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SUMMARY OF 2014 – 2018 CORPORATE PLAN

Canada

Background

Sir Humphrey Gilbert could have used a pilot with the skill of those employed by the Atlantic Pilotage Authority. When he arrived in St. John's in 1583 to take possession of the New Found Land in the name of Queen Elizabeth I, his ship struck a rock in the Narrows. Fortunately for him, there were 36 ships of various nationalities in the harbour and their sailors helped to refloat the ship. After pausing to relieve the ship's master of his duties- certainly not the last master of a vessel to come to grief in the Narrows- Sir Humphrey planted the royal standard and declared the land for the Queen, much to the bemusement of the crews of the other 36 vessels. While modern propulsion systems, electronic equipment and navigational aids have changed the way ships are operated at sea since those ancient times, the employment of a marine pilot with extensive local knowledge and expert ship-handling skills is as essential as ever to safely enter harbours and ports and efficiently put ships alongside their berths.

The Atlantic Pilotage Authority (APA) provides a valuable and necessary service to the marine community in Atlantic Canada. The highly skilled marine pilots employed by the APA make a vital contribution 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. A reliable and responsible marine pilotage system plays a significant role in allowing Canadian business to remain competitive in the global marketplace.

The APA consults widely with the shipping industry and stakeholders on both operational and financial issues. Consultations have included shipping agents, ship owners, port officials, and other stakeholders. The APA has established committees of stakeholders in many ports, and also consults regularly with the Shipping Federation of Canada and the Canadian Shipowners Association. The Authority takes advice from its stakeholders, and greatly values the open lines of communications that these consultations provide. The focus of the Authority continues to meet the requirements of the customers in each port at a reasonable cost, while remaining financially self-sufficient.

Summary

Operating Budget

The Authority has seen only a modest improvement in revenue in 2013 from 2012, but is projected to finish the year in a profitable position. The Authority intends to remain in a profitable position during the five years of the planning period. The revision of the tariff structure undertaken in recent years with the support of customers allowed the APA to withstand the downturn much better than would have been the case a few years ago. Upon reviewing the tariff structure for 2014, the Authority will be implementing tariff amendments in eleven ports

that will provide a 4.62% increase in overall revenue. The following chart indicates the actual results for 2012, the anticipated results for 2013, and the budgeted statements for 2014-2018.

			STATE	ΛEΝ	T OF OPERA	TIO	NS									
	ACTUAL OUTI				OUTLOOK BUDGET						PLAN					
	 2012	2	2013		2014		2015		2016		2017		2018			
TOTAL INCOME	20,341		21,342		21,882		22,742		23,504		23,974		24,454			
TOTAL EXPENSES	20,483		20,982		21,688		21,866		22,356		22,795		23,825			
PROFIT (LOSS)	\$ (143)	\$	360	\$	194	\$	876	\$	1,148	\$	1,179	\$	629			
RATE OF RETURN	-0.7%		1.7%		0.9%		3.8%		4.9%		4.9%		2.5%			

The Authority sought approval for the continuation of the \$1.5 million operating line of credit for 2014.

Capital Budget

With the completion of the second of two new pilot boats, the Authority's capital budget will be reduced in 2014 from the amounts expended in recent years. The largest expenditure will be for pilot boat refits and equipment for existing boats amounting to \$645 thousand, with an additional \$125 thousand to be spent on repairs and maintenance of wharf facilities. It is anticipated that the capital expenditure during 2014 will be \$827 thousand.

Cost Containment

The Authority continuously reviews its operations to determine where greater efficiencies and savings may be achieved. During 2013, the Authority received a final report from an accounting firm with respect to finding efficiencies in the maintenance program for pilot boats. As a result of this study, the APA will hire a marine engineer to provide better preventive maintenance.

The Authority is also implementing Human Resources software to improve the scheduling of pilots and other operational staff. The Authority will also realize savings from a recently implemented Electronic Source Form program. This program will not only provide administrative savings, but will provide advantages to pilots, industry, and the APA through improved cash flow.

Finally, after almost ten years of effort by the Authority and the Canadian Marine Pilots Association, the port of Halifax will have a weather buoy positioned in a strategic location by late 2013 or early 2014. This initiative will enhance safety for our pilots and pilot boat crews, and has the potential to create significant cost efficiencies for both the APA and its customers in the shipping community.

Risk Management

The Authority has developed a two stage approach to the Pilotage Risk Management Methodology (PRMM) process. The first stage, referred to as Phase I, is an initial scan of a province or other extensive geographical area to determine whether individual ports require a PRMM. A Phase I scan conducted in 2012 identified two areas in Newfoundland and Labrador (NL) that should have a PRMM review- Argentia and Conception Bay. The port of Argentia, NL was the subject of a PRMM in 2013, and the report will be presented to the Board by the end of the year. A PRMM review will be completed for the Conception Bay area of NL in 2014. Meanwhile, a Phase I scan will be conducted for Goose Bay, Labrador.

The Management and Board of the Authority completed an Enterprise Risk Management process during the year. Eleven of twenty-three risks were considered significant enough to warrant close monitoring, and mitigation strategies have been developed for all risks. The monitoring of each risk has been assigned to various Board committees.

The aforementioned placement of a weather buoy in Halifax is an important component of our risk management strategy. This buoy will offer accurate and timely information to pilots, industry, fishers, and recreational boaters. This initiative will also benefit many public sector users such as Environment Canada, Canadian Coast Guard, Department of Fisheries and Oceans, Transport Canada, Canadian Hydrographic Service, the Halifax Port Authority, and the APA. The APA will continue to work toward an objective of having weather buoys deployed in the Strait of Canso area of NS, and in Saint John, NB.

Corporate Governance

The Board and management of the APA continued the Directional Planning process that was initiated in 2007. This process provides long term planning, and is reviewed and updated each year. The fundamental principles of the Directional Plan have been incorporated into this Corporate Plan.

The Board of the Authority continues its mandate of ensuring good corporate governance. During 2013, all of the Board Committees were active, and the recommendations from these committees have been instrumental in reaching sound decisions and providing essential strategic direction.

The Chair and Members of the Authority (Board) are appointed by Governor-in-Council for terms of two to four years. The Board is composed of members with marine pilotage experience, members with shipping industry experience, and members representing the interests of the public at large. An effort is also made to have the Board reflect the widespread geographical area within the APA jurisdiction. This cross section of industry and business knowledge, experience,

business acumen, and regional perspective provides an excellent background for the Board's deliberations. The Board has created a number of committees with specific responsibilities, and further information on these committees is provided below.



Conclusion

The Atlantic Pilotage Authority is well positioned to continue offering professional and safe marine pilotage service to Atlantic Canada on a self-sustaining basis. The consultative relationship that has been established with stakeholders allows the Authority to keep current with the needs, issues, and concerns of its customers.

The Authority completed the latest stage of its pilot boat replacement program during 2013, with the next phase in the program scheduled to begin in 2015. Safe, robust, and reliable pilot boats that have modern electronic aids and provide a stable platform are essential to enhance safety for pilots.

The Canadian public and government remain vitally concerned about the environment. The Canadian marine pilotage service provides an important environment safeguard, perhaps more so today than when the *Pilotage Act* was proclaimed in 1972. The Authority believes that the service provided is relevant and remains a priority of government.

The Board and Management of the Authority are pleased to present the 2014-2018 Corporate Plan.

MANDATE, MISSION, VISION

<u>MANDATE</u>: The mandate of the Atlantic Pilotage Authority is to establish, operate, maintain and administer, in the interest of safety, an efficient pilotage service within the Atlantic region.

<u>MISSION</u>: The Authority will accomplish this by providing the necessary expertise and experience, associated with the appropriate technology, to meet the needs of the industry. The Authority is committed to maximizing the use of its resources/assets to meet the goals in a safe and environmentally responsible manner.

<u>VISION</u>: To continue to provide an effective pilotage service throughout the Atlantic Region. In doing so, the Authority would maximize opportunities and benefit the various ports/districts and surrounding communities.

CORPORATE PROFILE

BACKGROUND

The Atlantic Pilotage Authority was established February 1, 1972, pursuant to the *Pilotage Act*.

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 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 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, Nova Scotia.

The Authority has not received parliamentary appropriations since 1995 and, under provisions in the *Canada Marine Act* and *Pilotage Act*, will not be eligible for future appropriations.

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 settle the Authority's expenses.

DESCRIPTION OF OPERATIONS

Since 1972, the Authority has operated, in the interest of safety, a marine pilotage service for all Canadian waters surrounding the four Atlantic Provinces, including the waters of the Bay of Chaleur in the Province of Quebec. This is the only program of business for the Authority.

The Authority provides licensed pilots to ships that enter Atlantic Canadian Ports in order to ensure that these ships travel within the pilotage area as safely as possible. The Authority also examines qualified mariners, and issues pilotage certificates to successful candidates to enable them to navigate their ships within designated compulsory areas without a licensed pilot on board. The Authority organizes its operations according to geographic location, and has designated seventeen areas as requiring compulsory pilotage, with one more area in the process of being made compulsory. The Authority also endeavors to provide pilotage service to other areas, referred to as non-compulsory areas, upon request. Most of the pilots licensed by the Authority are employees; however, pilots may also be entrepreneurs, or a member of a body corporate contracting with the Authority for pilotage services. Pilot boat services may be owned and operated by the Authority or by a private operator who has a contract with the Authority. A complete breakdown of all revenue and costs related to the pilotage service is calculated and totaled for each port and area, and summarized for the entire operation.

Demand for the services of the Authority is, for the most part, determined by the shipping industry, over which the Authority has little or no control. The Authority evaluates its

performance according to the achievement of a safe, efficient, and effective marine pilotage service while maintaining financial self-sufficiency.

In addition, success is determined by how well the Authority adapts to changes in world trade, to the establishment of new business ventures, and to patterns that develop within the shipping industry. Shipping operates on market demand. The Authority does not attract ships to the Atlantic region; it merely responds to a demand that is influenced by a number of factors.

The Authority operates within the marine transportation sector. No competition exists to provide this service in compulsory pilotage areas.

The Authority's goal is to implement tariffs that are fair and reasonable, and that allow the entity to operate on a self-sustaining financial basis. The following Table reflects the annual average percentage increase in revenue derived from increased tariffs during the following periods:

Year	2013	2014	2015	2016	2017	2018
Average Percentage Increase	3.80%	4.62%	3.35%	2.42%	2.00%	2.00%
in revenue.						

COMPLIANCE WITH GOVERNMENT INITIATIVES

The Authority has been tasked to innovate and transform in an attempt to improve efficiencies and reduce the cost of the pilotage service for industry. There have been several projects launched or supported in an attempt to accomplish these goals.

Pilot boat maintenance costs make up a significant portion of the budget for the Authority as over \$1 million dollars per year is spent on repairs, pilot boat refits, and new equipment. The Authority employed an accounting firm to conduct an internal audit of the area to determine if there is a more efficient manner in which the APA could be conducting repairs and maintenance that would be cost effective, while also reducing the risk that operations will be disrupted due to vessel availability. In response to the report, an engineer is being added to the operating staff to provide the following advantages:

- Ability to inspect the pilot boats, effectively manage and prioritize the deficiency list and be able to perform basic repairs and maintenance.
- Oversight of the Pilot Boat Crews' daily maintenance program efforts and determination of when a potential issue is likely to result in major repairs and take necessary actions.
- Ability to leverage existing third party software applications to schedule and track repairs, inspections and maintenance performed.
- Ability to discuss major repairs and maintenance or refits of pilot boats with external service providers to determine if the quote is appropriate for the work required.

The Authority is also searching for efficiencies in the utilization of pilot and other employee resources. To this end, Human Resources software has been added to the Authority accounting software at a minimal cost. This software addition will allow more accurate and timely scheduling, and monitoring, of employee leave to target where improvements can be made.

A project was completed in 2013 where Electronic Source Forms were launched. This allows pilots to submit billing details, as well as expense claims, immediately following an assignment's completion. This process provides several benefits to the Authority and to industry:

- This saves the Authority the cost of having paper source forms printed.
- It saves the Authority the cost to send the forms to the pilots, and saves on the postage to have them returned.
- By having the information submitted within the day, invoices can be sent to customers within 24 hours, where it used to take days if not weeks with paper forms.
- o This has improved the Authority's cash flows as the invoicing is much quicker.
- The shipping agents also have improved cash flow as they can invoice their customers quickly as well.

• Efficiencies have been gained by the importing of the electronic information into the billing and accounting software, allowing more attention to be placed on quality output and processing.

Finally, the Authority has leant its support to a joint initiative to have weather buoys placed in key areas within the Atlantic region. Thus far, weather buoys have been established for Placentia Bay, NL and one is being deployed for Halifax, NS. The establishment of the buoys enhances safety and allows for more efficient use of manpower by the Authority and by other entities within a port.

It is estimated that weather-related delays cost the Halifax marine industry approximately \$2.6 million annually. The deployment of the buoy is expected to reduce this cost substantially. There are similar efficiencies to be gained in each port where these buoys are deployed. With more accurate and precise forecasts, the marine stakeholders are able to have better operational planning with respect to ordering tugs, pilots, port labour, and ground transportation. Improved planning provided by weather buoy information is expected to reduce delay related costs substantially.

RISK MANAGEMENT

Pilotage Risk Management Methodology

When reviewing the possibility of designating a compulsory pilotage area, it is expected that such designation not be imposed indiscriminately. It must be the result of appropriate research and evaluation of all the facts and of meaningful consultation with the stakeholders. There must be clear justification that compulsory pilotage is warranted to enhance safety and protect the marine environment. A risk management approach for pilotage was developed that was compliant with the Canadian Standards Association Standard CAN/CSA-Q850.

The APA has developed a two tier approach to the PRMM process. An initial high-level scan (referred to as a Phase I Review) of a broad geographic area is conducted to determine whether ports within the area require a full PRMM review. Upon completion of the Phase I Review, ports are identified for further study. A priority list of ports requiring a PRMM review is determined.

The PRMM approach provides an interactive process consisting of easy to follow steps which, when taken in sequence, provide for a consistent, transparent and well-documented decision-making process. Risk control strategies or risk reducing strategies are evaluated in terms of needs, issues and concerns of all affected stakeholders. The PRMM stresses the importance of involving stakeholders from the outset and maintaining good documentation throughout all stages in the process. This process was recommended by the Minister of Transport and the

development of the process was spearheaded by Transport Canada in cooperation with the pilotage authorities.

The APA has been a leader among Pilotage Authorities in conducting Pilotage Risk Management Methodology (PRMM) studies. The Authority has conducted six full study PRMM analyses in recent years on the following subjects:

- on vessel size and types subject to compulsory pilotage;
- on the Miramichi River Compulsory Pilotage Area to determine if it should remain compulsory;
- on the approaches to Voisey's Bay to determine whether compulsory pilotage was required;
- on the St. Croix River and Port of Bayside to determine whether compulsory pilotage was required;
- on the Port of Belledune to determine whether compulsory pilotage was required;
- on the Port of Argentia to determine whether this port should become part of the Placentia Bay Compulsory Pilotage Area.

The St. Croix River and Port of Bayside result was reviewed further and withdrawn as conditions in the area had changed. The Port of Belledune is in the regulatory process. The report on Argentia will be reviewed by the Board by the end of 2013.

In 2010, a Phase I Review was conducted on non-compulsory ports in Nova Scotia. Four ports were identified for further attention; however, two of these ports have had their primary industry close and will not merit a further review. In 2011, a Phase I Review was conducted in New Brunswick. Following the recommendation in this report, the PRMM review was conducted for the port of Belledune with a recommendation made that this area should have compulsory pilotage. After extensive consultations with direct stakeholders, the proposed amendments are in the regulatory process.

In 2012 a Phase I Review was conducted on non-compulsory ports in Newfoundland. The facilitator identified ports that would require a full PRMM as a result of his study. The initial PRMM, on the port of Argentia, will be presented to the Authority in the latter half of 2013. For 2014, the Authority plans to have a PRMM review of the Conception Bay area in Newfoundland.

Enterprise Risk Management Framework

The Authority has established an Enterprise Risk Management framework to identify and mitigate risks to the corporation. Risks were initially identified with the assistance of external consultants through a thorough analysis of the enterprise's environment. Any existing mitigation to help reduce the likelihood or impact of the risk was considered, and additional mitigation was identified and where practicable, implemented for each risk. This analysis initially identified 29 risks, which were reduced to 23 risk categories through refining the definitions and combining

like risks. The risks were ranked after a thorough review by the Board and Management of the Authority. It is understood that the risk categories are not static, and a regular review is required. The review may identify new risks, may determine that risks have decreased through sufficient mitigation to reduce their likelihood or impact, or may determine that the risk level has increased due to changes in circumstances.

The risk categories fall into one of four categories. High risk items are identified in red, medium risks are in yellow, and low risks are in green and very minor risk items in blue. While it is important to be cognizant of all risk factors, the high risk categories demand the most priority, followed by the medium risk categories. The following risk categories were identified:

APA Risk Categories- 2013 Ranking

1	Injury to pilot/crew member while transferring
2	External Economic Risk
3	Customer Satisfaction
4	Loss of Launch Services causing Major Interruption of Service
5	Governance/Organizational Structure/Succession Planning
6	Risk of Accident Caused by Human Error
7	Safety Compromised due to Pilot Fatigue/Under the Influence
8	Operating costs exceeding amount budgeted when tariffs are determined
9	Unable to Attract and Retain Adequate and Trained Relief Pool for Pilot Boat Crew
10	Risk that Employees are exposed to Injury or Illness in the Workplace
11	Safety Compromised due to Boat Crew Fatigue/Under the Influence
12	Interruption of Service due to Breakdown in Labour Relations
13	Loss or Misuse of Information, Data, or Other Assets
14	Administration Staff Coverage
15	Risk of being unable to Attract and Retain Pilots to meet Demand
16	Certificate Holders Evaluations
17	Safety Compromised due to Inappropriate Pilotage Area Designation
18	APA Involvement in Non Comp Ports
19	Pilot Vessels not meeting TC Inspections
20	Fraud
21	Management Information
22	Safety/Service Compromised due to Interruption to the Dispatch Operation
23	Business Continuity

The Authority has developed mitigation strategies for all twenty three identified risks.

ESTABLISHMENT OF WEATHER BUOYS IN ATLANTIC REGION

The APA has been a strong supporter of a joint initiative to establish weather buoys in key areas in the Atlantic region. This joint initiative, known as SmartATLANTIC, is spearheaded by the Canadian Marine Pilots Association and has had the support of the APA, the Halifax Port Authority, the Saint John Port Authority, the Strait of Canso Superport Authority, Canaport LNG, and Canaport Limited. It has been endorsed by the Shipping Federation of Canada and the Canadian Shipowners' Association. In 2013, important developments have taken place in this project because of the financial support of the Governments of Canada and Nova Scotia, as well as the research expertise of Dalhousie University.

In June 2013, there was a joint announcement by the Government of Canada (\$171,000) and the Province of Nova Scotia (\$150,000) that they would provide funding for the initial purchase and startup costs of the Halifax weather buoy. The buoy, to be built by AXYS Technologies Inc of Sidney, BC and to be owned by the Halifax Marine Research Institute of Dalhousie University, is expected to be in place in late 2013 or early 2014. The APA and the Halifax Port Authority have committed to sharing operating costs of the buoy in Halifax. This buoy is expected to be of the shipping community providing benefit to in Halifax by meteorological/oceanographic data to allow the production of high-resolution forecasts that will be available to the public through the internet or smart phone. In addition to forecasting, the research community will benefit greatly from real-time data that includes air temperature, humidity dew point, barometric pressure, wind speed, water temperature, salinity, current speed, current direction, wave height, wave direction, and wave period.

For the APA, the establishment of this buoy will enhance safety and allow for more efficient use of manpower. It is estimated that weather-related delays cost the Halifax marine industry approximately \$2.6 million annually. With more accurate and precise forecasts, the marine stakeholders will be able to have better operational planning with respect to ordering tugs, pilots, port labour, and ground transportation. It is expected that the improved planning provided by weather buoy information will allow the delay related costs to be substantially reduced.

This initiative will benefit many public sector users such as Environment Canada, Canadian Coast Guard, Department of Fisheries and Oceans, Transport Canada, Canadian Hydrographic Service, the Halifax Port Authority, and the APA. It would also benefit the private sector and the public at large through increasing the safety margin for aquaculture and fishers, recreational boaters, tourism operators, shipping lines, port terminal operators, and infrastructure and land use planners.

The emphasis will now be placed on obtaining a similar buoy for the Port of Saint John, NB. In that port, the commitment to cover operating costs of the buoy will be shared by the APA, the Saint John Port Authority, Canaport LNG and Canaport Limited if the capital costs can be covered by other parties.

The APA believes that this initiative is vitally important in reducing risk to the APA pilots and boat crews, and would be an essential factor in improving safety of the marine environment for all those who derive their living or pursue recreational interests in these areas. The Authority commends Transport Canada for their support of the SmartATLANTIC Weather buoy initiative, and look forward to continuing co-operation in establishing weather buoys in Saint John, NB and in the Strait of Canso, NS.

REVENUE AND TRAFFIC PATTERNS

The Authority provides pilotage service in the seventeen compulsory ports indicated in the below map. Pilotage service is provided to non-compulsory ports upon demand. The Authority has pilots licensed for 17 non-compulsory ports and did assignments in the majority of these areas in 2013.

Western NL Miramichi Pugwash Halifax

Atlantic Pilotage Authority Compulsory Pilotage Areas

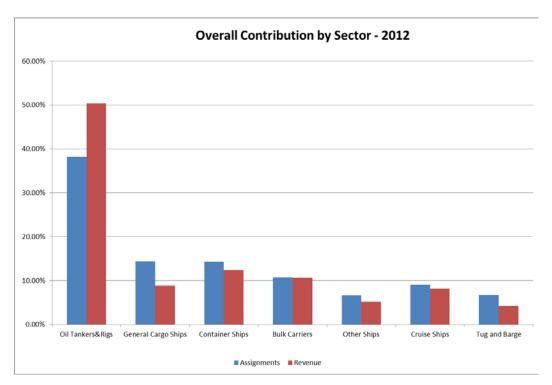
The total number of estimated assignments for 2014 is expected to be 8,093. The amount of activity in ports serviced by the APA can vary significantly due to factors that are beyond its

control. Currently two major issues are on the horizon: the widening of the Panama Canal which will lead to a change in traffic patterns; and International Maritime Organization regulations on air pollution of ships operating near shore. The former issue may have a significant effect on container ship traffic, and the latter regulation may impact cruise ship traffic.

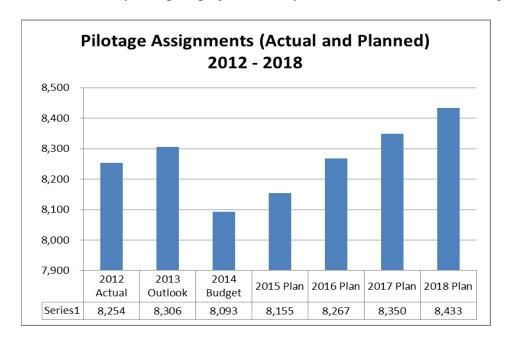
Of the 17 compulsory areas, there are four major ports that contribute approximately 74% of the Authority's assignments, and approximately 82% of revenues. These ports are Placentia Bay, NL, Halifax, NS, Strait of Canso, NS, and Saint John, NB. Much of the pilotage activity in the Atlantic Region is driven by the oil industry, with oil tankers being primary contributors in Saint John, Strait of Canso, and Placentia Bay. While tanker traffic is also important in Halifax, container ships are the primary contributor to that port which handles over 84% of the Authority's container ship traffic.

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 current trend is for foreign vessels to represent approximately 77% of assignments, and approximately 78% of 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 following chart indicates the overall contribution by different sectors.



The chart below illustrates the annual assignments for 2012, the outlook for 2013, and the forecast included in the Plan for 2014-2018. Even though the Authority has experienced declines in traffic recently, this plan projects activity levels to rebound over the longer term.



DISPATCH

The Authority provides dispatching services throughout its region from a dispatch centre located at its head office. The total cost of the dispatch operation in 2014 will be approximately \$602k and this amount has been included in the budget. The dispatching service provides significant information and added value to pilots, customers, port authorities, and management through controlled access web pages established for each group. The web pages are continuously updated from the Authority's Dispatch and Billing System as the dispatcher enters data. Customers and pilots are able to contact dispatch by telephone, e-mail, facsimile, VHF radio, and telex. As the service evolves, it continues to increase the efficiency of the Authority's operations while adding value for customers and employees. The APA has developed the capability to monitor vessel movements in the major ports and their approaches through a computer program utilizing the Automatic Identification System (AIS). The AIS is required on all commercial vessels, and the APA has also installed transmitters and receivers on its pilot boats.

PILOT BOAT COSTS

The APA has three models for pilot boat operations:

1. In the Strait of Canso, and all minor ports, a contractor provides both the boat and the crew.

The Authority prefers that all pilot boat contracts be paid on a "per trip" basis. This avoids a situation where a guaranteed annual amount of money is paid that has no relation to the number of assignments and revenue in that port. This principle is followed with a few minor exceptions to address local issues in a port.

2. 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.

The Authority attempts to use its own boats in the most efficient manner possible and to control costs where possible. The boat crews are APA employees and their costs do not fluctuate with activity in the port.

3. In Placentia Bay and Sydney, the Authority owns the vessels, with the manning contracted out to a local company.

The Authority encourages the contractor to use the APA boats efficiently while safeguarding the assets.

The APA prefers to have a variable cost in those ports in which a private contractor provides service. This is accomplished by having a "per trip" rate that will fluctuate with the volume of traffic.

Manning Levels

The Authority currently has seventy-six full time employees, and one part time employee. This complement includes 43 pilots, 18 pilot boat crew members (including maintenance), 6 dispatch personnel, and 9.5 management and administrative personnel. Please see Section 7 for a summary of the Human Resources budget and plan.

The Authority employs highly skilled and qualified pilots. Professional development is emphasized, and the Authority makes a significant financial commitment to ensure that the best available training is provided. The pilots are supported by competent pilot boat crews and dispatchers who work as a team to provide the best possible service to the customer. The Authority employs professional and proficient management and support staff to administer the operations.

The licensed pilots and the pilot boat crews are trained to conduct a safe marine pilotage service. The Authority monitors the requirements for each port and staffs accordingly, after consultation

with stakeholders. Pilotage and the marine industry are undergoing rapid technological change. The Authority evaluates and modifies training programs to deal with the rapidly evolving technology.

Statement of Human Resources 2010-2018

	ACTUAL	ACTUAL	ACTUAL	OUTLOOK	BUDGET		PLA	N	
	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
ADMINISTRATION									
EXECUTIVE OFFICERS	3.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0
MANAGERS	2.0	2.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0
SUPPORT	5.0	5.5	3.5	4.5	4.0	4.0	4.0	4.0	4.0
-	10.0	9.5	8.5	9.5	9.0	9.0	9.0	9.0	9.0
OPERATIONS									
PILOTS	46.0	44.0	43.0	43.0	45.0	43.0	43.0	43.0	43.0
PILOT BOAT CREWS	14.0	14.0	17.0	18.0	18.0	18.0	18.0	18.0	18.0
DISPATCHERS	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	66.0	64.0	66.0	67.0	69.0	67.0	67.0	67.0	67.0
TOTAL EMPLOYEES	76.0	73.5	74.5	76.5	78.0	76.0	76.0	76.0	76.0
ENTREPRENEURIAL PILOTS	13.0	12.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
ENTREPRENEURIAL PILOTS	13.0	13.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
TOTAL MANPOWER									
RESOURCES	89.0	86.5	84.5	86.5	88.0	86.0	86.0	86.0	86.0

The Executive Officers include the Chief Executive Officer, Chief Financial Officer, and the Chief Operating Officer. The Chief Operating Officer position has been vacant since late 2011, but will be staffed by the end of 2013. The Authority left this position vacant since late in 2011 in an attempt to reduce costs in administration. It has been decided that this position is essential to the longer-term operation of the Authority and with respect to continuity planning as the Chief Executive Officer nears retirement. The Managers of the Authority encompasses the Controller position and the HR Administrator. Support staff includes executive and administrative assistant positions.

Under Operations, "Pilots" and "Pilot Boat Crews" refer to employees of the APA. The pilot strength in Cape Breton was reduced by one through transfer in 2013 and will be reduced further by one by retirement early in 2014. Pilot strength in Halifax was increased by one with the incoming pilot from Cape Breton. The pilot in Restigouche, NB, retired early in 2013, and coverage in that port will be provided on a contract basis. Two apprentice pilots were added in Placentia Bay, NL in 2013 with one pilot retiring from the area. Two additional pilots will be added in the area in 2014.

Entrepreneurial (or Contract) Pilots are not employees of the APA, and derive their income from receiving a share of the tariff levied for an assignment. A Contract Pilot is paid a percentage of the tariff rate for each pilotage assignment. Some employee pilots perform Contract Pilotage in

non-compulsory assignments during their off duty time. Because these pilots are included above as employee pilots, they are excluded from Entrepreneurial pilot totals.

The pilot boat crew numbers increased in 2012 with the establishment of a fourth crew in Saint John, NB. This initiative was supported and encouraged by the Saint John stakeholders to ensure 24 hour coverage for the port while reducing fatigue and increasing safety. Each crew is made up of a launchmaster and a deckhand. The Pilot Boat Administrator position evolved from a support position in 2012 to manage the pilot vessel maintenance and manning. The addition of a pilot boat engineer has taken place in 2013. This addition was based on the recommendation of an internal audit that was tasked with analyzing the Authority's maintenance program and recommending actions to increase efficiencies, lower costs, and increase operating time of the vessels. The addition of an engineer will allow for increased preventative maintenance which will help avoid catastrophic repairs. The Authority had an engineer on staff from the early 1970's through 2008. Since the beginning of 2009, the duties have been performed by the former engineer on a contract basis. However, as new more complex boats enter service, much of the preventative maintenance required became beyond the scope of the contractor. Much of the cost of the new engineer will be offset by a reduction in contract engineering services.

Dispatchers are employees of the Authority who work out of the Dispatch Centre located in the Authority's head office. The Dispatch Supervisor duties are being rolled into the Pilot Operations Manager responsibilities and will include the responsibility of overseeing dispatch operations. This position is included in the six positions indicated here under dispatchers.

Statement of Income Years Ended December 31 (000's)

	ACTUAL	OUTLOOK	BUDGET		PL	.AN	
_	2012	2013	2014	2015	2016	2017	2018
INCOME							
PILOTAGE CHARGES \$	20,273	\$ 21,278	\$ 21,825	\$ 22,684	\$ 23,445	\$ 23,914 \$	24,392
INTEREST & OTHERS	68	64	57	58	59	60	62
TOTAL INCOME	20,341	21,342	21,882	22,742	23,504	23,974	24,454
<u>EXPENSES</u>							
PILOTS FEES, SALARIES, AND BENEFITS	9,573	9,662	9,791	9,885	10,144	10,398	10,658
PILOT BOATS	4,749	4,656	4,719	4,818	5,005	5,105	5,207
STAFF SALARIES AND BENEFITS	1,410	1,443	1,586	1,629	1,672	1,714	1,757
PILOT BOAT CREWS' SALARIES AND BENEFITS	1,504	1,610	1,710	1,747	1,783	1,819	1,855
TRANSPORTATION	699	707	750	715	708	726	744
PROFESSIONAL AND SPECIAL SERVICES	605	619	585	597	610	622	634
TRAINING	162	163	275	250	250	255	260
RENTALS	285	276	282	284	289	295	300
COMMUNICATION	118	118	121	118	120	123	125
UTILITIES, MATERIALS, AND SUPPLIES	357	350	412	406	407	416	424
AMORTIZATION	848	1,233	1,310	1,284	1,247	1,227	1,757
FINANCING COSTS	173	137	153	141	127	104	111
TOTAL EXPENSES	20,483	20,974	21,694	21,874	22,362	22,804	23,832
PROFIT (LOSS) FOR THE YEAR	(142)	\$ 368	\$ 188	\$ 868	\$ 1,142	\$ 1,170 \$	622
RATE OF RETURN	-0.7%	1.7%	0.9%	3.8%	4.9%	4.9%	2.5%

Statement of Financial Position Years Ended December 31 (000's)

	A	CTUAL	0	UTLOOK	В	UDGET				PL	.AN			
		2012		2013		2014		2015		2016		2017		2018
ASSETS														
CURRENT														
CASH	\$	466	\$	2,563	\$	2,854	\$	2,905	\$	2,036	\$	1,424	\$	2,610
ACCOUNTS RECEIVABLE		3,002		2,750		2,805		2,861		2,918		2,977		3,036
PREPAID EXPENSES		69	_	63	_	70	_	71	_	73	_	74	_	90
		3,537		5,376		5,729		5,837		5,027		4,475		5,736
FIXED CAPITAL AT COST		17,112		18,147		18,909		20,614		23,489		27,119		27,839
LESS ACCUMULATED		17,112		10, 147		10,303		20,014		25,465		21,113		21,000
AMORTIZATION		5,740	_	7,038	_	8,348	_	9,632	_	10,879		12,106	_	13,863
		11,372		11,109		10,561		10,982		12,610		15,013		13,976
	\$	14,909	\$	16,485	\$	16,290	\$	16,819	\$	17,637	\$	19,488	\$	19,712
LIABILITIES														
CURRENT														
ACCOUNTS PAYABLE	\$	2,475	\$	1,900	\$	1,825	\$	1,850	\$	1,860	\$	1,890	\$	1,900
CURRENT PORTION OF BANK LOANS		1,330		406		419		432		447		531		529
TERMINATION BENEFITS		62		57		110		75		85		90		90
LONG TERM		3,867		2,363		2,354		2,357		2,392		2,511		2,519
BANK LOANS		2.003		4.629		4,210		3,778		3,331		3,800		3,291
TERMINATION BENEFITS		1.383		1,469		1,514		1.604		1.692		1,785		1,888
		3,386		6,098		5,724		5,382		5,023		5,585		5,179
TOTAL LIABILITIES		7,253		8,461		8,078		7,739		7,415		8,096		7,698
CONTRIBUTED CAPITAL AND														
EQUITY		7,656		8,024		8,212		9,080		10,222		11,392		12,014
		7,656		8,024		8,212	_	9,080		10,222		11,392		12,014
	\$	14,909	\$	16,485	\$	16,290	\$	16,819	\$	17,637	\$	19,488	\$	19,712

Statement of Changes in Financial Position Years Ended December 31 (000's)

		CTUAL 2012		TLOOK 2013		JDGET 2014		2015		PL 2016	AN	2017		2018
OPERATING ACTIVITIES														
CASH PROVIDED BY (USED FOR) OPERATIONS	\$	(143)	\$	368	\$	188	\$	868	\$	1,142	\$	1,170	\$	622
NET PROFIT (LOSS) FOR YEAR ITEMS NOT REQUIRING CASH	Ф	, ,	Ą		Ф		Ф		Ф		Ф		Ф	
AMORTIZATION ASSET WRITE OFF		848 139		1,233 65		1,310 65		1,284 85		1,247 85		1,227 90		1,757 90
INCREASE (DECREASE) IN EMPLOYEE TERMINATION BENEFITS- SEVERANCE		199		143		155		165		173		183		193
		1,043		1,809		1,718	_	2,402		2,647		2,670		2,662
CASH PROVIDED BY (USED FOR) NON-CASH WORKING CAPITAL EMPLOYEE TERMINATION BENEFIT		(292)		(317)		(137)		(33)		(49)		(30)		(65)
PAYMENTS		(460)	_	(62)		(57)	_	(110)	_	(75)		(85)		(90)
CASH PROVIDED BY OPERATING ACTIVITIES	\$	291	\$	1,430	\$	1,524	\$	2,260	\$	2,523	\$	2,555	\$	2,507
FINANCING ACTIVITIES														
CASH PROVIDED BY FINANCING LOAN RECEIVED ACTIVITIES LOAN PAYMENTS		(256) (256)	_	2,000 (298) 1,702		(406) (406)		(419) (419)		(432) (432)		1,000 (447) 553		(511) (511)
INVESTING ACTIVITIES (INCREASE) DECREASE IN INVESTMENTS ADDITIONS TO CAPITAL ASSETS DISPOSAL OF CAPITAL ASSETS		- (2,961) 36		- (1,035) -		- (827) -		(1,790)		(2,960)		(3,720)		- (810) -
CASH USED FOR INVESTING ACTIVITIES		(2,925)		(1,035)		(827)		(1,790)		(2,960)		(3,720)		(810)
INCREASE IN CASH AND SHORT TERM INVESTMENT DURING THE YEAR	\$	(2,890)	\$	2,097	\$	291	\$	51	\$	(869)	\$	(612)	\$	1,186
CASH, BEGINNING OF YEAR		3,356	_	466	_	2,563	_	2,854	_	2,905		2,036	_	1,424
CASH, END OF YEAR	\$	466	\$	2,563	\$	2,854	\$	2,905	\$	2,036	\$	1,424	\$	2,610

Capital Budget (000's)

	ACTUAL	OUTLOOK	BUDGET				
	2012	2013	2014	2015	2016	2017	2018
PILOT BOATS							
CONSTRUCTION OR PURCHASE OF NEW BOAT	3,140	300	-	1,000	2,250	3,000	-
PILOT BOAT REFIT AND EQUIPMENT	473	550	645	650	600	600	700
WHARVES AND STRUCTURES	44	90	125	75	50	50	50
LEASEHOLD IMPROVEMENTS	-	-	-	10	-	10	-
COMPUTER AND OFFICE EQUIPMENT	10	20	20	20	20	20	20
SOFTWARE FOR COMPUTER							
PROGRAMS	64	75	37	35	40	40	40
TOTAL	\$ 3,731	\$ 1,035	\$ 827	\$ 1,790	\$ 2,960 \$	3,720	\$ 810

Capital Expenditure Comparison Explanation

The Authority had the second of two new pilot boats enter service in the Port of Saint John in April 2013. The first boat of this class was launched for Halifax in 2012. Some smaller additions related to these new vessels were made in 2013. This plan includes a preliminary timeline for adding two more new vessels, one each for Halifax and Saint John. Planning and design work will begin in 2015, with the expectation that the boats will be delivered in 2017. These boats will replace backup vessels that will be 34 and 41 years old by 2017. Customers in both ports have expressed the desire to have reliable pilot boat service, and there is a legitimate need to replace these older vessels. This timeline for more new vessels will be based on cash flows as the Authority would plan to self-finance the majority of the cost of the vessels. This project was included in the previous plan a year sooner, but a poorer than expected short-term outlook has caused it to be pushed back a year.

The Authority had considered purchasing a portable pilot boat in 2013. After further analysis it was decided that a vessel of this type would not be the ideal solution for the Authority.

Pilot boat refits and equipment are expected to increase with two new vessels in the fleet. Equipment on the Placentia Bay boats will be reaching the end of its useful life and needing service or replacement within the planning period. Transport Canada and Lloyd's Register inspections will also be due on all APA boats over this period.

New tablet computers continue to be evaluated by the Authority pilots for their feasibility as a Portable Pilot Units (PPU). Because of the nature of the pilotage performed by APA pilots, primarily harbour pilotage, the type of laptop PPU used by the other Pilotage Authorities is not practical for the APA application. The Authority is continuing its investment in IT as it sources a new leave tracking or Human Resource program. The other capital items are expected to remain

fairly consistent with some increases as aging wharves and equipment will have to be repaired or replaced.

Key Financial Ratios Years Ended December 31

	ACTUAL	OUTLOOK	BUDGET		PLA	PLAN				
	2012	2013	2014	2015	2016	2017	2018			
PROFIT MARGIN	-0.7%	1.7%	0.9%	3.8%	4.9%	4.9%	2.59			
DAYS COVERAGE	106	89	92	93	78	68	8			
CURRENT RATIO	0.91	2.28	2.43	2.48	2.10	1.78	2.2			
RETURN ON TOTAL ASSETS	-1.0%	2.3%	1.2%	5.2%	6.6%	6.3%	3.2			
DEBT TO EQUITY	0.95	1.05	0.98	0.85	0.73	0.71	0.			

Profit Margin- As discussed previously, the 2013 fiscal year has been below budget financially for the Authority for various reasons. The Authority is projecting a small profit for 2013, but will be well under the budgeted profit. In 2014, the profit margin is expected to remain low as traffic is expected to decrease further.

Days Coverage- In 2011, the Board adopted a resolution with respect to the amount of funds available in liquid assets. The resolution called for the calculation of days coverage of budgeted expenditures per day. It was agreed that if the days coverage reached 122 days, the excess funds would be set aside for future capital expenditures or debt reduction. Once these projects were funded, the targeted return on revenue would be adjusted accordingly. During the current period of capital replacement, a decision was made to limit the borrowing for the new vessels as much as possible in order to use cash on hand rather than long-term debt. The Authority has \$4 million borrowing approval, but current projections indicate that the maximum to be borrowed may be less than the approved amount. In the 2015 to 2017 period, the Authority is proposing two more vessels be constructed and currently plans to finance them primarily through cash reserves.

Current Ratio- The current ratio is expected to remain strong through the planning period with current assets being close to double current liabilities.

Return on Assets- The return on assets was at a low point in 2012, but is expected to improve. The goal is to earn a higher return on assets than what could otherwise be earned if the money were invested elsewhere.

Debt to Equity Ratio- The debt to equity ratio is expected to top out just over 1.05 to 1 in 2013 with the addition of borrowing for the new vessels. There is new borrowing tentatively planned for 2017 which will not have a significant effect on the debt to equity ratio as the equity is also expected to grow.