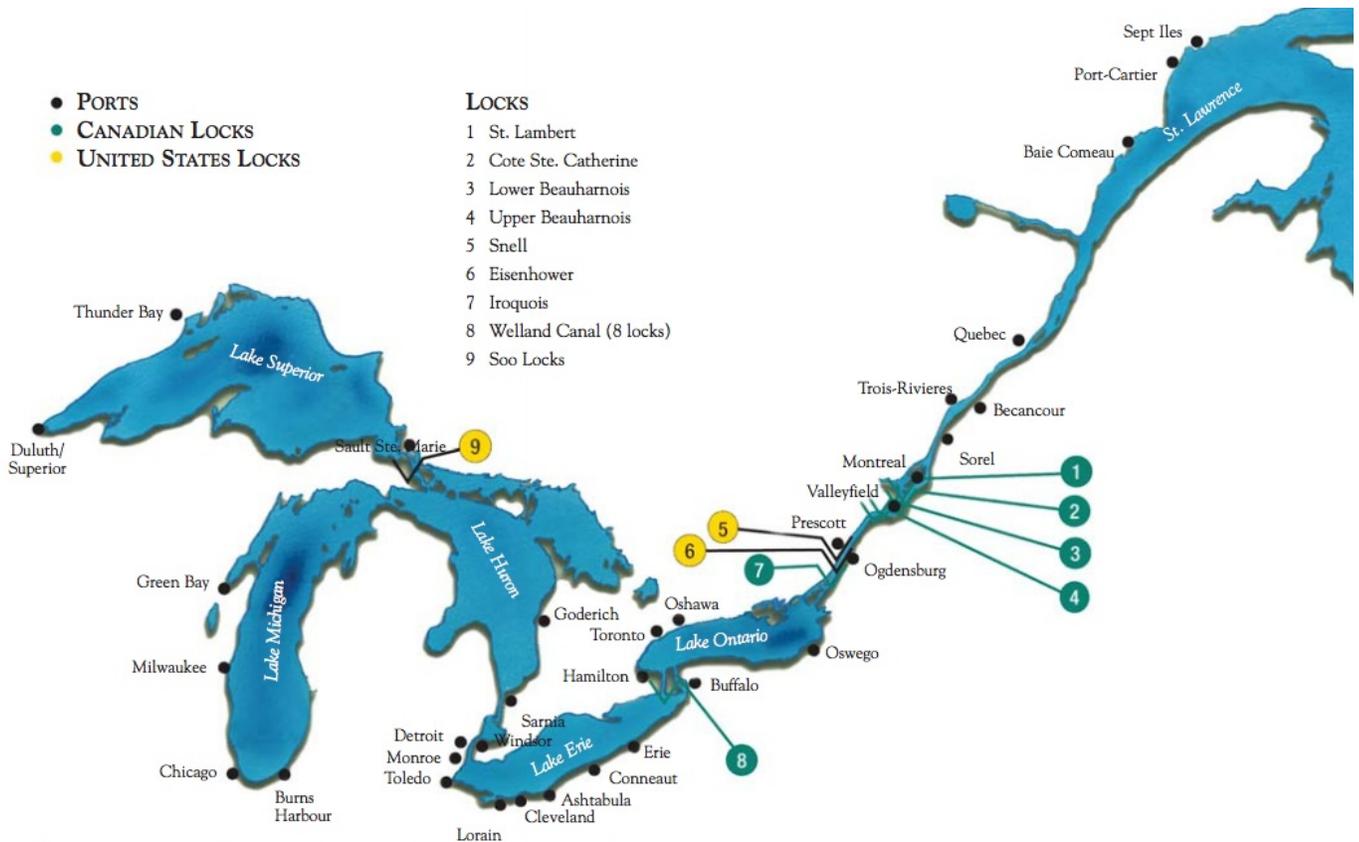


LOCK AVAILABILITY AND RELIABILITY

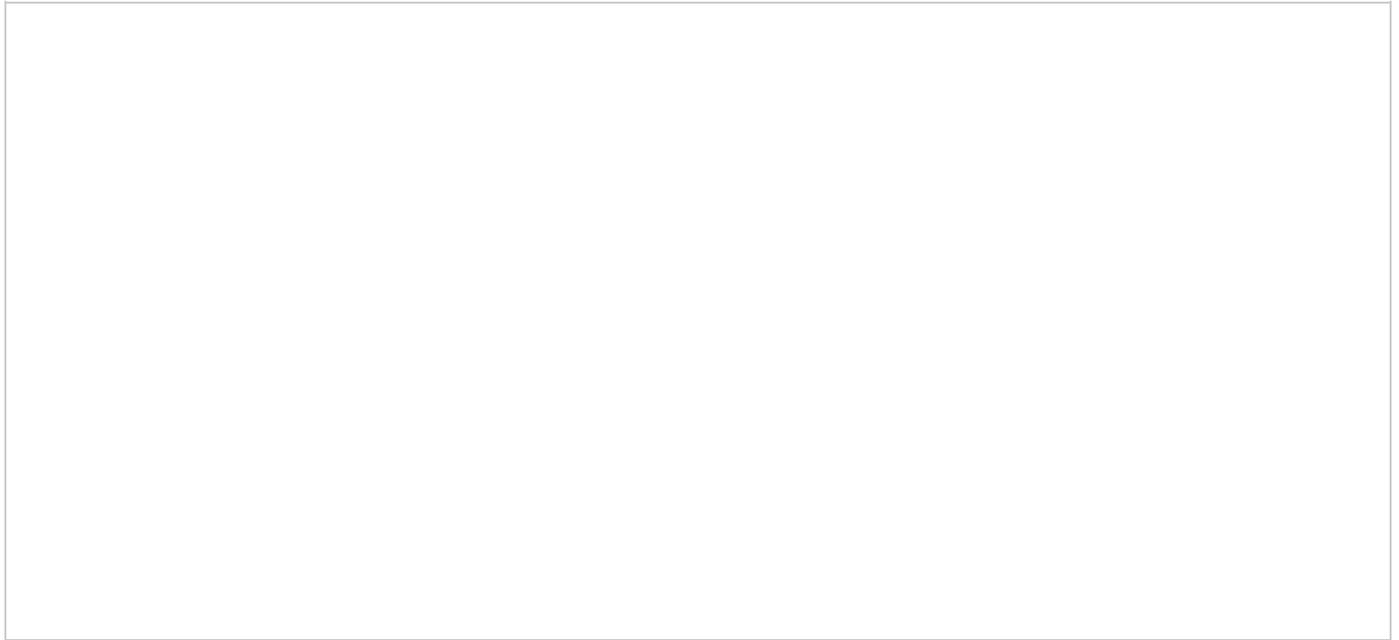
The reliable and efficient operation of the locks on the St. Lawrence Seaway and at Sault Ste. Marie, Michigan (Soo Locks) is critically important to the movement of cargo on the Maritime Transportation System (MTS). The St. Lawrence represents the system's connection to the world and the Soo Locks control the key connection point between Lake Superior and the rest of the MTS, enabling mined commodities including taconite to reach the steel mills and manufacturing plants in the southern portions of the MTS. The three lock-controlled sections of the MTS are shown on the map below. The US Army Corps of Engineers operates the Soo Locks, and the St. Lawrence Seaway Management Corporation, a Canadian entity operates the Welland Canal and 5 locks on the Montreal-Lake Ontario Seaway. The St. Lawrence Seaway Development Corporation, a US entity operates 2 locks on the Montreal-Lake Ontario Seaway.



Source: The St. Lawrence Seaway Management Corporation, the Saint Lawrence Seaway Development Corporation



The metric below reflects the availability of locks based on factors that are more directly within the control of management agencies (such as equipment malfunctions), while the average delay metric below includes delays from external factors outside of the control of management agencies, such as lock closures due to weather, ice, or vessel problems.



Overall, the operators of the Seaway have managed to maintain a high level of availability, within the scope of factors that they can control. Comparative information about the availability of the Soo Locks is unavailable at this time, due to each operating entity's use of differing data collection and reporting techniques. Vessel operators also define and record delays differently from lock operators. However, overall average delays faced by vessel operators vary significantly year-to-year, due to outages resulting from mechanical or operational failures at the locks, and changes in relatively uncontrollable factors such as weather, ice, and water levels.

Currently, the performance of these complex lock systems can be difficult to measure due to the fact that many delay-causing factors lie outside of the control of operating agencies, and each agency has different methodologies for tracking and reporting delays and shutdowns. For example, a shutdown of the Soo Locks due to ice may cause greater delays for vessel operators than is recorded by the Army Corps of Engineer if vessels waiting to pass through the locks are moored outside of areas monitored by the Corps for its delay metrics. The Great Lakes Commission is continuing to work with lock operators and vessel operators to refine these metrics and produce insights that provide additional value for all stakeholders.

The data for this metric came from the [St. Lawrence Seaway Management Corporation Annual Corporate summaries](#), [St. Lawrence Seaway Development Corporation Annual Corporate reports](#), and [US Army Corps of Engineers Lock Usage and Lock Unavailability Reports](#).

DATE RANGE

May 9 2019

TYPE

[Progress](#)

ISSUE

[Maritime Transportation](#)

ORGANIZATION

[U.S. Army Corps of Engineers \(USACE\)](#)
