



Laurentian
Pilotage
Authority

SUMMARY
2018-2022 CORPORATE PLAN

2018-2022 Corporate Plan Summary | 2018 Operating Budget Summary

2018 Capital Budget Summary

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EXECUTIVE SUMMARY

Since the beginning of 2017, economic indicators show growth in the world economy, which has translated into a steady increase in traffic on the St. Lawrence River. A higher containers volume transiting the Laurentian Pilotage Authority ("LPA" or "Authority") waters and the increased traffic for solid bulk cargo and constant traffic for liquid bulk cargo, suggest that the 22,432 assignments performed in 2016, should be exceeded in 2017. Tourism also contributes to the increase, as cruises have become very popular in recent years. Therefore, the Authority must, more than ever, ensure that it provides a safe and efficient pilotage service.

The global economy should continue to grow in the medium term, and Canada will be no exception to it. According to the Conference Board of Canada, Canada's GDP should grow by 2.6% in 2017 and by just under 2.0% in 2018. The world GDP should grow by about 2.9% in 2017 and 3.0% in 2018. Analysts at different banks and economic organizations forecast a CPI of around 1.7% for 2017, whereas there is no consensus for 2018, with forecasts ranging from 1.8% to 2.2%.

The current 2018-2022 Corporate Plan is a continuation of the 2017-2021 plan, whose aim was to refocus the organization on its basic principles, in addition to setting up pilotage consultation structures and strengthening its in-house navigational and IT expertise. Therefore, the LPA seeks to optimize the utilization of its new resources, while using the information collected from its Pilotage Committee to improve the safety and efficiency of its services in its waters. In the coming years, the Authority will also work to modernize its IT structures so that the latter can help the organization become a leader in its field and optimize the efficiency of pilotage services and navigational safety. Finally, the LPA will be more present and active on the public stage, with the aim of positioning itself as a leader on all issues having a pilotage impact.

The review of the *Pilotage Act* is still a top priority for the LPA. The lack of adequate legislative powers within the *Pilotage Act* and its regulations continues to hinder the effective and efficient management of the services rendered by non-employee pilots, which poses a major challenge in our region. It is still possible to circumvent the regulatory process and impose requirements and restrictions on navigation other than those required by the Act or regulation through a service contract or an arbitration decision. Shortcomings in the legislation limit the Authority's ability to set up and maintain processes and regulations which will ensure navigational safety and optimization of efficiency for the public interest benefit. The Authority is hopeful that the review of the *Pilotage Act* will expand and clarify the scope of its powers to manage and regulate pilotage services in its waters.

The Authority's sound financial health has made it possible to implement a tariff freeze for two consecutive years. As a result, tariffs have not been increased since 2015, despite increases in pilotage fees. Despite this freeze, the LPA posted a positive net income in 2016 while a minor financial loss is planned for 2017. However, the Authority has filed a tariff plan reflecting a 2.50% tariff increase, which matches the projected increase in the Consumer Price Index (CPI) for 2018, to take effect on April 1st, 2018, [equivalent to 1.80% on an annual basis] and 2.25% in 2019. This increase is necessary for the Authority to preserve sufficient liquidity to enable adequate maintenance and upgrade of assets, to invest in order to meet its strategic objectives and also to ensure that the necessary capacity is maintained to respond to major and unforeseen situations. This increase in tariff will enable it to remain financially self-sufficient and stop further erosion of our margins due to the increase in pilotage fees.

The financial forecasts presented in this Corporate Plan are the result of projections made by taking into account the priorities and key issues, and their inherent constraints and opportunities.

MANDATE AND CORPORATE PROFILE

MANDATE

The mandate of the Authority, a federal Crown corporation, is to establish, operate, maintain and administer, in the interest of navigational safety, an efficient marine pilotage service in Canadian waters in and around the Province of Quebec and north of the northern entrance to the St. Lambert Lock, with the exception of the waters of Chaleur Bay south of Cap d'Espoir.

VISION

To become a world leader in maritime pilotage by assuming a leadership role in the maritime sector and to serve the public interest by striving for excellence and continuous improvement in the provision of efficient pilotage services that contribute to navigational safety, environmental protection and the maritime industry's competitiveness.

POWERS

In order to fulfill its role and achieve its vision, the Authority is empowered by the *Pilotage Act* to make regulations on the establishment of compulsory pilotage areas. The Authority can also determine which ships are subject to compulsory pilotage, define criteria for the issuance of pilot licences, and determine the compulsory training for pilots and other safety requirements connected to pilotage services. Naturally, the approval of the Governor-in-Council is required. The Act also authorizes the LPA to negotiate service contracts with pilot corporations representing the pilots in its region.

The Authority is required to charge fair and reasonable fees which will enable it to be financially self-sufficient. Tariff revisions must be published and authorized by Order-in-Council.

ACCOUNTABILITY

Although sections 20 and 33 of the *Pilotage Act* provide the Authority with regulatory and disciplinary powers, the Authority is accountable to the Canadian Parliament for its actions. The LPA reports to Parliament through the Minister of Transport.

DESCRIPTION OF ACTIVITIES

To fulfil its mandate, the Authority has established three compulsory pilotage districts: Port of Montreal (district No. 1.1), the navigable waters between Montreal and Quebec City (district No. 1), and the navigable waters between Quebec City and Les Escoumins, including the Saguenay River (district No. 2). These districts cover a distance of 265 nautical miles between Montreal and Les Escoumins and another 70 nautical miles on the Saguenay.



Ships are subject to compulsory pilotage based on a number of criteria. For Canadian-registered ships navigating districts No. 1 or No. 1.1, compulsory pilotage applies to those that are over 70 metres in length and over 2,400 tons gross tons. For Canadian-registered ships navigating district No. 2, compulsory pilotage applies to ships over 80 metres in length and over 3,300 gross tons. Lastly, for ships not registered in Canada, all ships of 35 metres in length are subject to compulsory pilotage, regardless of the district.

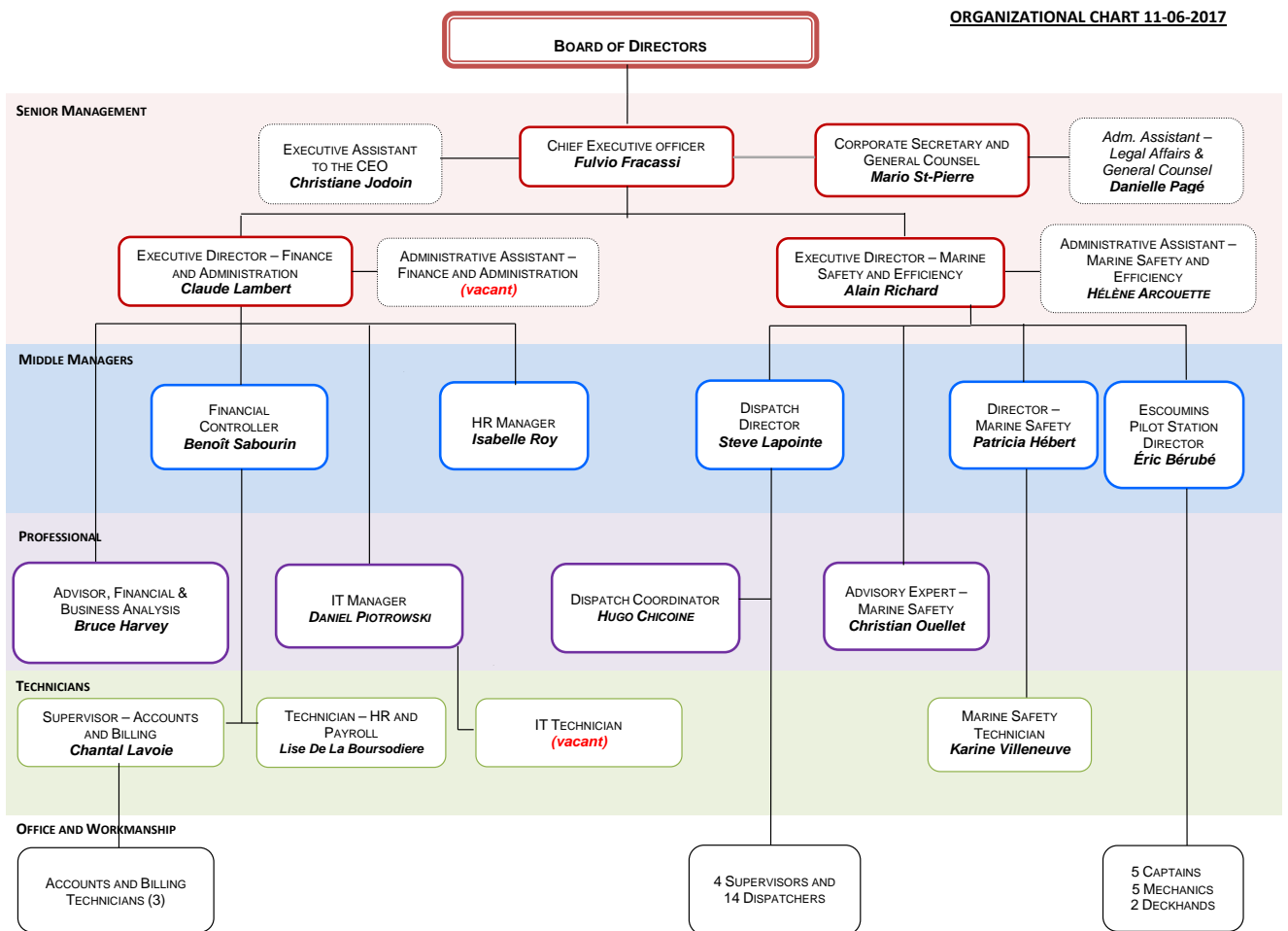
Pilotage services offered in each of the three districts are provided by contract pilots from two separate corporations: the Corporation of Mid St. Lawrence Pilots (CPSLC), and the Corporation of Lower St. Lawrence Pilots (CPBSL). The services are performed under separate service contracts negotiated between the Authority and each of the corporations. When, in accordance with the law, pilots choose to organize themselves into pilot corporations, the Authority cannot hire its own employee-pilots.

The LPA dispatch centre, which runs 24 hours a day, 365 days a year, serves all pilotage districts. The dispatch centre is located within the LPA’s headquarters in Montreal, along with maritime safety and efficiency services, as well as financial and administrative personnel.

Lastly, the LPA uses five boarding stations for its contract pilots. Quebec City, Trois-Rivières, Sorel and Montreal stations are owned and administered by Groupe Océan, with whom the Authority has a service contract. The fifth station, in Les Escoumins, is owned and operated by the LPA, which operates two pilot boats on site. These boarding stations are used to ferry pilots from shore to ship, and vice versa.

For any additional information, please refer to our most recent annual report, available on our website.

ORGANIZATIONAL CHART



GOVERNANCE

Since September 2012, Fulvio Fracassi is the Authority's Chief Executive Officer. His responsibilities include developing the organization's overall strategy, providing leadership and overseeing the stewardship of the Authority's resources and assets in order to fulfill the LPA's mission pursuant to the *Pilotage Act*. Before joining the Authority, Mr. Fracassi was Director General of Transport Canada's National Marine Safety Program and is a lawyer by training. He chairs the Executive Committee as well as the Internal Management Committee, which is made up of the Authority's managers, and which meets on a regular basis. He is also responsible for chairing the Pilotage Advisory Committee comprised of representatives from the marine industry, pilot corporations and representatives from Transport Canada and the Canadian Coast Guard.

BOARD OF DIRECTORS

The Authority maintains a modern governance structure which enables the fulfilment of its mandate. For this reason, various powers are exercised by the Board of Directors.

The Board is composed of seven members appointed by the Governor-in-Council including the Chairperson of the Board. Historically, the Board is composed of two representatives from Canadian society at large, two members who come from the Canadian and international marine community, and lastly, two members from pilot corporations. The position of Chairperson is currently vacant. The selection process has recently been modified and may no longer guarantee that two appointees will represent each group.

The Chief Executive Officer, who reports to the Board of Directors, occupies a full-time position at the Authority. As for the members, they are appointed for an initial term of up to four years; thereafter, they may be reappointed for a term not to exceed four years. The *Pilotage Act* does not include a limit as to the number of reappointments a director can receive. The terms of five of the six members have currently expired.

Sections 20 and 33 of the *Pilotage Act* provide the LPA with regulatory powers, including powers to suspend or cancel a licence. These various powers are exercised essentially by the Authority's Board of Directors, whose operating procedures are set out in the Authority's by-laws, which were completely overhauled in 2009 to provide the Board with up-to-date management tools tailored to its needs.

The Board of Directors is also responsible for the Authority's strategic planning, including its Corporate Plan, finances and overall stewardship. This includes the identification of major risks, succession planning and the setting up of an information system to meet its requirements.

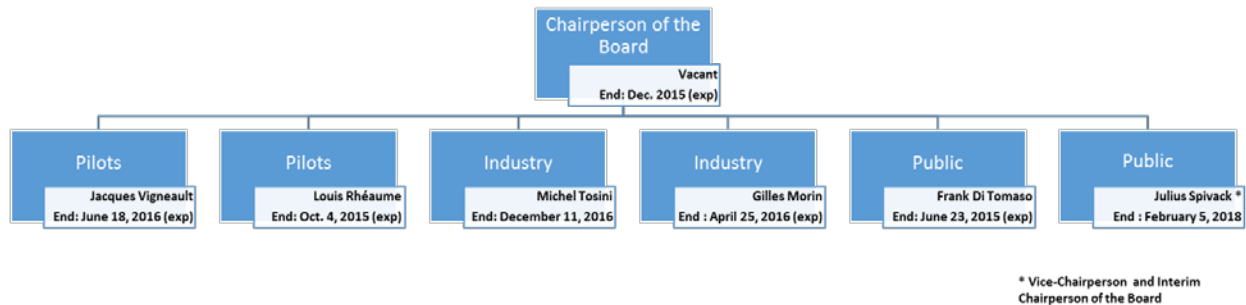
To fulfil its responsibilities, the Board has created two committees, each made up of three Board members.

Audit Committee

This committee is responsible for monitoring and supervising the Authority's financial situation and its various management practices, including, but not limited to, the various financial controls and the efficient operation of its information systems. The committee meets about five times per year. This committee is chaired by Julius B. Spivack, with the assistance of Gilles Morin and Louis Rhéaume.

Governance and Human Resources Committee

This committee is responsible for reviewing the Authority's governance practices and, where necessary, making changes to the employment management strategy, including current policies. The committee members meet about four times per year. This committee is chaired by Frank Di Tomaso, with the assistance of Jacques Vigneault and Michel Tosini.



COMMERCIAL ENVIRONMENT

EXTERNAL ENVIRONMENT

Global Economy

Following a growing global economy but somewhat uncertain in 2016, 2017 started on a positive note. In Europe, the first quarter seems to have continued its momentum in the second quarter, heavily aided by France and Germany. Recent elections in the Netherlands and France shattered the surge of populist votes and were beneficial to parties that favored the preservation of the euro zone. The next elections, which will take place in Germany and Italy, will play a crucial role in the decision to keep the euro zone, which cannot afford a division within the member countries. For its part, Great Britain has begun to feel the negative effects of Brexit, at the start of the negotiations. All in all, this situation is deemed favorable by economists, who raised their predictions for world GDP growth, which now stands at around 3.4-3.5% for 2017 and at around 3.5% for 2018. Growth is also back in emerging countries. Certain risks remain, such as US protectionist measures and monetary tightening by the Fed.

Canadian Economy

In Canada, the first two quarters of 2017 continued the growth cycle that started in 2016, the second being substantially lower than the first, but still above the trend. Although oil prices remain low, the loonie has become strong and flirts with rates of around US\$0.80, whereas it was closer to US\$0.70 in recent months. Analysts predict that in the short term, the loonie may rise, but there is quite a possibility of a slight drop in the long run. When the Fed raises its rates, the US dollar should actually go up and drive down the CAD dollar. Proof that the Canadian economy is doing well, the Bank of Canada raised its key interest rate by 25 basis points in July 2017, bringing it to 0.75%.

Economists from different banks are confident for growth in Canada. A GDP increase ranging from 2.4% to 2.6% for 2017 is expected, with the widely-held belief that it will be in the upper range. For 2018, analysts predict a GDP increase of 2.0% to 2.8%, with the Bank of Canada making the higher projection, while most banks lean towards the low end of the range. As regards the CPI, major Canadian banks' estimates, in the

spring of 2017, are between 2.0% and 2.4%, according to the publications consulted, with an average of 2.15% for 2018.

What makes the market uncertain at the moment is the renegotiation of the North American Free Trade Agreement (NAFTA) between Canada, the United States and Mexico. The main markets in the United States' line of fire are softwood lumber, Canada's protectionist measures for dairy products and wine, as well as the e-commerce framework which did not exist at the time NAFTA was created. On the other hand, the signing of the Comprehensive Economic and Trade Agreement (CETA) with the European Union after seven years of negotiations provides great opportunities for small and medium-sized enterprises. This agreement will facilitate trade between both partners by removing tariff and non-tariff barriers. Several negotiations are also underway with countries like China, Japan and India, which could ultimately have an impact on Canadian marine traffic.

Global Marine Transportation

The international shipping sector is doing better than last year, but still faces many challenges. As noted by the *Marine Log* in its July 2017 edition, the shipping sector is entering a period of considerable change. But stricter regulations, increased economic pressure and political factors are curbing profit margins and represent significant risks. This pressure will encourage companies to reduce costs and several technological innovations could help them achieve this. Rolls-Royce, in collaboration with tug operator Svitzer, a subsidiary of the Maersk Group, has already started remote control testing. Other companies like Inmarsat have published studies showing that the Internet of Things was a growing concern in companies. In the shipping sector, there are talks of being able to combine a ship's positioning data with meteorological data in order to optimize travel and save not only on travel time but also on fuel usage. 3D printing is also seen as an alternative that would make it possible to build spare parts for ships. Lastly, according to both *Marine Log* as well as *Science Advice*, technology would have the potential to improve the safety and efficiency of marine transport by reducing accidents caused as much by human factors as by machinery breakdowns, in addition to reducing costs. They also state that the technology behind autonomous navigation is developing rapidly and the impact it could have is comparable to that of containerization.

International Projects

The Panama Canal opened its new locks at the end of June 2016. The target market was primarily container ships sailing on the route from Asia to the Eastern United States. The results were as expected: old Panamax vessels were replaced by Post-Panamax vessels, going from 156 having a regular route to 30 on this axis. Therefore, the vessels crossing the canal are larger, but after only one year of operation, it is still too early to determine the impact that this expansion will have in the long term. (via <http://worldmaritimeneews.com/archives/226253/new-panama-locks-a-year-in-review/>)

The new Suez Canal was inaugurated in August 2015. However, it would seem that the expected results are still pending. The economic crisis affecting Egypt is not helping the situation. After one year, traffic had increased from 10,028 to 10,062 vessels and the increase in tonnage was also anemic. A year later, the responsible authorities are still trying to attract a more regular clientele. Rate reductions of up to 75% for certain bulk carriers and 45% for some container ships have also been granted.

Canadian Marine Transportation

In a letter published in the March 2017 edition of *Marine Delivers Magazine*, Minister Garneau noted that the Canadian government recognizes the importance of the shipping sector in Canada's development. However, in order to maintain the competitive advantage of the system, Canada must modernize its transportation infrastructure and strengthen its trade corridors. That is why emphasis will be placed on the review of the *Pilotage Act*, as well as on infrastructural investments in the transportation sector. At the commercial level, many companies recognize the benefits of shipping by seagoing vessels, mainly for non-standard merchandise. According to *Marine Delivers Magazine*, shipping of general merchandise by cargo should have increased by 17% in 2016, and the forecasts for 2017 also look good. Ranging from wind turbine blades to electrical transformers, transportation by ship avoids many logistical problems for companies as compared to shipment by road. The signing of the CETA between Canada and Europe is already bearing fruit in LPA's territory. In fact, Maersk Line Canada has just announced the addition of a new weekly service between Montreal and Europe as of September 30, 2017.

Solid Bulk Market

After finishing 2016 on an upward trend, the performance of base metal prices has been on the rise since the beginning of 2017. The global economy is getting better and the demand for these products is encouraging, judging by the signs of accelerating activity in the manufacturing sector. Demand for iron ore is therefore expected to remain high. With regards to aluminum, China's intention to limit production in its territory for environmental reasons, combined with global growth, is contributing to drastically reduced stocks, and is driving the price upward for this product. Although its price has decreased over the last month, it still remains over 18% higher than the price posted a year earlier.

Inventories are still high for cereals and agricultural products. US farmers have chosen to plant more soybeans this year, bringing wheat production down to the lowest level since 1919. This decision is likely to cause a significant drop in wheat and corn inventories, which could drive up prices. For their part, Canadian farmers have decided to opt for canola, which has, this year, exceeded wheat seeding for the first time and is now the largest crop in Canada. For the moment, expected yields equal the average of the last few years. Weather conditions will determine the quality of the harvest, which will in turn influence the price of the products. So far, Western Canada has experienced some drought while the East has experienced several episodes of rain. In short, despite the abundance of global inventories, the low value of the Canadian dollar is expected to provide farmers with higher sales than last year, according to Agriculture and Agri-Food Canada (up 5% for cereals and 3% for wheat).

Energy Transportation

High oil inventories mean that barrel prices are still low. In the medium term, we could see the price rise to about US\$55 a barrel, thanks in part to the efforts of the OPEC member countries that signed an agreement to reduce inventories hoping to see price increase. According to analysts at Desjardins, oil prices should remain below the break-even point of several expansion projects, which should limit them. But this does not prevent drilling activities, which are expanding in Canada. According to BDC analysts, Canada's annual production should increase by about 200,000 barrels a day in 2017 and 2018, which represents more than 4% of the current total production.

As mentioned in the previous Corporate Plan, two projects are still under development concerning liquefied natural gas (LNG). GNL Québec is continuing its feasibility study of building a liquefaction facility on the territory of the port of Saguenay (Énergie Saguenay project) with the goal of exporting LNG. Across the river, the Pétrolia-Tugliq partnership wishes to install a floating plant in Gaspé, to supply energy to Quebec businesses. This project is still under development.

Projects under Development on our Territory

The implementation of many projects could have a significant impact on traffic in the region covered by the LPA services. Port of Quebec is pursuing its development plan with the Beauport 2020 project. The environmental impact study was submitted to the Canadian Environmental Assessment Agency in December 2016. This project consists of an initial investment of \$190 million to upgrade the services offered by extending a wharf and developing the area behind the wharf. The potential total investment is about \$250 million to \$400 million. The Port also continues investments (\$89.5 million) in its fixed and mobile cruise terminals, to achieve its target of 400,000 passengers by 2025.

Port of Montreal still has three projects in progress. The first phase of the first project, which is the development of a container terminal in the Viau sector, was completed in November 2016 with an increase capacity of 200,000 TEUs, in addition to the 150,000 TEUs gained during the preparation phase. The timeline for Phase II, which will add 250,000 TEUs to the project, is yet to be determined. A second project is the rehabilitation of the Iberville passenger terminal and the Alexandra pier, which is used by cruise ships. Most of the work was completed in the spring of 2017, and the project should be finalized in 2018. Lastly, in the third project, which is the expansion of the port terminal at Contrecoeur. The Environmental Impact Assessment should be submitted shortly, as sectoral studies and public consultations have been completed. The work should begin around 2018 and be completed in 2021.

Lastly, the creation of industrial port zones along the St. Lawrence, thanks to the Government of Quebec's Marine Strategy, brings about its share of projects to be monitored. For its part, the Arianne Phosphate project in Saguenay continues its progression, with the signing of a construction agreement and a memorandum of understanding for phosphoric acid exploration, while the Arnaud Mine project in Sept-Iles, seems to be on hold. Both facilities plan to extract and export phosphate. Once approved by regulatory bodies, these projects will have a life span of approximately 25–30 years.

INTERNAL ENVIRONMENT

Background

The LPA's mandate is to manage and maintain, in the interest of navigational safety, an efficient, cost-effective pilotage service. Although all stakeholders are of the opinion that pilotage allows for a sustainable and safe network, they are not all of one mind regarding the costs and efficiency of these services. Shipowners who use the pilotage services put their ingenuity to work with the objective of reducing operating costs. This leads to the adoption of new technologies on vessels with the aim of optimizing travel times and the quantity of fuel used. Transit time of different networks is also important for Shipowners, and their perception of service quality being offered will be impacted if deadlines or delays are too frequent. Although pilotage fees do not make up a significant part of a vessel's expenses, all costs are put under the

microscope by clients to find ways to make a trip more economical and efficient, which will justify using one mode of transportation or final destination versus another.

For this reason, the LPA understands that cost control to an acceptable level, and efficiency of its services contribute significantly to the competitiveness and economic development of the region while maintaining its safety record, as demonstrated in recent years. To achieve this, the Authority must first ensure that it upgrades and optimizes its use of information technology (IT) to maximize the efficiency of its pilotage services, as to have a strategic impact for the organization. Secondly, the LPA must be vigilant with regards to changes in marine traffic, as voyages are more frequent and vessels are much bigger.

With regards to negotiations with pilot corporations, they are becoming increasingly complex, as the LPA must not only negotiate on remuneration of services received, it must also negotiate different terms regarding services rendered which also impact costs and efficiency of pilotage service. Therefore, forecasting models of the Authority must be updated on a regular basis. Moreover, at present, when there is a deadlock in negotiations with the pilot corporations, both groups can bring the matter to arbitration, whereby the arbitrator will choose between the final offer of both groups, binding parties to comply with the decision (final offer selection process). This methodology can lead to unforeseen situations in which the arbitrator chooses an option that results in imposing pilotage requirements or navigation restrictions that go beyond those required by the *Pilotage Act* or its regulations. This can result in additional costs for the LPA and for the marine industry, and lead to a negative impact on the efficiency of its services and maritime transportation in the region.

In another vein, in order to position itself as a leader in the marine industry, the Authority should not settle for mere participation in committees and working groups in the marine sector. Instead, it should take necessary steps to become the main point of contact for marine pilotage. This challenge has been addressed, in part, by the creation of a Pilotage Advisory Committee chaired by the LPA, and composed of industry members, pilots and other stakeholders. However, until the Act is amended, there is nothing to prevent clients, industry and other stakeholders from dealing directly with pilotage corporations without necessarily involving the LPA.

Lastly, the conclusions of the *Canada Transportation Act* Review, dealing with the efficiency of transportation systems in Canada, were made public by the Minister of Transport in February 2016. In April 2016, the government launched a public consultation process to hear the views of different stakeholders and discuss their ideas for a long-term plan for transportation in Canada. In November 2016, the government announced the Oceans Protection Plan, whose purpose includes protection of the environment, as well as improvement of marine safety and promotion of responsible marine transportation. As part of this overall plan, the government is committed to reviewing the *Pilotage Act* in order to establish a modernized legislative and regulatory framework for the provision of pilotage services in the future. In addition to the Act and its regulatory framework, this review will focus on service delivery, governance structures, and industry trends and technological advancements. The LPA welcomes this news and intends to actively participate in the review of the Act.

Pilot Corporations

Pilots providing pilotage services in the LPA territory are grouped under two separate pilot corporations with whom the Authority enters into service contracts. The relationship between the LPA and pilot corporations is strictly commercial in nature. In other words, there are no managerial rights for non-employee pilots or their corporations. In order for the Authority to achieve its mandate of ensuring the proper management of services, the key process is to negotiate adequate service contracts with the corporations.

The current service contract with the Corporation of Mid St. Lawrence Pilots (CPSLC) will expire on June 30, 2020. The contract with the Corporation of Lower St. Lawrence Pilots (CPBSL) was, for its part, renewed before its term for a 5-year period ending December 31, 2021. Certain clauses in the contract with the CPSLC are currently before the Federal Court of Appeal, which will examine whether regulatory requirements can be modified by the service contract between the LPA and pilot corporations. The issues raised may have an impact on LPA's expenditures on pilot compensation and on certain aspects of pilotage which could reduce navigational efficiency.

Human Resources

Workforce

To align organizational resources with the Authority's strategic and operational priorities, a strategic plan for human resources management has been developed, implemented and kept up to date to ensure that it reflects current needs. It is essential for the organization to have adequate human resources in place, with appropriate skills and training to achieve the strategic objectives defined by management.

The LPA has also examined its organizational structure and made a few adjustments to it, to ensure that it fully meets the needs of the organization.

As at December 31, 2017, the Authority will have a total of 50 employees working in its Montreal headquarters and its pilot boarding station in Les Escoumins. Of these, a total of 34 employees are covered by collective agreements, while the remaining 16 are non-unionized employees. The latter hold various positions as administrative support, professionals, technical experts, middle and senior managers, as well as management positions.

Labour Relations and Compensation

The Laurentian Pilotage Authority is working with two unions, the Public Service Alliance of Canada (PSAC) and the Canadian Merchant Service Guild (the Guild). The first group represents dispatching and billing employees, as well as deckhands at the pilot boarding station in Les Escoumins, while the second group represents captains and marine engineers at the same pilot boarding station.

The collective agreement for employees under the PSAC expired on June 30, 2013, and was renewed in June 2016 for a six-year term ending on June 30, 2019.

As for the collective agreement covering Guild-affiliated employees, it took effect on May 28, 2015 and expired on June 30, 2017. Negotiations with the Guild will be undertaken in the fall to renew this agreement as soon as possible.

The LPA ensures that it has an effective, competitive and reasonable compensation program to attract and retain qualified employees who add value to the Authority, while making sure that costs are kept under control.

Since the introduction of the most recent collective agreements, the accrual of benefits in case of voluntary departure has ended for all employees.

Commitment to Employees

Open communication with personnel is an essential part of the LPA's commitment to its employees. Biannual meetings conducted by the Chief Executive Officer are a proof in point. The LPA has also taken concrete steps to promote a healthy work environment, raise awareness among its employees about the importance of good mental health and encourage diversity. The Authority will continue to focus on and develop tools, policies and measures to promote these important workplace initiatives.

Pension Plan

With respect to the Authority's pension plan, all LPA employees are enrolled in the Public Service Pension Plan administered by the Government of Canada. The Authority is not required to make additional contributions to cover past service costs, funding deficits or actuarial deficiencies of the Public Service Pension Plan. Employees and employer contributions are equally shared for employees who joined the organization since January 1, 2013.

Succession Planning and Contingency Plans

One of the human resources strategic management plan priorities implemented during the past year is detailed succession plan the executive team.

The Authority has also set up a contingency plan to ensure continuity of operations in case of departure, illness, prolonged absence or death of a member of its team. This plan, developed in 2017, was also implemented during the year.

NUMBER OF EMPLOYEES AND LICENCED PILOTS

	ACTUAL	FORECAST	PLAN				
	2016	2017	2018	2019	2020	2021	2022
Employees							
Management	5	5	5	5	5	5	5
Administrative	10	11	12	12	12	12	12
Operations and assignment	18	22	22	22	22	22	22
Ship employees	12	12	12	12	12	12	12
Total	45	50	51	51	51	51	51
Pilots							
Contract pilots	177	178	180	180	180	180	180
Apprentices	16	19	16	14	14	14	14

Corporate Risk Management

To ensure the continued delivery of safe and efficient pilotage services necessary to achieve its strategic objectives, LPA's management conducts an annual review of its risks. This exercise makes it possible to identify the main risks faced by the LPA and to implement mitigation measures which will help the Authority maintain its financial self-sufficiency and carry out its mandate, as well as meet its strategic objectives.

Risks were identified and documented by the executive committee and followed-up with the Authority's senior managers. During these discussions, risks raised were all documented (description, facts, potential impacts, controls) to provide a common basis of understanding. Risks were assessed according to their likelihood and impact. Impacts are related to negative effects an event could have on the LPA's strategic objectives. Risks were then mitigated according to factors proportioned to the quality of controls in place. The residual risk represents the amount of inherent risk left over after mitigation.

The ultimate objective of this analysis is to identify key risks and assess whether current measures are sufficient to reduce risks to an acceptable level to the organization. It also seeks to identify whether implementation of additional controls is necessary to adequately address risks in question.

It should be noted that a yellow-colored residual risk box indicates a low risk whose management is considered adequate, an orange-colored residual risk box indicates a moderate risk that requires the attention of management, and a red-colored residual risk box indicates a high risk that requires immediate action on the part of management.

The following table lists the top 10 risks identified.

RISK TABLE

No	Risks	Inherent Risk	Residual Risk
1	Lack of adequate legislative powers and absence of managerial rights with regard to pilot corporations significantly hinder the LPA's ability to fully carry out its mission and serve public interest.	High	High
2	Negative impact on service efficiency and pilotage governance as assignment rules for notice of departure, at night, imposed by arbitration decision are manifestly different from those required by regulations.	High	High
3	Establishment of an efficient tariff planning and setting process in order to maintain a competitive rate structure for clients while ensuring the organization's financial self-sufficiency.	Medium	Low
4	Lack of thorough monitoring procedures following accidents and recurrent training and assessments of pilots.	Medium	Low
5	Delays in installation/removal of priority lighted buoys.	High	Medium
6	Potentially insufficient number of future pilots based on projected annual increases in assignment numbers and potential impact of risk study findings.	High	Medium
7	Impact on navigation efficiency because of delays attributable to pilots, ships and navigation restrictions.	High	Medium
8	Coordination between public organizations for the purposes of providing marine services.	Medium	Medium
9	Information technology (obsolescence of current system (Klein), lack of modern technologies to help us carry out our mandate)	High	Medium
10	External communication and public positioning	Medium	Medium

Following the recent update of risks and corresponding mitigation measures, the LPA believes that identified risks are, in general, well controlled. However, risks associated with shortcomings in governance and lack of adequate legislative powers to enable an efficient management of services rendered by non-employee pilots continue to be major challenges in our region. The absence of managerial and supervisory rights of pilot corporations, limited regulatory powers held by the LPA, and the ability to circumvent the regulatory process through a service contract or an arbitration decision to impose requirements other than those required by law, are problematic. These shortcomings limit its ability to establish and maintain procedures and regulations that promote navigational safety and optimization of efficiency for its clientele. The main methods of risk mitigation are seeking changes to the *Pilotage Act*, regulatory amendments and the judicial review process. There is a high risk for the LPA that required changes to the *Pilotage Act* and the Regulations may not materialize during or after the duration of this Corporate Plan. A successful judicial review of the arbitration decision circumventing the regulatory process is also uncertain.

Two new risks have been identified this year by LPA management: lack of modern technologies and risk of public positioning. The first one stems from the dispatch and billing system. The Authority's needs are complex and have evolved over time; the current system is still in place, but no longer meets the emerging needs which would help the organization perform better. As well, the current system has become unstable.

Therefore, the LPA does not make full use of newly developed features that could assist in data analysis, traffic management, planning and optimization of dispatch processes and preparation of periodic financial projections. Moreover, the risk facing the LPA is also based on the fact that the organisation does not perhaps exploit, within the services it provides, the potential benefits that may arise from technological advances available today. However, steps to replace the current system have been initiated in order to identify, where appropriate and with the help of technology, measures that might optimize dispatch and billing processes. The second risk stems from the LPA's lack of public visibility. Although this issue is documented in detail in the Leadership section (see page 23) of this plan, as of this year, the LPA has been working with a public relations firm which provides supports with the management of public service announcements, including publication of press releases to highlight the organization's achievements .

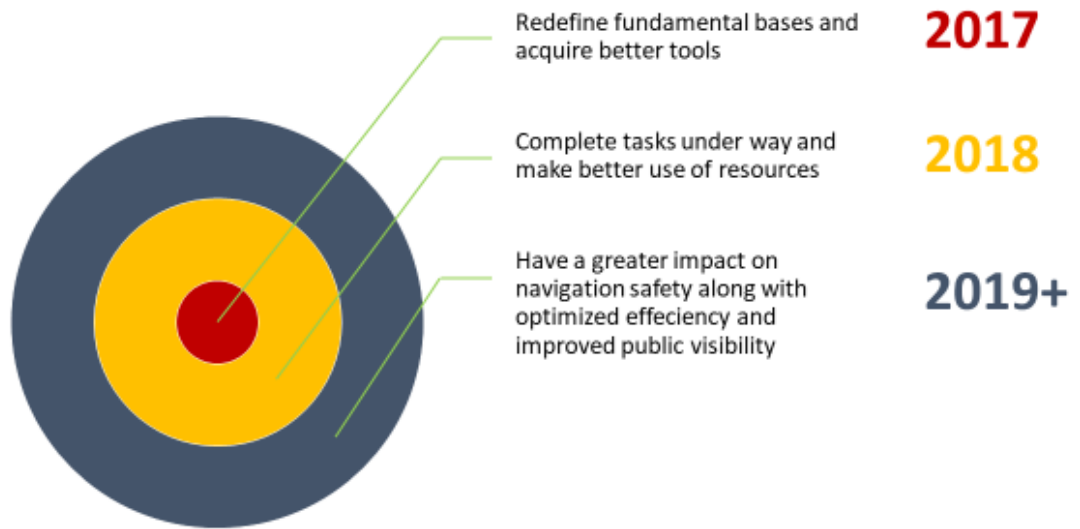
Lastly, the Authority considers that there is an increasing risk in terms of cybersecurity. This risk is not one of the top ten, and the Authority has recently put in place additional security that will allow it to further mitigate this risk.

STRATEGIC ORIENTATIONS

PROGRESSION OF THE CORPORATE PLAN

In 2015, the Canadian government set up a working group to redefine Canadian transportation in order to be more efficient and competitive globally. The creation of this working group eventually led to the *Pilotage Act* review process. While the government was asking stakeholders to provide recommendations, the Authority used the opportunity to redefine its core mission by going to the heart of its mandate. It is in this context that the 2017-2021 Plan was drawn up, and it was within this context that objectives were fixed.

Although the Authority set up major initiatives linked to its mandate in 2017, the 2018-2022 Plan represents a continuation of actions started earlier. A review of the *Pilotage Act* is still a top priority for the LPA. As the review process for the *Pilotage Act* is underway, management must now define the next steps that will enable it to consolidate its leadership and become the key authority in marine pilotage. During 2017, the LPA has adopted the necessary tools and resources to achieve its vision; the following sections include the LPA's 2018 strategic priorities for optimizing the use of new available resources. The years 2019 to 2022 will, in turn, focus on improving the organization's efficiency and expanding its outreach, with the aim of having a greater impact on navigational safety.



STRATEGIC ORIENTATIONS

To help the Authority achieve its vision, while fulfilling its mission, five strategic orientations have been established. These orientations will guide actions to be undertaken in the coming years to achieve our objectives.

1. Provide safe and efficient pilotage services on the St. Lawrence and the Saguenay Rivers.
2. Strive for excellence and continuous improvement by optimizing quality and efficiency of pilotage services.
3. Contribute to navigational safety, environmental protection and competitiveness of marine transportation in the Laurentian region.
4. Play a leadership role to promote marine safety issues within the navigable waters under our jurisdiction.
5. Maintain a close watch on cost control to ensure fair and reasonable tariffs to our marine clients.

STRATEGIC ISSUES

In addition to the risk analysis being undertaken, the Authority has identified various issues whose implementation will have a decisive impact on the achievement of our strategic directions. There are eight in total. To a large extent, the Authority's strategic issues revolve around challenges related to the management of the pilotage system where pilots are not the Authority's employees, the limited scope of our legislative powers, and the optimal use of technologies in order to maintain navigational safety and efficiency throughout the territory.

Leadership Role and Public Positioning

It is imperative that the LPA be positioned as a leader on all issues having an impact on pilotage and on the Authority's ability to ensure the safe and efficient movement of marine traffic in its region. To effectively carry out its mandate, the LPA must become a vital player in navigational safety and pilotage issues. This can be a challenge, given that pilots in its region are nonemployees and can therefore be contacted and consulted directly by members of the marine industry and by media representatives without necessarily involving the Authority. For these reasons, the Authority has, over the past two years, joined navigation-related committees and working groups that may have a direct or indirect influence on pilotage and therefore share its opinions and give its recommendations.

The LPA's presence in these working groups and committees has signalled the beginning of increased visibility, supported also by the production of a high-quality corporate video that clearly outlines the LPA's mandate and role in marine navigation safety and efficiency. However, the Authority remains relatively unknown by the general public. The LPA must be more visible to the public and to be the primary point of contact with regards to pilotage matters.

Developing, Retaining and Attracting Expertise

In an organization such as the LPA where technical expertise is important and scarce, recruiting a workforce to meet requirements can prove to be difficult. The Authority must have a plan which not only will allow to attract candidates with great potential, but also retain its existing talent. Over the past few months, the LPA has been able to fill important positions requiring special expertise in navigation and information technology. Since these resources have now become available, the LPA must use them to optimize what they have to offer, in order for the Authority to better fulfill its mandate. As mentioned above, it is also necessary to ensure that these resources, like other valuable employees, remain within the organization; a human capital development plan is therefore important.

Adaptation of Pilotage Services based on Changes in Marine Traffic

The area served by the Laurentian Pilotage Authority is considered to be a difficult route to navigate; although the waterway is wide, the navigation channel is rather narrow. With even larger vessels and ever-increasing traffic, the Authority will have little choice but to adapt as to ensure that service delivery continues to be efficient and safe. This adaptation involves the addition of new technologies at the Montreal dispatch centre in order to optimize dispatch management. Specialized software would maximize the number of dispatches made in a day, while respecting rest periods and the rotation system, and by decreasing the number of calls to pilots. Better systems for tracking navigation and communications could also improve the traffic flow of larger vessels.

Ability to Manage and Regulate Pilotage Services

The scope of the Act and current powers granted to the Pilotage Authority are insufficient to allow adequate management and supervise the work of non-employee pilots grouped into corporations. This has an impact on the efficiency of service delivery and hinders the competitiveness of the system. Ambiguities in the Act result in interpretation problems, allowing pilot corporations to amend the requirements of the Act and regulations through service contracts. As such, the LPA cannot play its regulatory authority role or ensure the maintenance of navigational safety throughout our territory.

The area of the St. Lawrence River located east of Les Escoumins and the Gulf of St. Lawrence are part of the territory governed by the LPA. The Authority is responsible for ensuring navigational safety throughout its jurisdiction through the provision of pilotage services. In this regard, the traffic in these areas has increased. There is more traffic and the vessels are bigger. It is essential for the LPA to assess whether measures are required in these areas to ensure navigational safety.

Financial Projections and Tariff-Setting Mechanisms

The shipping market is directly influenced by the global economy. Although part of the market is stable, a significant portion remains flexible, especially when it comes to transportation mode. Fluctuating commodity prices and transportation costs have a direct influence on marine traffic. Therefore, the Authority is at risk, given the market's unpredictability and the impossibility for pricing adjustment, within a reasonable period of time.

Modernizing and Optimizing IT Usage

It goes without saying that in 2017, we are surrounded by technologies. They greatly help businesses to stand out when they are modern and properly mastered. In order to become the leader in its field, the LPA must assess various technological opportunities which could help the organization meet its mandate more effectively. The LPA should equip its in-house resources with a view to optimizing processes and information quality, and it should also see what can be done on board ships, always with the aim of becoming safer, more efficient and competitive.

STRATEGIC STREAMS

To adequately address the above-mentioned strategic issues and orientations, the LPA carried out a strategic planning exercise from which specific initiatives were identified. These activities determine the company's strategy and have been grouped under eight streams.

Leadership

Continuing to strengthen relationships and gain more visibility

For the last two years, the LPA has been building strong relationships with various stakeholders in the marine community. Whether with groups and associations representing Shipowners, pilots or other partners, or

with representatives of the port authorities, the Canadian Coast Guard or Transport Canada, the Authority is of the view that good relations are essential to fulfilling its mandate. Healthy relationships allow for an improved exchange of information and leading to better solutions. Although the relations are harmonious, the LPA wants to do more, in order to gain respect with regards to its role as a public authority. Therefore, it intends to consolidate, through its membership in various working groups, its influence and continue its efforts in order to gain greater visibility among the general public. The Authority will continue its work by implementing a communications strategy specifically targeting social media, allowing an increase in visibility and outreach.

Strengthening Direct Links with Pilots

Although the pilots are not employed by the LPA, it is the Authority that is responsible under the Act for managing and providing safe and efficient pilotage services. In addition, the Authority is also responsible for determining the requirements for pilot training, issuing pilotage licences and has the power to suspend or revoke them. The LPA also has the responsibility to ensure follow up of incidents/accidents involving pilots licensed or certified by the Authority. It is therefore essential that the organization be able to communicate individually, or otherwise, depending on the circumstances, with pilots. This includes situations where an individual pilot may be directly affected with regard to his work or the maintenance of his licence or certificate. This will be achieved by making greater use of its authority to establish policies applicable to pilots licenced and certified by the LPA and focused on navigational safety or service efficiency. This objective of strengthening direct links with pilots will help the LPA play its role as a public authority and better meet its legislative mandate.

Acquisition of a Maritime Navigation Simulator

An investment of \$1.1 million, and ancillary costs of \$0.1 million, have been included in the current Plan for the acquisition of a bridge simulator in 2018 by the LPA; these amounts are estimated as negotiations are ongoing.

Navigational Safety

Risk Study – Gulf of St. Lawrence

Navigational safety is at the heart of the LPA's mandate and for this reason, we must evaluate the need to be involved appropriately throughout the territory under our responsibility. On the heels of the Tanker Safety Expert Panel report which emphasized that the Gulf of St. Lawrence was one of the regions presenting the highest risks, we announced in 2016, the launch of a three-phase pilotage risk assessment beginning with the ports of Sept-Iles, Port-Cartier, Baie-Comeau and Havre-Saint-Pierre. Pilotage services are provided by unlicensed pilots working for private enterprises in this area. The risk assessment will make it possible to evaluate what measures, if any, the Authority should require or undertake in order to ensure navigational safety.

The preliminary report on Phase I of this study should be available in the fall of 2017. The LPA will make this report public and organize consultations required to undertake the implementation of essential measures. A proposal for Phase II of the study, to begin in early 2018, focused on the South shore of the St. Lawrence,

is expected to be signed in late 2017. Finally, the LPA plans to finalize Phase III of the study, which will look at transits in the former District 3, an area with significant ice coverage. The contract for this last phase could be signed at the end of 2018 for the work to start at the beginning of 2019.

Training and Continuing Evaluation Programs – CPSLC

Training of contractual pilots is an essential component of safe and efficient pilotage services. It is a priority for the LPA to ensure that it has a system for training and conducting comprehensive periodical assessments of pilots. This initiative is consistent with sound governance practices recognized by a number of professional associations. This training and evaluation program must also include clear criteria to determine when a pilot is ready to be promoted to a higher licence. The Authority developed and implemented this type of program in May 2016 with the Lower St. Lawrence Pilot Corporation. Specific changes have been proposed concerning the training of apprentice pilots for the Mid St. Lawrence Pilot Corporation; the Authority is awaiting the Corporation's response and will follow-up on the implementation of this program. The Authority intends to amend its regulations to include these standards.

Issuance of Policies

One of the LPA's powers is to issue policies detailing standards, procedures and practices to be followed in specific pilotage situations. The LPA wishes to make greater use of this power, which has had limited use in the past. For example, the LPA will implement a policy on information exchange between pilots and captains upon boarding vessels. This information exchange is essential to a safe and efficient passage and some aspects should not be overlooked. Therefore, the LPA wishes to establish rules to be followed during this exchange. In addition, the Authority will develop and implement an enforcement and compliance policy for the *Pilotage Act* to emphasize and promote the importance of complying with legislative requirements and LPA regulations.

Governance

Review of the Pilotage Act

The modernization and strengthening of the *Pilotage Act* and its regulations is essential in providing the LPA with the necessary authorities and tools required to meet operational challenges and ensure safety of navigation and efficiency of pilotage services. As part of its Oceans Protection Plan, government has announced that a review of the *Pilotage Act* will be carried out. A position paper presenting the LPA's recommendations was submitted to the Minister of Transport in July 2016. The LPA will participate in the consultation process and will reiterate its position.

The LPA'S recommendations would ensure adequate supervision of pilot corporations. They would also ensure that safety rules, practices and procedures relative to the delivery of pilotage services are subject to the rigors of the regulatory process and could not be modified by contract or arbitration decision. Moreover, clear legislative powers authorizing the conduct of post-accident reviews, the imposition of compulsory pilot training and pilot re-assessment, where justified, would provide the LPA with new and essential tools to enable better discharge of its safety mandate. Finally, the ability to hire its own pilots will give access to

objective in-house experts, enabling the Authority to better fulfill its mandate and ensure that the public interest has priority.

Replacement of the current tariff-setting process with an efficient and flexible process, adoption of necessary measures to provide the LPA with the tools to enforce the Act along with modern regulations, are also essential for the organisation to achieve stated objectives relative to the safety and efficiency of pilotage services.

If implemented, these recommendations will make the pilotage system more accountable and transparent, and ensure that the public interest is taken into account when pilotage decisions are taken.

Regulatory Update

Proposed changes to the LPA's regulations have been drafted to improve transparency by including certain essential safety and efficiency rules in these regulations. The proposals include:

- Allow the Authority to have prompt access, without excessive restrictions, to information and to persons involved in an accident/incident, in order to take necessary measures to mitigate risks to navigation;
- Require the pilot corporations to submit for the Authority's approval, apprentice pilot training plans and continuing education plans, including periodical assessment of pilots as well as assessment scales used by corporations;
- Clarify and identify communication procedures and information to be shared between pilots and the captains;
- Select and define the Review Panel's chairperson powers;
- Determine the conditions for lifting licences or certificates suspensions;
- Require that the Authority be consulted during marine infrastructure construction projects having an impact on pilotage.

Exploring the Possibility of Establishing a Code of Ethics for Pilots

As a regulatory authority issuing pilot licences, the LPA's role is very similar to a professional association. Like professional associations, the Authority's duties are to control the skills and integrity of licenced pilots, monitor and regulate the profession's execution, manage the disciplinary process and promote the profession's development. In order to facilitate its management, the organization would do well to set up, just like the professional associations, a code of ethics governing the execution of the maritime pilot functions and dictate pilots' expected behavior. A code adopted by the LPA would increase the system credibility vis-à-vis clients and the general public, as the code would be accessible by all. Since the Authority issues pilotage licences, manages regulations and has the power to act, it is therefore desirable that a code of ethics that would govern the practice be established.

Quality | Efficiency

Compliance Mechanisms Implementation

As mentioned above, the LPA wishes to establish policies detailing procedures to be followed in specific situations related to pilotage services and its legislative mandate. Establishing policies relative to the implementation and compliance with the *Pilotage Act* and its regulations is vital and part of good governance. It is therefore essential to develop tools to promote and ensure compliance with the LPA's policies and procedures.

Validating Performance/Management Indicators

The Authority has reached a point where it has a good handle on its statistics; year over year, results have remained pretty constant. These results are important as they indicate the overall performance of the organization both in terms of incidents/accidents and in terms of service availability. On the other hand, with a goal of continuous improvement in mind, the LPA will analyze the relevance of developing new performance indicators. These indicators should be reviewed to measure and eventually improve the performance of the pilotage system.

Information Technologies

Master Plan Implementation

The Master Plan is a document dictating the use of technologies. It is directly based on the Corporate Plan, and is used to identify the organization's IT priorities and to see how technologies can help the LPA achieve its goals. Technologies should become catalysts to achieve the organization's objectives.

Exploring New and Available Technologies

The Authority wishes to optimize the use of its information and assignment systems. Three main functions are attached to these systems: the preparation and monitoring of pilot assignments, processing of invoices and accounting, and data analysis. The software used by the Authority will soon be obsolete and new technologies are more flexible and open to new possibilities; processes relative to the numerous assignment rules will be analyzed in order to maximize the use of computer systems in the management and decision-making of assignments, and to minimize or eliminate existing manual interventions.

Moreover, special attention will be given to the identification of various technological means that may allow the Authority's employees to have a better overview of various factors involved in the assignment of a pilot, such as volume of traffic in each district, the number and timing of upcoming pilotage requests, etc. These new technologies should also provide analysts with the opportunity to create their own reports and delve deeper into the information at hand. It is important to note that pilotage is not immune to technological advances, and the LPA must invest in the various systems to remain at the forefront.

To become a leader in its area of expertise, the Laurentian Pilotage Authority must ensure that it explores all available technologies. Some possibilities have already been identified and remain to be examined. For example, maximizing the use of "PPU's" ("*Pilot Portable Unit*") and "RoT's" ("*Rate of Turn*") on board ships, or proactive traffic management systems and vessels meeting points, could facilitate their work and reduce

risks. These instruments could also be used to establish direct communication with the pilots, making it easier to share relevant information.

Communications

External Communication Plan – Public Positioning

The Authority wishes to increase its visibility. Therefore, it must be more present, more visible and communicate better, with the aim of becoming the point of contact on any pilotage-related issue. An update of the external communication plan will therefore be carried out, while adding a public positioning component.

The Authority also aims for an increased presence on social media. Most organizations in this sector of the industry are present on this communication channel; the Authority also has to be visible, to be seen as a leader. To be effective in the approach, the communication plan should include a social media strategy as the latter requires a specific usage and support.

Human Resources

Workforce Planning – Optimization and Development of Human Capital

It is essential for the organization to have adequate human resources in place, with appropriate skills and training to achieve strategic objectives defined by management. With this in mind, and knowing that the LPA has specific skills needs, it is essential for the organization to properly plan its workforce to meet current needs and also anticipate future needs. Projections will therefore be made on this matter, in line with strategic orientations.

Another priority in the human resources strategy is to implement the succession plan for the executive team; development and implementation of this plan began in 2017, and will continue and updated in the following years.

A strategic human resources management plan that focuses on the Authority's strategic and operational priorities and on the development of human capital is also an important element for the achievement of the organization's objectives. The Authority recognizes the importance of maintaining and enhancing the multicultural heritage of Canadians. To this end, it acknowledges the importance of diversity in the Canadian population in terms of race, nationality of origin, ethnic origin, color and religion, which is a basic feature of Canadian society. For this purpose, the LPA is committed to ensure equality of all Canadians within its organization. The Authority believes that all Canadians should have the same opportunities to participate actively in maintaining safety, efficiency and quality of pilotage services, and it strongly encourages women and men to consider a career within the organization.

The Authority acknowledges that complete participation of women in the marine sector is still faced with challenges and it is committed to improve accessibility by eliminating the various barriers as far as possible, and help women participate fully in all activities and disciplines.

Lastly, a plan for optimizing and developing human capital will be drawn up with the purpose of not only attracting but also retaining talent.

Financial Management

In order to enable the LPA to implement all the actions described above, invest in its infrastructure, fulfill its mandate and achieve its objectives, it is essential to generate sufficient funds, while maintaining a reasonable cost for its clients. This is why financial management must be adequate on a continual basis.

Tariff Management

Due to increased costs from long-term pilotage service contracts, collective agreements and inflationary pressures in general, the Authority must amend the Laurentian Pilotage Tariff Regulations to ensure that sufficient revenues from pilotage tariffs are received. The new tariff would allow the Authority to absorb the increased costs of services provided to its clients without compromising the protection it has adopted against the financial risks it faces.

The last two years have seen a tariff freeze to the benefit of its clientele, leading the Authority to absorb cost increases, which had an impact on margins, and to estimate a planned loss in 2017. The tariff increases would allow the LPA to have a sound and stable financial position for 2018 and 2019 and avoid further erosion of its margins. For now, the LPA has nevertheless been able to proceed with the acquisition of pilotage portable units for the pilots of the Mid St. Lawrence Pilots, and has invested in continuing education and competency evaluation programs for pilots, as well as in risk analyses.

The tariff increase will enable the Authority to maintain its financial self-sufficiency on the basis of fair and reasonable rates that will allow the provision of efficient pilotage services and ensure navigational safety. The increase in pilotage tariffs applies to all prescribed tariffs in Annex 2 table of its tariff regulations. The expected increase is 2.50% from April 1, 2018 for fiscal year 2018, and 2.25% in 2019. This two-year tariff increase will enable greater stability and predictability for users, which will make it easier for them to recover the increase from their clients. There is no opposition to this project following consultations with customers, the Shipping Federation of Canada, the Chamber of Maritime Commerce and the St. Lawrence Shipowners.

Market Intelligence

Following gradual implementation of the 'Market Intelligence' process at the end of 2015, the Authority now wants to take this function further. Information retrieval is currently based on collection and analysis of commercial data from a variety of sources primarily linked to the marine sector. During the coming year, efforts will be made to expand sources of information, with principals of grain terminals, among others. As a result of this more thorough market knowledge, the Authority is able to better identify and document market trends with greater detail. It can therefore establish appropriate budget assumptions and accurate financial forecasts.

It is also in the interest of the LPA to improve its financial models to make them more agile, that is to say, to be able to modify several variables and analyze the impacts of these changes. The implementation of tools and dashboards for more data mining by all analysts is also part of the forthcoming actions. Lastly, development and enhancement of various performance indicators will also be part of the strategy.

PERFORMANCE INDICATORS

Safety and Efficiency

The provision of safe and efficient services is at the heart of the LPA's mandate. The LPA achieved an accident-free rate of more than 99% in 2016. The LPA aims for 100% of its assignments to be free of any accidents/incidents. However, the established objective is for an accident/incident rate of under 0.10% of assignments to reflect that certain situations beyond the LPA's control may—and certainly will—occur.

In 2016, the Authority was able to provide pilotage services without pilot-related delays in 100% of cases in District No. 2. In total, in 2016, the LPA provided services without delays caused by pilots 99.8% of the time.

The ultimate objective for 2018 is to provide 100% efficiency in all pilotage services in terms of service delays due to pilots, but the threshold has been set to below 0.10% of delays. The Authority is aware, however, that certain situations beyond its control may arise and affect performance.

Complaints

Although the LPA does not have a target with regard to a maximum number of complaints received, all complaints are recorded in order to track their number and status. The same is true for positive comments received.

Accounts Receivable

For 2018, the LPA aims to keep the proportion of unpaid accounts receivable related to pilotage missions and exceeding the 28-day credit terms, under 10% of total accounts receivable for pilotage services.

Summary Table – Objectives and Performance indicators

The following chart outlines the objectives and implementation strategies as well as performance indicators that the Authority adopted during its annual strategic planning process.

OBJECTIVES AND PERFORMANCE INDICATORS

Objectives	Means	Implementation strategies	Performance indicators	Timeline
Maximize efficiency, quality and safety by being attentive to user needs	Ensure the provision of safe and high-quality pilotage services	Active participation of the LPA to the <i>Pilotage Act</i> review	Possible amendment of the Act	2018-2019
	" "	Review training and continuing evaluation program	LPA approval of the pilot corporations' training programs,	Ongoing

Objectives	Means	Implementation strategies	Performance indicators	Timeline
		for pilots and apprentice pilots from the CPSLC	and incident rate kept below 0.10%	
	" "	Work of the LPA's Pilotage Advisory Committee	A minimum of two meetings per year Consultations on safety and efficiency issues involving several LPA partners	2018 and onwards
	" "	Issue policies detailing standards, procedures and practices to be followed in certain situations	Implementation of an exchange of information between pilot and captain policy.	2018
	" "	" "	Implementation of tools to promote and ensure compliance with policies and procedures.	2018
	" "	Reduce delays and causes of pilot shortages	Maintain the proportion of pilot-related service delays at under 0.10% of all assignments	Ongoing
	" "	Reduce delays due to clients	Delay statistics	Ongoing
	" "	Complete the risk study on former District No 3 - Phase 1	Analysis of study report, identification of potential measures and consultations. Implementation of accepted recommendations for 2019.	2018-2019
	" "	Begin the risk study on the former District No. 3 - Phases II and III	Analysis of study report & identification of potential measures	2018 and 2019

Objectives	Means	Implementation strategies	Performance indicators	Timeline
	" "	Monitoring the recommendations impacts following the risk study on safe duration of a transit in District No. 1	Number of delays and number of accidents/incidents	2018 and onwards
	Continue the LPA regulatory update process	Identify the key provisions and pursue consultations	Proposal for new LPA regulations discussed with stakeholders	2018-2019
	Enhance communication and co-operation level	Focus on co-operation and communication with partners	Organization of regular meetings	Ongoing
	" "	" "	Participation to committees organized by maritime partners	Ongoing
	" "	" "	Make the website more interactive with business partners	2018 and onwards
	" "	Increase LPA's public positioning	Update of the external communication plan	2018
	" "	Strengthen direct links with pilots	Explore different ways of communicating directly with pilots (on an individual basis)	2018
	Maintain an adequate number of pilots	Plan marine traffic and pilot retirements volumes with the pilot corporations	Analysis of apprentice pilot needs	Ongoing
	Supervise pilot duties performance	Assess possibility of establishing a code of ethics for pilots	Recommendation for implementation of a code of ethics	2018
	Enhance the efficiency and reliability of equipment, primarily pilot boats	Maintain preventive maintenance program of facilities (Les Escoumins wharf, and equipment)	Minimize major breakdowns and unforeseen expenditures	Ongoing

Objectives	Means	Implementation strategies	Performance indicators	Timeline
	" "	Implementation of a succession plan for LPA management	Skills development LPA organizational chart incorporating undertaken actions	2017 and onwards
	" "	Begin introducing measures to support employees with mental health issues and promote diversity	Training for managers Information to employees	2017 and onwards
	Ensure the safety and quality of pilot boarding services for employees and passengers	Update the pilot boat operations manual	Pilot boat operations manual	Ongoing
Maintain financial self-sufficiency	Stay within budget	Conduct monthly expenditure reviews (management)	Financial statements, budget report and analysis graphs showing status of operating results	Ongoing
	" "	Conduct quarterly reviews of revenues and expenditures (Audit Committee)	Quarterly financial statements; comments provided by Committee members and approved by the Board of Directors	Quarterly
	" "	Publish the Authority's annual report	Performance indicators included in the annual report; assessment of the relevance of developing new performance indicators	March 31, 2018 and December 31, 2018
	Establish the tariff planning strategy in order	Develop a Market Intelligence approach that	Budgeted comprehensive income	2017-2018 and onwards

Objectives	Means	Implementation strategies	Performance indicators	Timeline
	to maintain a competitive rate structure	permits building more realistic commercial budget assumptions		
	Monitor employee costs	Renewal of Merchant Service Guild collective agreement	New collective agreement	2017
	Increase revenues by publishing fair and reasonable tariffs	Tariff plan for the next 5 years	Achievement of adequate financial situation to enable maintenance and renewal of assets	2018-2022
	" "	" "	Implementation of new tariffs	April 1, 2018
	Optimize costs arising from the ownership and operation of assets	Maintain and renew assets	Achievement of adequate financial position to enable maintenance and renewal of assets	Ongoing
	Avoid bad debts	Ongoing use of credit strategies	Bad debt expenses	Ongoing
	Finalize selection of new assignment and billing software program in order to optimize existing processes and retrieval of data for analysis and statistics	Start development and installation with selected software supplier	Enhanced organizational performance, analytical skills and efficiency	2018
	Start implementation of IT Master Plan	Identify priorities	Documentation of achievements.	2018 and onwards
	Ensure minimum service threshold	Update the business continuity plan	Updated and well-documented business continuity plan	2018 and onwards

Objectives	Means	Implementation strategies	Performance indicators	Timeline
	in case of crisis or disaster			
Comply with Government of Canada policies	Good governance practices	Work of the governance and human resources committee	Periodic review of Board of Directors committees charters	Ongoing
	Update the Corporation's risk charter, including financial risks	Update the list of the various risks.	Annual follow-up report in the Corporate Plan	Annually and on an ongoing basis
	Responsible operating and capital budgets management	Tracking actual expenditures against approved budget.	Assignment and administrative expenses	Ongoing
	Ensure compliance with travel and hospitality expenses directive; update policies	Meetings and internal analyses to finalize required changes to the policies	Modification of our policy to ensure compliance with the order and directives relating to disclosure of these expenses on LPA website	2018 and onwards

GOVERNMENT POLICIES AND DIRECTIVES

GENERAL DECLARATION

The LPA has incorporated all opportunities for operational efficiencies into the Corporate Plan.

As part of its commitment to the *Canadian Multiculturalism Act*, the LPA conducts its activities with due consideration to Canada's multicultural reality, as witnessed by the cultural diversity in its workplaces. In recognition of the heritage and the role of First Nations in the history of pilotage, as they were the first "pilot" guides on the St. Lawrence in the era of the "Nouvelle France", the LPA named one of its two pilot boats "Taukamaim," meaning "To take to the open sea" in the Innu language.

The Authority also balances its responsibilities relative to the Canadian economy and its partners by ensuring that it can provide all levels of required services. Given the high proportion of variable costs, the capacity to partially reduce these costs is very limited, and any reduction in these expenditures would have a negative impact on the Authority's revenues, resulting in lower earnings.

PROMOTING A HEALTHY WORKPLACE

Mobilization activities, including training sessions on tools and methods in order to act and prevent problems of civility in the workplace and also on management of known mental health issues were carried out last year. The activities involved managers and the entire staff of the organization, and were intended to educate all staff in the promotion of healthy work practices.

BUILDING A DIVERSE PUBLIC SERVICE

The LPA is in the process of identifying relevant programs with diversity objectives according to its needs, and then determine activities required to increase social and cultural diversity within the organization.

QUARTERLY FINANCIAL STATEMENTS

The LPA posts its unaudited quarterly financial statements on its website.

GUIDELINES ON TRAVEL, HOSPITALITY AND CONFERENCE EXPENSES

In July 2015, a certain number of Crown corporations, including the Authority, were directed by the Governor-in-Council to align their policies, guidelines and practices with Treasury Board policies, directives and related instruments on travel, hospitality, conference and event expenditures.

Through the values expressed in its vision and mission statements, the LPA has made a further commitment to make effective use of the resources provided. For this reason, the Authority intends to proactively disclose travel, hospitality and conference expenses of the board chairperson, the chief executive officer and other board members on its website each quarter; furthermore, the Authority will implement the recent changes requested by the Treasury Board Secretariat in 2017.

The Authority is also assessing whether it would be appropriate to disclose on its website highlights of its process for managing travel, hospitality and conference expenses of the board chairperson, the chief executive officer and the other board members and the management.

For fiscal year 2017, expenses in these categories total about \$25,000 for the board chairperson and the chief executive officer and about \$9,000 for other board members. In addition, for the 2018 to 2022 period covered by this Plan, these expenses are estimated at an average of \$26,000 each year for the board chairperson and the chief executive officer and at \$8,000 for other board members.

AUDITOR GENERAL RECOMMENDATIONS

The last Special examination of the LPA performed by the OAG was in 2013. The report filed by the OAG noted that no major deficiency was identified. Furthermore, the OAG reported that the LPA has sound governance practices, a rigorous strategic planning process, that its resources are managed economically and efficiently and that appropriate systems are in place to ensure that the pilotage services are secure, efficient and of high quality. The LPA has implemented the report's two recommendations: (1) that the risk management measures identified are updated and reported to the board of directors annually or whenever a significant change occurs; and, (2) that the training program for apprentice pilots of the Corporation of Lower St. Lawrence Pilots is approved by the Authority, while specific modifications to the training plan for apprentice pilots of the Corporation of Mid St. Lawrence Pilots have been requested; the Authority is awaiting a response.

2018-2022 FINANCIAL STATEMENTS FORECAST

STATEMENT OF COMPREHENSIVE INCOME

Actual 2016, forecast 2017 and 2018-2022 budget

(in thousands of CND\$)

	Actual 2016	Forecast 2017	2018	2019	Budget 2020	2021	2022
INCOME							
Pilotage charges	91,271	100,263	105,644	110,175	115,268	119,436	124,926
Other income	159	140	135	135	135	135	135
	91,430	100,403	105,779	110,310	115,403	119,571	125,061
DIRECT EXPENSES							
Pilot fees	73,365	82,326	87,743	91,453	95,860	99,583	104,210
Operating costs of pilot-boats	10,363	11,204	11,370	11,559	11,764	11,973	12,299
	83,728	93,530	99,113	103,012	107,624	111,556	116,509
GROSS PROFIT							
	7,702	6,873	6,666	7,298	7,779	8,015	8,552
	8.42%	6.85%	6.30%	6.62%	6.74%	6.70%	6.84%
ADMINISTRATIVE AND OPERATING EXPENSES							
Personnel Costs	3,824	4,239	4,507	4,464	4,551	4,641	4,731
Professional and Special Services	1,369	2,221	1,587	1,403	1,538	1,299	1,130
Rental	370	385	504	561	572	578	584
Utilities, Supplies and Procurement	148	166	168	145	138	145	145
Transport and Communications	143	169	214	166	169	173	173
Information	79	80	80	94	80	94	80
Amortization	73	62	142	321	326	289	204
Repairs and Maintenance	71	21	26	40	40	41	41
Interest	1	1	1	1	1	1	1
Bad Debts	0	0	0	0	0	0	0
Other	84	83	71	71	71	71	71
	6,162	7,427	7,300	7,266	7,486	7,332	7,160
COMPREHENSIVE INCOME							
	1,540	(554)	(634)	32	293	683	1,392

* The investment (\$1.1 million) and ancillary costs (\$0.1 million) related to the acquisition of a bridge simulator are estimated as negotiations are ongoing

STATEMENT OF FINANCIAL POSITION

Actual 2016, forecast 2017 and 2018-2022 budget

(in thousands of CND\$)

	Actual 2016	Forecast 2017	2018	2019	Budget 2020	2021	2022
ASSETS							
Current							
Cash	10,971	9,319	5,479	5,903	8,049	8,554	11,684
Accounts Receivable	11,534	12,673	13,353	13,926	14,570	15,097	15,791
Short-term Investment	5,024	5,107	5,107	5,107	5,107	5,107	5,107
	27,529	27,099	23,939	24,936	27,726	28,758	32,582
Non-Current							
Long-term Investment	0	0	0	0	0	0	0
Property and Equipment (net)	14,952	16,121	18,034	17,819	16,116	16,444	14,857
Intangible Assets (net)	377	217	1,504	1,321	1,165	1,009	852
	15,329	16,338	19,538	19,140	17,281	17,453	15,709
Total Assets	42,858	43,437	43,477	44,076	45,007	46,211	48,291
LIABILITIES							
Current							
Accounts Payable and Incurred Liabilities	13,188	14,209	14,889	15,462	16,106	16,633	17,327
Non-Current							
Employee Benefits	340	480	502	524	546	568	590
Lease Inducement	200	172	144	116	88	60	32
	540	652	646	640	634	628	622
Total Liabilities	13,728	14,861	15,535	16,102	16,740	17,261	17,949
EQUITY							
Retained Earnings	29,130	28,576	27,942	27,974	28,267	28,950	30,342
Total Liabilities and Equity	42,858	43,437	43,477	44,076	45,007	46,211	48,291
Working Capital at Year End	14,341	12,890	9,050	9,474	11,620	12,125	15,255

* The investment (\$1.1 million) and ancillary costs (\$0.1 million) related to the acquisition of a bridge simulator are estimated as negotiations are ongoing

STATEMENT OF CHANGES IN EQUITY

Actual 2016, forecast 2017 and 2018-2022 budget

(in thousands of CND\$)

	Actual	Forecast			Budget		
	2016	2017	2018	2019	2020	2021	2022
Retained Earnings, Beginning of the Year	27,590	29,130	28,576	27,942	27,974	28,267	28,950
Comprehensive Income for the Year	1,540	(554)	(634)	32	293	683	1,392
Retained Earnings, End of the Year	29,130	28,576	27,942	27,974	28,267	28,950	30,342

* The investment (\$1.1 million) and ancillary costs (\$0.1 million) related to the acquisition of a bridge simulator are estimated as negotiations are ongoing

STATEMENT OF CASH FLOWS

Actual 2016, forecast 2017 and 2018-2022 budget

(in thousands of CND\$)

	Actual 2016	Forecast 2017	2018	2019	Budget 2020	2021	2022
OPERATING ACTIVITIES							
Comprehensive Income for the Year	1,540	(554)	(634)	32	293	683	1,392
Non-Cash Items							
Amortization	1,056	1,056	1,394	1,739	1,879	1,841	1,754
Changes in the Long-Term Portion of Employee Benefits	(93)	140	22	22	22	22	22
Changes in the Long-Term Portion of the Lease Inducement	(28)	(28)	(28)	(28)	(28)	(28)	(28)
Loss (Gain) on Asset Disposals	0	0	0	0	0	0	0
Decrease (Increase) in Accounts receivable	(1,288)	(1,139)	(680)	(573)	(644)	(527)	(694)
Increase (Decrease) in Accounts Payable and Accrued Liabilities	2,255	1,021	680	573	644	527	694
Cash Flows from Operating and Non-Operating Activities	3,442	496	754	1,765	2,166	2,518	3,140
INVESTING ACTIVITIES							
Net Additions to Fixed Assets, Intangible Assets and Long-Term Investment	(136)	(2,148)	(4,594)	(1,341)	(20)	(2,013)	(10)
CASH							
Change for the Year	3,306	(1,652)	(3,840)	424	2,146	505	3,130
Balance, Beginning of the Year	7,665	10,971	9,319	5,479	5,903	8,049	8,554
Balance, End of the Year	10,971	9,319	5,479	5,903	8,049	8,554	11,684

* The investment (\$1.1 million) and ancillary costs (\$0.1 million) related to the acquisition of a bridge simulator are estimated as negotiations are ongoing

STANDARDIZED FORECAST STATEMENT OF COMPREHENSIVE INCOME

LAURENTIAN PILOTAGE AUTHORITY								
Standardized forecast statement of comprehensive income (\$ '000)								
	2016	2017	2017	2018	2019	2020	2021	2022
		budget	projections					
Revenue								
Pilotage Tariffs	91,271	95,850	100,263	105,644	110,175	115,268	119,436	124,926
Pilotage Surcharges	-	-	-	-	-	-	-	-
Others (Interest, Supplementary Fees & Charges)	159	140	140	135	135	135	135	135
Total Revenue	91,430	95,990	100,403	105,779	110,310	115,403	119,571	125,061
Direct Pilotage Costs								
Pilot Costs								
Pilotage Fees (if under contract)	72,276	77,224	80,872	85,974	89,497	93,723	97,416	102,109
Pilot Salaries and Benefits	-	-	-	-	-	-	-	-
Total Pilot Costs	72,276	77,224	80,872	85,974	89,497	93,723	97,416	102,109
Pilotage Boat and Pilot Travel								
Pilot Boat Crew (Salaries and Benefits)	1,232	1,327	1,327	1,361	1,388	1,416	1,444	1,472
Pilot Boat Operating Cost (Fuel, Maintenance)	254	320	400	326	278	280	283	396
Pilot Boat Ownership Costs (Depreciation & Finance)	648	646	646	686	725	720	716	716
Pilotage Boat Fees (if under contract)	8,029	8,581	8,581	8,752	8,928	9,107	9,289	9,474
Pilot Travel Expenses	-	-	-	-	-	-	-	-
Other Related Costs	201	250	250	245	240	241	241	241
Total Pilot Boat and Pilot Travel	10,364	11,124	11,204	11,370	11,559	11,764	11,973	12,299
Other Pilotage Expenses								
Pilotage Portable Units	459	509	526	797	951	1,097	1,099	997
Pilotage Training (1)	630	928	928	972	1,005	1,040	1,068	1,104
Dispatch Center	2,503	3,077	2,979	3,232	3,570	3,551	3,448	3,337
Other Pilotage Costs	-	-	-	-	-	-	-	-
Total Other Pilotage Expenses	3,592	4,514	4,433	5,001	5,526	5,688	5,615	5,438
Total Direct Pilotage Costs	86,232	92,862	96,509	102,345	106,582	111,175	115,004	119,846
Indirect Pilotage Costs								
Administrative Expenses								
Administration (Salaries and Benefits)	1,919	1,853	2,109	2,157	2,067	2,107	2,148	2,189
Professional Services	1,036	963	1,613	1,093	789	995	881	787
Regulatory Fees (TC Service Fee)	42	70	70	-	-	-	-	-
Rent/Utilities/Supplies/Computers	372	372	372	455	497	505	510	514
Other Amortization	44	52	32	142	321	326	289	204
Other Administration Expenses	245	233	252	221	22	2	56	129
Total Administration Expenses	3,658	3,543	4,448	4,068	3,696	3,935	3,884	3,823
Financing Cost	-	-	-	-	-	-	-	-
Total Indirect Pilotage Costs	3,658	3,543	4,448	4,068	3,696	3,935	3,884	3,823
Total Expenses	89,890	96,405	100,957	106,413	110,278	115,110	118,888	123,669
Comprehensive Income	1,540	(415)	(554)	(634)	32	293	683	1,392
Capital Reimbursement	-	-	-	-	-	-	-	-
Number of Contract Pilots	177	178	178	180	180	180	180	180
Number of Employee Pilots	-	-	-	-	-	-	-	-
Number of Assignments	22,432	22,432	22,432	22,881	23,339	23,806	24,282	24,768
Average Assignment per Pilot	127	126	126	127	130	132	135	138
Revenue over Assignments Ratio	\$ 4,076	\$ 4,279	\$ 4,476	\$ 4,623	\$ 4,726	\$ 4,848	\$ 4,924	\$ 5,049

(1) An amount regarding training is paid to the Lower St. Lawrence pilots through travel fees

* The investment (\$1.1 million) and ancillary costs (\$0.1 million) related to the acquisition of a bridge simulator are estimated as negotiations are ongoing

OPERATING BUDGET COMPARISON

Variance between Budget 2016 and Actual 2016

Revenues

Pilotage revenues were \$1.1 million (1.4%) higher than budgeted, mainly due to significantly higher than previously forecasted oil tanker traffic. For its part, the number of assignments for the year was 2.3% (+494) higher than estimated.

Fees

Pilot fees remained stable compared to initially planned expenses, despite the increase in revenues. This variance may be explained by the combination of maneuvers performed and overestimation of certain expenses.

Administrative and Operating Expenses / Other Expenses

Administrative expenses are practically at the same level as what had been budgeted. In fact, a variance of \$59,000 (1%) was registered. Personnel costs, information-related costs and rental charges are higher (\$92,000 or 2.2%), while professional services, repairs and maintenance as well as procurement costs are \$49,000 or 3% lower.

Comprehensive Income

For the above reasons, actual comprehensive income of \$1.5 million in 2016 is \$1.3 million higher than the projected comprehensive income of \$206,000.

Variance between Budget 2017 and Forecast 2017

Revenues

Pilotage revenues are expected to reach \$88.7 million, compared to an initial budget of \$84.3 million (+\$4.4 million). This variance is mainly due to higher than expected results at the end of 2016 fiscal year which were used to establish the 2017 budget. As a result, growth was higher than planned for container ships and bulk transport.

Fees

Essentially for the same reasons as mentioned for revenues, fees were initially underestimated, since fiscal year 2016 ended with higher than anticipated results.

Administrative and Operating Expenses / Other Expenses

Administrative expenses are \$807,000 higher than what had been budgeted. Personnel costs due to hiring and departures varied upwards (+\$178,000), whereas expenses related to professional services increased as a result of pending litigations (+\$650,000).

Comprehensive Income

For the above reasons, the projected comprehensive income for 2017 is a loss of \$554,000, instead of a planned loss of \$415,000.

Variance between Budget 2018 and Forecast 2017

Revenues

Different assumptions were made based on traffic analysis and the economy in general. As a result, revenues have been adjusted to reflect growth in traffic as per our expectations. The largest impact comes from container ships, whose traffic should be larger in the coming years. Bulk carriers and oil tankers traffic should also increase, but the impact will be less. Tariffs will also be increased, which will have an impact on revenues.

Expenses

Fees vary according to traffic increase, as well as according to change in pilotage fees determined in service contracts. As for administrative expenses, they include the addition of an administrative assistant for the finance department, and recruitment of a technician for the marine safety and efficiency department. Adjustments to be made after signature of collective agreements of unionized employees, various service contracts and the general cost of living increase have also been taken into account. Since the Authority is currently looking to expand its work spaces, a budget allocation was also considered for rental purposes, as this would allow some flexibility in the deployment of its organizational plan. Other expenses remain stable.

FINANCIAL INFORMATION

SIGNIFICANT ACCOUNTING POLICIES

Please refer to the audited financial statements of the Laurentian Pilotage Authority included in the LPA's 2016 annual report for the description of these methods.

PILOTAGE TARIFF REGULATIONS

The Authority has the authority, with the approval of the Governor-in-Council, to make regulations prescribing tariffs of pilotage charges to be paid to that Authority. The tariff approval process is set out in the *Pilotage Act*. Consequently, the Authority must first publish the proposed tariff regulation in the Canada Gazette. Any person who has reason to believe that a charge in this proposal is not in the public interest may file a notice of objection, setting out the grounds therefor, with the Canadian Transportation Agency within thirty days following publication of the proposed regulation in the Canada Gazette. In such a case, the Agency must investigate the proposed regulation as necessary or desirable in the public interest, including the holding of public hearings. Once its investigation is complete, the Agency must make a recommendation within 120 days following the receipt of notices of objection, and the Authority is required to govern itself accordingly.

The tariffs may come into force 30 days after their publication in the Canada Gazette. However, where the Agency recommends a pilotage charge that is lower than that set by the Authority, the Authority is required to reimburse the difference between this charge and the charge recommended by the Agency, plus interest. The *Pilotage Act* stipulates that the Governor-in-Council may amend or cancel a recommendation of the Canadian Transportation Agency.

The tariffs of pilotage charges must be fair and reasonable, and must enable the Authority to operate on a self-sustaining financial basis. Thus, the tariffs set are intended to allow the Authority to recover its costs and to provide for a reasonable financial reserve necessary to, among other things, replace its capital assets.

KEY ASSUMPTIONS AND FORECASTS

Revenue

Pilotage fees

Pilotage fees have been set based on the growth in certain significant parameters of the current and budgeted tariffs. Forecasts on ship sizes and the number of assignments are determined on the basis of internal statistical reports, financial and economic trends published by research organizations (such as the Conference Board of Canada), by the Bank of Canada and by other Canadian institutions, such as chartered banks. In addition, this analysis was supplemented by discussions and analyses with various representatives and consultants involved in the marine industry. Details are found in the section Key assumptions and forecasts.

Pilot Boarding Services

a) Pilot boarding services provided by contractors

Revenue from pilot boarding services provided at the Montreal, Lanoraie, Sorel, Trois-Rivières and Quebec City boarding stations equals forecast expenditures under the various service contracts, plus an additional 4.8% for administrative overhead.

b) Pilot boarding services provided by Authority employees

Revenue from pilot boarding services provided at Les Escoumins boarding station was determined on the basis of forecast expenditures for providing the boarding services plus an additional 4.8% for administrative overhead.

Expenses

Pilot Fees

Training costs for pilots and apprentice pilots, communications and portable units, and expenses of review panels are included in this expenditures category. Pilot trainings usually includes ship-handling courses where pilots work with models and simulators. Training courses in the handling of post-Panamax ships are also given at the Maritime Simulation and Resource Centre in Quebec City. This centre offers other courses that pilots must take to obtain a higher certificate.

In the case of apprentice pilots, the Authority covers all costs relating to these expenses, for both corporations.

Pilot Boarding Services

a) Pilot boarding services provided by contractors

Projected expenditures were determined based on contracts in effect with the various Groupe Océans entities which provides services in Montreal, Sorel, Trois-Rivières and Quebec City. These contracts were negotiated for a 10-year period and came into effect on January 1, 2014. The costs for 2018 to 2022 have been estimated on the basis of rates agreed upon by the Authority and the contractor.

b) Pilot boarding services provided by Authority employees

These costs include several types of expenses, and the following assumptions were used:

Salaries have been forecast based on provisions in the existing collective agreements. For years not covered by the collective agreements, the salaries take an estimated increase in the Consumer Price Index (CPI) into account.

Costs associated with the operation of pilot boats and their replacements are taken into consideration based on assumptions relative to their service life, mandatory inspections under current regulations and historical data from recent years.

The majority of other expenditures were estimated by taking CPI increases into consideration.

Administrative and Operational Expenses

Expenditures from 2018 to 2022 were determined on the basis of actual 2016 expenditures and estimated 2017 expenditures, as well as on the basis of assumptions made by Authority management.

Projected salaries were determined according to terms and conditions set out in existing collective agreements or those being negotiated. Salaries of employees not covered by collective agreements were determined by taking estimated Consumer Price Index increases into account.

SENSITIVITY ANALYSIS

Revenue collected from pilotage fees and cost of pilotage services are directly related to the number of assignments, number and dimensions of ships, hours of pilotage time, and the draughts of ships. These modifications will result in a planned loss of about \$662,000 in 2018 and a return to profitability of about \$70,000 in 2019. Since the Authority has sufficient accumulated cash reserves, it is adopting this position to ensure reasonable costs for its services for its clients.

Contracted pilot boats expenditures and revenue are directly related to the number of pilot boarding services provided for ships; however, Dispatch Centre and administrative expenditures and costs are relatively fixed and do not vary according to the volume of services provided.

Revenue from pilot boats operated by the LPA in Les Escoumins is directly linked to projected expenditures at Les Escoumins station, plus 4.80%.

The drafting of budget estimates (2018 to 2022) is based on the following key assumptions: estimated Consumer Price Indices; estimated volume of marine traffic; pilot fees and sizes and dimensions of ships.

Any variation in one or more of these assumptions will result in a favourable or unfavourable change in the Authority's financial position. Each 1% variation in the tariff represents about \$938,000 in 2018, whereas any 1% variation in the fees of pilots on contract represents a variation of about \$846,000. This high percentage of variable costs gives the LPA substantial financial flexibility.

Pilot fees account for the majority of LPA expenditures and are the direct result of agreements negotiated by the two pilot corporations and the LPA.

Implementation of the plan depends on assumptions made during its preparation.

CAPITAL BUDGET

BUDGET 2018-2022

ACQUISITION OF CAPITAL ASSETS AND CAPITAL BUDGET

(in thousands of CND\$)

	ACTUAL	BUDGET	FORECAST	PLAN				
	2016	2017	2017	2018	2019	2020	2021	2022
Wharfs and route	--	--	--	2,500	--	--	--	--
Pilot Boat	--	--	--	--	--	--	--	--
Bridge Simulator*	--	--	--	1,123	--	--	--	--
Intangible Assets	2	2,126	--	860	--	--	--	--
Waiting room, boarding station and others	116	150	2,100	111	1,341	20	2,013	10
	118	2,276	2,100	4,594	1,341	20	2,013	10

* The investment (\$1.1 million) and ancillary costs (\$0.1 million) related to the acquisition of a bridge simulator are estimated as negotiations are ongoing

The capital budget for 2018 and subsequent years will include the following principal investments:

Renewal of the dispatch and billing system

As mentioned above, the dispatch and billing system is reaching the end of its useful life and will have to be replaced. This project had been scheduled earlier but was postponed in order to better assess the LPA's needs.

PPU

The portable units used by the Lower St. Lawrence Pilots will have to be replaced and updated in 2019. The Authority will now own these portable units.

Similar units will also have to be acquired in 2021 for the Central St. Lawrence pilots.

Reconstruction of Les Escoumins wooden wharf

The wooden wharf at Les Escoumins boarding station was severely damaged as a result of a 2016 winter storm. Although it has been repaired temporarily, a major reconstruction will need to be carried out in the summer of 2018.

Bridge Simulator

An amount of \$1.2 million has been included in the current Plan for the acquisition (\$1.1 M) by the LPA of a bridge simulator in 2018 and ancillary costs (\$0.1 M); this amount is an estimate as negotiations are ongoing.

CAPITAL BUDGET COMPARISON

Variance between Budget 2016 and Actual 2016

The Authority had an initial capital budget of \$0.43 million in 2016. The bulk of this sum, i.e., \$350,000, was targeted to start the conversion/upgrade of the LPA's dispatch/billing software, in addition to the introduction of a document management system, for \$40,000. Both projects have been postponed for a few months so that the Authority can better assess its needs. The actual amount of capital asset acquisition was approximately \$118,000 and this is mainly due to leasehold improvements carried out at the headquarters for the purposes of adding workspaces.

Variance between Budget 2017 and Forecast 2017

The Authority provided for a capital budget of \$2.33 million in 2017. The bulk of this sum was for the purchase of portable units and for the upgrade of the LPA's dispatch/billing system. The latter project has been postponed. The financial projection for capital asset acquisition in 2017 is estimated at \$2.1 million and mainly consists of the acquisition of portable units for the Central St. Lawrence Pilots.

BORROWING PLAN AND CASH RESERVES

CASH RESERVES

The Board of Directors approved cash reserves of \$5 million based on the Authority's obligation to fulfill its mission while maintaining its financial self-sufficiency as the Authority does not receive parliamentary appropriations. These reserves can be used in the following situations:

- Financial contributions to pilot corporations for the purchase of portable units within very short time frames (these contributions have already exceeded \$1 million in the past, notably in 2013);
- Delays during the long approval process of the tariff regulations modifications, as was the case in 2014;
- Delays caused by the removal and/or installation of priority buoys by the Canadian Coast Guard within District No. 1. Any installation delay of these buoys after April 7 of each year or removal prior to December 7 of each year produces additional costs payable to the Corporation of Mid St. Lawrence Pilots in the amount of about \$250,000 per week of delay. In 2014, the priority buoys were installed about five weeks late. These additional pilotage expenses are due to the LPA's obligation to assign a second pilot on board the ship for assignments in these situations.

The Authority has achieved its cash reserves objective and has not had to use any amounts it maintains. On the other hand, this situation enabled the LPA to freeze pilotage tariffs for the entire fiscal year 2017, to the benefit of its clientele.

It is important to note that in its Special examination report dated July 15, 2005, the Office of the Auditor General (OAG) identified a major deficiency in the Authority's financial self-sufficiency. The report mentions a "precarious" financial situation. In addition, other Canadian pilotage authorities have recently experienced financial difficulties. In most cases, these situations led to unexpected and significant increases in tariffs, resulting in increases in unplanned costs for their clientele.

The Authority's financial reserves are therefore strategically important, enabling it to adequately perform its mission of establishing, maintaining and administering an efficient pilotage service in the navigable waters under its jurisdiction in the interest of navigational safety.

BORROWING PLAN

Borrowing Approval

In accordance with section 36 of the *Pilotage Act* as well as subsection 127(3) of the *Financial Administration Act*, the LPA is required to obtain approval from the Minister of Finance to borrow funds, including the terms and conditions thereof.

Context

LPA's management requires the approval of the Minister of Finance with regards to its borrowing plan for the 2018-2022 period for an amount of \$1,500,000; such amount is currently authorized as a credit facility allowing for bank overdrafts. Despite the existing cash reserve, this request is justified in the event that a significant disbursement must be made while expiry dates of investments do not allow for an immediate access of the required funds, or to cover any unexpected situation where disbursements could not have been planned. A borrowing authorization of \$1,500,000 is therefore required to deal with this situation.

Continuity of Short Term Borrowing

The Laurentian Pilotage Authority requires that the following credit facility be continued:

OVERDRAFT

Lender:	Any financial institution in Canada that is a member of the Canadian Payments Association
Amount:	Up to \$1.5 million
Currency:	Canadian dollars
Interest Rate:	Prime
Maturity:	One year maximum

Historical Usage of Short Term Credit Facility

The following table details the history of the past five years in regard to the maximum amount of credit used during a given year and the average monthly credit used during that year.

HISTORY OF THE UTILIZATION OF SHORT-TERM CREDIT

YEAR	HIGHEST AMOUNT	MONTHLY AVERAGE
2013	\$833,000	\$126,000
2014	\$874,000	\$115,000
2015	\$425,000	\$100,000
2016	\$892,000	\$0
2017 (Forecast)	\$358,000	\$0

Long Term Borrowings to be undertaken in 2018

Not applicable.

Contingent Liabilities

In the normal course of business, the Authority is subject to various claims and legal proceedings. Two notices of dispute relating to a contractual agreement amounting to \$1,244,284 were filed with the Authority. To date, these claims have been referred to an arbitrator, in accordance with the contractual agreement between the parties.

Total Borrowings – New and Outstanding

The following table illustrates the level at which the maximum borrowing amount must be established in order to meet the financial requirements included in this Plan.

BORROWINGS UNDERTAKEN DURING THE YEAR (IN MILLIONS OF DOLLARS)							
	ACTUAL	ESTIMATED	BUDGET				
	2016	2017	2018	2019	2020	2021	2022
Bank Overdraft*	0.892	0.358	1.500	1.500	1.500	1.500	1.500
Line of Credit*	--	--	--	--	--	--	--
Short-term Borrowings	0.892	0.358	1.500	1.500	1.500	1.500	1.500
Long-term Borrowings	--	--	--	--	--	--	--
Total	0.892	0.358	1.500	1.500	1.500	1.500	1.500

* Maximum (or peak) amount at any point during the year

As illustrated in the following table, the Authority does not expect to end any of the following financial years with borrowing residual balances.

BORROWINGS OUTSTANDING, AS AT DECEMBER 31 (IN MILLIONS OF DOLLARS)							
	ACTUAL	ESTIMATED	BUDGET				
	2016	2017	2018	2019	2020	2021	2022
Bank Overdraft							
Line of Credit							
Short-term Borrowings	--	--	--	--	--	--	--
Long-term Borrowings	--	--	--	--	--	--	--
Total	--	--	--	--	--	--	--

COMPANY INFORMATION

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