



The St. Lawrence  
Seaway Management  
Corporation

Corporation de Gestion  
de la Voie Maritime  
du Saint-Laurent

# A RESILIENT *Seaway*

ANNUAL  
CORPORATE  
SUMMARY

**2019–2020**

As high water levels and flows broke records during 2019, the Seaway adapted, allowing ships to continue delivering essential cargoes safely and reliably.



The front cover photo (courtesy of Fednav) depicts activity at the Port of Johnstown during the 2019 navigation season. High water levels on Lake Ontario and the St. Lawrence River necessitated the International Joint Commission releasing record-breaking volumes of water via the Moses-Saunders dam in Cornwall, Ontario, to lessen the flooding of shoreline communities. Thanks to the efforts of Seaway employees, shipping companies, pilots, and a myriad of other stakeholders, commercial shipping activity was safely sustained throughout the season despite the high flows and currents.

### **The St. Lawrence Seaway Management Corporation (the “Corporation”)**

The St. Lawrence Seaway Management Corporation, the successor to the St. Lawrence Seaway Authority, was established in 1998 as a not-for-profit corporation by the Government of Canada, Seaway users and other key stakeholders. In accordance with provisions of the Canada Marine Act, the Corporation manages and operates the Canadian assets of the St. Lawrence Seaway, which remain the property of the Government of Canada, under an agreement with Transport Canada.



Throughout the 2019 navigation season, the Seaway demonstrated its resilience under very difficult conditions as it continued to function as a safe and reliable transportation artery serving a vast array of clients. From farmers eager to realize the sale of their crops, to municipalities dependent upon ships for the supply of road salt, to steel mills processing millions of tonnes of iron ore, the Seaway overcame many challenges to ensure that essential cargoes continued to reach their destinations.

**Terence Bowles, President and CEO**

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# ABOUT THE *St. Lawrence Seaway*


## Great Lakes – St. Lawrence Seaway System


Key Supply Chain  
for the World's  
3<sup>rd</sup> Largest Economy


With economic output estimated at \$6 trillion, the provinces and states bordering the Great Lakes – St. Lawrence Seaway System account for 30% of combined Canadian and U.S. economic activity and employment.

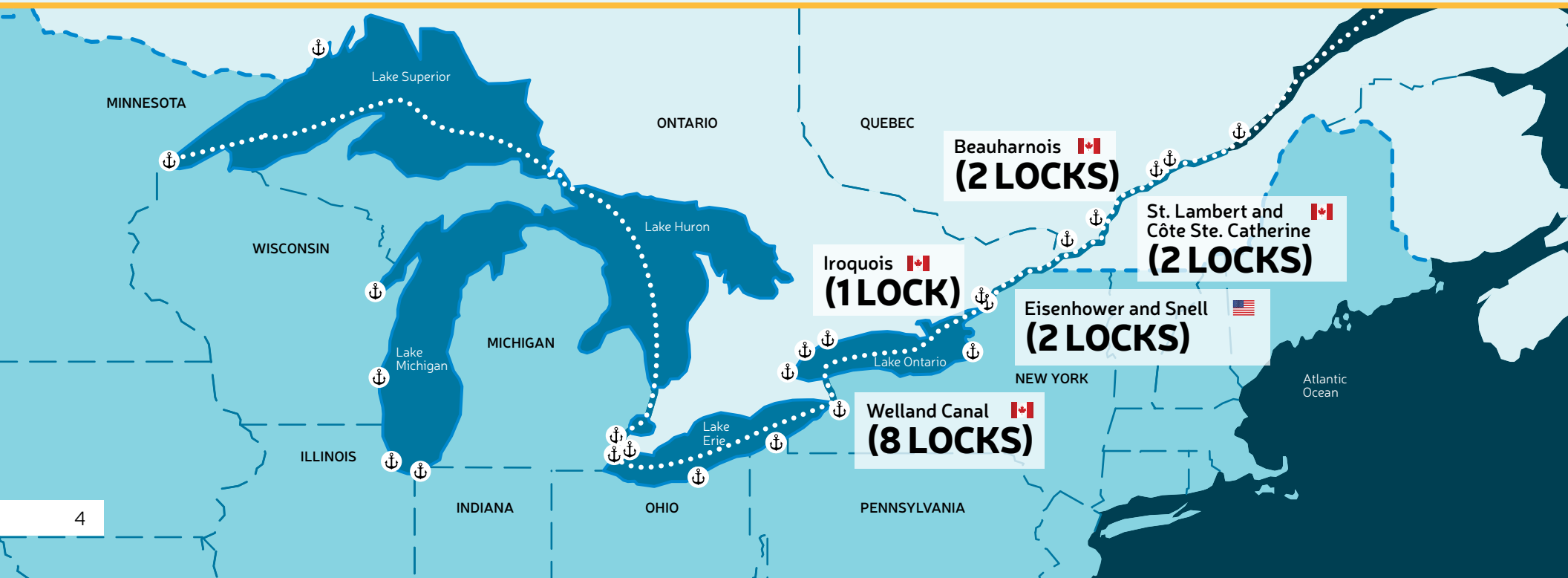
The region would rank as the third largest economy in the world if it were a country. Positioned at the core of this economic powerhouse, the Great Lakes – St. Lawrence Seaway System serves as a vital supply chain.

 The Great Lakes – St. Lawrence Seaway System extends 3,700 kilometres from the Atlantic Ocean to the head of Lake Superior.

 Major Ports

 Administered by the St. Lawrence Seaway Management Corporation

 Administered by the Saint Lawrence Seaway Development Corporation







## Great Lakes – St. Lawrence Seaway System (HWY H<sub>2</sub>O) Facts

- Distance from the Atlantic Ocean to Duluth, Minnesota on Lake Superior = 2,038 nautical miles (2,342 statute miles or 3,700 kilometres) or 8.5 sailing days. The waterway includes some 245,750 square kilometres (95,000 square miles) of navigable waters.
- In a typical year, about 25% of Seaway traffic travels to and from overseas ports, especially in Europe, the Middle East, and Africa.
- The waterway includes some of North America's largest ports, part of an excellent intermodal transportation network, and has maintained a near-perfect record of trouble-free navigation through ongoing improvements and meticulous maintenance for more than 60 years.

Cargo moving on the Great Lakes – St. Lawrence Seaway System supports:



**\$59 Billion**  
in Economic Activity



**329,000**  
Jobs



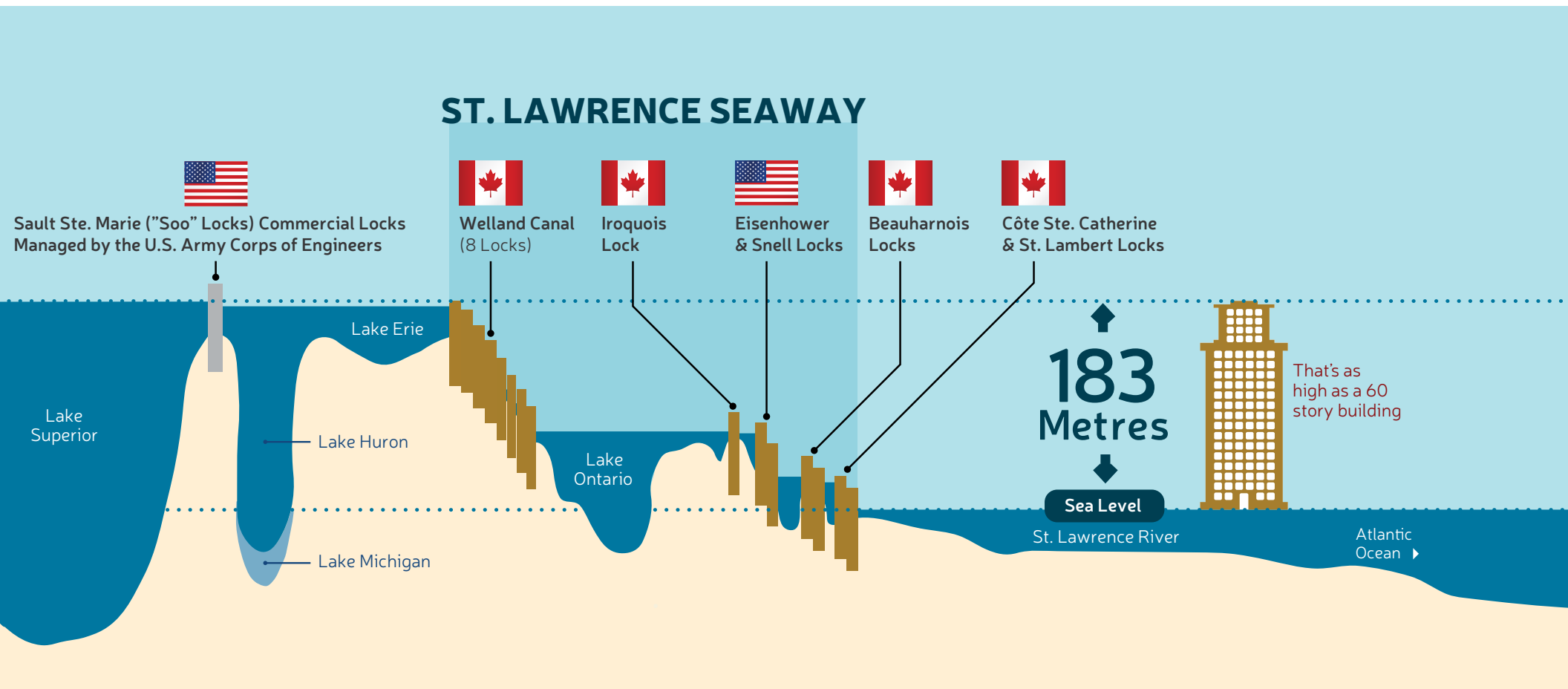
**\$23 Billion**  
in Wages

# The St. Lawrence Seaway— A Vital Waterway

The binational St. Lawrence Seaway's 15 locks (13 Canadian and 2 American) serve as the linchpin within the broader waterway, connecting the lower St. Lawrence River to the Great Lakes, enabling ships to transit

The binational St. Lawrence Seaway's 15 locks serve as the linchpin within the broader waterway.

between Montreal and Lake Erie, a difference in elevation of 168 metres. The "Soo" Locks, managed by the U.S. Army Corps of Engineers, enable ships to reach Lake Superior, which is 183 metres above sea level.



## Seaway Locks

Each lock is 233.5 metres long (766 feet), 24.4 metres wide (80 feet) and 9.1 metres deep (30 feet) over the sill. A lock fills with approximately 91 million litres of water (24 million gallons) in just 7 to 10 minutes. Getting through a lock takes about 45 minutes.

## Seaway Ships

Ships measuring up to 225.5 metres in length (or 740 feet) and 23.8 metres (or 78 feet) in width (also known as the ship's "beam") are routinely raised more than 180 metres above sea level, as high as a 60-story building. These ships can be over twice as long and about half as wide as a football field and carry cargoes the equivalent of 30,000 metric tonnes.

Ships can be over twice as long and about half as wide as a football field.

### Lock dimensions

**Length**  
233.5 m (766 ft.)  
**Width**  
24.4 m (80 ft.)  
**Water depth**  
9.1 m (30 ft.)

### Maximum vessel size



**Maximum beam**  
23.77 m (78 ft.)

**Capacity**  
Carries up to  
30,000 MT  
per voyage

**Maximum air draft**  
35.5 m (116 ft., 6 in.)

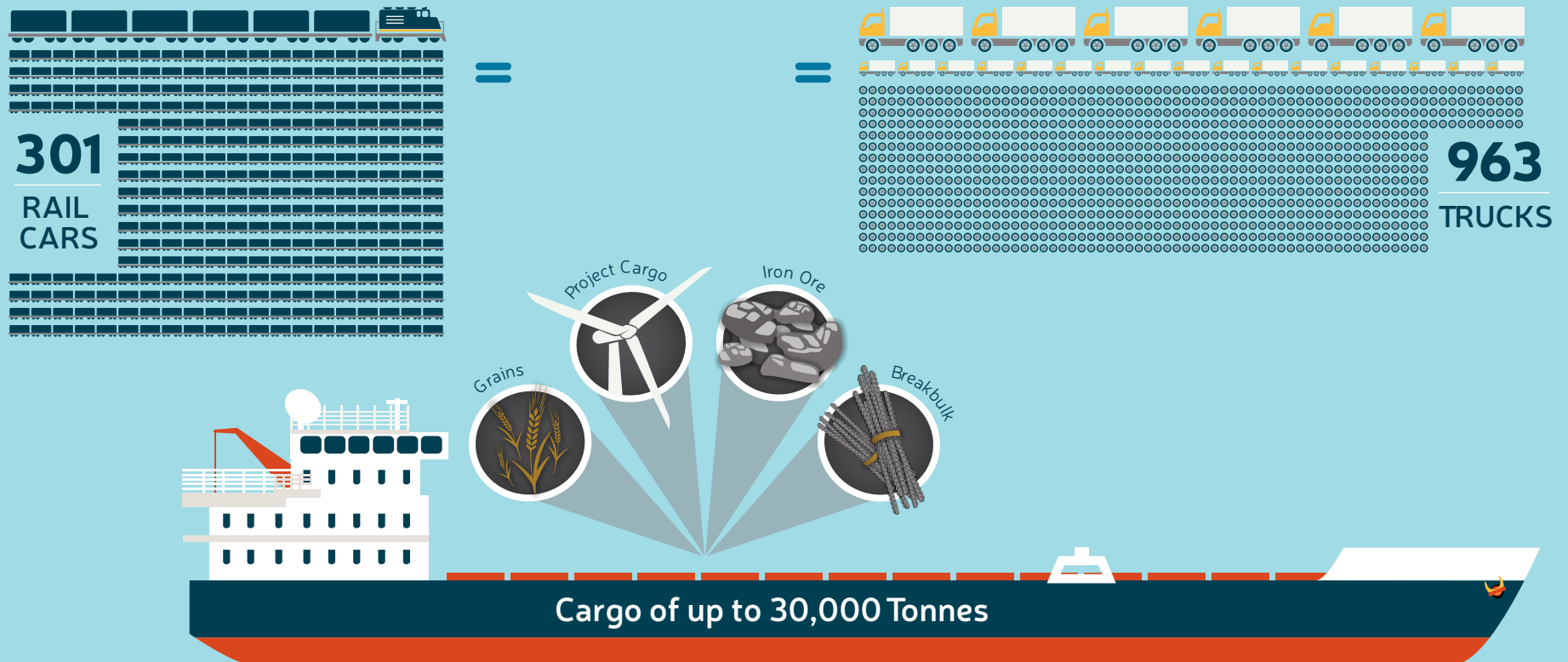
**Maximum length**  
225.5 m (740 ft.)

**Maximum draft**  
8.08 m (26 ft., 6 in.)\*

*\*Commercial vessels equipped with Draft Information System (DIS) technology are allowed to load to a maximum draft of 8.15 m (26 ft., 9 in.)*

# Shipping Impacts our Quality of Life Every Day

Using ships to move essential cargoes dramatically reduces congestion on land, ensuring that thousands of activities can be supported in a highly sustainable manner.







## 10 Ways Seaway Shipping Impacts Your Life



### YOUR MEALS:

Grain (including wheat, corn, soybeans, canola, peas, lentils, and barley) shipped over the Seaway is used to produce everything from bread, pasta, soy milk, and vegetable oil to beer, alcohol, ethanol and animal feed.



### YOUR BREAKS:

Sugar brought in by ocean ships is used in many applications, from sweetening your coffee to serving as an ingredient in countless baked goods.



### YOUR HOME:

From the steel, drywall, concrete and cement used to build a home to the steel used in the manufacturing of household appliances, Seaway ships are instrumental in the supply chain that supports all types of activity that makes your home comfortable and resilient.



### YOUR CITY:

Construction of highways, bridges, office buildings, factories, schools, and hospitals relies upon huge volumes of steel, cement, gypsum, and asphalt moved by ship.



### YOUR HOLIDAYS:

Double-hulled Seaway tankers move refined fuels between storage depots, enabling cars, buses and planes to whisk people away to holiday destinations.



### YOUR SAFETY:

Road salt moved over the Seaway is key to the efficient maintenance of roads in the winter, keeping motorists and pedestrians safe during their winter commutes.



### YOUR RIDE:

Manufacturing of cars and trucks is heavily reliant upon the marine supply chain moving across Seaway waters. From high quality steel to specialized aluminum, assembly lines are fed with supplies that in many cases count upon the Seaway to facilitate part of the journey to the assembly plant.



### YOUR COMMUTE:

A Seaway ship can carry almost 1,000 truckloads of cargo. Moving cargo over the Seaway eases congestion on land, enabling commuters to reach their destination every day with fewer delays and a greater degree of safety.



### YOUR MONEY:

Shipping cargo by ship is one of the most cost effective ways to move huge volumes of goods over longer distances. It is estimated that shipping goods over the Great Lakes – St. Lawrence Seaway System saves shippers billions of dollars per year compared to land alternatives, helping manufacturers, farmers, construction companies and energy providers compete effectively in a global market and provide jobs to many citizens in Canada and the United States.



### YOUR FUTURE:

Inland shipping is part of the solution to making our economy more energy efficient and reducing our carbon footprint. Advanced new ship designs and engine technology, coupled with new types of marine fuels, will further extend marine's advantage over other modes of transportation. A more sustainable transportation system will emerge by using marine to move more cargo, and the Seaway is the critical link between the Great Lakes and the Atlantic Ocean, enabling a 3,700 km marine highway to serve the heartland of North America.



Photo courtesy of John Gleed – Copyright [www.stlawrencepiks.com](http://www.stlawrencepiks.com)

## The St. Lawrence Seaway: Ready for the Future

As the most energy efficient transportation mode, with the lowest carbon footprint, moving more cargo using the Great Lakes – St. Lawrence Seaway System is an excellent way of supporting sustainable growth while easing congestion on land.

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Moving more cargo using the Great Lakes – St. Lawrence Seaway System is an excellent way of supporting sustainable growth.

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# PRESIDENT'S *Message*



On March 24<sup>th</sup>, 2020, the St. Lawrence Seaway Management Corporation (SLSMC) marked the opening of its 2020 navigation season at Lock 3 in the Welland Canal. To respect the need for social distancing due to the COVID-19 virus sweeping the world, there was no formal opening ceremony. Not only did we successfully deal with the challenges brought about by the pandemic, we also delayed opening the Montreal / Lake Ontario section a week, to April 1<sup>st</sup>, in order to support the International Joint Commission's (IJC) effort to move more water out of Lake Ontario and provide some relief from the threat of shoreline flooding.



The NACC *Argonaut* was the first ship to transit the Welland Canal's Lock 3 at the season opening on March 24, 2020



The delayed opening marked a continuation of the substantial challenges we faced during the 2019 navigation season in managing ship traffic in the midst of record-breaking water flows. Throughout the season, the IJC sought to bring down water levels on Lake Ontario which was receiving very high volumes from the upper Great Lakes. The Corporation, in cooperation with the U.S. Saint Lawrence Seaway Development Corporation, worked collaboratively to support the IJC's International Lake Ontario St. Lawrence River Board (ILOSRLR) in its efforts to provide flooding relief to shoreline communities.

The end result was that we were able to keep cargo moving throughout 2019, even with record-breaking volumes of water being moved out of Lake Ontario between June and December. With flows at the Moses-Saunders dam rising as high as 10,400 cubic meters (sufficient to fill four Olympic-sized swimming pools per second), Seaway navigation was safely sustained thanks to the implementation of special safety measures, contributions from Environment Canada Climate Change, Canadian Hydrographic Services, and the diligence of Seaway employees, ship captains and pilots.

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**I am pleased to report that the St. Lawrence Seaway Management Corporation's staff performed admirably in the midst of very trying circumstances. Together with members of the broader marine community, we succeeded in keeping essential cargo moving, demonstrating just how resilient the St. Lawrence Seaway can be in the face of great adversity.**

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The importance of sustaining Seaway navigation and keeping this vital trade artery open cannot be underestimated. The marine supply chain is vital to the provinces and states that surround the Great Lakes / Seaway System. Collectively, this region represents the world's 3<sup>rd</sup> largest economy with over \$6 trillion in economic activity, and cargo moving over the Great Lakes / Seaway System supports an estimated 329,000 jobs.

With a single SeawayMax ship carrying cargo that is equivalent to almost 1,000 truckloads or 300 railcars, a one-week interruption of Seaway navigation could result in almost 100,000 truckloads (or 30,000 railcars) of cargo failing to reach their destination. According to the Chamber of Marine Commerce, the economic impact of closing the St. Lawrence Seaway for one week carries a potential cost of up to \$193 million to the Canadian and U.S. economies.

Given the "headwinds" we faced during the 2019/2020 fiscal year, which ended on March 31<sup>st</sup>, it is not surprising that Seaway cargo activity exhibited a modest drop as compared to 2018, when Seaway tonnage was at a 10-year high. Our overall tonnage came in at 38.4 million tonnes and this result, of course, had an impact on our revenues. We ended the year with revenues of \$78 million, plus revenue generated from lands administered by the Corporation of \$5.9 million. This performance allowed the Corporation to fully cover the \$54.4 million in manageable costs and, as well, contribute \$29.5 million to asset renewal.

Asset renewal investments for the year totaled \$71.2 million. Our ongoing investments in asset renewal directly contribute to the Seaway's outstanding reliability and, operationally, we had another strong year with system availability once again exceeding the target of 99%.

As the Seaway celebrated its 60<sup>th</sup> anniversary in 2019, we marked this significant milestone in a number of ways. Having just emerged from the most transformative era in the Seaway's history with the completion of our modernization program, Transport Canada Minister Marc Garneau and I dedicated a plaque at the St. Lambert Lock, honouring the many Seaway employees who have been instrumental to the Seaway's success since its opening in 1959. I also took part in a number of other events throughout the year, including the U.S. SLSDC's celebration in Massena (NY) on September 24<sup>th</sup> where I had the opportunity to commend the strong relationship that exists between the two Seaway Corporations, while sharing the stage with U.S. Secretary of Transportation Elaine Chao and the SLSDC's Deputy Administrator, Craig Middlebrook.



U.S. Secretary of Transportation Chao and SLSDC Deputy Administrator Middlebrook seated to the left, as Terence Bowles addresses the dignitaries and guests at the Massena (NY) 60<sup>th</sup> anniversary celebration

As I have noted in the past, one of the strongest indications of future business growth prospects for the Seaway is the continued investment by various carriers in new purpose-built ships designed for Seaway use. As well, carriers are also making investments to upgrade their existing fleets of Seaway-sized ships. Over the last 10 years, billions of dollars have been invested by Seaway carriers, and the pace of new investment continues to be strong.

One of the strongest indications of future business growth prospects for the Seaway is the continued investment by various carriers in new purpose-built ships designed for Seaway use.



Investments underway in three Seaway-sized ships (photo courtesy of Canfornav)

Like all businesses, we face an ever-changing operating environment that requires us to adapt to remain competitive. Consequently, we are exploring various ways to increase our operating efficiency, including an updated system to provide comprehensive voyage planning. In light of this initiative, we are looking at what information is available from various service providers along the Seaway to improve traffic scheduling, while increasing efficiency and productivity. We also continue to examine a multitude of other opportunities, including the use of all-season buoys and virtual buoys to improve navigation, and thus our cost competitiveness.

Looking ahead at the Seaway's future, we hold a key advantage as marine transportation provides the "greenest" method of moving cargo. We hope that policy makers will take careful note of the success that European nations have enjoyed by encouraging more cargo to be moved over waterways, thus lessening congestion on land, improving safety, and lowering greenhouse gas emissions. As shippers become more attuned to lowering their carbon footprint by moving more cargo by

water, the Seaway has the capacity to readily meet their needs as our existing locks and channels can accommodate double the existing volume of cargo.

Looking ahead  
at the Seaway's  
future, we hold  
a key advantage  
as marine  
transportation  
provides the  
"greenest" method  
of moving cargo.

After 60 years of operation and the progress made on many fronts, we can take pride in our strong track record of managing Seaway assets and ensuring that ship traffic is managed safely and efficiently, under many diverse circumstances. Thanks to the outstanding efforts of our skilled personnel, the St. Lawrence Seaway is truly a resilient transportation system critical to the delivery of essential goods, and will continue serving as a vital trading artery and gateway for decades to come.





# BUSINESS *Growth*

The results for 2019/20 cover shipping activity between March 22, 2019 and January 8, 2020.

## Simple. Competitive. Connected.

**Simple.** The Corporation through HWY H<sub>2</sub>O is focused on creating an easy, streamlined approach to doing business on the Great Lakes – St. Lawrence Seaway System.

**Competitive.** Continued toll incentives and the unique ability to bring transportation decision makers together create a System that is economical and competitive.

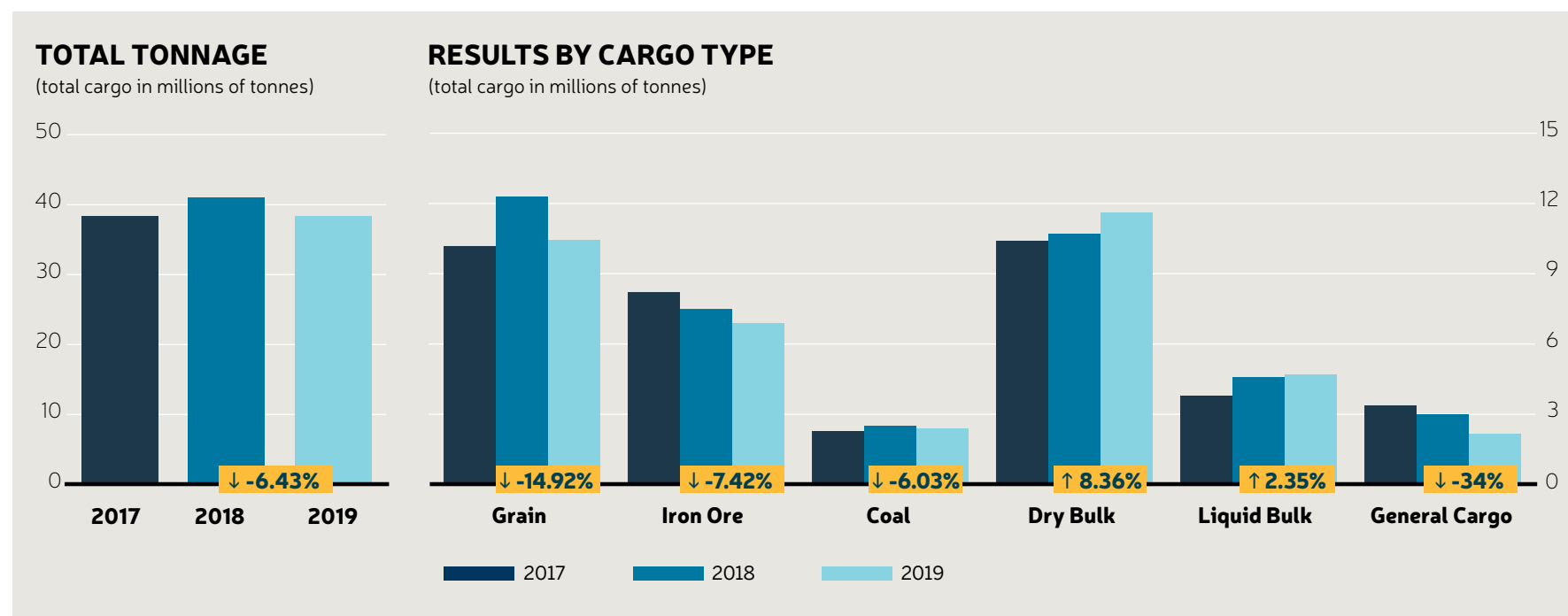
**Connected.** The network of contacts and connections via HWY H<sub>2</sub>O are vast and experienced.

# Traffic Results

Seaway traffic in 2019 totaled 38.4 million tonnes, a decrease of 6% or 2.6 million tonnes compared to 2018, when Seaway tonnage was at a 10-year high. Trade tensions, difficult navigational conditions due to very high water flows within the St. Lawrence River, combined with adverse weather conditions impacting grain harvests, all served to restrain total cargo volumes.

There is little doubt that trade tensions certainly were felt within the shipping industry, and we earnestly hope that the forthcoming implementation of the CUSMA will provide a catalyst for improvements within the trading arena.

—Terence Bowles, President and CEO



## 2019 New Business Results

The New Business Incentive program, which offers reduced tolls for eligible “new” cargo movements, attracted 108 applications in 2019 of which 101 were approved. This translated into 1.2 million tonnes of new cargo led by movements of salt, generating revenues of \$2 million.

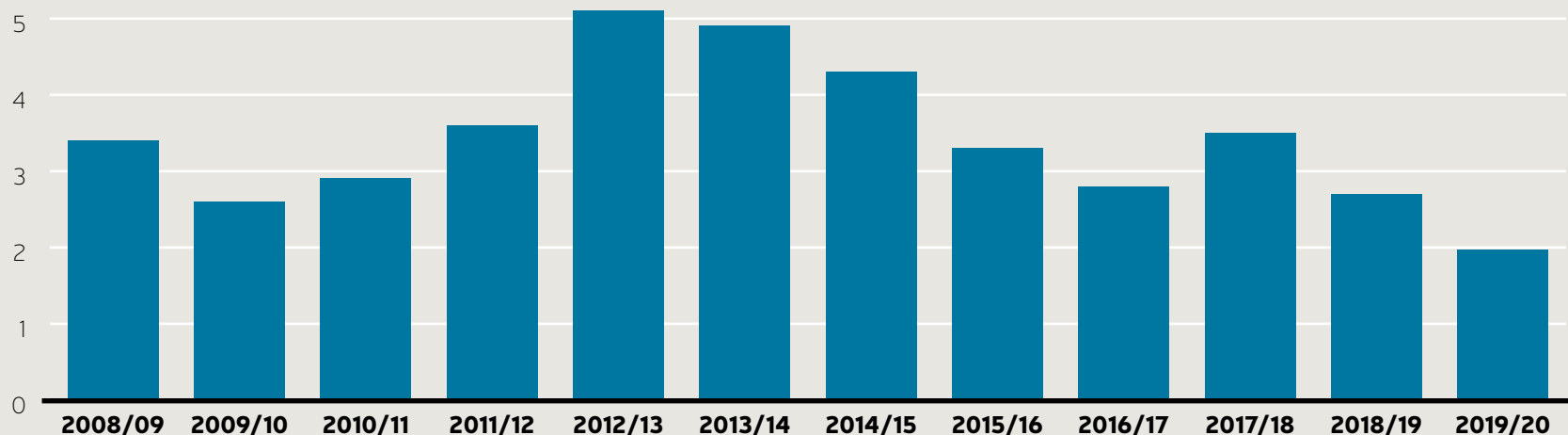
## Seaway Tolls

Tolls increased by 1% for the 2019 navigation season and increased by 2% for the 2020 season.

The Corporation’s various toll incentive programs will remain in place in 2020. These programs currently consist of the New Business Incentive, the Volume Incentive, the Service Incentive, and the Gateway Incentive. The newest addition, the Gateway Incentive, offers shippers a negotiated percentage reduction in cargo toll rates, in order to attract shipments to the Seaway that are currently moving via a competing gateway.

### NEW BUSINESS REVENUE

(in millions of dollars)



## Seaway Administered Lands

The Corporation manages substantial land holdings, and the Market Development team is working diligently with community stakeholders to ensure optimal utilization of these lands.

The development of the Port Weller Dry Dock lease serves as an example of the results achieved by the Market Development team. The leaseholder’s ongoing ship repair and manufacturing activities have resulted in the creation of 120 full time positions and 100 seasonal positions. The Corporation has also worked closely with stakeholders in the expansion of Wharf 12 in Port Colborne. This expansion has facilitated the handling of containers through our waterway, serving to increase traffic and cargo tonnage.

The development of the Port Weller Dry Dock lease serves as an example of the results achieved by the Market Development team.



## Binational Marketing Initiatives

The St. Lawrence Seaway Management Corporation and the U.S. Saint Lawrence Seaway Development Corporation continue to work together to create and implement joint strategic initiatives. These initiatives are anchored by the HWY H<sub>2</sub>O program, and include the sponsorship of various marketing campaigns, hosting of the annual HWY H<sub>2</sub>O Conference, and participation in trade shows and workshops.

HWY H<sub>2</sub>O participated in the Breakbulk Europe Exhibition and the Breakbulk Americas Exhibition, both of which were well attended. With over 400 exhibitors, Breakbulk Europe attracts many attendees, leading to new business opportunities. This event is matched only by the Breakbulk Americas show, which is the largest event in the Americas for project cargo and breakbulk.

The HWY H<sub>2</sub>O booth, staffed by a large contingent of stakeholders representing carriers, stevedores and ports on the Great Lakes – St. Lawrence Seaway System, attracted a lot of attention at these events. The booth provided opportunities for networking, and the development of sales leads which have, in turn, resulted in customer meetings.

THE GREAT LAKES & ST. LAWRENCE SEAWAY SYSTEM

HWY/AUT  
**H<sub>2</sub>O**

**SAVE TIME &**

**SAVE MONEY**

DIRECT ACCESS INTO ALL OF NORTH AMERICA

TRADING IN OVER 50 GLOBAL MARKETS

BULK, BREAK BULK, LIQUID & SPECIAL CARGO

SEAMLESS SUPPLY CHAIN WITH A CONNECTED NETWORK

**SIMPLE.  
COMPETITIVE.  
CONNECTED.**

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U.S. MID-WEST TO NORTH AFRICA

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LET'S CONNECT: HWYH2O@SEAWAY.CA @HWYH2O WWW.HWYH2O.COM



Seaway Trade Booth at Breakbulk Europe 2019 in Bremen, Germany (May 2019)

**Back Row [left to right]:**

Ken Carey (SLSMC), Alan Taylor (Hwy H<sub>2</sub>O Europe Rep), Ian Hirt (Port of Indiana – Burns Harbor), Paulo Pessoa (McKeil), Adam Schlicht (Port of Milwaukee)

**Front Row [left to right]:**

Vanessa Nordbruch (Fednav Bremen), Matt McPhail (FMT), Terry Berthiaume (Morterm), Teresa Boutet (Morterm), Bruce Hodgson (SLSMC), Michel Tosini (FMT), Rebecca Yackley (SLSDC)

In addition, the annual 2019 HWY H<sub>2</sub>O Conference held in Toronto was once again successful, attracting some 150 delegates. The conference is another key HWY H<sub>2</sub>O initiative designed to support networking, education and business growth within the Great Lakes – St. Lawrence Seaway System.

# OPERATIONAL *Excellence*



- ✓ Instill a “Zero Harm” safety culture
- ✓ Deliver secure, consistent and predictable service to Seaway customers
- ✓ Continue to enhance the organization’s culture of continuous improvement and leverage technology





## Navigation Season

In 2019, the St. Lawrence Seaway opened its 61<sup>st</sup> navigation season on March 22<sup>nd</sup> for the Welland Canal (Niagara Section) and on March 26<sup>th</sup> for the Montreal/Lake Ontario (MLO) Section.

High water levels and flows in the St. Lawrence River presented challenges once again in 2019. The Corporation and the U.S. SLSDC worked collaboratively throughout the year with stakeholders, including water flow regulators, to identify possible measures that would support efforts to lower Lake Ontario water levels, while sustaining safe navigation. As a result, the MLO Section was able to remain open for the full navigation season, closing on December 31<sup>st</sup> (providing a total of 281 days of navigation).

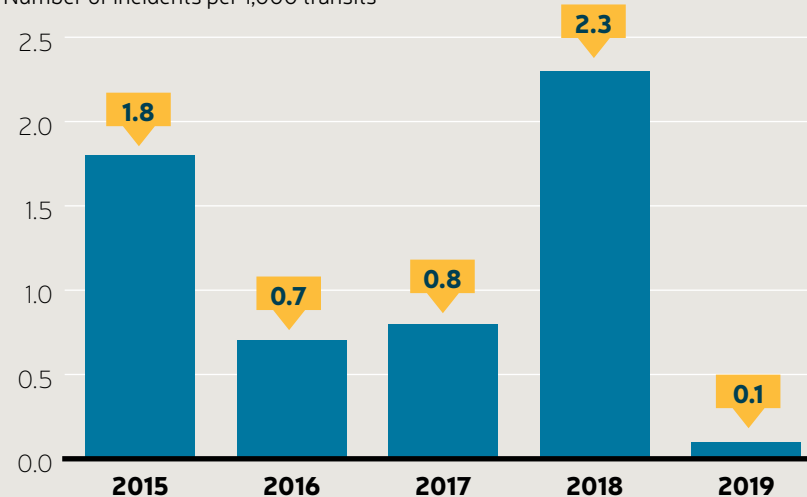
In the Welland Canal, a pilot project was introduced to extend the navigation season until January 8<sup>th</sup>. Several commercial vessels took advantage of this opportunity, with the last vessel clearing Lock 1 on January 7<sup>th</sup> at 19:45 (providing a total of 293 days of navigation).

## Marine Safety and Security

During the 2019 navigation season, there were 7 commercial vessel incidents in which damage to a vessel occurred, translating to a rate of 0.12 incidents per 1,000 transits, a significant decrease from 2018. The vessel incident rate is well below the target of less than 5 vessel incidents per 1,000 transits.

### VESSEL INCIDENT RATE

Number of incidents per 1,000 transits





Ville de Châteauguay Fire Department taking part in emergency planning exercise

## Emergency Preparedness

Recognizing the value of emergency preparedness, the Corporation held a series of training exercises throughout 2019.

- Boom deployment training was conducted across the MLO and Niagara Sections to enhance spill containment readiness.
- In the MLO Section, personnel took part in a confined space emergency evacuation exercise. Together with firefighters from the Ville de Châteauguay, personnel took part in an elaborately staged scenario simulating the evacuation of a victim out of an 87-foot deep well shaft.

In 2019, 100% of vessels bound for the Great Lakes – St. Lawrence Seaway System originating from outside the Exclusive Economic Zone (EEZ) received ballast water management tests, marking the 11<sup>th</sup> consecutive year that Seaway inspectors subjected every such vessel to a rigorous testing regimen. Verification exercises indicated that there was no non-compliant ballast water discharged in the System.

## Ballast Water Management

Since 2006, ballast water management requirements in the Great Lakes – St. Lawrence Seaway System have been the most stringent in the world. Independent research by Fisheries and Oceans Canada indicates that the risk of a ballast water mediated introduction of aquatic invasive species into the Great Lakes is extremely low.

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Encompassing 481 vessel transits, some 9,167 ballast tanks were assessed and 100% of ballast water reporting forms were screened. Inspectors determined that 98.3% of tanks were compliant, and all non-compliant vessel transits were required to either retain the ballast water and residuals on board, treat it in an environmentally-sound and approved manner, or return to sea to conduct a ballast water exchange.

## Reliable Infrastructure and Asset Renewal

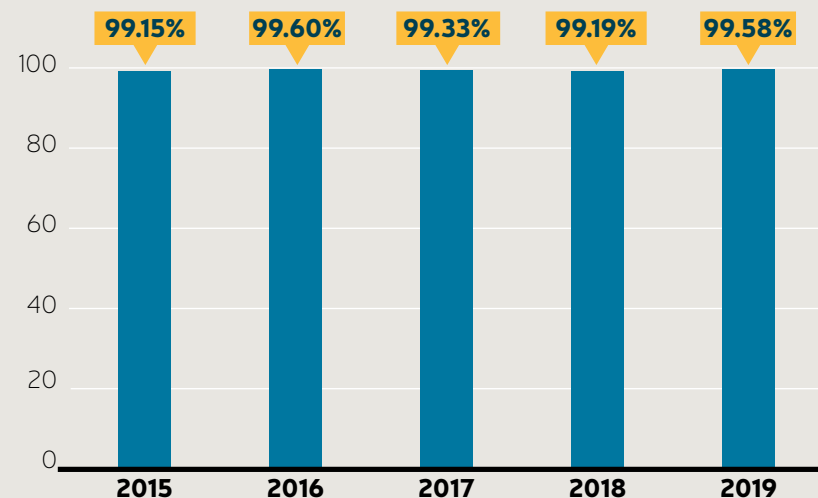
Maintaining a safe, reliable and cost-effective transportation system is vital to the Seaway's competitive position. The Corporation uses a well-established Asset Management System to optimize value from its assets and contribute to a sound long-term planning process, ensuring that capital expenditures lead to consistently high levels of system availability.

Over the course of the 2019 navigation season, the system availability rate which incorporates delays attributable to the Seaway was 99.58%, once again exceeding the 99.00% target.

Over the course of the 2019 navigation season, the system availability rate was 99.58%, once again exceeding the 99.00% target.

### SYSTEM AVAILABILITY

Target 99.00%





## Examples of major projects executed over the course of the 2019/20 fiscal year:

### Niagara Section (Welland Canal)

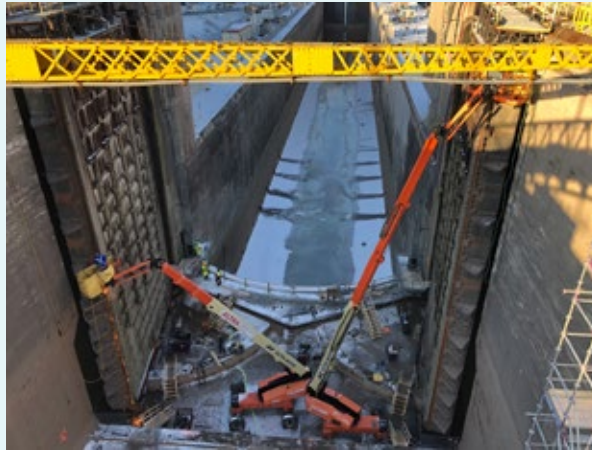


**Reach 7 Bank Repair Program** – Areas with advanced deterioration and erosion were identified leading to slopes being stabilized and repaired, and rip-rap stone installed to protect the banks in the future

**Lock 4 West** – Valves 7 and 8 were rehabilitated, entailing their removal, structural repair and recoating, and subsequent reinstallation



**Lock 5 West** – Mitre gates 3 and 4 were rehabilitated and aligned to restore bearing surfaces and ensure watertight seals



**Lock 8** – New stop logs were fabricated (stop logs are used when dewatering the lock for maintenance purposes)



## MLO Section (Montreal/Lake Ontario)



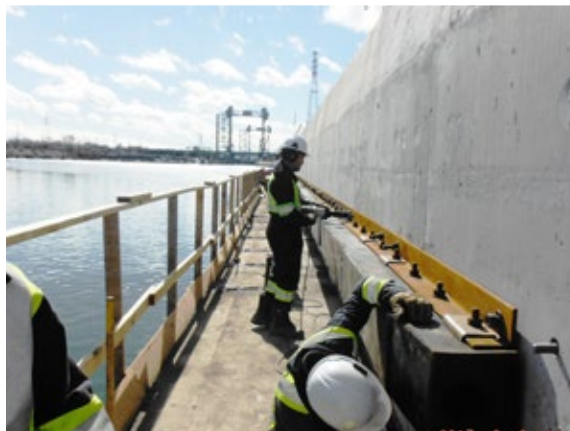
**St. Lambert Lock 1 –**  
Re-tensioning of diagonal  
braces on gates 7 and 8



**St. Lambert Lock 1 –** Concrete  
repairs to the vertical wall surfaces



**Côte-Ste-Catherine  
Lock 2** – Reconstruction  
of Bridge 19 which provides  
access to the lock and  
the dike



**Côte-Ste-Catherine Lock 2  
And Beauharnois Lock 3** –  
Reconstruction of the  
upper approach walls and  
installation of new fenders

**Côte-Ste-Catherine Lock 2** – Reconstruction of the protective covers for gear mechanisms at gates 5 and 6



**Beauharnois Lock 3** – Installation of new electrical panels and cables in four electrical rooms







**Iroquois Lock 7** – Replacement of the top wooden defense beams on lock sector gates, using a new type of material

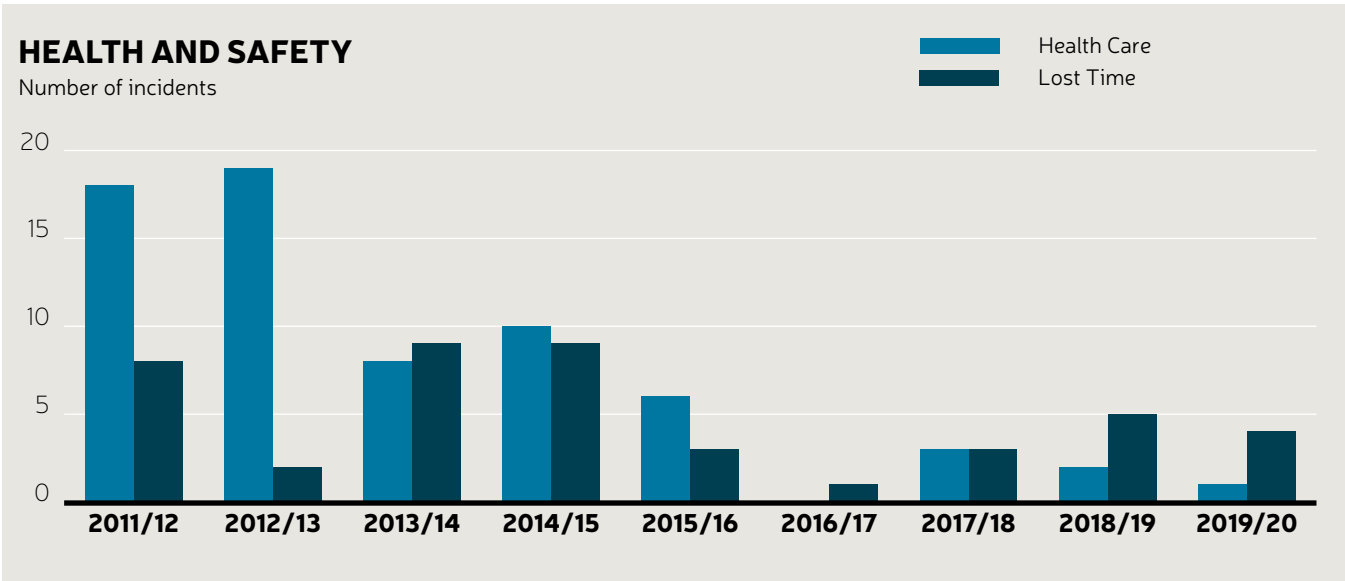
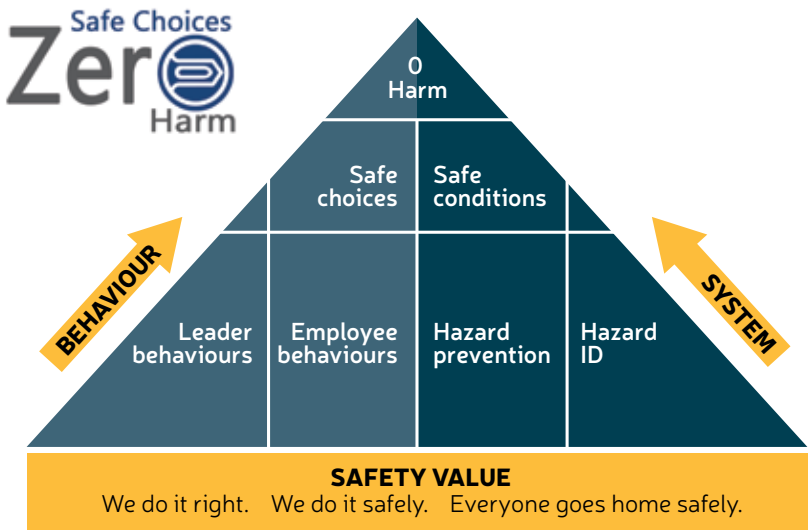




# Health and Safety

From April 1, 2019 to March 31, 2020, the Corporation reported four lost time injuries. The fact that contractors working onsite recorded “0” incidents also represents a significant achievement. When compared to other industries in the same peer group, the Corporation’s safety record represents a “world class performance”. The overall long-term trend continues to demonstrate consistent gains toward the Corporation’s goal of “zero harm”.

Every year, with the help of Regional Health and Safety Committees, the Corporation strives to eliminate work accidents by implementing mitigation measures to deal with the main areas of risk. A key activity in promoting safe working practices and preventing accidents is the “Safety Intervention”, where a supervisor engages with workers to make adjustments to work procedures that will enhance safety. Throughout the past year, over 3,800 safety interventions were carried out. Findings point to a direct correlation between the number of interventions and a positive impact on the Corporation’s safety performance.



When compared to other industries in the same peer group, the Corporation’s safety record represents a “world class performance”.



Maintenance Planning Team - MLO Section



Maintenance Planning Team and Maintenance Shops (Trades) Team - Niagara Section

## President's Safety Award

In September, 2019, the President's Safety Award recognized the Niagara Maintenance Shops (Trades) Team, along with the Maintenance Planning and Scheduling Teams in both the Niagara and MLO Sections. These groups maintained zero lost-time and health care incidents. They also developed tools to rate safety risks and designed new equipment to reduce physical harm.

# HIGH PERFORMANCE *Workforce*

The Corporation's vision for its people is driven by leaders at all levels, who actively develop and maintain a skilled, versatile, engaged and accountable workforce.

## Bob Swenor Award

Robert Swenor, the first Chair of the St. Lawrence Seaway Management Corporation, was a person who believed strongly in continuous personal development and education, commitment to the Corporation and community, as well as recognition that people make a difference. In keeping with these values, the annual Bob Swenor Living the Values Award is given to a Seaway employee who exhibits these character traits.





The 2019 recipient of the Bob Swenor Award is Alan Noble, who joined the Seaway in the Niagara Section in early 2007. He has been a Canal Services Maintenance Supervisor since 2010.

Alan consistently demonstrates his commitment to safety year after year and never hesitates to take on new initiatives. He consistently shows the utmost integrity internally and in dealings with external contractors and suppliers. Alan ensures that work is well planned and milestones are set in order to attain the expected deliverables, seeing a project through from first thought to final launch.

## Continuous Improvement

The continuous improvement (CI) program has evolved since its implementation, with all sectors of the company now targeted by the program. This year, CI initiatives provided an estimated \$2.3 million in value, with some examples being:

- maintenance productivity improvements
- a review of replacement and purchasing processes, including for certain parts used in our operations, and entering into longer-term contracts with suppliers
- inventory reductions
- streamlining telecommunication contracts

This year, the Most Valuable Person in Continuous Improvement Award was presented to Susan Atkinson to recognize her leadership role in the Procurement Department. Susan is a strong proponent of CI and motivates the other members of her team to look for improvement opportunities. She was key to improving her department's work environment through initiatives to reduce inventories as noted above, and reorganize and downsize storage space requirements.



**Left to right:** Luc Boisclair, Terence Bowles, Susan Atkinson, and Dan Boich



Lead engineer Benoit Nolet (holding the award) with, to his left, Simon Remillard, Eric Lechasseur, Claude Dumont, Sandro Pasqualetto and Fares Hindie, and award ceremony officials at the extreme left and right of the Seaway team

## SLSMC Receives Project of the Year Award for Hands-Free Mooring


In December 2019, the Corporation was awarded the innovative project of the year award by the Québec Order of Engineers (Montréal Region) for its Hands-Free Mooring project. The award reflects the professionalism of the Corporation's engineers and their commitment to high quality

work, overcoming challenges, and the importance of teamwork. Benoit Nolet, the lead engineer of the "Transit of the Future" project commended the team members for their creative and innovative spirit, and consistently meeting the high objectives set-out for this project.



# STAKEHOLDER *Engagement*

As a steward of the St. Lawrence Seaway, the Corporation recognizes that the task of managing the waterway must take into account the interests of a wide range of stakeholders, including business and industry, local communities, and recreational users.



Scene from the Prescott (Ontario) waterfront, bordering the St. Lawrence Seaway



# Engaging with Our Communities

Throughout 2019, high water levels on Lake Ontario and record-breaking flows on the St. Lawrence River made the navigation season very challenging. The Corporation was able to safely sustain navigation thanks to the implementation of special safety measures, including the imposition of reduced speed limits and alternating one-way navigation in certain portions of the river. Strict measures to enforce speed limits and to require ship operators to monitor their wake helped minimize the impact of shipping activity on the shoreline.

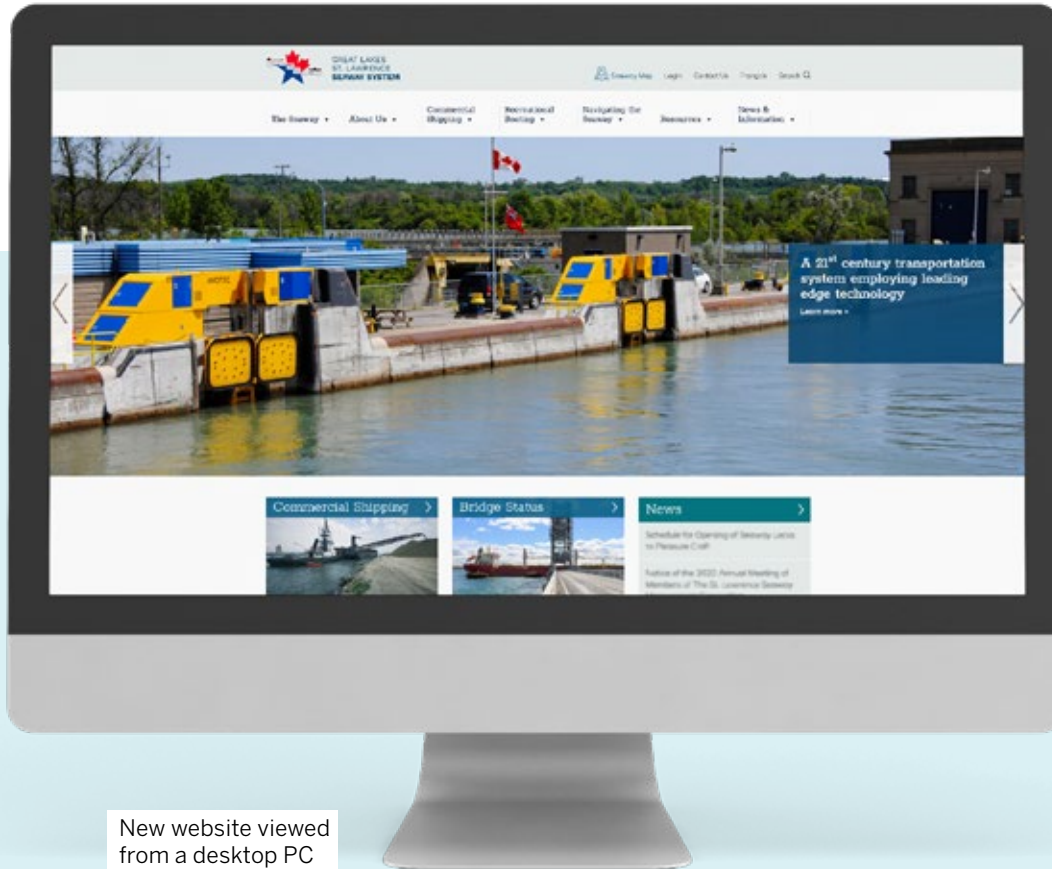
In light of high water levels, efforts directed toward community relations and media relations helped ensure that shipping activity could be viewed through an objective lens. The Corporation's new Manager of Government and Community Relations undertook a series of consultations with elected officials and municipalities. Efforts are advancing on many fronts, including the development of Seaway administered lands to boost economic development, and management of the various bridges that span Seaway canals.



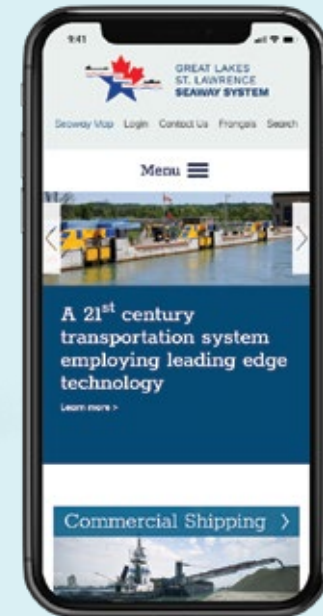
Seaway officials attending a meeting with elected officials in the Beauharnois / Valleyfield (Quebec) area

# Enhancing Communications

In early 2020, the St. Lawrence Seaway Management Corporation and the Saint Lawrence Seaway Development Corporation unveiled a redesigned [www.greatlakes-seaway.com](http://www.greatlakes-seaway.com) website. The new site boasts a fully responsive interface, instantly recognizing the user's device and automatically reconfiguring the display to suit the device's screen size. The site also conforms to WCAG 2.0 AA standards, providing greater accessibility to those with special needs.



New website viewed from a desktop PC



New website viewed from a smartphone

The Corporation also expanded its use of social media in order to broaden its outreach across multiple channels. With the creation of a Twitter account ([@CorpSeaway](#)) and an expansion of activity on the LinkedIn site, the Corporation's messaging is now conveyed across multiple channels for maximum reach and impact.

SLSMC's Twitter profile page



## Green Marine

The Corporation is an active member and proponent of Green Marine, a world leading environmental performance measurement program for the marine industry. The Corporation aligns its scores with those of its U.S. counterpart, the Saint Lawrence Seaway Development Corporation (SLSDC), and provides results on an aggregated basis. Overall for 2019, the Seaway entities achieved an aggregated score of 4.5 out of a maximum of 5. As part of its continuous improvement process, the Corporation successfully completed the alignment of its Environmental Management System (EMS) with the ISO 14001:2015 Standard.



SLSDC Deputy Administrator Craig Middlebrook and SLSMC Vice President of External Relations Jean Aubry-Morin receive membership plaques from Green Marine Executive Director David Bolduc (centre)

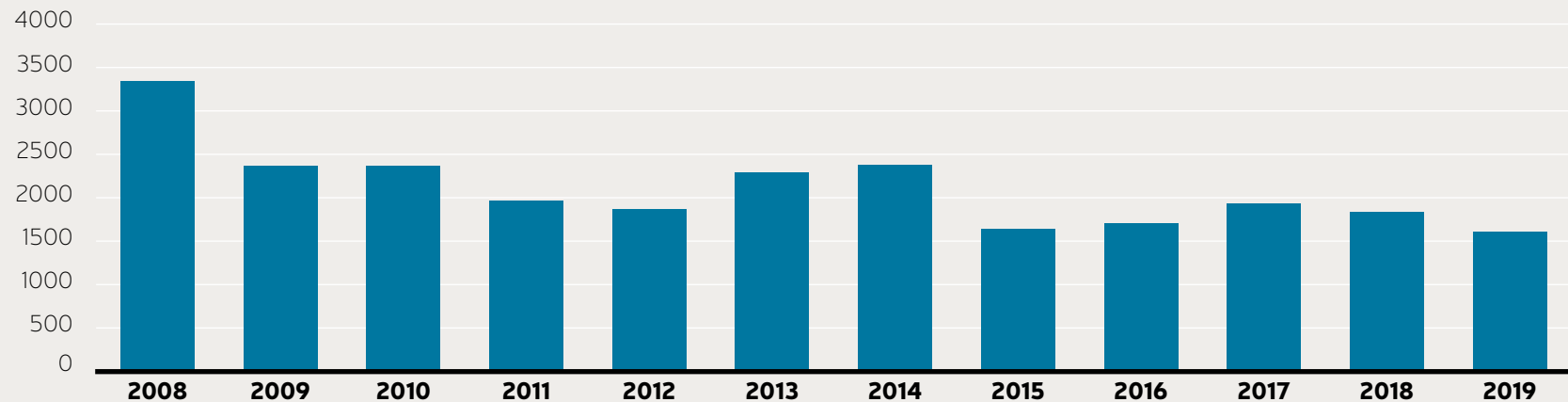


In 2019, the Corporation's greenhouse gas (GHG) emissions were the equivalent of 1,605 metric tonnes of CO<sub>2</sub>, a 13% decrease when compared to 2018, which was principally due to warmer weather conditions during the closing of the 2019 navigation season and the resulting lower utilization of equipment to prevent ice forming in the locks. As well, gains reflect other factors, such as the use of engine monitoring systems on fleet vehicles to help reduce idling vs. running time. Over the last three years, the Corporation achieved a 52% reduction in its overall level of GHG emissions, when measured against emissions generated during the 2003–2005 baseline period.

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### SLSMC GREENHOUSE GAS EMISSIONS

Tonne equivalent CO<sub>2</sub>



# 60<sup>th</sup> Anniversary Events and Celebrations

Throughout 2019, the external relations team supported and participated in a series of events and celebrations to mark the Seaway's 60<sup>th</sup> anniversary.

In concert with various community groups and stakeholders, the Corporation will continue installing information panels along the Seaway's waterfront, serving to highlight the environmental and economic benefits made possible by shipping activity on the Seaway.



Unveiling of original artwork depicting the Seaway by artist Yvon Lemieux, commissioned by CEO Terence Bowles



Plaque dedicated by Minister Garneau and CEO Terence Bowles paying tribute to Seaway's highly skilled and dedicated workforce



Seaway's 60<sup>th</sup> anniversary video being shown to an audience gathered at Brockville's Aquatarium Theatre



Seaway information panel on Morrisburg's Waterfront Historical Path, which commemorates the opening of the waterway in 1959 with a series of photos and plaques

# FINANCIAL

## *Sustainability*

The results for 2019/20 cover the period  
April 1, 2019 to March 31, 2020



Photo courtesy of John Gleed—  
Copyright [www.stlawrencepiks.com](http://www.stlawrencepiks.com)



FINANCIAL HIGHLIGHTS	2019/2020	2018/2019	2017/2018
	('000s)		
<b>Revenue</b>			
Tolls	\$73,772	\$78,108	\$75,073
Other	4,273	4,472	3,757
Category 1 Lands Revenue remitted directly to Receiver General	5,885	4,260	4,223
<b>Total revenue</b>	<b>\$83,930</b>	<b>\$86,840</b>	<b>\$83,053</b>
<b>Manageable expenses</b>			
Salaries and benefits*	\$55,702	\$57,809	\$65,137
Other**	13,948	12,074	15,074
Employee Future Benefits (Non-cash)	(15,250)	(18,510)	(20,180)
<b>Total manageable expenses</b>	<b>\$54,400</b>	<b>\$51,373</b>	<b>\$60,031</b>
<b>Excess of revenue over manageable expenses</b>	<b>\$29,530</b>	<b>\$35,467</b>	<b>\$23,022</b>
<b>Asset renewal investments</b>			
Regular maintenance	\$10,141	\$10,067	\$10,641
Major maintenance	58,907	49,915	55,295
Capital acquisitions	2,107	1,049	1,886
<b>Total asset renewal investments</b>	<b>\$71,155</b>	<b>\$61,031</b>	<b>\$67,822</b>

The comparative numbers reflect the same time span for the preceding fiscal years.

\* Includes pension solvency deficit payments of \$1,113 (2019–20), \$3,892 (2018–19) and \$9,803 (2017–18).

\*\* Additional costs in 2019–20 of \$2,046 due to high water flows and in 2017–18 of \$3,478 due to closing costs and high water levels.

# CORPORATE *Governance*

As of March 31, 2020

The St. Lawrence Seaway Management Corporation is governed by a nine-member board that is responsible for ensuring the long-term viability of the Seaway as an integral part of Canada's transportation infrastructure. The Board is composed of the Corporation's President and CEO, representatives from grain; steel and iron ore; other industry members; the domestic and international carriers; as well as one each from the federal government and the provincial governments of Québec and Ontario. Individual Board Committees include: governance, human resources, audit and asset renewal.

## BOARD OF DIRECTORS

**Gerald Carter (Chair)**

*Québec Provincial  
Government*

**Terence F. Bowles**

*President and Chief  
Executive Officer*

**Patrick Bushby**

*Grain*

**Paul Gourdeau**

*International Carriers*

**Frank Hummell**

*Ontario Provincial Government*

**Bronko Jazvac**

*Steel and Iron Ore*

**Raymond Johnston**

*Other Members*

**Karen Tippet**

*Federal Government*

**Greg Wight**

*Domestic Carriers*

## OFFICERS

**Terence F. Bowles**

*President and Chief  
Executive Officer*

**Karen Dumoulin**

*Chief Financial Officer*

**Pauline LeBlanc**

*Corporate Secretary*

## INDUSTRY MEMBERS 2019/20

### DOMESTIC CARRIERS

**Algoma Central  
Corporation**

*St. Catharines, Ontario*

**Canada Steamship  
Lines, A Division of The  
CSL Group Inc.**

*Montréal, Québec*

**Groupe Desgagnés Inc.**

*Québec, Québec*

**Lower Lakes**

*Towing Ltd.  
Port Dover, Ontario*

**McAsphalt Marine  
Transportation Ltd.**

*Toronto, Ontario*

**McKeil Marine Limited**

*Hamilton, Ontario*

**St Marys Cement Inc.  
(Canada)**

*Toronto, Ontario*

### GRAIN

**ADM Agri-Industries  
Company**

*Windsor, Ontario*

**G3 Canada Limited**

*Winnipeg, Manitoba*

**Cargill Limited**

*Winnipeg, Manitoba*

**Louis Dreyfus Company  
Canada ULC**

*Calgary, Alberta*

**Parrish & Heimbecker,  
Limited**

*Guelph, Ontario*

**Richardson  
International Limited**

*Winnipeg, Manitoba*

**Sollio Agriculture**

*Montréal, Québec*

**Viterra Inc.**

*Regina, Saskatchewan*

### INTERNATIONAL CARRIERS

**Colley Motorships Ltd.**

*Montréal, Québec*

**Fednav International  
Ltd.**

*Montréal, Québec*

**Gresco Ltée**

*Montréal, Québec*

**Inchcape Shipping  
Services**

*Dorval, Québec*

**Lower St. Lawrence**

*Ocean Agencies Ltd.  
Québec, Québec*

**McLean Kennedy Inc.**

*Halifax, Nova Scotia*

**Montreal Marine**

*Services Inc.  
Longueuil, Québec*

**Navitrans Shipping  
Agencies (East) Inc.**

*Laval, Québec*

**Robert Reford, div. of  
the La Perriere Group**  
*Montréal, Québec*

### OTHER MEMBERS

**K & S Windsor Salt Ltd.**

*Pointe-Claire, Québec*

**Lafarge Canada Inc.**

*Laval, Québec*

**Lehigh Hanson  
Materials Limited**

*Edmonton, Alberta*

**Redpath Sugar Ltd.**

*Toronto, Ontario*

**Suncor Energy Inc.**

*Mississauga, Ontario*

### STEEL AND IRON ORE

**ArcelorMittal**

**Dofasco Inc.**  
*Hamilton, Ontario*

**Iron Ore Company  
of Canada**  
*Montréal, Québec*

**Stelco Inc.**

*Hamilton, Ontario*