



# Great Lakes St. Lawrence Seaway Development Corporation

-Who I am and,  
-Who we are-





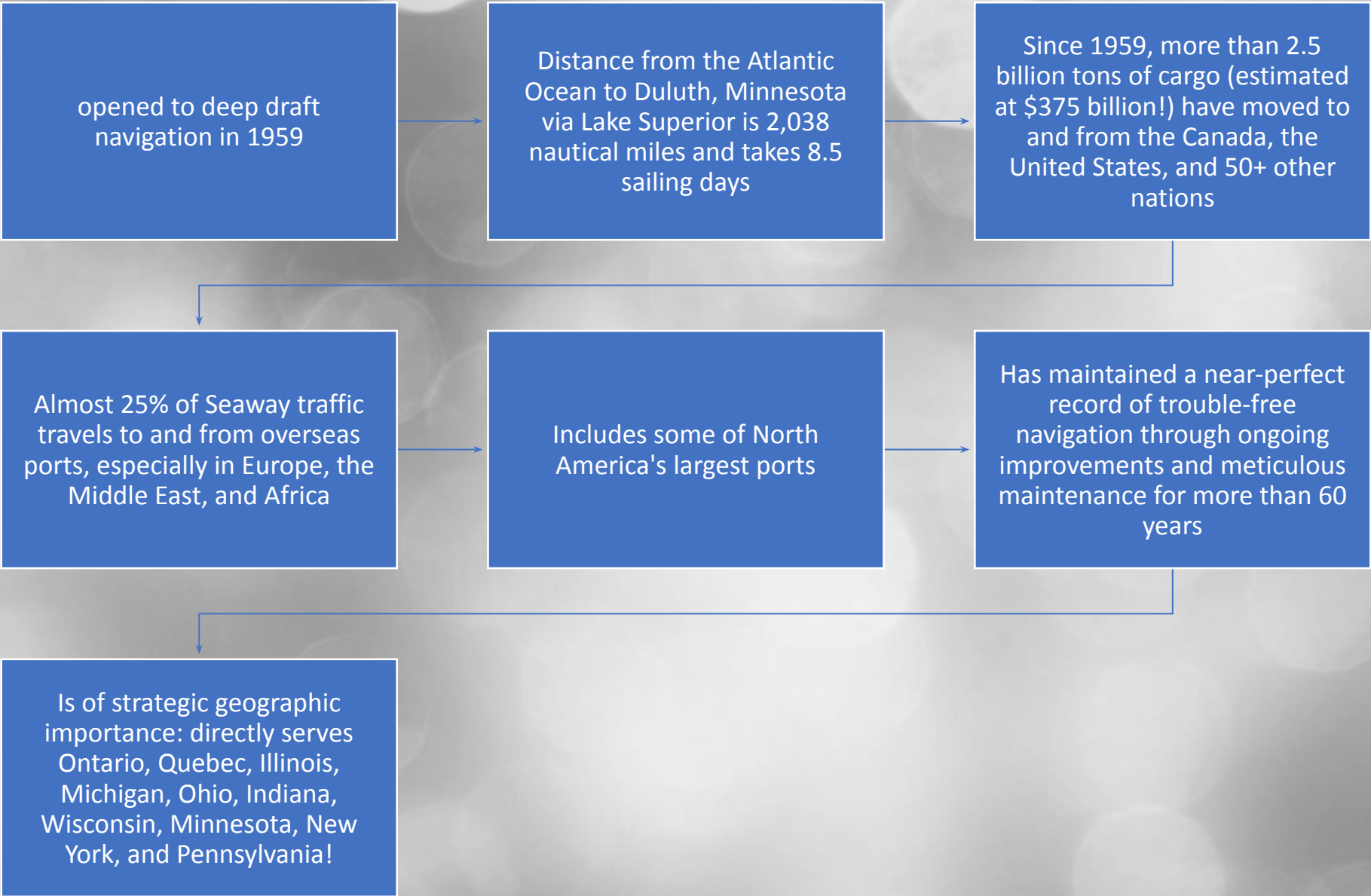
The Great Lakes St. Lawrence Seaway  
Development Corporation works to operate and  
maintain a safe, reliable, and efficient waterway  
between the Great Lakes and the Atlantic  
Ocean.




GLS has (2) locations,

- a. DOT headquarters and Offices in Washington DC
- b. Eisenhower and Snell Locks here in Massena NY

We at GLS work Bi-nationally with our Canadian counter-parts the St. Lawrence Seaway Management Corporation.





Combined with the eight locks of the Welland Canal, which link Lake Ontario to Lake Erie, the bi-national St. Lawrence Seaway's 15 locks (13 Canadian and 2 American) allow ships to transit between Montreal and Lake Erie, a difference in elevation of 168 meters. 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.



•Now with 15 locks on the seaway, we manage two of them while the Canadians have 13.

•We also maintain ATON, vessel traffic control, even ship inspections, and ballast water inspections.

•We own 68% of a bridge across the Seaway.

• And we have a mandate to promote trade and economic development.

•This is a priority for us. The Great Lakes region accounts for 6 trillion dollars in economic output, which would make it the world's 3<sup>rd</sup> largest economy after the US and China. For context, imagine taking the economies of Japan and South Korea, wrapping them in a bow, and hiding them behind a single seaway. There are a lot of untapped cargo opportunities in the Great Lakes.



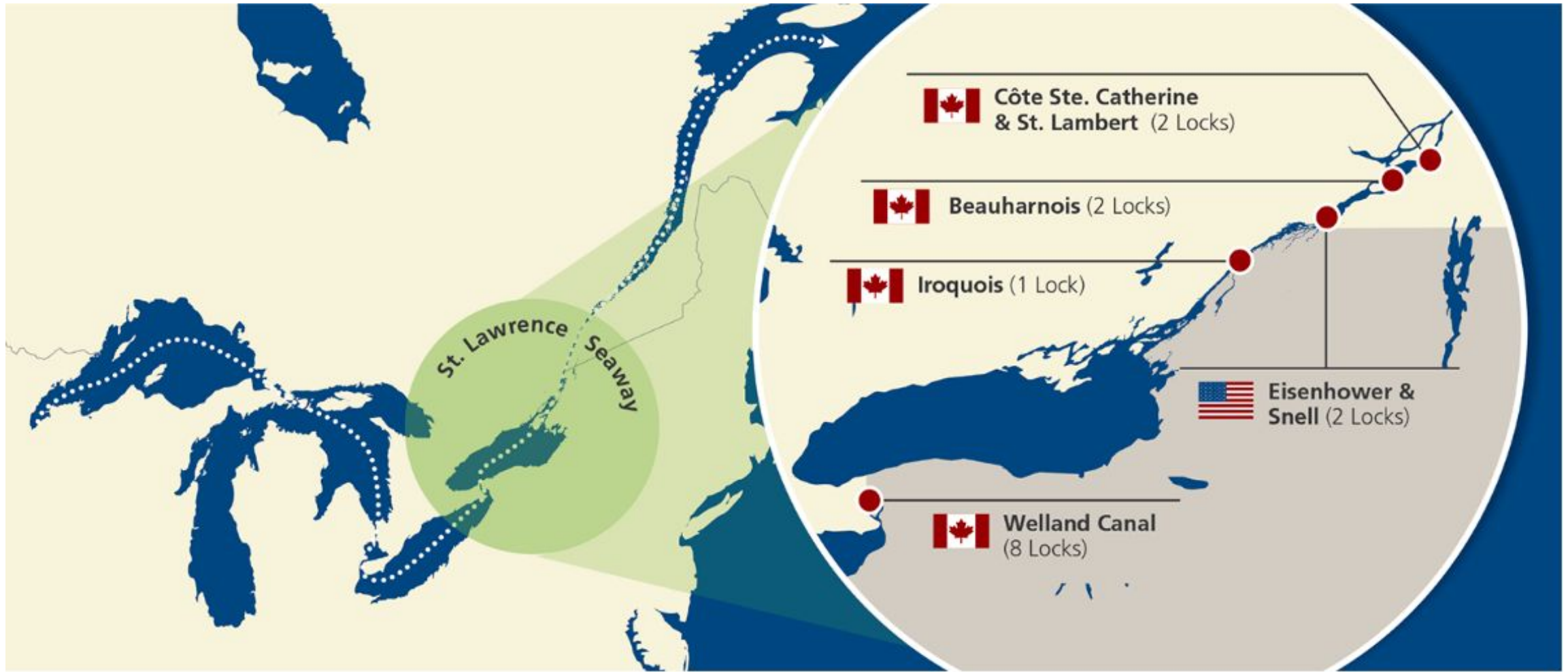
- Our two locks are in Massena NY, which if you've been there in the wintertime it reminds you of the ice wall on Game of Thrones.

- It gets cold, or at least it used to. Partially because of climate change, we've been able to extend our shipping season. This year we closed the Seaway on January 5<sup>th</sup>, the latest on record, and re-opened in mid-March.

- And while a 20,000 TEU monstrosity won't fit through the locks, it doesn't have to. We're exploring ways to make the seaway cost competitive for container shuttle services between the lakes and coastal ports like Montreal or Halifax, taking advantage of the quick turnaround times for small ships and barges.

- Put simply, big ships are efficient on long voyages, whereas small ships are efficient on short voyages.





•To expedite transits, we installed hands-free mooring systems at the US and Canadian locks – the first waterway and lock system in the world to put this technology in place.

•Quicker transits mean lower Operating expenses for the carriers, which in theory should result in greater system competitiveness.

•Here's how it works, It's a fairly simple concept, these arms are fixed with suction cups that pull a vacuum and guide the vessel as the water levels are raised and lowered – obviating the need for line-handling aboard the VSL or use of longshoreman/line-handlers.

•It also means that ships no longer need special fittings to transit the locks. Which increases tenfold the variety of vessels that can transit the seaway.

•We intend to be globally competitive. Being first to market with hands-free mooring was the initial step.


## Hands Free Mooring

Improves safety by eliminating traditional linehandling.

Reduces transit time per Seaway lock by approx. 5-7 minutes each way or 3-4 hours for a roundtrip Seaway voyage.

Increases ten-fold the number of commercial ships capable of transiting the Seaway.





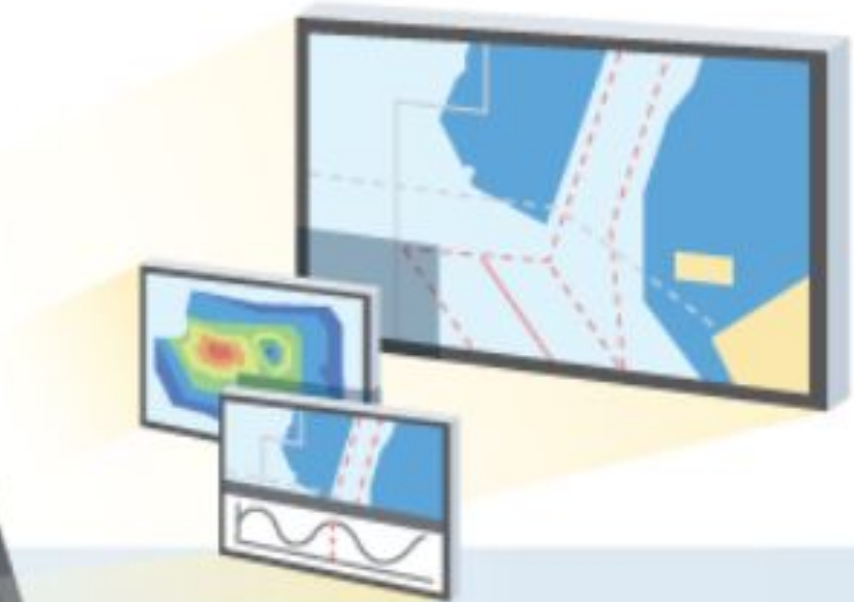
- In addition to the locks, we're also responsible for maintaining the channels and navigational aids in U.S. waters and performing vessel traffic control along the St. Lawrence River and Lake Ontario.

- We're in the process of developing a new Voyage Information System, along with our Canadian counterparts, again with expediency and safety in mind.

- As well as interoperability with the systems in use by the pilots, ports, and carriers.

- This increases route optimization and reduces fuel burn.

- We will continue to leverage new technologies to keep optimizing a safe and efficient Seaway.





- From an economic security perspective, the so-called rust belt, now referred to as the opportunity belt, produces 70 percent of the total U.S. steel production.

- Likewise, Michigan, Indiana, and Ohio rank 1, 2, and 3 in auto and trailer manufacturing. And it's headquarters for one-half of Fortune 500 industrial companies.

- Also, the system provides waterborne access across 2,342 miles from Quebec to Duluth, which for context is almost exactly the same distance as the total length of the Mediterranean sea.

- And for cross-border cargoes, which is a \$278B market, think about how much distance you could save by moving a trailer or a box across a lake rather than around it.



## **GREAT LAKES ST. LAWRENCE SEAWAY economic impact**

- **135.7 Metric tons moved per NAV-SEASON**
- **241,286 jobs supported**
- **US\$26.1 Billion / Cdn\$33.9 Billion of cargo value**
- **US\$17.8 Billion / Cdn\$23.2 Billion wages paid**
- **US\$36 Billion / Cdn\$46.8 Billion of economic activity**







Any  
Questions?