SeawayCompass

U.S. Department of Transportation • Saint Lawrence Seaway Development Corporation

SUMMER 2020

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Mid-Season Review: A *Wind-Swept* 2020 Navigation Season So Far

The 2020 St. Lawrence Seaway navigation season has reached its midpoint, and one supply chain has established a well-worn maritime path throughout the entire Great Lakes St. Lawrence Seaway System (GLSLSS). This transportation lane is burgeoning with wind energy equipment, destined for both existing wind farms and new wind energy project locations: not just within the Great Lakes region, but in some cases, much farther inland than the system's 2300-mile marine highway.

Since the beginning of this navigation season, 60 ocean vessels have entered the Seaway laden with wind energy cargo. For wind energy shipments, this represents the most inbound transits year-to-date in the last five years and almost doubles the 5-year average.

The destinations for this cargo have been spread throughout the Great Lakes Seaway System. From Ogdensburg in the St. Lawrence Seaway to Duluth and Thunder Bay on Lake

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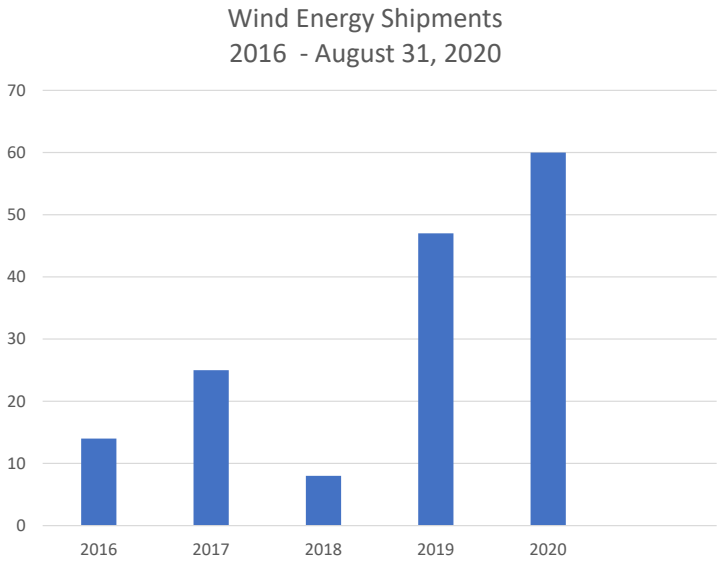

This charts reflects the number of ships that transited the St. Lawrence Seaway with wind energy components on board.

DEPUTY ADMINISTRATOR'S COLUMN

The Secret to Success

Craig Middlebrook
Deputy Administrator

Any organization is only as strong as the quality of the people who comprise it. By that measure, the Saint Lawrence Seaway Development Corporation has been successful over the years because of the exceptional people who have dedicated themselves to working there. Few employees in the 61-year history of the Seaway have contributed more to the success of the waterway than Thomas

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GUEST COLUMN

Port Perspective: Wind Cargo in 2020

Windmill blades

This issue's Guest Column features commentary from some of the Great Lakes ports that are seeing firsthand the strength of the wind energy supply chain through the St. Lawrence Seaway this navigation season.

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Superior, and seven other ports in between; wind towers, hubs, nacelles, and blades have been arriving at a rapid pace. As of the end of August, ten ports have handled this type of project cargo in six different Great Lakes states and one Canadian province. These ports and terminals have increased their ability to support a diverse supply chain that links them to wind energy projects in locations near and far.

This season's wind cargo influx exemplifies the system's global connectivity with equipment arriving from traditional cross-Atlantic trade partners like Germany, Denmark, Spain, France, Turkey, and the Netherlands but also from Trans-Pacific origins like China, South Korea, Thailand, and Vietnam.

The cargo on these vessel decks, and in each of their holds, will ultimately harness power from the relentless winds that blow across the Lakes. How appropriate that the equipment being installed to grow the renewable energy capacity in the heartland of North America is being delivered by marine transportation, the most environmentally friendly mode to move goods to market. By delivering these wind energy materials to ports as close to the project sites as possible, truck and rail transportation miles are minimized as close to the "last mile", or fewest land borne miles, as possible.

Here is a glimpse of the ports actively handling this cargo movement so far, this shipping season:

- **Ogdensburg, N.Y.** has received several vessels from Spain, delivering complete wind energy assemblies including towers, blades, and nacelles. This equipment is destined for the Roaring Brook Wind Farm located in Martinsburg, New York State.
- **Buffalo, N.Y.** has seen multiple vessels of wind energy cargo from Spain, South Korea, and Germany, with equipment destined for wind farm installation within a few hours of the port in upstate New York.
- **Erie, Pa.** received the very first wind cargo vessel of the season within a week of the Seaway opening in April, offloading wind towers from Spain for a project in the region.
- **Monroe, Mich.** has seen regularly-scheduled shipments of wind energy cargo from the Port of Becancour, Quebec, through the Seaway in an example of short sea shipping at its finest. A total of 16 transits are scheduled this season.
- **Bay City, Mich.** has been receiving wind cargo on vessels from China and South Korea for projects in both Michigan and Indiana. This will continue for the rest of the year, making 2020 an even more active year than 2019.
- **Burns Harbor, Ind.** has received wind energy equipment for two project locations: Ohio and Indiana, with another potential site being supplied by year's end. Cargo has arrived from Denmark, Thailand, and Vietnam.
- **Chicago, Ill.** has also been a link in this season's wind energy supply chain, with two vessels arriving in the "Windy City" from Denmark, carrying hubs to support Midwest wind farm projects.
- **Menominee, Mich.** has continued its support of wind projects in the upper Midwest by handling wind cargo early in the season. Those shipments originated from Morocco, Denmark, and Spain.
- **Thunder Bay, Ont.** has handled two vessels of wind equipment for wind projects in Western Canada, one arriving with equipment from Germany, and the other from Spain.
- **Duluth, Minn.** may have been the last port of these nine to receive wind energy project cargo, but it will end up being the "closer" for the system, with vessels scheduled through year's-end. Coming on the heels of their record-wind energy cargo year in 2019, their traffic flow picked up this season where it left off. Duluth's geography makes it the access point for wind energy projects in at least eight western states.

The Great Lakes St. Lawrence Seaway System is poised for a strong close to the season with wind energy cargo continuing to set the pace as it has since the outset. So, when you find yourself traveling the Great Lakes region and see a wind farm on the horizon, look for the billboard that reads, "These windmills, *brought to you through your local Great Lakes port and the St. Lawrence Seaway.*" You may not see one, but… ■■■

DEPUTY ADMINISTRATOR'S COLUMN
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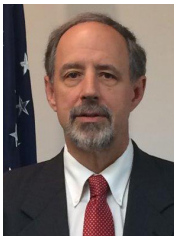
Lavigne, who is retiring this month after 40 years of service to the Corporation. For the past five years, Tom served as the Corporation's Associate Administrator, and before that as the Associate Administrator for Infrastructure Management and Strategic Programs, Director of Engineering and Maintenance, and Chief Engineer.



Thomas Lavigne
Former Associate Administrator

In all of those significant roles, Tom has done more than anyone to establish and maintain the reputation of the Seaway as one of the premier international waterways in the world. A brilliant engineer, a gifted strategic planner, and the hardest-working person you'll ever meet, Tom has contributed to — and often led — just about every major infrastructure or policy initiative at the Corporation over the last 40 years.

His record of achievement is voluminous and varied, but perhaps the most indicative testament to all that Tom has achieved is the SLSDC's exceptional reputation for reliability — after 61-years of operation in one of the harshest climates in North America, the SLSDC's 1950's vintage lock and channel infrastructure still operates flawlessly at close to 100 percent of the time, day-in-and-day-out, month-to-month, and year-after-year.

Behind that performance feat lie thousands of strategic and tactical decisions over the past 40 years, and Tom has touched just about every one of them. Tom has patiently taught me more than I will ever be able to repay, and he has inspired me to be as good a public servant as I can possibly be. I'm honored to call him a colleague and friend. To all of the SLSDC's stakeholders who have come to depend on our reputation for reliability and customer service, you should drop Tom a line to say "Thanks" and wish him well in his well-deserved retirement.

Succeeding Tom as the SLSDC's Associate Administrator is Gary Croot. The Corporation and those we serve are extremely fortunate to have someone with Gary's varied background and skill take over the reins in Massena. Gary comes to the Corporation after a successful career at the United States Coast Guard, where he retired with the rank of Commander. During his time in the Coast Guard, he held a variety of senior positions around the Great Lakes, including as the Supervisor of the Coast Guard Marine Safety Detachment in Massena from 1999–2002. He has also served as a Marine Safety Officer, an Executive Officer, and the Commanding Officer of the Marine Safety Unit in Duluth, Minnesota. He finished up his Coast Guard career as the Chief of the Environmental Standards Division in Washington, D.C., where he was responsible for directing the Coast Guard's research, development, drafting, and implementation of environmental regulations applicable to the commercial maritime industry. This included the publication of the Coast Guard's historic national ballast water regulations in 2010. For the last nine years, he has been President of a successful international consulting firm. Gary knows the Great Lakes St. Lawrence Seaway System well, and he comes into his new role as well-prepared as anyone can be. Gary has an article in this edition of the *Compass* to introduce himself to you.

The "secret" to the SLSDC's success over the years has been — and still is — the exceptional quality of the individuals who serve here. While nobody exemplifies that more than Tom Lavigne or Gary Croot, that fact applies equally to all the women and men who work at the Corporation. As a wise Frenchman once said: *"La plus ça change, la plus c'est la même chose."*

Gary Croot
Associate Administrator

New SLSDC Associate Administrator: In His Own Words

When I first accepted the position of Associate Administrator of the Saint Lawrence Seaway Development Corporation earlier this year, my daughter asked me what I would be most looking forward to with the change in careers. Having worked primarily as a ballast water consultant since retiring from the Coast Guard in 2011, my professional focus had been fairly narrow and specialized.

My consultancy was very rewarding as I felt that I was having a positive impact on the shipping community while at the same time working toward improving the environment by reducing the risk of invasive species throughout the world. However, I was ready for a change. Some of my most enjoyable postings in the Coast Guard had been positions which had a variety of challenges from day to day and week to week. So, my response to my daughter was that I was most looking forward to the widely varying operations and challenges in which the Saint Lawrence Seaway Development Corporation is engaged on a daily basis.

Well, after two months here in Massena, I can say it has been a whirlwind of different challenges and experiences, far exceeding my expectations. Each day brings a new — and often unexpected — obstacle. Fortunately, for the last two months, I have been able to rely on the wise counsel of my predecessor, Tom Lavigne, to shepherd me through my first two months here at the Seaway. Additionally, I have relied heavily on the expertise, experience and wisdom of the staff — including our supervisors, lock operations crews, engineers, maintenance workers, vessel crews, and financial and human resources personnel — to keep things running smoothly and at peak efficiency. I know I will continue to rely on their sage advice as we tackle new and different challenges in the coming months.

Unfortunately, as a result of the ongoing travel restrictions, I have not been able to personally meet with many of our partners on both sides of the border. While I have spoken with many of you via teleconference and videoconference, I hope to rekindle old friendships throughout the Great Lakes maritime community in the coming months. ■■■

GUEST COLUMN, PORT PERSPECTIVE:
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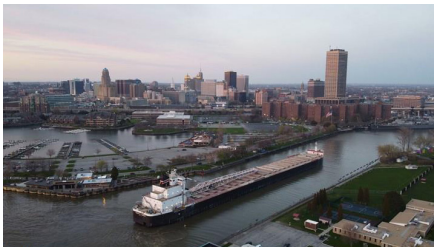
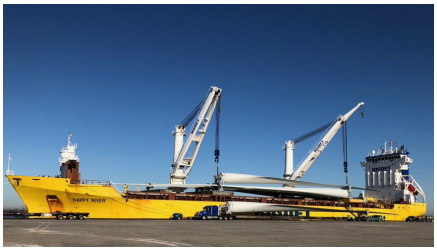


AIDAN VOGT, MARINETRAFFIC.COM

Port of Buffalo

Patricia C. Schreiber, Port Director, Port of Buffalo: "The Port of Buffalo received its first Wind Turbine vessel the first week of May which contained blades and last of five vessels the second week in July. The original schedule was to have one vessel in and cargo reloaded to truck to be shipped out. Due to the site not being ready we had to make room for all five vessels of cargo. The first loads of turbines have just begun to be shipped out to the site this week. The cargo is being transported to the site by a local trucking company and will be loaded at the port with our own people. This has created some new jobs for us."



PORT OF INDIANA-BURNS HARBOR

Wind turbine components being unloaded at the Port of Indiana-Burns Harbor in 2020

Ian Hirt, Port Director, Ports of Indiana-Burns Harbor: "The impact that wind turbine shipments will have on the Port of Indiana - Burns Harbor in 2020 is significant. It begins on the dock with the extra man hours generated for the International Longshoreman's Association and Operating Engineer unloading the ships and re-loading the pieces onto trucks. These individuals are hired and fired every day and with few exceptions they don't know when their next paycheck will arrive nor how much it will be. The economic uncertainty related to COVID-19 and the negative impact on the steel industry did not bode well for these men and women prior to the opening of the St. Lawrence Seaway this spring. However, the approx. 40 wind turbine shipments that will move through Burns Harbor in 2020 have provided a lifeline for them. The same can be said for their employer, Federal Marine Terminals, as well as the Ports of Indiana. As challenging as this year has been economically, POI-BH is actually ahead of last year's tonnage handled through the end of June and the wind turbine shipments are one of the major reasons for this surprising fact. The revenue generated from these shipments also has a direct impact on truckers, security guards, police escorts, restaurants, gas stations, pilots, tug boat operators and the local community where these dollars are spent. Lastly, we would be remiss if we did not mention the environmental benefits derived from these components. While there will always be a need for some fossil fuels, utilizing the wind to generate electricity will make Northern Indiana a better place to live, work and play and we are proud of all our partners in/around the Port of Indiana Burns Harbor that help make this happen."

PORT OF DULUTH

Big Lift's *Happy River* delivers wind towers to the Port of Duluth, Minnesota.

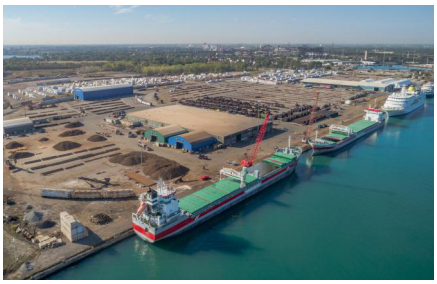
Deb Deluca, Executive Director, Duluth Seaway Port Authority: "As the farthest inland seaport in North America, Duluth is geographically well-situated to support mid-continent wind energy expansion. We're also well equipped for this role as a heavy-lift port and multimodal transportation hub. We welcomed our first wind energy cargo in 2006, and it's been an important part of our cargo portfolio ever since. Last year, Duluth set a wind cargo freight tonnage record; this year, we're on pace to break that record. When those cargoes arrive, they bring a cascade of benefits to our port and the region, with opportunities for more employment and more revenue across a wide swath of companies involved in moving cargo from its origin to its destination. Additionally, wind cargo is a very visible symbol of North America's increasing embrace of renewable energy and the resulting benefits for our planet, so the positive effects are multifaceted."

THE GREAT LAKES SEAWAY PARTNERSHIP

Port of Erie

Carmeuse America, Port of Erie Stevedore: "We are on our 2nd consecutive year of handling wind energy components through the Port of Erie. We have a zero damage / zero injury record in dealing with this type of cargo and our customers are very happy with the quality and professionalism that our crew brings to the table. We always look forward to taking on added cargo handling opportunities here at Carmeuse Americas / Erie Dock Operation. We are the only fresh water port with access for foreign vessels for the State of PA and we take pride in handling this gateway. Not only does the business create opportunities for growth in our economy, but it also provides jobs for local northwest Pennsylvanians."

Clayton K. Harris III, Executive Director, Illinois International Port District: "Wind energy is a growing industry throughout the country and the Midwest is prime for transporting the components needed to continue to advance renewable energy development.



ILLINOIS INTERNATIONAL PORT DISTRICT

Illinois International Port District

As the *Greatest Multimodal Facility in North America*, the Illinois International Port District is a key conduit to support the wind cargo supply chain in the state. The IIPD is excited to support its largest tenant, the North American Stevedore Company (NASCO) as they bring in components of wind turbines into the Chicago region. This freight activity promotes regional economic growth, keeps jobs in our region, and helps to ensure the Chicago region remains the premier freight hub in the country. The IIPD is exploring more opportunities to make wind cargo one of the many goods to come to and pass through the Port's facilities, including partnering with the Illinois Department of Transportation to ensure that the road network is able to handle this significant cargo type so that the IIPD's tenants can continue to increase cargo volumes."

Paul C. LaMarre III, Port Director, Port of Monroe: "If there is one word that defines the Port of Monroe during these challenging times, it is "resilient." In the midst of an ever-evolving economic and social climate, our team has adapted to new protocols and reinforced long-standing relationships, leading to the Port's most prosperous year in its history.

PAUL LAMARRE, III

The *M/V Happy River* delivers a shipment of 40 wind tower segments to the Port of Monroe. The components will be used in General Electric's wind energy efforts in Michigan.

As the home to one of only four wind tower manufacturers in the U.S., Ventower Industries, the Port has become a regional congregation and distribution hub for GE Wind. The work ethic and professionalism of our Port Team continues to breathe life into a long dormant Port. We couldn't be more thankful."

JASON HUNTER, WATERTOWN DAILY TIMES

A ship, docked at the Port of Ogdensburg, holds wind turbine tower sections on the St. Lawrence River in Ogdensburg.

Steve Lawrence, Interim Executive Director, Ogdensburg Bridge & Port Authority: "The Port of Ogdensburg has been kept busy this shipping season moving wind turbine components. The wind turbine components are made abroad and have been transported to the United States over the past 2 months on large ocean vessels. Recent shipments consisted of wind turbines including blades, nacelles, generators, hubs, tower sections and other sub-components. The recent blade shipment was delivered by the BBC Elbe, which carried 5 sets of 235-foot-long blades. The shipment joins other turbine blades stored at the terminal. The Port of Ogdensburg will eventually handle and ship a total of 15 turbine systems for the *Roaring Brook* project, with one additional ship arriving later this September."

NORTHERN ONTARIO BUSINESS, PORT OF THUNDER BAY

Handling project cargoes like wind turbines and oil sands equipment have put the Port of Thunder Bay on the map as a gateway port to Western Canada.

Tim Heney, Chief Executive Officer, Thunder Bay Port Authority: "The Port of Thunder Bay is Canada's Gateway to the West — built as a crucial transportation link connecting the western provinces of Alberta, Saskatchewan and Manitoba with the world. The port has established itself as a competitive supply chain link for accessing wind energy projects in Western Canada. Thunder Bay is a viable alternative to more congested ports and has the closest proximity by land to Western Canada of any port east of the Rockies. Wind cargo shipments are handled at Keefer Terminal; competitive advantages include direct access to Canadian National and Canadian Pacific railways, as well as the TransCanada Highway and U.S. highways. The terminal is equipped with a Liebherr mobile harbour crane and a toplifter for cargo handling. A $15 million-dollar terminal reconfiguration project is nearly complete that includes construction of an additional 50,000 sq. ft. of heated cargo storage, cargo laydown area expansion and rail upgrades. The Port received contributions for the reconfiguration project from the National Trade Corridors Fund and the Northern Ontario Heritage Fund Corporation." ■■■

High Water Levels on Lake Ontario Trend Lower

This summer, the above average water levels on Lake Ontario and the lower St. Lawrence River have remained below the record high levels of 2019. Despite high inflows from Lake Erie, persistent dry weather conditions throughout the Lake Ontario basin and high outflows from Lake Ontario have resulted in water levels slowly declining since Lake Ontario reached its peak level in early May at 52 cm (20.5 in) below the record high peak of last year.

NEW YORK UPSTATE

The Sterling Nature Center features nearly two miles of Lake Ontario shoreline.

By contrast, the water level on Lake St. Lawrence has remained well below average as outflows through the Moses-Saunders Dam remain high and continue to draw the level of Lake St. Lawrence down significantly. On May 22, the International Lake Ontario-St. Lawrence River Board (Board) agreed to adjust outflows when needed to maintain the water level on Lake St. Lawrence above 73.0 m (239.5 ft), or 40 cm (16 in) higher than the typical navigation season low level limit, until after this year's Labor Day weekend. So far, the recommended weekly outflows have not needed any significant adjustments to meet this requirement helping to maximize outflows while still maintaining safe water levels for commercial navigation.

However, the weather is still the main driver of future water levels throughout the Lake Ontario-St. Lawrence River, specifically wet or dry conditions. The current forecasts suggest high outflows will continue through the rest of this year as Plan 2014 responds to the above average water levels of Lake Ontario resulting from the high inflows from the upper Great Lakes. While the water level of Lake Ontario is slowly receding, the Seaway Corporations continue to work closely with the Board and the International Joint Commission to determine the most appropriate and effective approach going forward.

Even though conditions in the Lake Ontario-St. Lawrence River system have improved, it remains clear that the challenges experienced over the past few years still require a plan for greater resilience among all stakeholders. Commercial navigation interests remain committed to being a part of a process that explores how to adapt to the reality of variable and unpredictable weather conditions. ■■■

Port Milwaukee's Busy Summer

Port Milwaukee has had, by any measure, a very productive August, adding to its already robust multimodal portfolio with two impactful lease agreements and officially welcoming a long-time customer as its new neighbor.

On August 6, the Board of Harbor Commissioners approved two long term leases between the port: a 99-year lease with construction firm Michels Corporation for development of port property on the Kinnickinnic River and a 30-year lease with agricultural firm, The Delong Company, for deep draft property at the port. Delong is in the process of designing and building a $31 million agricultural export facility at the port that will utilize the St. Lawrence Seaway as its maritime export gateway. Then, as the month came to a close, the sale was completed of land, including former Port-controlled property, to Komatsu Mining Corp. for their headquarters and manufacturing facility. This deal brings a world class manufacturer and global exporter of heavy equipment to the Port's doorstep. ■■■

PORT MILWAUKEE

The Great Lakes freighter *Stewart J. Cort* passes through Port Milwaukee in 2017.

Seaway Guardian Arrives in Massena, N.Y.

On July 20, the U.S. Department of Transportation's Saint Lawrence Seaway Development Corporation (SLSDC) announced the arrival of its new tugboat, the *Seaway Guardian*, in Massena, New York. The vessel completed a three-week journey through the Gulf of Mexico, around Florida, and up the Atlantic seaboard from the Gulf Island Shipyards in Houma, Louisiana, where it was constructed. The *Seaway Guardian* will be the first new American-built tugboat to join SLSDC since the Seaway opened 61 years ago.

"The St. Lawrence Seaway is important because it provides access for American raw materials, manufactured goods and agricultural products to be exported all over the world. Many thanks to the Wisconsin-based crew that sailed the new tug on its long journey from the shipyard to the Seaway. The *Seaway Guardian*, the first new American-built, American-crewed tugboat to join the Saint Lawrence Seaway Corporation in 61 years, will be a great addition to the Seaway's fleet," said U.S. Secretary of Transportation Elaine L. Chao.

Construction of the *Seaway Guardian*, which is capable of operating in difficult ice conditions, began in 2018. The keel was laid on June 26, 2018 and the vessel launched on September 12, 2019. Sea trials in the Gulf of Mexico were completed in June of this year and the tug began its delivery voyage to SLSDC's marine base in Massena on July 2.

Seaway Guardian

The *Seaway Guardian's* primary missions will be buoy maintenance and ice management. It will also assist in firefighting and emergency operational response on the St. Lawrence Seaway. The new tug cost $24 million to construct as part of the SLSDC's Asset Renewal Program. The tug will replace the 62-year-old vessel, *Robinson Bay*, which the SLSDC will maintain as back-up for the foreseeable future.

Shipping on the Great Lakes-St. Lawrence Seaway System sustains more than 237,000 jobs and generates $35 billion in economic activity annually. The St. Lawrence Seaway stands to see continued growth, following the passage of the United States-Mexico-Canada Agreement (USMCA), a comprehensive, 21st century agreement with two of the United States' most critical trade partners. The USMCA not only keeps most tariffs between the three countries at zero, it does more than any prior agreement to eliminate non-tariff barriers and unfair subsidies that work against America's farmers, workers, and employers.

View Secretary Chao's remarks here. ■■■

Pacesetter Award Virtually Presented to Duluth

This summer, Deputy Administrator Craig H. Middlebrook provided a virtual presentation of the SLSDC's Pacesetter Award to the Port of Duluth – Superior. The SLSDC annually recognizes U.S. Great Lakes ports that increase international tonnage shipped through the St. Lawrence Seaway compared to the previous year. Five U.S. ports earned the Pacesetter Award for the 2019 navigation season. In addition to Duluth, the other recipients were the Port of Chicago, the Port of Green Bay (Wis.), the Port of Monroe (Mich.), and the Port of Oswego (N.Y.). Since the award was first issued 28 years ago, the SLSDC has distributed 147 Pacesetter Awards to different ports in the Great Lakes Seaway System.

In a recorded message, the Deputy Administrator congratulated Port Director Deb DeLuca and her team for their commitment to keeping the port thriving.

During the 2019 navigation season, the port handled over 1.3 million metric tons of international freight moving through the St. Lawrence Seaway, representing a 16 percent increase in cargo tonnage over the 2018 season. This year's award marks the 17th time the Port of Duluth-Superior has earned the Pacesetter Award.

The Pacesetter Award serves as a way to raise awareness among a wider community about how important ports are to their local, regional, and national economies. Congratulations to all five ports that earned the 2019 award!

DID YOU KNOW?

2020 Navigation Season: Enduring Benefits of Hands Free Mooring (HFM)

Increased safety

- HFM increases safety with fewer "snap backs" of mooring cables or mooring lines. There are also fewer lock crew and onboard ship crew injuries due to muscle strains, etc.
- 99.2 percent of the fleet that transits the two U.S. locks are found to be HFM compatible.

Lower costs

- Due to HFM, captains and crews have additional time to dedicate to other ship-board responsibilities.
- HFM is much faster overall than traditional tie-up methods, and that greater efficiency translates into cost savings.

Reduced transit times

- Vessels using HFM can reduce transit times by approximately 7 minutes as compared to traditional methods, which will save over 3 hours on a round trip transit through the Seaway.

Save the Date

September/October

September 29 – October 2
Great Lakes Commission Annual Meeting — Virtual
Info: https://www.glc.org/meetings/annual

November

November 18–19
Hwy H_2O — Virtual
Info: https://hwyh2o-conferences.com/