% would increase the defined benefit obligation at December 31, 2018 by $103. An increase in the discount rate of 1% would decrease the defined benefit obligation at December 31, 2018 by $92.

The assumed salary increase rates also have a significant effect on the amounts reported for the accrued benefit obligation. A 1% increase in this assumption would increase the defined benefit obligation at December 31, 2018 by $103. A 1% decrease would reduce the obligation at December 31, 2018 by $93.

When the retirement age assumption is reduced by one year for all employees, the defined benefit obligation increases by $8 for December 31, 2018.

The weighted-average of the maturity of the plan at December 31, 2018 was 6.4 years (2017 – 7.5 years). The Authority expects that benefits paid during 2019 will be $201.

15. 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 financial management and accountability provisions of the *Financial Administration Act* (FAA) which imposes restrictions in relation to borrowings and acquisition of investments. The Authority must obtain approval of all borrowings from the Minister of Finance on an annual basis. The FAA 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 December 31, 2018 and December 31, 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*.

The Authority's objectives when managing capital are:

- to safeguard the Authority's ability to continue as a going concern by having enough capital in reserve to offset possible operating losses, so that it can continue to provide a safe and efficient pilotage service;
- to build an allowance for the cost of constructing or purchasing pilot boats; and
- to build an allowance for an unfunded liability pertaining mainly to employee severance benefits.

The Authority conducts its business in a manner intended to maintain capital to meet these three requirements. Adjustments to the capital structure are made based on changes in economic conditions and the risk characteristics of the underlying assets. In order to maintain or adjust the capital structure, the Authority may change its targeted return on pilotage services and tariff structure for a given period, delay possible construction projects, or sell assets to reduce debt. There has been no change to what the Authority defines as capital or its objectives, policies and processes for managing capital from the prior year.

16. Pilotage Charges

During 2016, the Authority implemented a 1.5% surcharge for the eleven ports serviced by employee pilots. The surcharge was used to recover a portion of recent losses incurred due to shortfalls in expected revenues. This surcharge came into force on March 11, 2016 and was in effect until June 30, 2018.

	2018	2017
Pilotage charges	**$ 28,584**	$ 27,358
Surcharge	**176**	364
Total pilotage charges	**$ 28,760**	$ 27,722

17. Related Party Transactions

(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 majority of these transactions are not of significance and do not have a material effect on these financial statements.

(b) Compensation of key management personnel

The remuneration of Members and key management personnel for the year ended December 31 included:

Executive Management Compensation	**2018**	2017
Short-term employee benefits, such as wages and salaries	**$ 754**	$ 654
Post-employment benefits (Note 17(c))	**78**	71
	$ 832	$ 725
Board Compensation		
Retainer	**$ 24**	$ 24
Per diem	**41**	40
	$ 65	$ 64

(c) Pension plan

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 while the Government of Canada holds a statutory obligation for the payment of benefits relating to the Plan (Note 13).

18. Commitments

The Authority has entered into contracts for pilot boat services, software maintenance, safety equipment, and support for weather buoy operations requiring the following minimum payments:

As at	**December 31, 2018**
Not later than one year	$ 2,389
Later than one year but not later than five years	332
Later than five years	22
	$ 2,743

The Authority has also committed to operating leases for office space, office equipment, and wharfage requiring the following minimum payments:

As at	**December 31, 2018**
Not later than one year	$ 295
Later than one year but not later than five years	850
Later than five years	739
	$ 1,884

During the year ended December 31, 2018, $297 was recognized in the statement of comprehensive income in respect of expenses incurred under operating leases (2017 – $292).