

GREAT LAKES PILOTAGE AUTHORITY

CORPORATE PLAN SUMMARY

2017 to 2021

Approved by the Board

SEPTEMBER 13, 2016

GREAT LAKES PILOTAGE AUTHORITY

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GREAT LAKES PILOTAGE AUTHORITY

CORPORATE PLAN SUMMARY 2017 to 2021

1. **EXECUTIVE SUMMARY**

The Great Lakes Pilotage Authority (the Authority) is facing a challenging time as it tries to balances its responsibility to be financially self-sufficient while providing progressive and reliable pilotage services that are safe, environmentally sensitive, efficient and economical. The Authority historically benefitted from a stable pilot workforce with minimal turnover. However, the Authority has been experiencing an abnormally high level of pilot employee retirements in the last few years and expects to see this trend continue over the planning period. At the same time, service demands have been between 6% and 22% greater than those budgeted for when determining pilot numbers. The Authority has identified pilot succession as a critical risk as it plays a critical role in the following issues:

Accumulated Deficit:

The Authority was on track to meet its objective to eliminate its \$5.7 million accumulated deficit dating back to 2009. By the end of 2014, the accumulated deficit had been reduced to \$0.4 million. Although a strategy was in place in 2015 to report a surplus, the Authority encountered a few unexpected issues leading to a \$0.4 million loss. The variances were partly due to a \$0.2 million higher apprentice-pilot costs to counter higher pilot retirements, non-recoverable \$0.2 million of pilot transfer services which had been previously provided at a NIL cost by the St. Lawrence Seaway Management Corporation, \$0.1 million additional professional fees in response to an incident investigation and \$0.3 million in additional pilot compensation to service a 10% increase in traffic.

Although the industry approved a 1.0% increase to the 2016 surcharge, the additional revenues of \$0.2 million do not offset the forecasted \$1.2 million in apprentice-pilot costs. Tariff rates have never been set to fund the currently high levels of pilot retirements and the business needs to train such a high number of apprentice-pilots. As such, the Authority is forecasting a \$1.0 million loss for 2016. Thus, the accumulated deficit is expected to be approximately \$1.8 million at the end of fiscal 2016.

Elimination of the Accumulated Deficit by 2019

Through proposed tariff strategies for 2017 and 2018 combined with cost containment strategies on labour costs, the Authority believes it will return to the financially self-sufficiency profile expected by the Government of Canada. The Authority will need the support of all its internal and external stakeholders to achieve this objective.

2017 Proposed Tariff Adjustments:

As the Authority continues to invest in its human resources to meet business needs, apprentice-pilot training costs are budgeted to be \$0.9 million dollars for 2017. With the objective to also reduce the accumulated deficit, the Authority is proposing to adjust the already approved 2.0% increase for 2017. The additional revenue will thus allow the Authority to report a \$0.5 profit in 2017 and subsequent reduce the accumulated deficit to \$1.3 million.

Reliable Pilotage Services:

The Authority has been experiencing unprecedented high levels of vessel delays due to a shortage of pilots since 2014 and the trend is expected to continue in 2016. Pilot numbers are established prior to the start of the navigation season based on the budgeted pilot assignments. When pilot assignments materialize at higher levels of 6% to 22%, vessel delays due to a shortage of pilots are inevitable. The Authority's customers have expressed their dissatisfaction with these levels of delays. As to provide a more reliable service, the Authority has planned to increase its number of pilots during the planning period.

Pilot Succession:

The demographics of the pilot employees highlight a significant risk that a great number of pilots may decide to retire at any day. The Authority has been working with its pilots to identify potential retirement dates over the course of the planning period as to ensure apprentice-pilots are hired and trained in a timely manner as to minimize potential disruptions to its services. Along with the need to hire apprentice-pilots to the current levels of pilot retirements, the traffic over the last few years as well as the anticipated traffic for the planning period requires the Authority to increase its pilot numbers during the planning period.

<u>Technology Innovations:</u>

The Authority continues to assess its operational risks and develops action plans to mitigate such risks. It is with this thought process that the Authority has invested in new technologies. The Authority has invested financial and human resources to upgrade it dispatching and billing system that will not only benefit the Authority but will also enhance its business dealings with its customers.

The Authority is currently in the process to source new portable pilotage units to take advantage of the most recent technological advances to improve efficiencies and safety.

Both of these initiatives are expected to be operational for the start of the 2017 navigation season.

Laurentian Pilotage Authority Arbitration Decision:

In April 2016, the Laurentian Pilotage Authority informed the shipping industry that a recent arbitration decision will significantly impact pilotage services rendered between Montreal and Quebec by placing some restrictions for night time departures. Although the arbitration decision directly impacts the LPA pilotage services, it will most likely have impact the Authority. The Authority will monitor this issue to see how the customers react to this decision, their strategies to accommodate this requirement and its implications on the Authority efficient use of its pilots.

Board of Directors Appointments:

The Authority currently has two Board members with expired terms waiting for the Privy Council Office to initiate the recruitment process. In 2017, an additional Board member will see his term expire. The timing of the new appointment and reappointment process is crucial to ensure the Board's effectiveness and efficiencies.

2. CORPORATE PROFILE, MANDATE AND GOVERNANCE

2.1 MANDATE

The mandate of the Authority is to establish, operate, maintain and administer a safe and efficient pilotage service within designated Canadian waters. The *Pilotage Act* provides that the pilotage tariffs shall be fair, reasonable and sufficient and, together with any revenue from other sources, shall permit the Authority to operate on a self-sustaining financial basis.

2.2 CORPORATE PROFILE

The Great Lakes Pilotage Authority, a non-agent Crown corporation listed in Schedule III, Part I of the *Financial Administration Act*, does not receive Federal appropriations and is exempt from any income taxes.

The Authority was established in February 1972 pursuant to the *Pilotage Act*, incorporated as a limited company in May 1972, and was continued under the *Canada Business Corporations Act*. Until October 1st, 1998, it operated under the name of Great Lakes Pilotage Authority, Ltd. Pursuant to the *Canada Marine Act*, which received Royal Assent on June 11th, 1998, the name of the Authority was changed to Great Lakes Pilotage Authority and the Authority is deemed to have been established under subsection 3(1) of the *Pilotage Act*. The Authority is a Crown corporation. On October 1st, 1998, the Authority ceased to be a subsidiary of the St. Lawrence Seaway Authority and has surrendered its charter under the *Canada Business Corporations Act*.

The Authority is exempt from any income taxes.

The Authority is not an agent of Her Majesty.

POWERS

To carry out its responsibilities, the Authority may establish the regulations needed to achieve its objectives, subject to the approval by Order-in-Council, pursuant to the *Pilotage Act*. Examples include:

- 1. The establishment of compulsory pilotage areas.
- 2. The prescription of the ships or classes of ships subject to compulsory pilotage.
- 3. The prescription of the classes of pilot licenses and classes of pilotage certificates that may be issued.
- 4. The prescription of the tariffs of pilotage charges to be paid to the Authority for pilotage services.

CORPORATE OBJECTIVES

The Authority's corporate objectives are:

- > To provide economic, safe, reliable and comprehensive marine pilotage and related services in its region of responsibility.
- To provide the above services within a commercially-oriented framework directed towards achieving and maintaining financial self-sufficiency at the least cost to the user.
- > To be responsive to the Government's environmental, social and economic policies.
- To promote the effective utilization of the Authority's facilities, equipment and expertise through the productive application of these resources in such activities and geographic areas as may be appropriate in the interest of safe navigation.

The Authority must follow the *Pilotage Act*'s directions under Section 33(3) when it comes to tariffs. The tariffs of pilotage charges prescribed by an Authority under the Act shall be fixed at a level that permits the Authority to operate on a self-sustaining financial basis and shall be fair and reasonable. Under section 36.01 of the *Pilotage Act* the Authority cannot receive any payment under an appropriation by Parliament to enable the Authority to discharge an obligation or liability.

FURTHER CORPORATE INFORMATION

Further corporate information regarding the Authority can be found in its 2015 Annual Report, which can be accessed from its website http://www.glpa-apgl.com/annualReports_e.asp under the "Reports" tab.

2.3 GOVERNANCE AND ACCOUNTABILITY

The Board of Directors reports to the Minister of Transport and consists of the Chair and six other Directors. The Chair of the Board is appointed by the Governor in Council on the recommendation of the Minister of Transport. The other Directors are appointed by the Minister of Transport with the approval of the Governor in Council. The Board of Directors is comprised of two members from the marine pilot community, two members from the marine shipping industry, and two members representing the general public. The Chairperson position is currently vacant and one member's term has expired and is awaiting to be replaced.

Board Member	Term Expiration Date	Length of Service	
Ms. Danièle Dion, Acting Chair	2018-11	4 years	Public Interest Representative
Mr. Terry Geddes	2015-12	10 years	Public Interest Representative
Captain Michael Pratt	2017-08	9 years	Pilot Representative
Captain Michel Desrochers	2018-10	7 years	Pilot Representative
Mr. David Grieve	2018-02	5 years	Industry Representative
Captain Jim Pound	2018-02	1 year	Industry Representative
Vacant - Board Chair			Public Interest Representative

Role of the Board of Directors

Similar to other Crown corporations, the Authority operates at arm's length from its sole shareholder, the Government of Canada. While the shareholder provides policy direction for the corporation's ongoing operations, as stated in the *Financial Administration Act*, the Authority's Board of Directors is responsible for overseeing the strategic direction and management of the Authority and approves all strategies, initiatives, budgets, corporate plans, performance agreement for the Chief Executive Officer as well as his performance evaluation, and all high-value contracts. The Board ensures that the Authority maintains the highest standards in operating a safe, efficient and cost effective pilotage service. The Board meets at least five times a year with other meetings scheduled as needed.

Committees

Two standing committees assist the Board in oversight: the Audit Committee and the Governance and Human Resources Committee.

Reporting

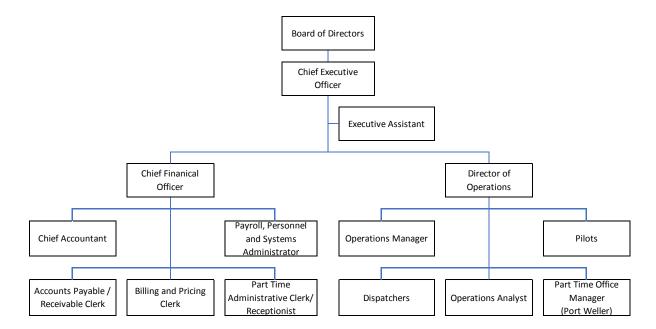
The Officers of the Authority are the CEO and the Chief Financial Officer (CFO). The Officers report to the Board through the Chair at each meeting of the Directors on various areas of their responsibilities. Ongoing and new policy matters are discussed and corporate direction is provided.

The Authority reports to the Minister of Transport through its Annual Report, which includes the Auditor General's report as required under section 150(1) of the *Financial Administration Act* (FAA)

Organizational Structure of the Authority

The Authority's CEO is responsible to plan, organize, direct and control the business of the Authority and reports to the Chair and the Board of Directors. The CEO is appointed by the members of the Board of Directors pursuant to section 13. (1.1) of the *Pilotage Act*. The remuneration of the CEO is fixed by an Order of the GIC.

The Authority's organizational chart is as follows:



3. **BUSINESS ENVIRONMENT**

3.1 CURRENT SITUATION

DESCRIPTION OF THE OPERATIONS

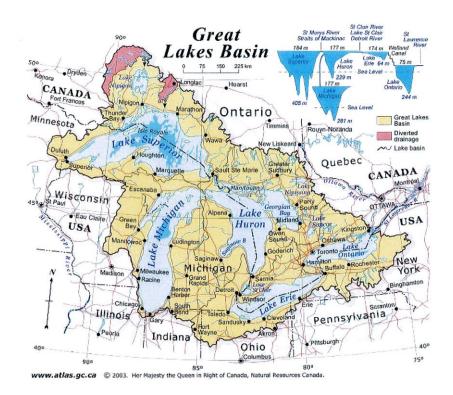
The Authority operates, in the interest of safety, a marine pilotage service in all Canadian waters in the Provinces of Ontario, Manitoba and in Quebec south of the northern entrance to the St. Lambert Lock.

Services are provided through the performance of pilotage assignments to those vessels entering the region which are subject to compulsory pilotage by pilots employed by the Authority, using pilot boats contracted by the Authority and dispatch services, both controlled from the Authority's Headquarters in Cornwall, Ontario.

The Authority must co-ordinate its efforts and operations with a number of other organizations such as the St. Lawrence Seaway Management Corporation and the United States Seaway Development Corporation, who operate the lock facilities, and maintain traffic control systems within the Region, the Canadian Coast Guard who provide aids to navigation, and the United States Coast Guard who are responsible for the United States pilotage matters in international waters.

The Authority operates in the following six regions:

- Cornwall District
- International District No. 1
- Lake Ontario
- International District No. 2 (including the Welland Canal)
- International District No. 3 (including Lakes Huron, Michigan and Superior)
- > The Port of Churchill, Manitoba



Cornwall District

The Cornwall District is defined as the Canadian Waters of the St. Lawrence River between the northern entrance to St. Lambert Lock and the pilot boarding station near St. Regis in the Province of Quebec (i.e. Snell Lock). The district is divided in two sections: the northern section extending from St. Lambert Lock to Beauharnois Lock and the southern section from Beauharnois to the Snell Lock. Pilots are divided and interchanged between these two sections. The district was divided in 1977 as a result of mediation efforts to reduce the lengthy duration of pilot assignments. The pilots employed in the district are members of the *Corporation des Pilotes du Fleuve et de la Voie Maritime du Saint-Laurent*.

All dispatches are made from Cornwall.

International District No. 1

International District No. 1 is 103 miles long and consists of the waters of the St. Lawrence River, between Snell Lock and Cape Vincent, New York at the entrance to Lake Ontario, and includes the Eisenhower and Iroquois Locks. There are both Canadian and U.S. pilots in this district. The Canadian pilots are members of the Corporation of the Upper St. Lawrence Pilots. In District 1, Canadian pilots are licensed strictly for the District.

A *Memorandum of Arrangements* between Canada and the U.S. Canadian dictates that Canadian pilotage takes twenty (20) out of every thirty-four (34) assignments, or 58.82 percent, of all dispatches in the district.

Effective at the start of the 2016 navigation season, each Country dispatches its own pilots.

International District Lake Ontario

Lake Ontario is also serviced by both Canadian and U.S. pilots. The Canadian pilots are members of the Pilots' Corporation, Lake Ontario and Harbours and are specifically licensed to service Lake Ontario and its harbours. As per a *Memorandum of Arrangements*, Canadian and U.S. pilots share assignments equally on Lake Ontario.

Effective at the start of the 2016 navigation season, each Country dispatches its own pilots.

International District No. 2 (including the Welland Canal)

This district consists of the Welland Canal, Lake Erie, Lake St. Clair and the Detroit and St. Clair Rivers. The pilot boarding or change points are located at Port Weller, Lock 7 in the Welland Canal, as well as Port Colborne, Detroit and Port Huron. The Canadian pilots are members of the Corporation of Professional Great Lakes Pilots, all of whom are licensed to serve the entire District.

As with International District No. 1 dispatches are made in accordance with the *Memorandum of Arrangements* in the following manner:

Welland Canal - Canadian pilots only

Port Colborne - Detroit - Canadian pilots are assigned 50 percent of the through transits

Detroit - Port Huron - three (3) of eight (8) ships take Canadian pilots.

In addition, Canadian pilots are dispatched to all ships destined to or departing from Canadian ports within the District.

International District No. 3

International District No. 3 is defined as the Canadian waters of the St. Mary's River connecting Lakes Huron and Superior and includes Lakes Huron, Michigan and Superior. Pilots employed by the Authority in this District are all members of the same Corporation as District No. 2 pilots. Ships going to ports on Lakes Michigan or Huron from Port Huron keep the pilot on board. Ships destined for Lake Superior ports change pilots at Detour where a District pilot takes them through the St. Mary's River to Gros Cap. A lake pilot will then board the ships at that point guiding them to their final destination. The *Memorandum of Understanding* between the United States Coast Guard and the Great Lakes Pilotage Authority does not specify the division of assignments between Canadian and U.S. pilots but states that Canadian pilotage is to receive 18.9 percent of the revenue generated in the district for the season.

All administrative and dispatching functions are performed by the U.S.

Port of Churchill

The Port of Churchill, Manitoba falls under the Authority's jurisdiction and is accessible for only a few months of the year. The normal pilotage operation consists of three manoeuvres, that is, piloting the ship into the harbour, turning the ship, and piloting the ship out of the harbour.

The Authority's Canadian Lake Ontario pilots are licensed to perform all pilotage duties in the Port of Churchill during the navigation season, and only one is assigned to Churchill to perform the assignments in the port.

3.2 EMERGING TRENDS: THREATS AND OPPORTUNITIES

ANALYSIS OF THE EXTERNAL COMMERCIAL ENVIRONMENT

The Authority's traffic volume and patterns are determined by a very complex combination of business, economic and environmental factors which are unpredictable and their impact can mean the difference between a break-even financial position and operating at a loss for the Authority. The list below provides some of the factors which impact the Authority's business:

(1) GRAIN EXPORTS

Canadian grain going into the Asian market is moved through the Port of Vancouver/Prince Rupert on foreign ships. The grain going to Africa, Europe and the Middle East is moved from Thunder Bay to market on foreign ships or from Thunder Bay to East Coast ports (Montreal, Quebec, Sept Iles) on Canadian ships then moved to market on foreign ships.

The Authority provides pilots when foreign ships move grain directly from Thunder Bay to market as pilotage on domestic ships in the Great Lakes is in most cases carried out by the ships' officers who hold pilotage certificates, and therefore are exempt from pilotage.

Grain exports through the Great Lakes are also dependent on the quality of the crop and selling prices. Should the crop quality be lower than standard, the grain may be kept in storage as to blend with better quality grain. When the grain prices are below expectations, the grain may be held longer waiting for better pricing. Both of these issues can delay the need to ship grain from the Great Lakes.

The majority of the Canadian grain crop is shipped through the West for the Asian market.

The demand on rail capacity does have an impact on the grain export destined to the Great Lakes shipping corridor. When rail car demand for oil movement in the West is high, grain export via rail can be diverted to the Great Lakes' system. The Port of Vancouver's grain terminals have seen increased volumes in 2016 due to a new grain elevator and improvements to the rail lines.

The Authority is expecting strong demand in the last 5 months of fiscal 2016 as the industry is expecting another above-average harvest. The Authority does not have any direct knowledge of what the crop quality, crop prices or rail movement for the other years of the planning period.

(2) STEEL IMPORTS/EXPORTS

The Great Lakes region of North America sees most of the U.S.'s steel making industry in cities such as Cleveland, Toledo, Detroit, Chicago and a great deal of steel is destined for domestic markets. The reorganization of the North American auto industry has caused steel companies to reduce their output by over 50% in 2009. The Authority has seen a slight improvement in the 2016 steel trade but does not expect the levels to return to those experienced prior to the recession. The Authority expects these slight improvements experienced in 2016 to be maintained during the

planning period as the US continues to invest in updating and replacing its current infrastructure.

(3) CANADIAN AND AMERICAN ECONOMY

Both of these economies rely to a certain extent on import and export markets to determine the level of employment needed to meet the demand of goods. Cyclical trends affect positively and negatively both economies. These factors are known only after they have been experienced and cannot be forecasted. During periods of economic growth, the Canadian/American economies are in an export mode. A great portion of the exports are shipped on vessels to international markets from the Great Lakes regions and pilot services are required on these vessels. Conversely, during years of economic downturns, export to trading countries usually falls off, therefore reducing the need for pilots as fewer ships are trading internationally.

As the Authority, like the rest of the world, is not able to forecast these trends with any accuracy, it is difficult to anticipate the pilot number requirements. It reacts to the conditions once they manifest themselves. Economic experts agree that the recession 2008 and 2009 is now over and slow but improving growth is expected for the planning period. This is evidenced by the consistent level of traffic in 2015 and 2016 due to the resurgent U.S. economy.

(4) CHINA FACTOR

The immersion of China as the world's third largest economy has had significant impact on world trade and international trade in the Great Lakes. In its simplest form, the Chinese economic growth and China's need for ships to export their goods to the West and Europe has caused shippers to increase the fees for their vessels fivefold. Thus, goods produced in the Great Lakes are now too costly to move on ships since the shippers will not bring a ship in the Great Lakes unless they can generate similar revenue levels as ships China bound. This scenario has meant that vessels stay close to the Chinese markets to trade and are not as willing to trade in the Great Lakes. At times, goods in the Great Lakes are available for export but most of the available ships capable of sailing to the Great Lakes are committed to China. The shipping industry has not kept up with demand for ships which has caused freight prices in North America to increase significantly. Since 2009, the China factor has not been as significant due to a slowdown in some economies. The Authority has no way to react to this external factor and can only react once a trend is established. Projections for the Chinese exports at the current levels bode well for Authority traffic for the planning period. We have seen a return to the Great Lakes of certain types of ships which is a positive indicator for the Authority when forecasting traffic.

(5) VALUE OF THE CANADIAN DOLLAR

The higher value of the Canadian dollar vis-à-vis the American currency has a significant negative impact on the Authority in the form of lower exports coming out of Canada. The Authority has no control over the Canadian dollar value. Recent devaluation of the Canadian dollar has seen increases of Canadian exports to U.S. and international markets. Some of these exports are traded on international vessels which required the services of pilots. Should the value of the Canadian dollar remain as is, it is expected to that traffic will remain stable during the planning period.

(6) EURO ZONE POST-BREXIT

In 2016, the United Kingdom voted to leave the European Union. Given the uncertainties and complications, not only could there be trading implications in terms of trade with Britain but also with the European Union. Should the Comprehensive Economic and Trade Agreement (CETA) be implemented in 2017, the traffic on the Great Lakes could be favorably impacted.

CONCLUSION

The Authority works in an environment where the factors above can affect its operation significantly. The factors on their own, or in concert with each other, cannot be forecasted with any accuracy. The Authority can only be reactive, and not proactive, to the implications once changes in the environmental factors are experienced. The industry and users have indicated that they are willing to fund the elimination of the Authority's accumulated deficit and are no longer ready to accept delays to achieve this. Based on past experiences, when demand increases slightly (1%), delays can increase significantly which are very costly to the users. Although the economic conditions have improved from 2013 to 2015 and are expected to be at the same level for 2016, the 2017-2021 Corporate Plan is prepared in an uncertain and volatile economic environment as the outlook is unknown.

ANALYSIS OF THE OPERATIONAL ENVIRONMENT

The following is a list of key strategic issues facing the Authority based on its assessment of recent events and external factors.

(1) TRAFFIC VOLUME

Pilotage service is provided to almost entirely ocean-going vessels (85% of pilotage assignments) although Canadian tankers and non-ocean-going vessels (15% of pilotage assignments) are using the Authority's pilotage services on a more consistent basis.

Marine traffic during the planning period will be heavily dependent on grain exports and steel movements in and out of the Great Lakes ports. Traffic through the Welland Canal to ports in the upper lakes is important for revenue generation.

In the Auditor General of Canada's April 2008 Special Examination Report, the report indicated that fluctuating traffic volume can have a major effect on the Authority's financial situation, specifically the Auditor General stated that,

"65. All the stakeholders that we interviewed believe that the demand for pilotage services is difficult to predict. The locks in the Seaway limit transportation by container and thus the diversity of products transported; mining products (mainly iron and steel) and grain shipped in bulk account for more than half of the cargo shipped in the region. Traffic volumes depend greatly on economic conditions, domestic and international government policies on products, and climate conditions. These factors can cause traffic volumes to vary from year to year, and also from month to month during the ninemonth navigation season."

The historical levels of pilotage assignments have fluctuated significantly at times as supported by year to year traffic increase/decrease of over 10% for 6 out of the last 11 years. The 2008 and 2009 pilotage assignments decreased by 42% from 2007 and then the 2010 actual pilotage assignments increased by 36% from 2009. The 2014 traffic levels well exceeded expectations, a 17% increase vs. 2013 and a 22% increase from the 6,100 assignments budgeted. Forecasted traffic for 2016 is now expected to be 5.9% greater than the 6,700 assignments previously budgeted. Based on industry consultation, pilot assignments for the planning period should be maintained between 7,000 and 6,700 assignments.

(2) PILOTAGE TARIFF POLICY

In order to finance its activities, the Authority charges users for its services through a tariff. As dictated in the *Pilotage Act*, tariffs are intended to be fair, reasonable and sufficient to allow for a safe and efficient service while ensuring financial self-sufficiency. The Authority has and continues to have open and transparent discussions with the industry on its strategies to eliminate its accumulated deficit dating back to 2003.

In August 2009, the Authority, with agreement from the industry, introduced a 15% surcharge at a time when the economic recession was at its height and assignment levels in the Great Lakes were reduced by 40%. The implementation of the surcharge was supported by the Shipping Federation of Canada, who represents over 90% of the customers, as a temporary measure to offset the destructive effects of the economic downturn. The surcharge was to remain in place until the accumulated deficit of 2009 (\$5.7 million) was eliminated as well as to allow the Authority to return to a financial self-sufficiency level. Since then, the surcharge was reduced to 12% and is set to 11.5% for 2017. General tariff rates set below the 2015 to 2016 pilot compensation rate increases, coupled with the significant increase in apprentice pilot numbers and training costs to ensure pilot succession to meet service demands no longer allows the Authority to be financially self-sufficient without the revenues generated by the surcharge.

General Tariff Rates

As the Authority is expecting the accumulated deficit to increase by another \$1.0 million in 2016, the Authority can longer consider minimal net rate increases that have been offered lately; being 0.5% in 2015, 1.5% in 2016, and 1.5% currently approved for 2017. As to allow the Authority to eliminate the accumulated deficit by the end of fiscal 2019, it must increase the general tariffs.

Tariff Surcharge Strategy

The industry views the surcharge as part of the entire tariff. However, unlike the general tariff rates, the surcharge has an end date in the tariff regulations. The industry's 2009 initial objectives have changed over the years and they no longer align themselves with the initial intention of the temporary nature of the surcharge. However, the Authority's new financial profile can no longer support the revised industry objective and now requires the revenues generated by the surcharge to be permanent as to offset significant annual apprentice pilot training costs for the planning period given the high number of anticipated pilots retiring. The Authority recently had its first discussions with the Shipping Federation of Canada to present the proposed strategies. At this stage it is too early to gauge their thoughts on the proposed increases.

2017-2021 Tariffs

During this planning period of 2017-2021, the Authority has budgeted tariff adjustments that will start to generate and to maintain a reasonable surplus at the end of the planning period. Refer to section 11. *Financial Statements*.

Refer to Appendix 1 for the history of the Authority's tariff adjustments since 1994.

(3) LAURENTIAN PILOTAGE AUTHORITY (LPA) ARBITRATION DECISION

In April 2016, the LPA informed the shipping industry that a recent arbitration decision will significantly impact pilotage services rendered between Montreal and Quebec by placing some restrictions for night time departures. The arbitration decision requires the LPA to modify its dispatch rules for ship departures between 22:00 and 08:59 to impose that customers must confirm a ship's departure within this timeframe by 18:00 with the option of extending the departure time only

once and for a maximum of two hours. Thus, any departure time delayed for more than two hours will entail the obligation to provide a new twelve hour notice in order.

Although the arbitration decision directly impacts the LPA pilotage services, it will most likely have collateral damage for the Authority. The Authority can only wait to see how the customers react to this decision and the strategies to accommodate this requirement. The Authority cannot start a risk analysis on this decision as the outcomes are currently speculative. However, potential implications from this decision may include: (i) a greater level of one way traffic which would restrict the Authority in its ability to efficiently leverage its pilots and (ii) a greater and constant need for night time navigation in specific districts which may lead to a decrease in pilot availability. Both of these outcomes would drive significant increases in vessel delays due to a shortage of pilots and significant increases in pilot overtime due to the inherent scheduling inefficiencies that would result.

(4) PILOT NUMBERS

In the Great Lakes region, vessels enter and leave the system on a non-scheduled basis under sometimes severe weather and environmental conditions. Therefore, an infrastructure must be in place to ensure safety, provide a pilot on demand (even to exempt vessels) and meet uneven traffic flows. This may be challenging in the future as financial self-sufficiency does not allow the Authority the luxury of having extra pilots to cover sudden and temporary increases in traffic that may never materialize.

Based on more favourable traffic levels in the past 4 years and the forecasted traffic levels, the Authority plans to increase its pilot numbers to an average of 62.0 FTE for the planning period. The increase also factors in the high level of retiring pilots and provides for a more fluid succession plan for apprentice-pilots. Refer to section 11. *Financial Statements*, subsection (4) *Headcount* for the proposed pilot headcount for the planning period.

Pilot workload was an average of 136 assignments in 2014 and 2015 when compared to 116 assignments in 2013. Although assignments per pilot are to be maximized, the Authority needs to ensure this does not exceed a reasonable number as to avoid pilot fatigue and possible safety concerns. Recently, the industry has started to voice its concerns on the excessive vessel delays due to a shortage of pilots. The Authority is expecting a similar level of delays due to a shortage of pilots in 2016 to those experienced in 2015. With forecasted traffic for 2017 at the same level as in 2016, the average number of assignments per pilot is still expected to be above the reasonable level but will be improved as apprentice-pilots are licensed. In its analysis of pilot headcounts for safe and efficient pilotage services, the Authority is targeting an average of 110 to 115 assignments/pilot. However, 120 assignments/pilot could be manageable on short-time basis. Thus, in its planning stance, the Authority expects to continually improve on the average number of assignments per pilot and achieve the reasonable level noted above.

The rationale to increase the pilot numbers also factors in the feedback from pilots to the effect that they cannot maintain the level of service that has been provided in last few years without increasing the number of vessel delay hours due to a shortage of pilots.

(5) PILOTAGE CAPACITY

The Authority has interpreted its mandate of safety and efficiency to include not only its own financial self-sufficiency but also their application and cost impact on the effectiveness of the Seaway system and to vessel delays. This means having sufficiently trained, qualified and licensed pilots available to serve the industry (generally the foreign ships) with a minimum of pilot delays as delays are extremely costly to the industry.

The Authority recognizes that when it reduces its number of pilots, it also reduces its ability to provide the level of service which the industry expects.

The Shipping Federation has historically indicated that delays cost up to \$24,000 per day in addition to the cost of cancelling berths or stevedores if schedules are not maintained. The system must, in its mandate of safety, be capable of providing a pilot to any vessel requesting one regardless of whether it is an exempt vessel. Further, and of major importance, traffic comes into the system unscheduled and often in surges. For traffic surges in the later months of the navigation season, pilot availability is often strained, with significant overtime situations required.

During the heavy traffic years, pilot numbers and the Authority's capacity to service ships to only between five (5) and six (6) ships per day, and only for short periods. The Authority continues to monitor traffic levels so that pilot numbers are adequate to meet traffic. The cost of reducing pilots prematurely is significant. At present, the cost for training an apprentice pilot ranges between \$150,000 to \$180,000, which includes remuneration, benefits, travel and course fees which are borne entirely by the Authority. Reducing pilot numbers too quickly can be devastating to the industry especially when traffic increases unexpectedly.

In order to achieve the Authority's mandate to provide a safe and efficient pilotage service, a delicate balance must be maintained between the resources to be made available and the demand for service with safety being paramount. Achieving this balance could be complicated due to tariff revisions being delayed through appeals to the CTA, due to significant deviations in ship size and destinations from historical trends, due to unpredictable and uneven traffic flows, and due to sharing revenues and traffic in the international sectors which are accomplished through a complex interface with the United States.

In 2014, the Authority's pilot assignments surpassed its budgeted assignments by 22.3%. In 2015, pilot assignments surpassed its budgeted assignments by 9.7%. The 2016 and 2017 pilot assignments are forecasted to be 5.9% greater than what was projected when the tariffs were finalized. These continued increases in assignments have resulted in significant vessel delays due to a shortage of pilots. The traffic for the remaining years of the planning period are forecasted to be similar to 2016. Due partly to these increases in traffic and the initiative to decrease the numbers of vessel delays, the pilot numbers will be increased as indicated above.

(6) PORT OF CHURCHILL

In July 2016, Omnitrax, the U.S. company that owns the Port of Churchill, announced that they would not ship grain to the Port. For 2016, only three vessels are expected. The future of the Port is uncertain as the provincial government is expected to consult with the federal government and others to determine if anything can be done. Should the Port remain open for this low traffic level, the Authority will need to assess how best to service this Port. Options include issuing pilotage certificates for domestic shipowners or the contracting of a pilot dedicated to this Port on an as needed basis.

(7) PILOT CHANGE AT IROQUOIS LOCK

The Authority's U.S. Pilotage Association counterpart in International District 1 has been contemplating a mandatory pilot change point at the Iroquois Lock. The Authority will be assessing the merits of a similar change point for its Canadian pilots. Should there be sound business and safety needs for the mandatory pilot change point, the Authority will need the St. Lawrence Seaway Management Corporation to continue its current business model in which the linepersons assist the pilot at this change point, at no cost. Should the St. Lawrence Seaway Management Corporation

not allow a pilot change at these locks for all vessels, the Authority will need to source pilot boat services which would increase costs to the users.

The St. Lawrence Seaway Management Corporation is currently in discussions with the U.S. Coast Guard on the feasibility of allowing the pilot change at Iroquois Lock and maintaining its current assistance for a predetermined number of years. At this stage the Authority has not built this scenario into its financial plans.

(8) PORTABLE PILOTAGE UNITS (PPU)

In 2012, the Authority invested to purchase PPU's for all of its pilots. These PPU's, with enavigation functionality and navigation chart formats, are a fully integrated software and hardware system designed to function as a situational awareness and decision support tool for marine pilots operating in high-risk marine navigation environments.

The PPUs are now past their useful life of 5 years. Therefore, capital requirements for their replacement will be required before the start of the 2017 navigation season.

(9) CONTINGENCY PLAN TO MANAGE CHANGE AND CONTINGENCY RESERVE

In 2005, the Treasury Board's review of the Pilotage Authorities Corporate Plans led to a communication on the need for the Authorities to have a contingency plan for reserves and a process for managing changes. Now that the Authority is expecting a surplus during the planning period, the Authority will continue to meet with its main users, the Shipping Federation of Canada and the domestic shipowners, to discuss the current traffic forecasts, its impact on the Authority's financial results and the appropriate level of surplus. The users are committed to the Authority's return to a positive cash position and will continue to cooperate with the Authority to address the issue.

(10) CANADA TRANSPORTATION ACT REVIEW REPORT

The Canada Transportation Act (CTA) final review report was delivered to the Minister of Transport, Marc Garneau, in December 2015 and subsequently tabled in Parliament in late February 2016. . Of interest to the Authority are the following three recommendations:

- a) immediately integrate the four pilotage authorities within one National Pilotage Board to enable a strategic and holistic approach to pilotage for better alignment and harmonization in the way regions contract for and provide services;
- b) complete a full assessment of the governance framework for marine navigation services within three years;
- c) formally review compulsory pilotage areas, circumstances, and processes every three to five years minimum, in consultation with users and the international pilotage community, taking into account new technologies and best practices and including a re-assessment of navigational safety risks.

The Authority has reviewed the report and has provided its views on the aforementioned recommendations. As part of its process, the Authority hosted various industry stakeholders and the other three pilotage authorities in a meeting to discuss the recommendations and share viewpoints. The Authority remains at the Minister's disposal for future consultations, as needed.

The Authority will develop strategies according to the final decisions the Minister of Transport takes on the future of marine pilotage in Canada.

ASSESSMENT OF CORPORATE STRENGTHS AND CHALLENGES

The following are the Authority's main strengths and weaknesses:

STRENGTHS AND OPPORTUNITIES

- Organizational structure well suited to its mandate;
- A qualified team;
- Provision of highly efficient and professional pilotage services;
- Recognition of the compulsory pilotage principle by all industry stakeholders;
- Good relations with bargaining units and unions:
- Consensus throughout the organization on the need to continually improve client service and strive for excellence:
- ➤ Highly competitive pilotage tariffs, compared with all other pilotage organizations in North America;
- Equipment renewal and capital investment in recent years are positive factors in boosting productivity;
- ➤ The Authority's custom designed Dispatch and Billing System provides real time information to dispatchers, pilots, customers, and management;
- ➤ Pilots are very highly skilled, which is reflected in an historical 99.9% average incidentfree assignment rate;
- ➤ The Authority has a comprehensive training program for all pilots, and firmly supports continuing education by providing refresher training and developing training on new technologies; and
- ➤ The potential for the Great Lakes and St. Lawrence River to be a significant corridor to transport crude oil to external markets.

CHALLENGES

- ➤ The Authority is susceptible to changes in national and world economic conditions. This leads to difficulties in forecasting marine traffic levels. However, the Authority will continue to involve its stakeholders with its proposed tariff rate adjustments to ensure revenue offset's operating expenditures. It will also review its pilot numbers on an annual basis. These strategies should assist the Authority to remain financially self-sufficient over the planning period.
- Recurring challenges of tariff regulations, a lengthy administrative process for reviewing regulations and tariffs, and increased oversight and reporting requirements from Government Departments adding to the length in time needed to implement a tariff adjustment to users could lead to lost revenue should the tariff rates not be finalized prior to the start of the navigation season. The Authority's continued focus on open and transparent consultations with the industry to present its tariff proposal is considered invaluable to negate the potential for objections to tariff adjustments.
- Labour relations, working conditions and management rights are included in labour contract negotiations. The Authority has difficulty meeting pilot demands (i.e. significant wage increases to match US pilot compensation and in the other Canadian Pilotage Authorities reached by arbitration not bound by the Government of Canada's policies or

directives) and requirements mainly because of economic conditions to which it is subject. However, the Authority will continue its open and transparent communication style with the pilot groups as it addresses their concerns. The Authority will benchmark pilot and navigation officer compensation to ensure they remain competitive.

4. ENTERPRISE RISK MANAGEMENT

The Authority is committed to ensure that all risks are identified, assessed and mitigated when deemed appropriate. As such, the Authority applies an Enterprise Risk Management (ERM) approach to its Strategic Planning process.

Risk Categories

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

Strategic	Risks emanating from the Authority's strategy and decision making.
Financial	Risks pertaining to liquidity, capital availability, capital structure.
Organizational	Risks emanating from the Authority's management of its human resources, including
	leadership depth and quality, management and labour availability and costs, cultural, etc.
Operational	Risks emanating from the Authority's day-to-day operating processes and activities.
External	Risks emanating from external sources over which the Authority (although impacted) has
	little control (e.g. macro-economic volatility; industry structural change; political, etc.)
Legal and	Risks associated with the Authority's compliance with applicable laws and regulations.
Regulatory	
Incident	Risks emanating from incidents (accidents, near misses, etc.) within the Authority's
	jurisdiction where a pilot is present on board ship.
Emerging	Risks that are emerging on a worldwide scale.

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

Please refer to the Authority's latest Annual Report posted on the Authority's website at http://www.glpa-apgl.com/annualReports_e.asp for further information on the risk management programs as well as governance structures and processes that support it.

The Authority revisits it two year strategic plan every two years. At its two-day strategic planning session held in April 2015, the Board and Senior Management establish its strategic plan for the following two years. The Board identified and prioritized the risks with the following risk profiles:

Priority	Risk Title	Category	Risk Rating	Likelihood	lm pact
1	Traffic Volatility	Financial	EXTREME	EXTREME	EXTREME
2	Pilot Succession	Organizational	VERY HIGH	VERY HIGH	HIGH
3	Pilot Labour Relations	Organizational	VERY HIGH	VERY HIGH	HIGH
4	Recruiting and Training Pilots	Strategic	HIGH	HIGH	HIGH
5	Marine Incidents	Incident	HIGH	MEDIUM	VERY HIGH
6	Financial Risk / Stability and Tariff Objections	Financial	MEDIUM	MEDIUM	HIGH
7	Security / Business Continuity	Operational	MEDIUM	LOW	VERY HIGH
8	U.S. Pilotag Concerns	External	MEDIUM	HIGH	MEDIUM
9	Pilotage Certification	Operational	MEDIUM	MEDIUM	HIGH

Between strategic planning sessions, the Board reviews its ERM each quarter and follows the development of the risk profiles as well as the mitigating actions taken to address each risk.

From the risk profile table noted above, the following provides background information, the potential impacts and the mitigating strategies that the Authority has identified as its area of priorities for the planning period:

1. TRAFFIC VOLATILITY

The Authority has historically relied on industry forecasts as well as economic trends for establishing traffic forecasts for its annual budgetary process as well as to determine the tariff rates and the operation requirements. Pilot numbers are finalized prior to the start of the navigation season based on these forecasts. Once the navigation season starts and the traffic decreases significantly, as experienced with the 2009 recession, the Authority does not have the ability to react as a course of action and reduce costs. There is no mechanism in place that allows for traffic forecast validation during the course of the navigation season.

Given that over 80% of the Authority's costs are tied to pilot remuneration/benefits and pilot boat services, the Authority is unable to reduce pilot numbers and the associated costs in the middle of a given navigation season in order to react to the decrease in traffic levels that would be significantly lower than forecasted. Should the traffic levels be significantly lower than forecasted, the Authority could be faced with significant financial losses for the given year. The Authority cannot easily reduce pilot numbers as it would be difficult to attract officers to an organization that cannot guarantee employment. Conversely, the Authority is also unable to increase pilot numbers on short notice in order to react to significant increases in traffic levels given the long lead time of training a mariner to be a qualified pilot. The Authority has experienced the latter since 2014 as actual pilot assignments exceeded budgeted assignments in a manner to cause important vessel delays due to a shortage of pilots as well as significant operational losses to service these higher levels with the current existing pool of pilots.

With the level of uncertainly associated with traffic forecasting accuracy, the Authority must have tariffs that are properly set as to reduce its financial exposure resulting from actual traffic fluctuations from forecast.

Strategies

As part of its process for proposed amendment to the tariff regulations, the Authority will continue to reach out to the Shipping Federation of Canada in order to gain insight to traffic trends and assumptions that are to be considered before proposing tariff rates to the industry. Pilot number validation and agreement with the industry during these discussions is crucial to reduce the Authority's exposure to financial risks. The goal is to ensure that the proposed tariffs will offset the compensation for apprentice pilot training costs, the budgeted pilot headcount and other direct operating costs while giving the Authority some financial flexibility to weather some degree of negative implications due to decreases in traffic.

The Authority continually discusses working rules with its pilot groups with the goal to better manage traffic surges. The Authority continues to have open discussions with the St. Lawrence Seaway Management Corporation and its U.S. counterparts to problem solve for the most efficient use of resources during demand surges and severe weather conditions.

As part of the collective agreement negotiations planned for 2017, the Authority will discuss with its pilot groups alternative crewing options to allow for more flexibility which would reduce delays due to shortage of pilots.

2. PILOT SUCCESSION

Pilot succession is one of the most important factors contributing to safe and effective pilotage services in addition to providing pilotage services without excessive delays due to shortage of pilots. Issues around pilot recruitment, training and evaluation have been central items in various reports and are key elements in the strategic planning process.

By the end of the 2016 navigation season, the Authority will have approximately 22 full time and 8 part time pilots 60 years of age or older. The Authority no longer has a mandatory retirement age, and therefore, predicting retirement for the pilots is extremely difficult. Historically, pilots will give the Authority a few months' notice which does not provide adequate time for the Authority to recruit and fully train a replacement apprentice prior to the pilot's departure. Given the above information, pilot succession is an important issue that needs management's attention. Historical trends indicate an average of two pilots retire per year. However, the Authority saw 6 pilots retire in 2016 and anticipates the level of retirements for the planning period to average 4 pilots annually.

Please refer to the reductions in pilots on *Appendix 2 – Statement of Pilot Numbers* for the anticipated number of retirements per year.

Strategies

The Authority has formalized an annual request for employee retirement notification. In the summer, all employees are asked to submit a response on their potential retirement plans for the planning period. Although the employees are not under any obligation to respect the communicated retirement notice, it does allow the Authority to gauge the level of pilot retirements and start its planning on apprentice-pilot recruiting. The results provide a starting point on discussions with the pilot groups and arrive to agreements on the need for management to plan for the proper level of pilot headcount, to actively start the apprentice-pilot recruitment process and to gauge the need for part-time pilots.

3. PILOT LABOUR RELATIONS

The Authority must maintain and continually work on building strong working relationships with the different pilot groups. If strong bonds are not maintained, there is a risk that the pilots will not be

willing to work with management to support the Authority's initiatives. To meet the business needs and to deliver a quality service to our customers, both parties need to work together to resolve issues. In the last few years, there have been significant changes in the senior management team. At the same time, business dynamics have changed which place additional responsibilities on the pilots. Both of these events have led to a change in the Authority's culture. Thus, these two senior directors have to build and maintain a positive and respectful rapport with the pilot groups as to gain their trust and assist them in understanding changing business requirements. Both of these individuals will participate in their first union negotiations with the pilots in 2017.

Strategies

The Senior Management team plans on meeting with each Pilot groups' executives in the Fall and the Spring of each year for information sharing and as a vehicle to resolve outstanding issues. As to build better employee relations with the pilots, the Authority has started to hold monthly teleconferences to share information on topics of equal importance for all employees in the organizations.

In the Fall 2016, the Management team will start to develop its union negotiation strategies as all four pilots' agreements expire on March 31st, 2017.

The Authority is in the process of extending a "no strike, no lockout" agreement with the pilots as to ensure continued operations in a case where the collective agreements cannot be renewed in a timely fashion.

4. RECRUITING AND TRAINING APPRENTICE-PILOTS

The Authority needs to ensure that there is always a sufficient pool of skilled, trained and experienced pilots available to meet current and future needs. Current needs can be gauged by the ongoing demand for pilotage service which has a nature of fluctuating greatly from year to year. Based on past results, the Authority has seen years in which the year over year traffic increased/decreased by over 10%. As such, future needs are more difficult to forecast given the lack of information on further demands for pilotage services.

The Authority draws its pilots from the Domestic Officers working on Canadian vessels in the Great Lakes. Currently over 450 individuals hold Pilotage Certificates that would allow them to perform pilotage in the Great Lakes. The Authority is confident that the new recruits will all have the knowledge required to discharge their pilotage duties. However, the time required to train an apprentice is expected to be longer as the pool of candidates may not have the profile experience nor the experience maneuvering ships in the district, especially for the Cornwall district. There may be some short term impacts on the service levels in districts where there are a few pilots allocated to them or in districts which would see a high level of retirements in a given time. The Authority is confident it will be able to attract apprentice pilot candidates for all districts. Apprentice pilots in the Cornwall District must be fluently bilingual which limits the pool of candidates. Both the Laurentian Pilotage Authority and this Authority are competing for the same limited bilingual candidates.

If apprentice pilots are not properly trained, the risk of incidents will increase, including the risk of a potential major incident. Thus, the training program and evaluation process to transition an apprentice pilot to a pilot must be effective as to ensure the apprentice pilots have the tools and knowledge to pilot a vessel. The evaluation process must also be fair and just to recommend an apprentice pilot to a pilot status while being vigilant to identify non-performing apprentice pilots.

Strategies

The Authority will continue to give high priority to pilot recruitment, training and evaluation. It will monitor changing operating environment and assess the impact on the need for additional pilots, the supply of pilot candidates and the training requirements.

At the start of the 2015 navigation season, the Authority revamped its apprentice-pilot training program to better meet the realities facing today's apprentice-pilots. Along with the theoretical studies and the practical training voyages, simulator training will round out the types of training provided. Alongside with the training program, the new requirements were also communicated to the pilots assisting in the training and evaluation processes. Based on feedback from the newly licensed pilots, the revamped program truly suits their training expectations. The Authority will continue to leverage its pilot performance evaluation results in the apprentice orientation and training plans.

5. MARINE INCIDENTS

The vessels transiting the Great Lakes are navigating in restricted waters and canals that are subject to wind effect, low draft and environmental (weather) conditions that can change in a moment's notice. The public and the Governments are extremely sensitive to environmental incidents and there is no tolerance for any type of error, be it human or mechanical. Exxon Valdez and the Gulf of Mexico BP oil spills are but a few events that confirm the public's reactions and fears to environmental destruction.

The likelihood of an occurrence is very low but their impact could be extreme. Pilotage plays an important part in the safety chain in order to eliminate or reduce the likelihood of an incident that could cause catastrophic results. Properly trained, qualified and rested pilots must be provided for every assignment. Communication of the changing environment is also required as events change and mitigating actions are amended over time. In most major incidents, the reasons for the event are not limited to one action but to a series of events. In this series of events, safety measures are inserted to avoid the risk of harming the environment. The Authority must be cognitive that it cannot eliminate all marine incidents alone but that it certainly has a significant role in mitigating the likelihood and the impact of the event.

Strategies

This type of risk is inherent in every action that each Authority employee takes during his or her time on task. The Authority has in place training policies for all apprentice pilots, active pilots and pilotage certificate holders to ensure the proper levels of knowledge and experience are in place. The Authority will continue to promote ongoing communications with all employees on the importance of embracing a safety minded culture as to achieve the goals of limiting risk to the environment. Over the course of the planning period, the Authority will participate in a simulated emergency exercise in the Great Lakes to assess its strengths and areas of improvement in its response system.

The Authority has been sending its pilots to complete simulator training within a five year cycle. The Authority will continue with this training practice as it allows the pilots to train on different ships, conditions and on specific issues like slow rudder and crew responses. The Authority reviews the incidents and trends as a means to continually re-assess the training program needs.

The Authority holds ongoing training for its pilots and their PPUs as to take advantage of changing technology and practices. With the PPUs needing to be replaced before the beginning of the 2017 navigation season, the Authority has involved a committee of pilots to examine the current needs

and future alterations as well as test various PPUs as part of its Request For Proposal process. The PPUs are considered valuable tools assisting the pilots in safe navigation.

FINANCIAL RISK/STABILITY AND TARIFF OBJECTIONS

Financial stability is vital as the Authority is required to be financially self-sufficient. At the end of 2015, the Authority had an accumulated deficit of \$0.8 million and anticipates the accumulated deficit to increase to \$1.8 million dollars by the end of 2016. Based on the 2016 forecast and budgets for the remainder of the planning period as found on the *Statement of Operations and Comprehensive Income*, the Authority is targeting to eliminate its accumulated deficit by the end of fiscal 2019.

Crucial to be financially self-sufficient is to have the actual operations results aligned with the budget process. It is the annual budget process that helps determine the tariffs and operation requirements. The key assumption is the traffic levels. As the Authority's financial structure is tied directly to traffic levels, should traffic decrease or increase significantly from the budget assumptions, the Authority will incur important operating losses given the fixed nature of the operating costs (over 80% of costs are tied to pilot wages / benefits and pilot boat services).

The current financial profile of the Authority does not allow it to have a financial reserve to assist in weathering years of significant traffic decreases.

Finally, the current tariff approval process does not allow the Authority to be responsive in a timely manner when encountered with issues that result in negative financial implications.

Strategies

The Authority meets with the Shipping Federation of Canada a few times each year as to gain insight into the traffic level forecast for the remainder of the year and for the next few years.

As part of financial reviews, management continuously reviews the pilot numbers required to support the forecasted traffic levels. On a monthly basis, management reviews the financial results to gauge pacing versus budget and prior years. At each of its meetings, the Audit Committee reviews the internal financial statements to question financial performances. Each quarter, the Audit Committee reviews the revised forecast for the year which includes the year-to-date results along with the year-to-go projections.

Although the Authority has tariffs in place for 2017, it has started the tariff process to adjust the 2017 rates to recover the previously unforeseen 2015 losses as well as the anticipated 2016 loss. Although the Authority tried to keep tariff adjustments to a strict cost recovery for the benefit of the industry, it will now modify its approach to generate the surpluses needed to eliminate the accumulated deficit. This includes increasing the general tariff rates by the surcharge as these revenues are needed to offset ongoing operational expenditures.

At its 2015 Strategic Planning meeting in April, the Authority determined that in the Fall of 2016 it will develop a financial reserve strategy for future years while considering the implications on the proposed tariff strategies. Its objective is to have an appropriate level of operating surplus and financial reserves required to offset the negative impact of fluctuating traffic patterns and to weather unpredictable short term traffic changes. The reserve will need to deal with short term Authority cash requirement so that sufficient time is available to amend Authority operations during a period of significant traffic increase/decrease. The Authority will review and approve the level of operating surplus required and implement actions in 2017 to achieve this objective. Its strategy will be discussed with the industry to ensure given the implications on future tariff and surcharge adjustments.

7. SECURITY/BUSINESS CONTINUITY

Running a successful company requires an understanding of how to serve customers, meaning to maintain services during natural disasters, economic downturns and bad publicity. The business continuity plan outlines the necessary steps for the Authority in the wake of a sudden and severe change (i.e. the chain of command in the event the company's leader dies or becomes extremely ill, system backup recovery strategies, labour disputes). Although the Authority does have some aspect of a business continuity plan informally assessed, a comprehensive business plan is now being developed.

Although recent terrorism and virus threats had minor impacts to our business, there is always the potential for our business to be subject to a security breach.

Strategies

The Authority will develop a business continuity plan prior to the end of 2016. It will cover (i) business continuity plan governance, (ii) business impact analysis, (iii) plans, measures, and arrangements for business continuity, (iv) readiness procedures, and (v) quality assurance techniques. In addition to developing a business continuity plan, the Authority will also be developing a cyber security and a crisis management policy.

Along with the migration to the new Dispatching and Billing systems, the Authority has obtained confirmation that the third party system provider does have the required business continuity plans.

On the security front, the Authority will continue to participate in the Seaway's annual Table Top Exercise. In addition, the Authority will provide security awareness for its pilots.

8. U.S. PILOTAGE CONCERNS

The results of the Authority's 2015 customer satisfaction survey highlighted the fact that the U.S. Pilotage Authorities' issues are having a negative impact on the Authority's reputation.

Strategies

The Authority continues to discuss its customer satisfaction survey results with its U.S. counterparts and the Authority's action plans to address the more critical elements of dissatisfaction. The Authority will continue to participate in the two annual meetings with the U.S. Pilotage Associations and the U.S. Coast Guard as a means to help facilitate discussion points between the U.S. and its Canadian customers.

9. PILOTAGE CERTIFICATION

The Authority published a regulatory change to its Regulations in June 2011 which announced the end of the pilotage exemption system previously in place since 1972. The publication introduced the Pilotage Certification regime effective January 2013. With the grandfathering phase now complete, the Authority is now tasked with ensuring that the newly certified domestic officers are respecting the requirements to maintain their certification in good standing.

Strategies

The Authority, in joint partnership with the Canadian Shipowners Association, plans to revise the format of the pilotage certificates to include expiry dates and to ensure they are more district oriented. Both parties will work together to update the pilotage certification training program based on the findings noted during the audits performed. The Authority, in discussions with the Canadian Shipowners Association, will also review the issues identified from the grandfathering phase to determine if revisions to the Regulations are required.

5. STRATEGIC PLAN, OBJECTIVES AND PERFORMANCE MEASURES

(1) Continued focus on providing an economic, safe and reliable pilotage service

Description of the Corporate Objective:

The Authority's main objective of the 2017-2021 planning period continues to be providing economic, safe, reliable and comprehensive marine pilotage and related services in the St. Lawrence River and the Great Lakes.

Expected Outcomes:

The Authority's continued focus on economic, safe and reliable pilotage services ensures all Canadians that it will provide a safe and efficient marine transportation system in the Great Lakes, specifically reducing the risks of environmental spills.

Strategies to Achieve the Objective:

To this end, the Authority continues to leverage the system for assessing pilots' competencies and quality of service. The focus remains on:

- assessing the pilots training needs and developing training solutions to meet the need
- reviewing past assignments and incidents;
- conducting simulator training and assessing pilot skills through the use and the enhancement of the full bridge simulator at the Centre de Simulation et d'expertise maritime in Quebec City;
- leveraging customer feedback and complaints regarding pilotage services and performance;
- ensuring the pilot evaluation within a 5 year cycle is being respected.

The Authority's training objectives include a module on Bridge Resource Management (BRM). The course provides pilots with the opportunity to refresh their BRM knowledge in order to facilitate the communication and exchange of information with the captains, while enabling them to work more effectively and efficiently with the bridge team. The ultimate goal is to further reduce the risk of errors on the navigation bridge when the pilots and the captains of the vessels navigate the restricted waters of the St. Lawrence River and the Great Lakes.

The assessment of pilots' competencies and quality of service is ongoing with each pilot evaluation completed at least once every five years. The pilot evaluation is performed at the marine simulator in Quebec City and includes the evaluation of pilotage skills and performance by the Authority's Director of Operations and the pilot's peers. This pilot evaluation assures the industry and the Authority that only qualified pilots are performing pilotage duties. It also permits the Authority to identify areas of development and potential improvements in the delivery of the services.

The Authority and the *Canadian Merchant Service Guild*, representing the pilot corporations, had entered into an agreement to establish a Binding Dispute Resolution process to be utilized in circumstances where the parties have engaged in collective bargaining for the purpose of entering into a collective agreement but have failed to reach a settlement. As this agreement expires March 31, 2017, the Authority is initiating its renewal as a means to avoid the pilots from discontinuing performance of compulsory pilotage duties and instigating or supporting any form of strike, work stoppage or suspension of pilotage services while agreeing not to proceed with a lockout or otherwise refuse to use the services of the pilot employees.

The Authority will continue its strategy to provide its pilots with state of the art Portable Pilotage Units (PPU) as it believes the benefits of the PPU's in the restricted waters of the Great Lakes are numerous and have improved delivery of services as well as increased the safety of navigation.

Key Performance Indicators:

1-1 MAJOR INCIDENT

Major Incidents	Targets 2017-2021	2016 Forecast	June 2016 YTD	2015	2014	2013
TOTAL	0	0	0	3	0	0

1-2 MARINE INCIDENTS

	Targets	2016	June 2016			
Incidents	2017-2021	Forecast	YTD	2015	2014	2013
Collision			-	1	-	-
Foundering			-	1	-	ı
Fire/Explosion			-	ı	-	ı
Grounding			-	4	4	1
Striking			-	1	2	ı
Contact with Lock Wall			1	3	8	9
Touching Bank/Bottom			1	ı	2	ı
Ice Damage			-	ı	-	1
Ship Arrestor			-	-	-	-
TOTAL	8	9	2	9	16	9
Percentage of Incident Free Assignments	99.9%	99.9%	99.9%	99.9%	99.8%	99.9%
Synopsis on historical data: As depict	ed in the above	table, there is	s no special t	rend in the	incidents.	

2016 Performance:

The Authority currently has 2 minor incidents in 2016 with no major incidents with potential adverse implications to its reputation of providing safe pilotage services. None of these incidents resulted in loss of life, serious injuries, or any environmental spills. After investigation, it was determined that the incidents were not due to pilot error.

As the number of assignments per pilot increases, there is a greater inherent risk for the potential of an increased number of marine incidents as pilot fatigue might increase. This was experienced in 2014 with the 17% increase in assignments being serviced by the existing pool of pilots similar to 2013. As the forecasted assignments are expected to remain stable over the planning period and with the Authority's objective of increasing pilot numbers, expectations are that the number of incidents will remain at a 99.9% incident free assignment status.

Despite the number of incidents incurred, the training program for the pilots have allowed them to effectively course correct as to minimize the severity of the incidents.

Target Rationale:

The Authority's focus remains on providing safe pilotage services with zero incidents. The historical results demonstrate the positive impact of the Authority's ongoing focus on pilot training has had on its marine incident statistics. While there are a small number of marine incidents, none of the completed incident investigations have established pilot error as causative. As such, the continued focus on enhancing pilot training on Bridge Resource Management and the efficient use of the

PPUs, the number of marine incidents should be maintained or even improved on over the planning period.

1-3 SERVICE LEVEL (Pilotage)

	Targets 2019 to 2021	Targets 2017 & 2018	2016 Forecast	July 2016 YTD	2015	2014	2013
# of delays due to a shortage of pilots	60	60	307	93	310	308	125
# of Assignments	6,700	7,000	7,094	2,763	7,166	7,462	6,403
Average delay per assignment	0.9%	0.9%	4.3%	3.4%	4.3%	4.1%	2.0%

^{*} More than 80% of the 2013 delays were incurred in December due to the record cold weather causing early freeze up and numerous Seaway closures due to ice-related issues and ice-related navigation stoppage.

2016 Performance

The 2016 YTD delays have decreased when compared to 2015 due to the following circumstances: a reduction in 525 hrs that were directly attributable to lack of ice conditions that were experienced in the month of April 2015. As result, the Authority did see have as many daylight navigation restrictions and the lack of pilot boats due to these ice conditions which had led to double pilotage, and in turn, had reduced the number of pilots available to service vessels in 2015.

Vessel delays due to a shortage of pilots for the remainder of the year are expected to remain similar to 2015 given the anticipated number of assignments are up 5.9% versus the planned number of assignments that was agreed upon with the industry in the determination of the 2016 pilot numbers. As previously stated, the Authority cannot easily course correct to service significant traffic increases in the middle of a navigation season. The current number of pilots cannot continue to support such high levels of traffic without causing delays. Should the number of assignments surpass the current forecast and increase to the 2014 levels, the delay hours due to pilotage shortages will be well beyond those experienced in 2014. The lower than expected pilot numbers in the Cornwall district is having an impact on the vessel delays due to a shortage of pilots.

Target Rationale:

The Authority has started recruiting apprentice-pilots to compensate for the number of pilot retirements anticipated for 2017 as well as to increase the number of pilots in the Cornwall District. However, the time to have the apprentice-pilots fully licensed in the Cornwall District will not lower the delay hours due to shortage of pilots in 2017 but will allow the Authority to lower the number of delays in the future. It will be important for the industry to have open and honest discussions on the future traffic levels to ensure that the Authority can staff the pilots accordingly and reduce the number of delays.

(2) Continued focus on improving the Authority's financial self-sufficiency profile

Description of the Corporate Objective:

Financial self-sufficiency is achieved by maintaining and controlling expenditures while generating sufficient and adequate revenues. As such, the Authority's primary financial objective for the 2017-2021 planning period is to eliminate this projected accumulated deficit of by the end of fiscal 2019 and to be financially self-sufficient for the remainder of the planning period.

^{**} The significant increase in delays was directly attributable to the increase in traffic being serviced by the existing pool of pilots as well as a higher level of over carried pilots due to the extreme ice conditions experienced at the start of the 2014 navigation season.

Expected Outcomes:

The Authority's continued focus on improving the Authority's financial self-sufficiency profile ensures all Canadians that it will provide an economical marine transportation system in the Great Lakes.

Strategies to Achieve the Objective:

Financial forecasting and cost control are critical for the Authority to achieve its financial objective of being self-sufficient during the planning period.

Pilot remuneration represents approximately 70% of the Authority's total expenditures. As such, the number of pilots employed has a significant impact on the Authority's financials. Pilot numbers are based on traffic levels through consultations with the industry. When budgeted traffic is significantly lower than actual levels, these incremental pilot assignments are then serviced a low number of pilots at extremely higher compensation rates. High levels of overtime and additional pilot compensation are the main drivers for the Authority's 2015 loss and the anticipated 2016 losses. The Authority needs to effectively monitor traffic to ensure pilot overtime is managed accordingly and is justified.

Pilot travel, land transportation costs and pilot boat expenses represent approximately 13% of total expenditures. A further 10% is absorbed by all other operational costs. Administration costs only represent 6% to 7% of the Authority's total expenditures. All of these expenditures must be controlled in order to maintain a balanced budget. The Authority will invest wisely in its resources as to operate as efficiently as possible with its limited human resource structure.

Management will continue to be encouraged to consider innovative ways to improve processes and control costs, without compromising the safety standards of the pilotage services.

Throughout the planning period, management will be reviewing its financial results on a monthly basis to assess year-to-date performance and forecast year-to-go results to keep focus on its financial objectives. The Audit Committee will review the quarterly financial statements and revised forecasts as an oversight measure that expenditures are in line with budget.

The Authority will continue to meet its main user of the service, the Shipping Federation of Canada – Pilotage Committee (Foreign vessels), on a periodic basis to have open and transparent discussions of the Authority's operational, financial, administrative and labour issues, with the view to enhance the partnership between the Authority and its users. The Authority also meets with its other user, the Canadian Shipowners (Domestic vessels), to review the service levels and tariff requirements.

Key Performance Indicators:

2-1 ACCUMULATED DEFICIT ELIMINATION BY 2019

	2019		2018		2017		2016		2015		2014		2013	
Accumulated deficit - beginning	\$	(165)	\$	(1,254)	\$	(1,774)	\$	(780)	\$	(428)	\$	(1,764)	\$	(2,664)
Profit (Loss) of current year		625		1,089		520		(994)		(352)		1,336		900
Accumulated deficit - ending	\$	460	\$	(165)	\$	(1,254)	\$	(1,774)	\$	(780)	\$	(428)	\$	(1,764)

2016 Performance:

Although traffic is expected to be 5.9% higher than budgeted, the ratios of large vessels to small vessels has decreased expected revenues by approximately \$0.7 million. The increase in service demand being serviced by the current existing pool of pilots on overtime has resulted in \$0.3 million of additional expenditures.

Target Rationale:

Management's consistent update on year-to-date results and forecasting year-to-go financial results have been assisting the Authority to identify financial issues and develop compensating financial decisions to course correct on attaining financial targets. Even with increases in revenue, this outcome may not always result in very favourable bottom line. When the traffic increase is excessive, the additional costs in pilot overtime and additional compensation as well as related pilot boat and pilot travel costs will be greater than the revenue generated as the existing pool of pilots would not be able to meet the demands during its regular schedule. This is also true when the traffic increases are at the same time in comparison to increased traffic that is spread out over the course of the navigation season.

The Authority does not believe it is the industry's best interest to defer the financial investment associated with the apprentice-pilot recruitment as it will cause significant delays to vessels that will not only be seen in 2017 but will impact future years.

2-2 COST PER ASSIGNMENT

	2021	2020	2019	2018	2017	2016	2015	2014	2013
Cost per Assignment	\$ 4,210	\$ 4,206	\$ 4,037	\$ 3,882	\$ 3,843	\$ 3,811	\$ 3,615	\$ 3,370	\$ 3,332
% Increase from prior year	0.10%	4.19%	3.99%	1.01%	0.84%	5.42%	7.27%	1.14%	8.04%

Target Rationale:

The Authority has been historically been able to keep the year over year cost per assignment increase consistent with the general inflation increases. Years 2015 and 2016 have higher year-over-year increases due mainly to the investment in the apprentice-pilot recruitment and training as well as the incremental costs associated to the pilot transfer charges compounded with the lower assignments when compared to the 7,462 assignments of 2014.

(3) Tariff Amendments

Description of the Corporate Objective:

Financial self-sufficiency is achieved by maintaining and controlling expenditures while generating sufficient and adequate revenues. As to allow the Authority to generate sufficient and adequate revenues, the Authority must revise its previously approved 2017 tariff rates by amending its rates in the *Great Lakes Pilotage Tariff Regulations*. The Authority's current surcharge expires at the end of December 31, 2017.

Expected Outcomes:

The Authority's continued focus on improving the Authority's financial self-sufficiency profile ensures all Canadians that it will provide an economical marine transportation system in the Great Lakes.

Strategies to Achieve the Objective:

In the last few rounds of tariff adjustments, the Authority has been relying on the industry's assessment of traffic. Given these discussions not only impact the tariff rates but also pilot numbers, these underestimated traffic levels have resulted in unreasonably lower tariff rates and high pilot compensation to service actual service demands, and consequently leading to the 2015 and 2016 losses. Although the Authority had previously finalized the 2017 tariff rates, these rates no longer allow the Authority to meet its financial self-sufficiency objective. These increases in rates are needed to ensure the pilot numbers are reflective of the current service demands. Previously the

industry was willing to accept a certain level of vessel delays due to a shortage of pilots as a means to keep tariff increases to a minimum. In recent years, they are not as forgiving and are expecting significant reductions in these types of delays. The only option available for the Authority is to increase its pilot numbers which entails an increase in tariffs to recover these extra costs.

2016 Performance:

The Authority has been in an accumulated deficit position since 2002 and reached its highest at \$5.7 million in 2009 before the Authority started reporting annual surpluses up to fiscal 2014. In 2015, the Authority reported a \$0.4 million loss and it also expects another \$1.0 million loss for fiscal 2016 for a projected \$1.8 million accumulated deficit at the end of 2016.

Target Rationale:

As evidenced in the *Statement of Operations and Comprehensive Income* these proposed amendments to the tariffs are needed for the Authority's financial self-sufficiency.

(4) Modernizing the Great Lakes Pilotage Regulations

Description of the Corporate Objective:

The Authority's last amendments to its Regulations was in July 2011. Since then business needs and requirements warrant a complete review of the Regulations to better reflect today's reality. Proposed changes include, but are not limited to:

- Review of the Compulsory pilotage areas;
- Introduce new definitions;
- Remove the transitional exception and standards that were applying prior to January 1, 2013;
- Review the mandatory requirements for an applicant to a pilot license and pilotage certificate. (Updated with Transport Canada's new Regulations.)
- > Review the requirements for the renewal of a pilotage certificate;
- Review the requirements for maintaining qualifications for a pilot license holder;
- > Introduce the Authority's responsibilities to approve all training programs and courses:
- Review the fees set out in section 15:
- Introduce comments received by the Standing Joint Committee for the Scrutiny of Regulations.

Expected Outcomes:

The Authority's modernizing its pilotage regulations ensures all Canadians that it will provide a safe and efficient marine transportation system in the Great Lakes.

Strategies to Achieve the Objective:

In the Summer of 2016, the Authority held a two day session with pilot representatives to gather their input on proposed amendments. In the Fall of 2016, the Authority will meet with the Canadian Shipowners Association to gain an insight into their proposed amendments. A joint committee will review all the proposed changes. In the winter, the Authority will meet with all companies regarding the proposed changes. With the Authority's focus on open and transparent discussions and involvement of all stakeholders, the Authority believes the proposed amendments to the *Great Lakes Pilotage Regulations* will be completed and approved in a timely basis, dependent the Government's support of this initiative.

2016 Performance:

The Authority, with the support of the Canadian Shipowners Association, continues to build on its 2015 successes when it initiated a new record of transits in the Great Lakes Region for Pilotage Certificate holders as well as audited and approved three Great Lakes Marine Pilotage Certificate Training Programs.

Target Rationale:

Given the increased focus on sound business requirements, especially the next phase of the pilotage certificate process, the Authority is confident all stakeholders will be in full support of the proposed amendments.

(5) Strengthening Strong Customer Relations

Description of the Corporate Objective:

The Authority's objective is to maximize the efficiency of the pilotage system by being attentive to its customers' business needs in a joint effort to ensure a profitable and efficient pilotage service within the Great Lakes region for commercial vessels.

Expected Outcomes:

Strengthening already strong customer relations will allow the Authority to work in partnership with its customers to provide Canadians with goods from a cost effective and timely marine transportation system in the Great Lakes.

Strategies to Achieve the Objective:

Management completed a customer satisfaction survey in Winter 2015. The survey results were very positive as the overall customer experience was rated at 80% favourable, 13% neutral and 8% unfavourable. The results and comments provided the Authority with pertinent information in areas where it meets expectations as well as areas where it falls short of expectations. The themes of dissatisfaction are:

- customers' perception that the Authority is not looking out for the customer's best interest (customer focus);
- > the lack of pilot availability when they are required in the high periods of traffic
- although they believe vessel transits are safe and efficient, they are dissatisfied with the cost/benefit of the service and the number of delays;
- > the Authority's problem-solving and communication processes;
- the Authority's website is not user friendly and currently does not add value to its customers' businesses; and
- the major customer irritant is accessibility of, or having to wait for U.S. pilots, and the associated extra costs incurred as a result (even when delays are for uncontrollable reasons).

In 2015 and 2016, the Authority developed action plans to address the crucial service areas noted above. The action plans focus around (i) communication, (ii) customer focus from employees, (iii) improve relations with agents, and (iv) website.

In 2018, the Authority will follow-up with another customer satisfaction survey.

Aside from the satisfaction survey, the Authority will continue to meet with its main user groups to ensure transparency in the pilotage operations and obtain constructive feedback on the delivery of service. For example vessel delays due to a shortage of pilots are significant dissatisfiers for the

Authority's customers. The Authority has been proactive in working with customers to develop anchorage strategies as to minimize additional costs for the customer when these types of delays cannot be avoided.

Key Performance Indicators:

To achieve its objective, the Authority is to obtain a greater customer satisfaction rating on its second survey in comparison of the first survey results.

Target Rationale:

Now that the Authority has a heat map on key customer dissatisfiers, it will be able to focus its attention and efforts on operational matters that are important to its customer base. The elements of the action plan are all manageable without the requirement to invest significant financial and human resources to achieve the desired outcome.

(6) Modernizing

Description of the Corporate Objective:

The Authority is currently upgrading its Dispatch and Billing system for the 2017 navigation season. Along with the system upgrade, the Authority has been reviewing its current processes to revamp the system to better meet its needs and its customer needs as well as ensure its resources are utilized to their full potential.

The Authority has provided support in the development and configuration stages and will be starting the testing phase in October 2016. User training is planned for March 2017 as to meet a start of the 2017 navigation season implementation date.

Expected Outcomes:

The modernizing of its dispatching and billing system will allow the Authority to provide an economical and efficient marine transportation system in the Great Lakes for the Canadian public.

Strategies to Achieve the Objective:

Management has developed a project schedule which illustrates the timelines for various progression stages, objectives for each stage and process ownership and key contributors. Periodic meetings are held with the vendor as to discuss progress, identify issues and action plans to resolve the identified issues.

Management has reviewed various system processes of the Pacific Pilotage Authority and the Laurentian Pilotage Authority who are currently using the same system as to assess enhancement requirements and potential changes to current processes to support the system. The Authority and the other Canadian pilotage authorities are considering process standardization as a means towards the most efficient system. The Authority also obtained participation from various user groups to identify their concerns on the current system limitations so they are properly addressed.

Management will ensure proper training documents will be developed for reference material as well as for training new employees. Management will work with the vendor to ensure training is customized to the individual user groups' requirements.

Key Performance Indicators:

To have successfully achieved its objectives, system upgrades must be completed prior to the 2017 navigation season. Another success indicator is the user assessment that the system and the processes are more efficient, more user friendly vs. the previous version and that their concerns

have been addressed appropriately in the upgrade process.

Target Rationale:

Given the Dispatching and Billing system is jointly shared with the U.S. Coast Guard and its U.S. Pilotage Associations, all parties need to agree on the configuration and implementation timelines. As the Authority users are viewed as the system experts, it has provided the majority of the support on configuration and process design. The proposed timelines are well within the scope of work and vendor support has been obtained on the timelines.

(7) Special Examination

Description of the Corporate Objective:

As required by Part X of the FAA, the Auditor General of Canada is to carry out a special examination of the financial and management control and information systems and management practices maintained by the Great Lakes Pilotage Authority. The Authority is required by paragraphs 131(1) (b) and 131(2) (a) and (c) of the FAA to maintain these systems and practices in a manner that will provide reasonable assurance that the following requirements are met:

- the assets of the Authority are safeguarded and controlled;
- the financial, human, and physical resources of the Authority are managed economically and efficiently; and
- the operations of the Authority are carried out effectively.

The next Special Examination is scheduled for 2017 with a report to be finalized in 2018. The Auditors are starting their planning in September 2016. The Authority's objective is to have a clean report stating that there are no significant deficiencies in its systems.

Expected Outcomes:

The positive outcome of Auditor General of Canada will re-assure all Canadians that the Authority is providing a safe, efficient and clean marine transportation system in the Great Lakes.

Strategies to Achieve the Objective:

Management will review the findings noted in the Auditor General of Canada's 2007 Special Examination Report. It will continue to focus its attention on sound controls, leveraging the ERM process and assessing the existing controls. It will also leverage the Auditor General of Canada's management letter point recommendations, if any, that follow the audited financial statements as well as any recommendations identified in the internal audit reports.

Key Performance Indicators:

To have successfully achieved its objectives, the Authority is to be assessed as having no significant deficiencies stipulated in the Auditor General of Canada's next Special Examination Report.

Target Rationale:

The Auditor General of Canada previously presented their Special Examination Report to the Board of Directors in April 2008. The report identified a single significant deficiency in the current system of exempting Canadian ships from compulsory pilotage. Also, they reported that there is reasonable assurance that there are no significant deficiencies in the systems and practices examined except for the significant deficiency noted above. The Authority, with the cooperation, input and consultation of the Canadian domestic shipowners, the Canadian Marine Pilots, and with the support from Transport Canada – Marine Safety, the deficiency has been addressed and the *Great Lakes Pilotage Regulations* was amended accordingly in 2011. These changes have eliminated the

exemption system and replaced it with an Authority Pilotage Certification program effective January 1, 2013. These amendments have fully addressed the significant deficiency highlighted by the Auditor General.

Prior to 2008, the Auditor General of Canada conducted three other Special Examinations, with all three reports confirming there were no significant deficiencies.

The Authority's recent internal audit reports have been issued with opinions that "the system of internal controls are appropriately designed and, with some minor exceptions, effectively implemented". Thus, the Authority is confident that it will not have any significant deficiencies stipulated in the Auditor General of Canada's next Special Examination Report given the past results reported.

6. SAFETY IMPERATIVES

6.1 OVERVIEW

As stated in the Authority's mandate, its mission and vision, its Enterprise Risk Assessment, its objectives and strategies, providing safe pilotage services is at the core of the Authority's operational and administrative mind-set.

In addition to the Authority's dedication to its Pilot Training Program and the Apprentice-Pilot Training Program, and other safety strategies discussed in section 5 (1) "Continued focus on providing an economic, safe and reliable pilotage service", the Authority actively participates in various joint initiatives and associations to keep abreast of emerging safety concerns and best practices.

Through its participation in the *International Marine Pilots' Association*'s conference every two years, the Authority is able to interact with other pilotage authorities from around the world to discuss promoting professional standards of pilotage in the interests of pilots' safety. This conference encourages both consultation between its members and the exchange of technical information with other industry partners and regulators at an international level. Similarly but on a more national level, the Authority also gains these benefits from its interaction with the Canadian Marine Pilots' Association.

With a greater focus on pilotage safety in the Great Lakes region, the Authority is an active member of the Seaway Safety Committee which has representation from the St. Lawrence Seaway Management Corporation, the U.S. St. Lawrence Seaway Development Corporation, the U.S Coast Guard and the U.S. Pilotage Associations.

In consultation with the Canadian Marine Pilots' Association, Transportation Safety Board and the Great Lakes pilot groups, the Authority formalized a post-incident protocol in 2015. Since its implementation, this protocol has been respected in all marine incident investigations.

6.2 INCIDENT REPORT

The historical incident data can be found in tables 1-1 Major Incident and 1-2 Marine Incident under section 5 (1) "Continued focus on providing an economic, safe and reliable pilotage service".

6.3 PROTOCOL

The Authority does not own any pilot boats. All pilot boat services are either contracted out to third party contractors or under the Memorandum of Agreement with U.S. Pilotage Authorities. The

Authority's safety practice and maintenance plan requirements are stipulated in either the request for proposals/contracts or the memorandum of agreements.

For all other contracts which have pilot safety elements, all have been well defined in the request for proposal mandatory requirements and the signed contracts. This includes the pilot transfer service contracts and the land transportation contracts.

7. STAKEHOLDER RELATIONS

The Authority is a Crown Corporation with near monopoly powers in terms of the provision of pilotage services. Consequently, it is important that the Board and management reach out to its stakeholder organizations to ensure that important issues are identified and managed effectively.

The three primary stakeholders are the government, the shipping interests and the pilots. The latter two have representation on the Board of Directors. Even with Board representation, the shipping interests are also under the responsibility of the Shipping Federation of Canada, the Canadian Shipowners Association and the Chamber of Marine Commerce while the pilots' interests are under the responsibility of the 4 Pilot Corporations (identified in section 8.2 Labour Relations, Collective Agreements), the Canadian Merchant Service Guild and the Canadian Marine Pilots' Association. In the case of the government, there are a number of stakeholders including the Minister of Transport and many of his officials, the Canadian Coast Guard, the Transportation Safety Board, the CTA and central agencies.

All three primary stakeholder groups must be consulted and must support the Authority's decisions as they have access to the CTA for review when issues are not resolved to their satisfaction. Solutions with consensus, when possible, are preferred versus legislated ones as they create a winwin situation for all parties. The Authority must manage potentially differing expectations from the various stakeholders. Striking a proper balance, while achieving the Authority's own objectives, is challenging.

In addition to the three primary stakeholders, there are others that have an interest in a safe, efficient and effective pilotage in the Great Lakes area. They would include, but are not limited to:

- St. Lawrence Seaway Management Corporation (Canada)
- > St. Lawrence Seaway Development Corporation (US)
- > U.S. Pilotage organizations
- GLPA area ports and harbours
- > Environmental groups
- Recreational boaters
- Private citizens living along the GLPA area of responsibility.

Strategies

The Authority will continue to be proactive in consulting with all primary and other stakeholders on an ongoing basis, giving them an ongoing opportunity to provide input into the planning and operations of the Authority. It is important that all issues with stakeholders, including pilots are resolved. However, the Authority will never compromise the safety of the vessels and the environment as a means to avoid a third party settlement.

During the course of a given year, the Authority formally meets with the Shipping Federation of Canada, the Canadian Shipowners Association and the Chamber of Marine Commerce to discuss current topics, joint concerns, and proposed tariff amendments. In addition, these stakeholders and the Authority discuss operational issues throughout the navigation season. In preparation of the start and the close of a navigation season these stakeholders are consulted and informed on the

potential implications to the pilotage services

For the interaction with the pilot interest stakeholders, the Authority holds a formal meeting with the Pilot Corporation Presidents at the start of the navigation seasons. There are ongoing communications with the pilot union representatives throughout the navigation season to discuss working rules and other labour relation issues. The strategies are believed to be effective and efficient as there are little to no grievances to date in 2016.

The Authority is in constant communication with the St. Lawrence Seaway Management Corporation, the St. Lawrence Seaway Development Corporation, U.S. Coast Guards and the U.S. Pilotage Associations to provide safe and efficient pilotage services. The Authority has been a driving force to develop strategies to reduce vessel delays at the start and the end of the navigation seasons.

The Authority visits various Canadian and U.S. Ports and Harbours during the course of the year to discuss pilotage services. For example, the Authority, along with the U.S. Pilotage Association, held discussions with the Thunder Bay Port Authorities and agents to discuss the pilotage services and address their concerns.

In addition to the stakeholders noted above, the Authority, at all levels of the organization, has regular meetings and discussions with the other 3 Canadian Pilotage Authorities to discuss common topics. The Authorities also share best practices.

8. HUMAN RESOURCES

8.1 WORKFORCE

The Authority's anticipated workforce for January 1, 2017 is as follows (in terms of Full Time Equivalent employees):

- > 3.0 executives
- 5.0 non-unionized salaried employees
- > 2.5 unionized clerical employees
- 9.0 unionized dispatchers
- > 57.0 unionized pilots
- > 3.0 unionized apprentice-pilots

Please refer to the Authority's organizational chart previously noted above.

The average age of the full time pilot group is 55 years. The average age of the part time pilots, all retired pilots, is 64 years.

8.2 LABOUR RELATIONS AND COLLECTIVE AGREEMENTS

For the unionized workforce, the following table provides the names of the bargaining units, the expiry date of the current collective agreements and the number of employees per union:

Bargaining Unit	Type and number of employees	Expiry date of the current collective agreement
Corporation des Pilotes du Fleuve et de la	16 full time pilots	
Voie Maritime du Saint-Laurent	4 apprentice-pilots 1 part time pilots	March 31, 2017
Corporation of the Upper St. Lawrence	6 full time pilots	
Pilots	0 apprentice pilot	March 31, 2017
	3 part time pilots	·
The Pilots' Corporation, Lake Ontario and	6 full time pilots	March 31, 2017

Harbours	0 apprentice-pilot	
	0 part time pilots	
Corporation of Professional Great Lakes	24 full time pilots	
Pilots	1 apprentice-pilots	March 31, 2017
	2 part time pilots	
The Public Service Alliance of Canada	8 full time dispatchers	
	2 part time dispatchers	luno 20, 2016
	2 full time clerical	June 30, 2016
	1 part time clerical	

Key human resource management issues and negotiation strategies

Other than salary increase expectations, there are currently no key human resource management issues with major financial implications to the Authority. The Authority will commence to look at its negotiation strategies to contain compensation costs and trade-off considerations in mid-2016 as it prepares for the next round of negotiations slated for 2017.

As part of the collective agreement negotiations and changes to conditions of employment of all employees in 2012 and 2013, the accumulation of severance benefits under the severance pay program ceased for all employee groups. Due to cash flow restraints, the pilot employees did not have their severance paid at such times. Thus, these employees will have their value of the severance pay benefits paid at termination of employment at the rate of pay in effect at termination.

8.3 COMPENSATION

Recruiting: Apprentice-Pilots

Given the high number of applications received for the apprentice-pilot positions posted at the end of 2015 and the start of 2016, the Authority is confident that the compensation package for pilots is not an immediate concern from a recruiting front.

Recruiting: Dispatchers, Office Staff and Management

For the Cornwall market, there is a good pool of qualified candidates for the above noted positions. Compensation and working conditions for these positions are very competitive with the private sector in Cornwall and surrounding area. Therefore, the Authority does not have any recruiting concerns.

Retention

The Authority has no retention issues due to compensation. The statistics for the dispatchers, office staff and management are even better as there has not been any voluntary terminations.

Strategy for Containing Compensation Costs

The Authority is just starting to develop its union negotiation strategies for the Public Service Alliance of Canada and will pay close attention to the outcome of the negotiations from the other Authorities to gauge the reactions to wage increases. A similar exercise will be implemented for the 4 pilot bargaining units starting in the first quarter of 2017.

Sick Leave and Short Term Disability Benefit Plans

The Authority does not have a specific short term disability benefit plan for its employees. All unionized and non-unionized employees are entitled to 1.25 sick day credit for each month of continuous employment. The accumulated number of sick days is not capped at a maximum amount.

8.4 PILOT TRAINING

Pilot Training - Annual

The Authority requires all pilots to complete simulation training within a 5 year cycle. The *Centre de simulation et d'expertise maritime* in Québec City currently provides the simulation training services. For the planning period, an annual average of 20 pilots/apprentice-pilots will participate in this week long training session. The Authority expects to incur approximately \$175,000 in annual simulation training costs, including pilot wages and travel expenses. Starting in 2016, ad-hoc simulation training will be offered to specific pilots based on the business needs. This ad-hoc training is budgeted to be approximately \$20,000 per year.

The Authority has also been organizing annual training for the PPUs. The average annual cost to provide this pilot training is approximately \$25,000.

Pilot Training - Apprentice

By the end of the 2016 navigation season, the Authority is expected to have 10 apprentice-pilots being trained (in comparison to 2 in 2015). Apprentice pilot training includes theoretical studies, practical on board ships and simulator training. The costs associated with training a mariner to become a pilot are salaries/benefits, travelling expenses and compensation to mentoring and evaluating pilots. The total cost to train a pilot averages close to \$25,000/month. Depending on the district to which the apprentice is assigned to and the apprentice's experience navigating in the Great Lakes, the length of training varies as follows:

District	Length of Training
Cornwall District	12 to 18 months
International District No. 1	6 to 12 months
Lake Ontario District	6 to 12 months
International District No. 2	6 to 12 months
International District No. 3	6 to 12 months
Port of Churchill	1 month (a Lake Ontario pilot)

8.5 ALIGNMENT WITH GOVERNMENT OF CANADA PENSION PLAN

Voluntary Severance Benefits

Since 2013, the Authority no longer has the accumulation of severance benefits upon termination as it has been removed from the employment benefits of collective agreements for all employees. Due to the Authority's financial cash flow constraints, only the pilot groups' have retirement and separation gratuity amounts that remain outstanding and are to be paid out at the termination of employment. The severance calculation remains frozen and will only be adjusted based on the rate of pay in effect at the time of termination.

Pension Plan

All Authority employees participate in the Public Service Pension Plan (the Plan), a defined benefit plan whereby participants receive benefits based on years of service and average earnings at retirement.

The Authority does not receive information pertaining to the Plan position or its participation in the Plan and consequently does not have sufficient information to account for the Plan as a defined benefit pension plan. As a result, the Authority accounts for its participation in the Plan as a defined contribution pension plan. A surplus or deficit in the Plan may have an impact on future

contributions made by the Authority, which would be communicated to the Government of Canada through the contribution matching ratio.

The employer contribution rates under the Plan for 2016 are those communicated by Treasury Board of Canada Secretariat for Crown Corporations. The 2016 rates have been held consistent for the planning period.

Other Savings Plan Benefits

The Authority does not offer any other savings plan benefits to its employees.

8.6 EMPLOYEE ENGAGEMENT

In the Fall of 2015, the Authority initiated an Employee Engagement Survey. Although there were no indicators of low employee morale or lack of employee engagements, the Authority believed it was important to undertake this important initiative. As the Authority has seen changing business needs from our customers, increasing requirements from the Federal Government and experiencing important changes in its human resources, the focus on our employees needed to be respected. To this end, the Authority was seeking to obtain employee feedback and the survey results were believed to provide valuable insight into performance barriers encountered by employees. The goal was to subsequently develop resolutions to allow each employee to unlock their full potential and to create a supportive work environment that enables employees to perform to their best every day.

The Authority had an 82% employee response rate. The central theme where the Authority fell short of employees' expectation related to the lack of communication. Since receiving the survey feedback, the Authority has been elevating the quality, timeliness and means of communication to keep employees informed on the status of business and industry issues.

8.7 SUCCESSION PLANNING

The Authority has recognized three key positions within its organization which must be staffed with effective/efficient individuals in order to ensure the continued success of the organization. The positions of CEO, CFO and Director of Operations need experienced and qualified individuals. Through rationalization and cost cutting in the last 25 years, the Authority is no longer structured in a way where qualified and experienced candidates are in place to succeed senior management. As previous lower level management positions were eliminated or rolled into other functions. As a result, there are no in house replacements qualified to assume neither the CFO nor the Director of Operations senior management roles. A current CFO was hired in October 2013 while the current Director of Operations was hired in September 2014. The CEO is eligible for retirement in the next two years.

While it is possible for either the current CFO or Director of Operations to have the qualifications to assume the CEO role in the near, it may prove difficult for either one to gain enough experience in some aspects of the business in such a short amount of time.

Strategies

The Authority has developed an orientation and development plan for both the CFO and the Director of Operations. These individuals will also have their performance measured against defined objectives as to gauge their progression.

Should the Authority be required to replace the CFO or the Director of Operations, it will continue to obtain the assistance of a recruiting agency to perform external searches.

For the CEO position, the Board of Directors has developed a succession strategy, which considers

both internal candidates and external searches. It will also inform the Privy Council Office of the CEO retirement as part of the process with the CEO's selection committee.

The three senior management individuals are not permitted to travel together as to negate the risk of having the three injured in one single event.

9. **GOVERNMENT DIRECTION**

The Authority may receive a directive issued under *FAA* (s.89.8) and/or (s.89.9), which would require it to seek approval of its negotiating mandate with some or all of its unions or approval of the terms and conditions of employment for non-unionized employees who are not GIC appointees. The Authority has not received any such directive regarding this matter

Also the *FAA* (s.89) empowers the GIC, on recommendation of the Minister of Transport, to issue a directive to the Authority, a parent Crown Corporation, if the GIC is of the opinion that is in the public interest to do so.

9.1 DIRECTIVE ON PENSIONS

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

9.2 DIRECTIVE ON TRAVEL, HOSPITALITY, CONFERENCE AND EVENT EXPENDITURES

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

At its February 2016 Board meeting, the Authority's Board of Directors approved a revised directive on travel and hospitality as to comply with the Government's *Directive on Travel, Hospitality and Conference and Event Expenditures*. As a means of ensuring transparency and communication to the public, a copy of the revised directive is published on the Authority website http://www.glpa-apgl.com/Policies_e.asp.

As to comply with the proactive disclosure of travel and hospitality expenses, the Authority has been reporting the Board of Directors and the Chief Executive Officer's travel and hospitality expenditures in its quarterly financial reports since March 2016. The Authority's quarterly financial reports can be accessed on its website at http://www.glpa-apgl.com/QuartFinReports_e.asp. As to comply with the Treasury Board's *Directive on Travel, Conference and Event Expenditures* requirement to disclose the total annual expenditures for each travel, hospitality and conference fees, the Authority will include this information in its 2016 Annual Report.

The total budgeted annual expenditures for each travel, hospitality and conference fees for the planning period is provided in Appendix 3.

10. SUPPORT FOR GOVERNMENT POLICIES

10.1 SECURITY POLICY IMPLEMENTATION NOTICE

In January 2016, the Authority received SPIN: 2015-01 - *Priority IT Security Actions (2015/16* from the Treasury Board. The SPIN highlighted three security management actions that need to be

reinforced: patching of operating systems and applications; enforcing the management and administrative privileges; and hardening of information systems. The objective is to minimize intrusions or the impacts to networks if a successful cyber intrusion occurs. The Authority has obtained an independent third party to perform a security audit and provide a detailed network analysis of the Authority's existing network. The Authority is currently reviewing the results and will develop actions plans and policies to address any weaknesses identified.

At its August Board meeting, the Board of Directors benefited from a workshop that provided them with insight on current and evolving cyber security risks and impacts, cyber governance best practices, and cyber security performance indicators. Following this workshop, the Board and management have agreed that cyber security will be reviewed and discussed as part of future Board meetings.

10.2 MENTAL HEALTH AWARENESS

As to support the Government of Canada's initiative to raise the awareness about mental health, the Authority will develop in late 2016 an action plan as to be able to actively encourage honest and open conversations at the workplace and as to put an end to the stigma around mental health illness amongst its employees.

10.3 COMPLIANCE WITH OTHER ACTS OF PARLIAMENT AND GOVERNMENT PROGRAMS

The Authority fully complies with the Federal Identity Program, the Access to Information Act, Privacy Act, Official Languages Act and the Employment Equity legislation. This compliance is monitored by the respective Government departments. The Authority also follows all the regulations listed in the FAA and the Regulations governing Crown Corporations.

11. FINANCIAL STATEMENTS

ASSUMPTIONS USED FOR DEVELOPMENT OF THE CORPORATE PLAN

(1) PILOTAGE ASSIGNMENTS

Based on management's assessment, the Authority forecasts 7,094 pilot assignments, a 1.0 % decrease in traffic for 2016 compared to 2015. The Authority further assumes 7,000 assignments for fiscal 2017.

SCHEDULE OF PILOTAGE ASSIGNMENTS SINCE 2004

		Actual # of	% change	# of	Average # of	Average # of
# of		assignment	from prior	years	assignments	assignments in
years	Year	s	year	over	in the last 5	the last 10
1	2004	6,398	12%	Х	6,847	7,162
2	2005	6,443	1%		6,415	7,197
3	2006	7,331	14%	Х	6,498	, -
4	2007	7,177	-2%		6,617	7,238
5	2008	5,989	-17%	Х	6,668	6,929
6	2009	4,468	-25%	Х	6,282	6,565
7	2010	6,059	36%	Х	6,205	6,310
8	2011	6,389	5%		6,016	6,257
9	2012	6,358	0%		5,853	6,235
10	2013	6,403	1%		5,935	6,302
11	2014	7,462	17%	Х	6,534	6,408
12	2015	7,166	-4%		6,756	6,480
13	2016 Forecast	7,094	-1%		6,897	6,457
14	2017 Forecast	7,000	-1%		7,025	6,439

(2) PILOTAGE TARIFFS

During the planning period of 2017-2021, the Authority plans general tariff increases and adjustments to the tariff surcharge as to respect its mandate to be financially self-sufficient.

(3) GENERAL INFLATION

Excluding wages and unless otherwise stipulated, a general inflation (cost of living) increase has been assumed for each of the years in the planning period.

(4) HEADCOUNT

Pilots

The Authority has forecasted anticipated retirements and corresponding new hires as reference in Appendix 2 *Statement of Pilot Numbers*.

(5) WAGE INCREASES

All collective agreements with the Authority's pilots, dispatchers and office staff have or will expire prior to the start of the 2017 navigation season.

(6) PILOT BOAT

The Authority contracts its pilot boat services at both Port Weller and Port Colborne. Under an open competitive procurement process in 2015, these contracts were awarded and are in place until the end of the 2018 navigation season, 2019 optional. The costs for both of these pilot boats (including crew) are semi-variable with a minimum fixed cost per month and a charge for each transfer trip. The Authority has budgeted cost of living increases for the remaining planning period.

The Authority continues to follow past strategies of contracting out pilot boat services for the Welland Canal as the investment in pilot boats, crewing and maintenance costs are not cost

advantageous for the Authority. Thus, there are no plans to revisit to current strategy in the near future.

(7) LAND TRANSPORTATION

Under an open competitive procurement process at the start of the 2016 navigation season, the contract for Land Transportation services to transfer pilots between St. Lambert and Beauharnois, Quebec, and Cornwall was were awarded and are in place until the end of the 2017 navigation season, 2018 optional. The Authority has budgeted cost of living increases for the remaining planning period.

The contract for Land Transportation services to transfer pilots between Cornwall, Ontario and Snell Lock (U.S.), St. Lambert, Quebec and Cape Vincent, New York was awarded in 2015 following an open competitive procurement process. The contract is in place until the end of the 2017 navigation season, 2018 optional. The Authority has budgeted cost of living increases for the remaining years of the planning period.

The contract for the Land Transportation services to transport pilots to points in the area of the Welland Canal was awarded in 2015 following an open competitive procurement process. The contract is in place until the end of the 2016 navigation season, 2017 optional. The Authority has budgeted cost of living increases for the remaining years of the planning period.

The cost of associated with these services is directly correlated to the volume of assignments and will fluctuate accordingly.

(8) PILOT TRANSFER SERVICES

In 2015, the Authority was required to negotiate contracts with third parties for the pilot transfer services at the St. Lambert Locks, the Beauharnois Locks, and Lock 7 in the Welland Canal. Under open competitive procurement processes at the start of the 2016 navigation season, contracts for Pilot Transfer Transportation services were awarded for the 2016 and 2017 navigation season. The Authority has budgeted cost of living increases for the remaining years of the planning period.

(9) LEASES

In January 2014, the Authority re-negotiated its head office lease contract for the next ten (10) years, which expires on January 31, 2024. Per the agreement, the lease costs increase annually as per the Canadian Consumer Price Index for 2015 and subsequent years. The landlord is the St. Lawrence Seaway Management Corporation.

As per the new agreement with the St. Lawrence Management Corporation, the landlord agreed to leasehold inducements. These inducements are being amortized over the term of the lease and are reflected as an offset to the lease costs.

(10) COMPUTER SYSTEM SUPPORT

The Authority has a software support agreement for its dispatch/billing/accounts receivable system. It also has a hosting support agreement for the Authority's web site and Authority database. The contract stipulates the annual increase.

STATEMENT OF OPERATIONS AND COMPREHENSIVE INCOME

	ACTUAL 2015	FORECAST 2016	BUDGET 2017	BUDGET 2018	BUDGET 2019	BUDGET 2020	BUDGET 2021
REVENUES							
PILOTAGE CHARGES	\$ 25,056	\$ 26,116	\$ 27,288	\$ 27,981	\$ 27,458	\$ 28,139	\$ 28,692
DISPATCHING AND PILOT BOAT INCOME	304	89	-	-	-	-	-
INTEREST AND OTHER INCOME	194	40	20	30	30	50	60
TOTAL	\$ 25,554	\$ 26,245	\$ 27,308	\$ 28,011	\$ 27,488	\$ 28,189	\$ 28,752
EXPENSES							
PILOT SALARIES AND BENEFITS	\$ 18,131	\$ 19,061	\$ 18,680	\$ 18,664	\$ 18,619	\$ 19,600	\$ 19,732
TRANSPORTATION AND TRAVEL	2,575	2,682	2,616	2,653	2,612	2,621	2,652
OPERATION SALARIES AND BENEFITS	1,289	1,294	1,305	1,322	1,331	1,359	1,377
PILOT BOAT	1,215	1,286	1,078	1,105	1,084	1,111	1,147
ADMINSITRATION SALARIES AND BENEFITS	946	1,003	1,043	1,052	1,068	1,083	1,099
PURCHASED DISPATCHING SERVICES	355	399	298	304	309	316	322
PROFESSIONAL FEES	352	175	215	237	227	220	218
AMORTIZATION AND DEPRECIATION	245	259	407	427	427	439	443
UTILITIES, RENTALS, REPAIRS AND SUPPLIES	283	296	307	313	360	368	374
PILOT TRANSFER SERVICES	244	301	298	304	297	303	309
PILOT TRAINING AND RECRUITING COSTS	143	245	267	272	273	277	243
PILOT LAP TOP AND NAVIGATION SOFTWARE	100	115	107	107	110	112	114
COMMUNICATIONS	88	106	106	109	111	113	115
INTERST AND BANK CHARGES	17	17	37	34	23	24	24
INTEREST ON BORROWING		-	24	19	12	7	24
TOTAL	\$ 25,983	\$ 27,239	\$ 26,788	\$ 26,922	\$ 26,863	\$ 27,953	\$ 28,193
PROFIT (LOSS) FOR THE YEAR OTHER COMPREHENSIVE INCOME:	\$ (429)	\$ (994)	\$ 520	\$ 1,089	\$ 625	\$ 236	\$ 559
ACTUARIAL GAIN (LOSS) ON EMPLOYEE BENEFITS	77	-	_	_	_	_	-
COMPREHENSIVE INCOME (LOSS) FOR THE YEAR	\$ (352)	\$ (994)	\$ 520	\$ 1,089	\$ 625	\$ 236	\$ 559

STATEMENT OF FINANCIAL POSITION

	ACTUAL 2015	FORECAST 2016	BUDGET 2017	BUDGET 2018	BUDGET 2019	BUDGET 2020	BUDGET 2021
ASSETS							
<u>CURRENT</u>							
CASH AND CASH EQUIVALENTS	\$ 5,082	\$ 4,253	\$ 3,890	\$ 4,951	\$ 4,097	\$ 3,298	\$ 3,718
INVESTMENTS	2,097	3,000	3,000	2,500	3,800	4,500	4,800
ACCOUNTS RECEIVABLE	3,064	3,000	3,200	3,300	3,200	3,300	3,400
PREPAIDS	40	50	50	50	50	50	50
	10,283	10,303	10,140	10,801	11,147	11,148	11,968
NON-CURRENT							
LONG TERM INVESTMENTS	345	-	-	-	-	-	-
PROPERTY AND EQUIPMENT	356	334	970	791	568	337	885
INTANGIBLE ASSETS	225	339	521	393	259	121	300
	926	673	1,491	1,184	827	458	1,185
TOTAL ASSETS	\$ 11,209	\$ 10,976	\$ 11,631	\$ 11,985	\$ 11,974	\$ 11,606	\$ 13,153
LIABILITIES							
ACCRUED SALARIES AND BENEFITS	\$ 7,857	\$ 8,796	\$ 8,247	\$ 7,909	\$ 7,528	\$ 7,758	\$ 8,239
OTHER ACCOUNTS PAYABLE AND	φ 7,057	\$ 0,750	φ 0,247	φ 1,909	φ 7,320	φ 1,130	φ 0,239
ACCRUED CHARGES	591	600	612	620	632	650	650
EMPLOYEE BENEFITS	326	439	317	216	779	587	295
BORROWING	020	-	321	278	284	-	321
BORROWING	8,774	9,835	9,497	9,023	9,223	8,995	9,505
	0,114	3,000	3,431	3,023	3,223	0,555	3,000
NON-CURRENT							
DEFERRED LEASE INDUCEMENTS	62	54	46	38	30	22	14
EMPLOYEE BENEFITS	3,153	2,861	2,780	2,805	2,261	1,893	1,817
BORROWING		-	562	284		-	562
	3,215	2,915	3,388	3,127	2,291	1,915	2,393
TOTAL LIABILITIES	11,989	12,750	12,885	12,150	11,514	10,910	11,898
EQUITY							
RETAINED EARNINGS (ACCUMULATED DEFICIT)	(780)	(1,774)	(1,254)	(165)	460	696	1,255
TOTAL LIABILITIES AND EQUITY	\$ 11,209	\$ 10,976	\$ 11,631	\$ 11,985	\$ 11,974	\$ 11,606	\$ 13,153

STATEMENT OF CHANGES IN EQUITY

	ACTUAL 2015	FORECAST 2016	BUDGET 2017	BUDGET 2018	BUDGET 2019	BUDGET 2020	BUDGET 2021
RETAINED EARNINGS (ACCUMULATED DEFICIT) BEGINNING OF YEAR	\$ (428)	\$ (780)	\$ (1,774)	\$ (1,254)	\$ (165)	\$ 460	\$ 696
COMPREHENSIVE INCOME (LOSS) FOR THE YEAR	(352)	(994)	520	1,089	625	236	559
RETAINED EARNINGS (ACCUMULATED DEFICIT) END OF YEAR	\$ (780)	\$ (1,774)	\$ (1,254)	\$ (165)	\$ 460	\$ 696	\$ 1,255

STATEMENT OF CASH FLOW

	ACTUAL 2015	FORECAST 2016	BUDGET 2017	BUDGET 2018	BUDGET 2019	BUDGET 2020	BUDGET 2021
OPERATING ACTIVITIES							
PROFIT FOR THE YEAR	\$ (429)	\$ (994)	\$ 520	\$ 1,089	\$ 625	\$ 236	\$ 559
ITEMS NOT AFFECTING CASH:							
Employee benefits	(21)	(179)	(203)	(76)	19	(560)	(368)
Amortization and depreciation	245	259	407	427	427	439	443
Decrease in deferred leasehold inducemnents	(8)	(8)	(8)	(8)	(8)	(8)	(8)
CHANGES IN NON-CASH WORKING CAPITAL ITEMS:							
Decrease (Increase) in acccounts receivable	1,457	64	(200)	(100)	100	(100)	(100)
Decrease (Increase) in prepaids	(2)	(10)		-	-	-	
Increase (Decrease) in accrued salaries and benefit	(1,095)	939	(549)	(338)	(382)	230	481
Increase (Decrease) in other accounts payable	(,===,		(,	(,	(,		
and accrued charges	(27)	9	12	8	12	18	_
CASH PROVIDED BY OPERATING ACTIVITIES	\$ 120	\$ 80	\$ (21)	\$ 1,002	\$ 793	\$ 255	\$ 1,007
PURCHASE OF INVESTMENTS	(3,225)	(4,364)	(3,000)	(2,500)	(3,800)	(4,500)	(4,800)
DISPOSAL OF INVESTMENTS	6,331	3,806	3,000	3,000	2,500		
A COLUMNIA OF PROPERTY A NID FOLUDATAT	-,	-,				3.800	4.500
ACQUISITION OF PROPERTY AND EQUIPMENT				•	_,000	3,800	4,500
AND INTANGIBLE ASSETS	(242)	(351)	(1,225)	(120)	·	·	ŕ
	(242) \$ 2,864	(351) \$ (909)	(1,225) \$ (1,225)	(120)	(70) \$ (1,370)	(70) \$ (770)	4,500 (1,170) \$ (1,470)
AND INTANGIBLE ASSETS		• • •	• • •	• • •	(70)	(70)	(1,170)
AND INTANGIBLE ASSETS CASH PROVIDED (USED) IN INVESTING ACTIVITIES		• • •	• • •	• • •	(70)	(70)	(1,170)
AND INTANGIBLE ASSETS CASH PROVIDED (USED) IN INVESTING ACTIVITIES FINANCING ACTIVITIES	\$ 2,864	\$ (909)	\$ (1,225)	• • •	(70)	(70)	(1,170) \$ (1,470)
AND INTANGIBLE ASSETS CASH PROVIDED (USED) IN INVESTING ACTIVITIES FINANCING ACTIVITIES PROCEEDS FROM BORROWING	\$ 2,864	\$ (909)	\$ (1,225) 1,100	\$ 380	(70) \$ (1,370)	(70) \$ (770)	(1,170) \$ (1,470)
AND INTANGIBLE ASSETS CASH PROVIDED (USED) IN INVESTING ACTIVITIES FINANCING ACTIVITIES PROCEEDS FROM BORROWING REPAYMENT OF BORROWING	\$ 2,864	\$ (909) - -	\$ (1,225) 1,100 (217)	\$ 380	(70) \$ (1,370) - (278)	(70) \$ (770) - (284)	(1,170) \$ (1,470) 1,100 (217)
AND INTANGIBLE ASSETS CASH PROVIDED (USED) IN INVESTING ACTIVITIES FINANCING ACTIVITIES PROCEEDS FROM BORROWING REPAYMENT OF BORROWING CASH PROVIDED (USED) IN INVESTING ACTIVITIES CASH AND CASH EQUIVALENTS	\$ 2,864	\$ (909) - -	\$ (1,225) 1,100 (217)	\$ 380	(70) \$ (1,370) - (278)	(70) \$ (770) - (284)	(1,170) \$ (1,470) 1,100 (217)
AND INTANGIBLE ASSETS CASH PROVIDED (USED) IN INVESTING ACTIVITIES FINANCING ACTIVITIES PROCEEDS FROM BORROWING REPAYMENT OF BORROWING CASH PROVIDED (USED) IN INVESTING ACTIVITIES	\$ 2,864	\$ (909) - - - \$ -	\$ (1,225) 1,100 (217) \$ 883	\$ 380 - (321) \$ (321)	(70) \$ (1,370) - (278) \$ (278)	(70) \$ (770) - (284) \$ (284)	(1,170) \$ (1,470) 1,100 (217) \$ 883

12. CAPITAL BUDGET

GREAT LAKES PILOTAGE AUTHORITY CORPORATE PLAN (in 000's)

	ACTUAL 2015	FORECAST 2016	BUDGET 2017	BUDGET 2018	BUDGET 2019	BUDGET 2020	BUDGET 2021
CONSTRUCTION IN PROCESS							
	\$ 13	\$ (13)	\$ -	\$ -	\$ -	\$ -	\$ -
BUILDINGS							
	\$ -	\$ 98	\$ 50	\$ 50	\$ -	\$ -	\$ -
FURNITURE AND FIXTURES							
	\$ 45	\$ 11	\$ -	\$ 20	\$ 20	\$ 20	\$ 20
LEASEHOLD IMPROVEMENTS							
	\$ 54	\$ 35	\$ -	\$ 10	\$ 10	\$ 10	\$ 10
COMPUTER AND COMMUNICATION EQUIPMENT							
	\$ 2	\$ 21	\$ 838	\$ 10	\$ 10	\$ 10	\$ 788
SOFTWARE							
	\$ 154	\$ 186	\$ 337	\$ 30	\$ 30	\$ 30	\$ 352
TOTAL	\$ 268	\$ 351	\$ 1,225	\$ 120	\$ 70	\$ 70	\$ 1,170

Overview of Significant Capital Expenditure Plan

Upgrade to Dispatch and Billing System

As previously highlighted in the *Technical Advancement* sub-section of the *Enterprise Risk Management Framework* section as well as stated in the 2016-2020 Corporate Plan, the Authority spent funds in 2015 and in 2016 to upgrade and migrate from its present dispatch/billing/accounts receivable computer system to a web based system. In addition, the Authority plans for further system enhancements staring in 2018 for the remaining planning period.

During the planning period, the Authority plans to spend funds from 2018 to 2021 on upgrades to the database used for training of Authority pilots at the pilot simulator.

Replacement of Portable Pilotage Units (PPU)

As previously highlighted in the *Portable Pilotage Units* sub-section of the *Strategic Issues, Environment* section and as stated in the 2016-2020 Corporate Plan, the PPU is a valuable tool to assist pilots in their navigation decision making process. The Authority considers the PPU as essential aid in achieving its objective on providing an economic, safe and reliable pilotage service. The current PPUs' five year useful life ends in 2016. As the Authority is still currently in an open competitive procurement process, a capital cost has been earmarked for 2017. The PPUs will only be in use at the start of the 2017 navigation season.

Pilot Waiting Stations

The Authority owns the pilot waiting station building at the St. Lambert Locks and currently leases a trailer at the Beauharnois Locks and at Lock 7 in the Welland Canal. Since 1994 there has been minimal upkeep done to the buildings. In compliance with the 2016-2020 Corporate Plan, the Authority completely reconfigured and renovated the inside of the St. Lambert pilot waiting station.

The pilots at the Beauharnois location have endured less than favourable accommodations at the Beauharnois Locks' pilot waiting station. Similar to the St. Lambert pilot waiting station, the Authority

now needs to accommodate the pilot transfer service contractor's employees. At the end of 2015, the St. Lawrence Seaway Management Corporation, the landlord, informed the Authority that it must relocate its pilot waiting station trailer as the area on the locks was deemed a security zone. As to accommodate the request, the Authority needed to excavate the new location for plumbing, sewer and site preparation. After the relocation in September 2016, the Authority will source a structure in 2017 to replace the trailer.

In 2018, the Authority will assess the pilot waiting station at Lock 7 in the Welland Canal and plans to spend on leasehold improvements.

Other Capital Expenditures

None of the other capital expenditures represent significant costs to the Authority. As evidenced by the historical capital expenditure spending prior to 2014 as noted in the following chart, the Authority has relatively been in a cost control mode on capital spending. However, the deferral of capital spending could not be maintained at the same level and office renovations and furniture/equipment replacement has been required since 2014 and continues for the remainder of the planning period.

In 000's of \$	2	2015	2	014	2	013	2012	2	011	2	010	2	009
Construction in Progress	\$	13	\$	-	\$	-	\$ -	\$	-	\$	-	\$	-
Building		-		-		-	-		-		-		-
Furniture and fixtures		45		58		2	-		18		-		1
Leasehold Improvments		54		53		-			3		-		-
Computer and Communication		2		4		1	710		1		6		1
Software		154				14	320		1		6		-
Total Actual Spending	\$	268	\$	115	\$	17	\$ 1,030	\$	23	\$	12	\$	2
Budget	\$	125	\$	100	\$	20	\$ 100	\$	100	\$	70	\$	60
Under (Over) Spent vs. Budget	\$	(143)	\$	(15)	\$	3	\$ (930)	\$	77	\$	58	\$	58

^{*} In 2012, the Authority previously budgeted the PPUs as an operating expense for the entire planning period. Subsequently, a decision was made to purchase the PPUs. Without this expenditure, the Authority would have under spent \$30,000 vs. budget.

Implications on cash flows and loans

The Authority anticipates funding the purchase of the PPUs through the use of a 4 year long-term borrowing.

Appropriations

The Canada Marine Act amended the Pilotage Act in section 36.01 and does not allow an appropriation by Parliament to enable the Authority to discharge any obligation or liability. The Authority must maximize all its returns to increase its revenues so that Parliamentary Appropriations do not become a necessity.

^{**} In 2015, the Authority had only originally budgeted for the migration of its dispatching and billing system.

13. OPERATING BUDGET

STATEMENT OF OPERATIONS 2015 ACTUALS VS. FORECAST & 2016 FORECAST VS. BUDGET

GREAT LAKES PILOTAGE AUTHORITY CORPORATE PLAN (in 000's)

	FORECAST 2015	ACTUAL 2015	VARIANCE	BUDGET 2016	FORECAST 2016	VARIANCE	BUDGET 2017
REVENUES							
PILOTAGE CHARGES DISPATCHING AND PILOT BOAT INCOME INTEREST AND OTHER INCOME TOTAL	\$ 24,921 284 203 \$ 25,408	\$ 25,056 304 194 \$ 25,554	\$ 135 20 (9) \$ 146	\$ 25,019 278 73 \$ 25,370	\$ 26,116 89 40 \$ 26,245	\$ 1,097 (189) (33) \$ 875	\$ 27,288 - \$ 20 \$ 27,308
EXPENSES							
PILOT SALARIES AND BENEFITS TRANSPORTATION AND TRAVEL OPERATION SALARIES AND BENEFITS PILOT BOAT ADMINSITRATION SALARIES AND BENEFITS PURCHASED DISPATCHING SERVICES PROFESSIONAL FEES AMORTIZATION AND DEPRECIATION UTILITIES, RENTALS, REPAIRS AND SUPPLIES PILOT TRANSFER SERVICES PILOT TRAINING AND RECRUITING COSTS PILOT LAP TOP AND NAVIGATION SOFTWARE COMMUNICATIONS	\$ 17,206 2,400 1,414 1,177 965 355 278 244 303 279 152 100 88	\$ 18,131 2,575 1,289 1,215 946 355 352 245 283 244 143 100 88	(925) (175) 125 (38) 19 - (74) (1) 20 35 9	\$ 17,405 2,361 1,294 1,155 1,003 359 316 325 285 446 151 102	\$ 19,061 2,682 1,294 1,286 1,003 399 175 259 296 301 245 115	\$ (1,656) (321) - (131) - (40) 141 66 (11) 145 (94) (13) (6)	\$ 18,680 2,616 1,305 1,078 1,043 298 215 407 307 298 267 107
INTERST AND BANK CHARGES INTEREST ON BORROWING	19 -	17 -	2	20 -	17 -	3 -	37 24
TOTAL	\$ 24,980	\$ 25,983	(1,003)	\$ 25,322	\$ 27,239	(1,917)	\$ 26,788
PROFIT (LOSS) FOR THE YEAR OTHER COMPREHENSIVE INCOME:	\$ 428	\$ (429)	\$ (857)	\$ 48	\$ (994)	\$ (1,042)	\$ 520
ACTUARIAL GAIN (LOSS) ON EMPLOYEE BENEFITS		77	77			-	
COMPREHENSIVE INCOME (LOSS) FOR THE YEAR	\$ 428	\$ (352)	\$ (780)	\$ 48	\$ (994)	\$ (1,042)	\$ 520

MAJOR ASSUMPTIONS

Refer to section 11 *Financial Statements*, sub-section *Assumptions Used for the Development of the Corporate Plan* for the listing of the major assumptions.

2017 SENSITIVITY OF PROJECTIONS TO CHANGES

As previously stated, the Authority's major expenditures are in the form of wages, fringe benefits and pilot boat costs as well as other contracted commitments. Thus, approximately 80% of the operating costs are relatively fixed over an operating season with only the remainder of the 20% costs being variable or semi-variable. Therefore, major fluctuations in pilotage assignments will have a significant impact on the Authority's financial results.

At the forecasted level of assignments and pilot numbers for the planning period, the Authority can, to a certain degree, manage pilot overtime and productivity, travel and land transportation expenses which could fluctuate to a certain degree with an increase or decrease in traffic. At this assignment level, these variable expenses may represent up to 70% of incremental or shortage in the pilotage revenues. The increase or decrease in pilotage revenue will directly impact the operating surplus or deficit of the Authority.

Applying this reasoning of revenue to the cost of operations as forecasted for 2017 based on 7,000 assignments, it can be stated that the pilotage revenue, operating expenses and the surplus or deficit of the Authority could vary as follows:

Percentage Variation in Pilotage Assignments	Variation in Pilotage Revenue	Variation in Operating Expenses	Resulting Change to Surplus or Deficit
+2%	\$ 0.6 M	\$ 0.5 M	\$ 0.1 M
-2%	\$ (0.6) M	\$ (0.5) M	\$ (0.1) M
+4%	\$ 1.2 M	\$ 1.1 M	\$ (0.1) M
-4%	\$ (1.2) M	\$ (0.9) M	\$ (0.3) M

^{*} A sensitivity analysis cannot be completed for any traffic fluctuations greater than 5% as the results would be skewed given the pilot numbers would need to be re-evaluated.

2015 ACTUAL VS. 2015 FORECAST

Pilot Salaries and Benefits

The \$0.9 million increase in pilot salaries and benefits was driven by pilot overtime required to support the 7,166 pilot assignments, a 10% increase in pilot assignments, serviced by the existing 52.5 FTE of pilots to service 6,531 assignments. The overall increase in overtime was also partly due to a 2.5 FTE decrease in pilot numbers vs. forecast while the level of traffic surges were extremely higher than forecasted. Given the timelines to complete the Corporate Plan, forecasts are completed in June, which only provides 3 months of actuals.

2016 FORECAST VS. 2016 BUDGET

Pilotage Revenue

The Authority is planning a 5.9% increase in pilot assignments which would increase revenues by \$1.5 million. However, this incremental revenue generated is offset by \$(0.5) million due to a shift in the large vessel ratio.

Pilotage Salaries and Benefits

The \$1.6 million increase in these expenses is primarily driven as a means to service the incremental 5.9% assignments generating the increase in revenue noted above while revising planning assumptions similar to the 2015 results given the pilot number is expected to be at 52.7 FTE.

14. BORROWING PLAN AND INVESTMENT FRAMEWORK

14.1 BORROWING APPROVAL

The Authority's funding activities are governed by section 36 of the *Pilotage Act* and section 127 of the *Financial Administration Act*.

In accordance with section 36 of the *Pilotage Act* and 127(3) of the *FAA*, the Authority requires approval from the Minister of Finance to enter into any particular transaction to borrow money, including the time and terms and conditions of the transaction. The following outlines the Authority's borrowing plan:

14.2 SHORT-TERM BORROWINGS TO BE MAINTAINED IN 2017

The Authority requests authorization from the Department of Finance to borrow \$3,000,000 in 2017 pursuant to Section 127(3) of the FAA.

The following provides a five-year backward-looking table of short term borrowing usage:

Year	Hig	hest Amount	Moi	nthly Average
2012	\$	2,450,000	\$	1,750,000
2013	\$	664,000	\$	450,000
2014	\$	202,000	\$	100,000
2015	\$	-	\$	-
2016	\$	-	\$	-

14.3 LONG-TERM BORROWING TO BE UNDERTAKEN IN 2017

The Authority requested from the Department of Finance to authorize \$1,100,000 in long term borrowings in 2017 pursuant to Section 127(3) of the FAA. The long-term borrowing would be for four years. The terms and conditions for borrowing the funds are as follows:

LENDER: Chartered Bank offering the lowest available lending rate

AMOUNT: Up to \$1.1 million

INTEREST RATE: Lender's Prime Commercial Lending Rate or, lowest available lending rate

TERM: Maximum of 48 months

REPAYMENT: Monthly blender payment of principal and interest

14.4 CONTINGENT LIABILITIES

The Authority does not anticipate giving any contingent liabilities in the form of guarantees throughout 2017.

14.5 CONTEXT

Line of Credit

The Authority does foresee a need to utilize a portion of the requested \$3 million line of credit given the 2017 cash flow implications from the forecasted 2016 \$1.0 million loss. The line of credit would be needed to fund the cash outlays during the non-navigation season until cash is collected following the start of the 2017 navigation season. The line of credit is also an important part of the Authority's business strategies given the seasonal nature of its business as it ensures funds are available to even out cash flow during fluctuations in traffic over the course of the navigation season.

The Authority will need to rely on its line of credit until the start of the following navigation season. Under the current tariff process, the tariff process is not flexible nor timely to allow the Authority to resolve its cash inflow needs once the decrease in traffic starts to materialize.

For 2016, the Minister of Finance approved the Authority's borrowing up to \$3 million from its Banker to bridge any cash flow shortfall.

Long Term Borrowings

The Authority is planning to fund the purchase of the PPUs through a 4 year loan.

14.6 TOTAL BORROWING - NEW AND OUTSTANDING

As outlined in *Section 14.5 Context*, the line of credit is needed during the non-navigational season until the Authority starts to collect revenues at the start of the 2017 navigation season. Given the financial loss anticipated at the end of 2016 and resulting deficiency in operating funds, the Authority expects it will utilize its line of credit in April but should be able to re-pay the amount by the end of July 2017. As the Authority is working on an important tariff increase in 2018 which will generate a positive cash flow, it anticipates to reduce the need of line of credit in 2018 with no further use for the remainder of the planning period.

The Authority's long term loan is a one-time requirement for the procurement of the PPUs. As the Authority's cash flow improves, renewal of PPUs will be able to fund these purchases with its operating cash flow.

The following table illustrates the maximum borrowing needed for each year of the planning period. The long term borrowing noted demonstrates the amortization of the 2017 loan of \$1.1 million.

BORROWINGS UNDERTAKEN DURING THE YEAR (in millions of dollars)														
		2015		2016		2017		2018		2019	2020 Forecasted		2021 Forecasted	
		Actual	Estimated		Forecasted		Forecasted		Forecasted					
Bank overdraft *	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Line of Credit *	\$	-	\$	-	\$	1.5	\$	1.0	\$	-	\$	-	\$	-
Short-term borrowings *	\$	-	\$	-	\$	1.5	\$	1.0	\$	-	\$	-	\$	-
Long-term borrowings *	\$	-	\$	-	\$	1.1	\$	0.9	\$	0.7	\$	0.4	\$	0.1
Total	\$	-	\$	-	\$	2.6	\$	1.9	\$	0.7	\$	0.4	\$	0.1

^{*} Maximum (or peak) amount during the year.

The following table illustrates the outstanding borrowings at the end of each fiscal year for the planning period.

promitting promotes														
BORROWINGS OUTSTANDING, AS AT DECEMBER 31 (in millions of dollars)														
		2015 2016			2017 2018		2019		2020		2021			
		Actual	Est	timated	Forecasted		Forecasted		Forecasted		Forecasted		Forecasted	
Bank overdraft *								NIL						
Line of Credit *		IVIL												
Short-term borrowings *	\$	-	\$	-	\$	-	\$		\$	-	\$		\$	-
Long-term borrowings	\$	-	\$	-	\$	0.9	\$	0.7	\$	0.4	\$	0.1	\$	-
Total	\$	-	\$	-	\$	0.9	\$	0.7	\$	0.4	\$	0.1	\$	

14.7 INVESTMENT STRATEGY

The *Pilotage Act* in Section 37 allows the Authority, with the approval of the Minister of Finance, to invest in bonds or other obligations guaranteed by Her Majesty in right of Canada or any Province, or any Municipality in Canada, any moneys not immediately required for the purposes of the Authority.

The Authority requested and received since 1996 formal approval from the Minister of Finance to invest sums of money for any extended period of time. The Authority has historically invested surplus money in short-term bonds, which on average have very low returns.

The Authority consults with the bank and investment experts and receives a list of typical investment instruments that could be purchased to maximize returns while at the same time virtually eliminating

any type of risk. The investment instruments the Authority is planning on purchasing for short-term and long-term basis (max. of 10 years) are the following:

- (i) Government of Canada Treasury Bill, Strip Bonds and coupons.
- (ii) Provincial Treasury Bonds guaranteed by the Provincial Governments.
- (iii) Municipal Bonds guaranteed by Municipal Governments.
- (iv) Any other instrument guaranteed by the Government of Canada, Provincial Governments, or a Municipality in Canada that might be introduced during this planning period.

All of the above instruments are guaranteed by either the Federal Government, a Provincial Government or a Municipality in Canada and are extensively traded therefore they can be liquidated before their maturity dates without incurring a penalty.

The Authority plans on investing its surplus funds for periods ranging from one (1) to two (2) years until the future employee benefits are paid. The Authority expects that it can only earn an average, given the current economic conditions, of a return slightly below 1.0% on these funds.

Given that an important portion of cash inflow is received between September and December and given the Authority's significant cash outflows in January the following year, the Authority cannot aggressively invest in instruments that mature beyond February. To this end, the Authority has negotiated an investment account that yields a minimum 0.45% interest on the cash balance at the end of each month. This provides the Authority with flexibility in the future should cash requirements exist.

The Authority maintains a cash management system which covers an 18-month period. The system is updated on a weekly basis and allows the Authority to minimize cash levels in non-interest bearing accounts.

The Authority, therefore, requests from the Department of Finance approval to invest in bonds or other obligations guaranteed by Her Majesty in right of Canada of any Province, or any Municipality in Canada, any monies not immediately required for the purpose of the Authority. This request is made to satisfy the requirements of Section 37 of the *Pilotage Act*.

<u>APPENDIX 1 - TARIFF ADJUSTMENTS / CPI / PILOTAGE ASSIGNMENTS</u>

1 1995 No tariff increase 2 1996 No tariff increase 3 1997 No tariff increase 4 1998 No tariff increase 4 1998 No tariff increase 5 1999 March 1999: 5% tariff reduction in Canadian districts. It represented a 3% overall reduction. March 2000: 5% tariff reduction maintained in 6 2000 Canadian districts. It represented a 3% overall reduction. 7 2001 No tariff increase March 2002: Tariff increase of 5% in Cornwall and 8 2002 Lake Ontario Districts only. It represented a 3% overall increase. November 2002: Increase of 11% in International 2002 District # 2 (above canal) only. It represented a 1% overall increase. March 2003: Increase of 5% in Cornwall and Lake 9 2003 Ontario Districts only. It represented a 3% overall increase. 2003 July 2003: 4.5% overall tariff increase. 10 2004 April 2004: 8% overall tariff increase. 2004 September 2004: 7% overall tariff increase. 11 2005 April 2005: 5.5% overall tariff increase.	0% 0% 0% 0% -3% -3% -3% 3% 4.5% 8% 7% 5.5%		1.8% 2.1% 1.3% 1.3% 1.4% 1.6% 2.7%	6,091 6,903 7,192 9,085 8,108 8,605 6,916	1,342 1,016 1,210 1,701 (353) (1,093) (2,276) (1,560)	2,918 3,934 5,144 6,845 6,492 5,399 3,123
3 1997 No tariff increase 4 1998 No tariff increase 5 1999 March 1999: 5% tariff reduction in Canadian districts. It represented a 3% overall reduction. March 2000: 5% tariff reduction maintained in 6 2000 Canadian districts. It represented a 3% overall reduction. 7 2001 No tariff increase March 2002: Tariff increase of 5% in Cornwall and 8 2002 Lake Ontario Districts only. It represented a 3% overall increase. November 2002: Increase of 11% in International 2002 District # 2 (above canal) only. It represented a 1% overall increase. March 2003: Increase of 5% in Cornwall and Lake 9 2003 Ontario Districts only. It represented a 3% overall increase. 2003 July 2003: 4.5% overall tariff increase. 10 2004 April 2004: 8% overall tariff increase. 2004 September 2004: 7% overall tariff increase.	0% 0% -3% -3% 0% 3% 1% 3% 4.5% 8% 7%		1.3% 1.3% 1.4% 1.8% 1.6%	7,192 9,085 8,108 8,605 6,916	1,210 1,701 (353) (1,093) (2,276)	5,144 6,845 6,492 5,399 3,123
4 1998 No tariff increase 5 1999 March 1999: 5% tariff reduction in Canadian districts. It represented a 3% overall reduction. March 2000: 5% tariff reduction maintained in 6 2000 Canadian districts. It represented a 3% overall reduction. 7 2001 No tariff increase March 2002: Tariff increase of 5% in Cornwall and 8 2002 Lake Ontario Districts only. It represented a 3% overall increase. November 2002: Increase of 11% in International 2002 District # 2 (above canal) only. It represented a 1% overall increase. March 2003: Increase of 5% in Cornwall and Lake 9 2003 Ontario Districts only. It represented a 3% overall increase. 2003 July 2003: 4.5% overall tariff increase. 10 2004 April 2004: 8% overall tariff increase. 2004 September 2004: 7% overall tariff increase.	0% -3% -3% 0% 3% 1% 3% 4.5% 8% 7%		1.3% 1.4% 1.8% 1.6% 2.7%	9,085 8,108 8,605 6,916 6,581	1,701 (353) (1,093) (2,276) (1,560)	6,845 6,492 5,399 3,123
5 1999 March 1999: 5% tariff reduction in Canadian districts. It represented a 3% overall reduction. March 2000: 5% tariff reduction maintained in 6 2000 Canadian districts. It represented a 3% overall reduction. 7 2001 No tariff increase March 2002: Tariff increase of 5% in Cornwall and 8 2002 Lake Ontario Districts only. It represented a 3% overall increase. November 2002: Increase of 11% in International 2002 District # 2 (above canal) only. It represented a 1% overall increase. March 2003: Increase of 5% in Cornwall and Lake 9 2003 Ontario Districts only. It represented a 3% overall increase. 2003 July 2003: 4.5% overall tariff increase. 10 2004 April 2004: 8% overall tariff increase. 2004 September 2004: 7% overall tariff increase.	-3% -3% -3% -3% -3% -3% -3% -3% -3% -3%		1.4% 1.8% 1.6% 2.7%	8,108 8,605 6,916 6,581	(353) (1,093) (2,276) (1,560)	5,399 3,123
districts. It represented a 3% overall reduction. March 2000: 5% tariff reduction maintained in 2000 Canadian districts. It represented a 3% overall reduction. 7 2001 No tariff increase March 2002: Tariff increase of 5% in Cornwall and 8 2002 Lake Ontario Districts only. It represented a 3% overall increase. November 2002: Increase of 11% in International 2002 District # 2 (above canal) only. It represented a 1% overall increase. March 2003: Increase of 5% in Cornwall and Lake 9 2003 Ontario Districts only. It represented a 3% overall increase. 2003 July 2003: 4.5% overall tariff increase. 10 2004 April 2004: 8% overall tariff increase. 2004 September 2004: 7% overall tariff increase.	-3% 0% 3% 1% 3% 4.5% 8% 7%		1.8% 1.6% 2.7%	8,605 6,916 6,581	(1,093) (2,276) (1,560)	5,399
March 2000: 5% tariff reduction maintained in 6 2000 Canadian districts. It represented a 3% overall reduction. 7 2001 No tariff increase March 2002: Tariff increase of 5% in Cornwall and 8 2002 Lake Ontario Districts only. It represented a 3% overall increase. November 2002: Increase of 11% in International 2002 District # 2 (above canal) only. It represented a 1% overall increase. March 2003: Increase of 5% in Cornwall and Lake 9 2003 Ontario Districts only. It represented a 3% overall increase. 2003 July 2003: 4.5% overall tariff increase. 10 2004 April 2004: 8% overall tariff increase. 2004 September 2004: 7% overall tariff increase.	-3% 0% 3% 1% 3% 4.5% 8% 7%		1.8% 1.6% 2.7%	8,605 6,916 6,581	(1,093) (2,276) (1,560)	5,399
6 2000 Canadian districts. It represented a 3% overall reduction. 7 2001 No tariff increase March 2002: Tariff increase of 5% in Cornwall and 8 2002 Lake Ontario Districts only. It represented a 3% overall increase. November 2002: Increase of 11% in International 2002 District # 2 (above canal) only. It represented a 1% overall increase. March 2003: Increase of 5% in Cornwall and Lake 9 2003 Ontario Districts only. It represented a 3% overall increase. 2003 July 2003: 4.5% overall tariff increase. 10 2004 April 2004: 8% overall tariff increase. 2004 September 2004: 7% overall tariff increase.	0% 3% 1% 3% 4.5% 8% 7%		2.7%	6,916 6,581	(2,276)	3,123
March 2002: Tariff increase of 5% in Cornwall and 8 2002 Lake Ontario Districts only. It represented a 3% overall increase. November 2002: Increase of 11% in International 2002 District # 2 (above canal) only. It represented a 1% overall increase. March 2003: Increase of 5% in Cornwall and Lake 9 2003 Ontario Districts only. It represented a 3% overall increase. 2003 July 2003: 4.5% overall tariff increase. 10 2004 April 2004: 8% overall tariff increase. 2004 September 2004: 7% overall tariff increase.	3% 1% 3% 4.5% 8% 7%		2.7%	6,581	(1,560)	
8 2002 Lake Ontario Districts only. It represented a 3% overall increase. November 2002: Increase of 11% in International 2002 District # 2 (above canal) only. It represented a 1% overall increase. March 2003: Increase of 5% in Cornwall and Lake 9 2003 Ontario Districts only. It represented a 3% overall increase. 2003 July 2003: 4.5% overall tariff increase. 10 2004 April 2004: 8% overall tariff increase. 2004 September 2004: 7% overall tariff increase.	1% 3% 4.5% 8% 7%					1,563
2002 District # 2 (above canal) only. It represented a 1% overall increase. March 2003: Increase of 5% in Cornwall and Lake 9 2003 Ontario Districts only. It represented a 3% overall increase. 2003 July 2003: 4.5% overall tariff increase. 10 2004 April 2004: 8% overall tariff increase. 2004 September 2004: 7% overall tariff increase.	3% 4.5% 8% 7%		2.0%	5,737	(2.620)	
 9 2003 Ontario Districts only. It represented a 3% overall increase. 2003 July 2003: 4.5% overall tariff increase. 10 2004 April 2004: 8% overall tariff increase. 2004 September 2004: 7% overall tariff increase. 	4.5% 8% 7%		2.0%	5,737	(2.630)	
10 2004 April 2004: 8% overall tariff increase. 2004 September 2004: 7% overall tariff increase.	8% 7%				(2,039)	(1,076)
2004 September 2004: 7% overall tariff increase.	7%					
			2.2%	6,398	(2,082)	(3,158)
June 2005: Elimination of Currency Equalization Factor (CEF) calculation in international districts			2.6%	6,443	(833)	(3,991)
2005 (District # 1, Lake Ontario and International district # 2 & 3). Tariff adjustment of 17.5%. Not seen as a tariff increase.	0%		2.076	0,443	(633)	(3,991)
12 2006 June 2006: 2.5% overall tariff increase and an 8% inccrease in Class 1 vessels.	2.5%		1.7%	7,331	321	(3,670)
13 2007 January 2007: 2.5% overall tariff increase and a 7% inccrease in Class 1 vessels.	2.5%		2.2%	7,177	262	(3,408)
April 28, 2008: 4% overall tariff increase. (Different 2008 % increase in different dsitricts); introduction of the temporary surcharge.	4.0%	2.0%	2.4%	5,989	(237)	(3,645)
March 31, 2009: 4% overall tariff increase and 2009 increase in the temporary surcharge from 2% to 6%. 2009 August 18, 2009: Increase in the temporary	4.0% 0.0%	4.0% 9.0%	0.3%	4,468	(2,063)	(5,708)
surcharge from 6% to 15%. June 1, 2010 - Tariff increase of 15% in Lake						
Ontario, 30% increase in Port of Churchill, 1.5% increase in all other districts and introduction of vessel class 5	5.5%	0.0%	1.9%	6,059	2,013	(3,695)
Navigation season - 3% overall tariff increase and 2011 a reduction of the temporary surcharge from 15% to 12% and the repeal of class 5 vessel class.	3.0%	-3.0%	2.8%	6,389	654	(3,041)
Navigation season - equivalent of 2% tariff increase (Cornwall district 4% increase, International district #1 no increase, Lake Ontario district and Port of Churchill 2% increase, International district #2 & 3 3% increase) and maintain of the temporary surcharge at 12%.	2.0%	0.0%	1.5%	6,358	377	(2,664)
Navigation season - equivalent of 2.5% tariff 19 2013 increase and maintain of the temporary surcharge at 12%.	2.5%	0.0%	1.8%	6,403	900	(1,764)
20 2014 Navigation season - 2.5% tariff increase and maintain of the temporary surcharge at 12%.	2.5%	0.0%	1.0%	7,462	1,336	(428)
21 2015 Navigation season - 1.5% tariff increase and reduction of the surcharge to 11%.	1.5%	-1.0%	1.1%	7,166	(352)	(780)
22 2016 Navigation season - 1.5% tariff increase and increase of the surcharge to 12%.	1.5%	1.0%	2.0%	7,094	(994)	(1,774)

APPENDIX 2 – STATEMENT OF PILOT NUMBERS

HEADCOUNT ASS	<u>UMPTIONS</u>					
	FORECAST	BUDGET	BUDGET	BUDGET	BUDGET	BUDGET
	2016	2017	2018	2019	2020	2021
Pilots						
Start of Year	52	53	55	60	60	65
Reductions	(8)	(3)	(2)	(4)	(3)	(7)
Increases	9	5	7	4	8	5
End of Year	53	55	60	60	65	63
Apprentice-Pilots						
Start of Year	3	4	3	2	4	2
Reductions	(11)	(5)	(7)	(4)	(8)	(5)
Increases	12	4	6	6	6	5
End of Year	4	3	2	4	2	2
Part Time Contract	Employees					
Start of Year	5	6	8	9	8	7
Reductions	0	0	(1)	(1)	(1)	(4)
Increases	11	2	2	0	0	1
End of Year	6	8	9	8	7	4

<u>APPENDIX 3 – ANNUAL TRAVEL, HOSPITALITY AND CONFERENCE FEES</u>

The anticipated annual travel, hospitality and conference fees for the planning period of the Board Chair, Chief Executive Officer and other Board Members are:

THE ANTICIPATED ANNUAL TRAVEL EXP	ENSES	ARE:									
	F	ORECASTED 2016		BUDGET 2017		BUDGET 2018	BUDGET 2019	BUDGET 2020			BUDGET 2021
Chair of the Board	\$	5,000	\$	5,000	\$	10,000	\$ 5,000	\$	10,000	\$	5,000
Chief Executive Officer	\$	45,000	\$	40,000	\$	47,500	\$ 42,000	\$	50,000	\$	42,000
Board of Directors	\$	20,000	\$	25,000	\$	20,000	\$ 20,000	\$	25,000	\$	20,000
TOTAL	\$	70,000	\$	70,000	\$	77,500	\$ 67,000	\$	85,000	\$	67,000
THE ANTICIPATED ANNUAL HOSPITALIT	Y EXPI	ENSES ARE:									
	F	ORECASTED 2016		BUDGET 2017		BUDGET 2018	BUDGET 2019	BUDGET 2020		BUDGET 2021	
Chair of the Board	\$	750	\$	1,000	\$	1,500	\$ 1,000	\$	1,500	\$	1,000
Chief Executive Officer	\$	17,500	\$	15,000	\$	17,500	\$ 16,000	\$	17,500	\$	16,000
Board of Directors	\$	2,000	\$	2,500	\$	2,250	\$ 2,250	\$	2,500	\$	2,250
TOTAL	\$	20,250	\$	18,500	\$	21,250	\$ 19,250	\$	21,500	\$	19,250
THE ANTICIPATED ANNUAL EVENT EXPE	NSES A	ARE:									
	F	FORECASTED BUDGET BUDGET BUDGET BUDGET 2016 2017 2018 2019 2020			BUDGET 2021						
Chair of the Board	\$	-	\$	1,000	\$	3,000	\$ -	\$	4,000	\$	-
Chief Executive Officer	\$	6,000	\$	1,000	\$	3,000	\$ -	\$	4,000	\$	-
Board of Directors	\$	-	\$	6,000	\$	-	\$ -	\$	6,000	\$	-
TOTAL	\$	6,000	\$	8,000	\$	6,000	\$	\$	14,000	\$	-
THE ANTICIPATED ANNUAL TRAVEL, HO	SPITA	LITY AND EVEN	IT EX	PENSES ARE:							
	F	ORECASTED 2016	BUDGET 2017		BUDGET 2018		BUDGET 2019		BUDGET 2020		BUDGET 2021
Chair of the Board	\$	5,750	\$	7,000	\$	14,500	\$ 6,000	\$	15,500	\$	6,000
Chief Executive Officer	\$	68,500	\$	56,000	\$	68,000	\$ 58,000	\$	71,500	\$	58,000
Board of Directors	\$	22,000	\$	33,500	\$	22,250	\$ 22,250	\$	33,500	\$	22,250
TOTAL	\$	96,250	\$	96,500	\$	104,750	\$ 86,250	\$	120,500	\$	86,250