



# Maritime Strategy Data Review

Donald Ludlow  
Eric Oberhart  
October 11, 2018

# Presentation Map



## Background and Objectives of Report

Major Findings

Recommendations

Discussion

# Project Objective

Provide Blue Accounting with recommendations on data sources for maritime transportation performance measurement for the Great Lakes and St. Lawrence System.

Data to measure progress toward the Maritime Transportation System (MTS) Strategy's 3 Goals:

1. Double maritime trade
2. Shrink the environmental impact of the transportation network
3. Support the region's industrial core



Source: GSGP

# Measure Categories from MTS

Categories from “Delivering Results and Managing for the Future” MTS Strategy Objective:



Freight volume



Freight value



Environmental performance



Employment and taxes



Investment



Value creation



System performance

# Data Selection Guidelines

Data selections oriented to facilitate:

- “Quick start” of measurement in next 6-9 months.
- Sustainable long-term measurement in future.

- Readily available



- Free or inexpensive



- Real, not modeled



- Updated frequently



- Up-to-date



# Report Format

1. Guidance for initial measure development
  - Data sources and gaps for goals and categories
  - Recommendations for future work
2. Data profiles for future reference
  - Reference information on key data sources
  - List of other sources reviewed



Report does not:

- Comprehensively list all data relevant to GLSLS.
- Evaluate performance measures. Data evaluation only.
- Put bounds on future data collection or measures.

# Presentation Map

Background and Objectives of Report



**Major Findings**

Recommendations

Discussion

# Data Sources, Providers, and Categories

Data Source:	Provider:	Volume	Value	Environment	Employment	Investment	Performance	Value Creation
Automatic Identification System	Canadian and US Coast Guards	X					X	
Canada Port Authority Annual Reports	Transport Canada	X				X		
Canadian Business Counts	StatCan				X			
Canadian International Merchandise Trade	StatCan	X	X					
County Business Patterns	US Census Bureau				X			
Dredging Information System	US Army Corps of Engineers					X		
Employment by Industry	StatCan				X			
Federal Reserve Economic Data	US Federal Reserve							X
GDP by Province and Industry	StatCan							X
Incident Investigation Reports	US Coast Guard			X			X	
Pilotage Association Annual Reports	Great Lakes Pilotage Association				X		X	
Great Lakes Water Level	US Army Corps of Engineers						X	
Green Marine Annual Performance Report	Green Marine			X				
INNAV	Canadian Coast Guard	X					X	
Lake Carriers' Association Dry Bulk Data	Lake Carriers' Association	X						
Lock Performance Monitoring System	US Army Corps of Engineers						X	
Marine Safety Information System	Transportation Safety Board (CA)			X			X	
National Response Center Reports	US Coast Guard			X			X	
Occupational Employment Statistics	US Bureau of Labor Statistics				X			
St. Lawrence Seaway Annual Reports	Seaway Development Corporation					X	X	
	Seaway Management Corporation	X				X	X	
TransBorder Freight Data	US Bureau of Transportation Statistics	X	X					
Waterborne Commerce Statistics	US Army Corps of Engineers	X						



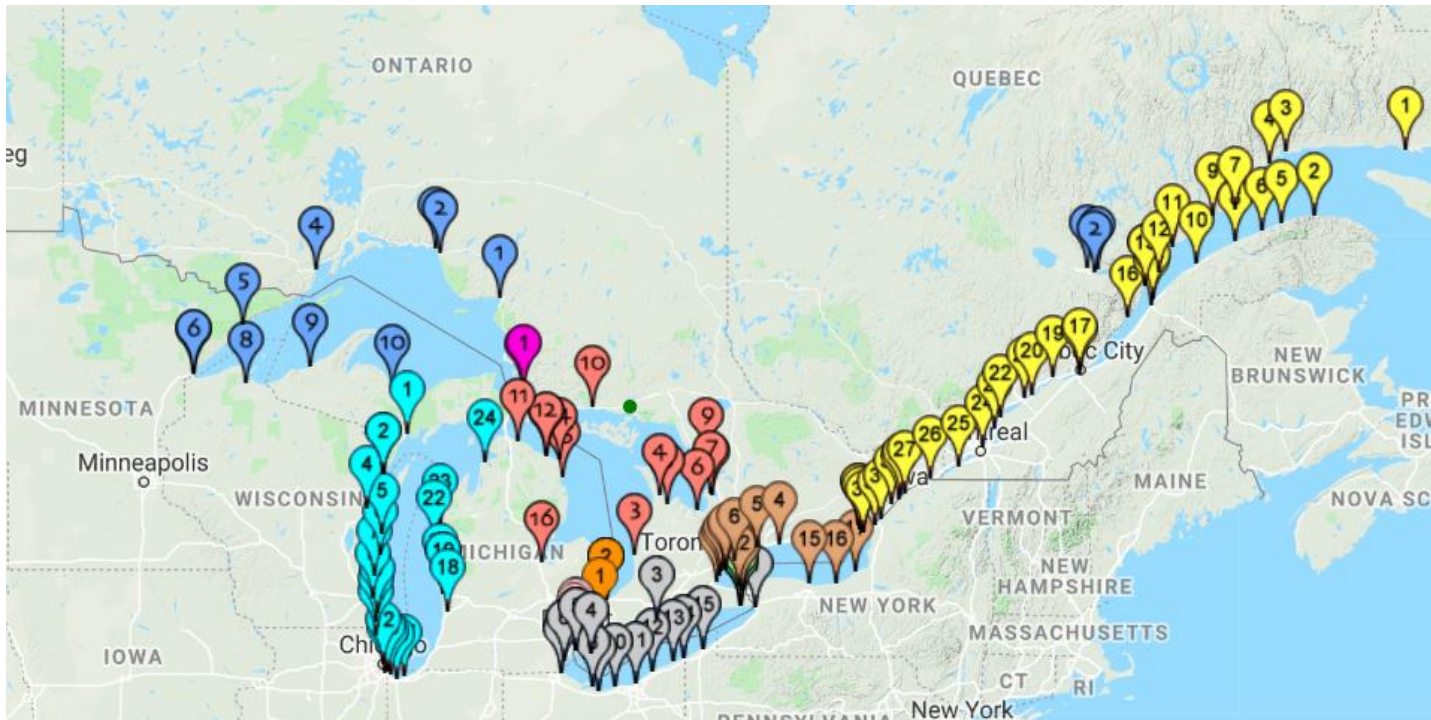
# Data Availability

Category	Data Types and Availability
Freight Volume	Tonnage: All US ports, Soo Locks, Seaway. Vessel Trips: All GLSLS, Soo Locks, Seaway.
Freight Value	US and Canadian imports and exports.
Environment	Incidents and Spills: All GLSLS Green Marine Participation: select ports, vessel operators
Employment	Establishment and employment counts: all US and CAN Labor productivity: Canadian provinces
Investment	Port Investments: select Canadian and US ports Dredging: US ports Lock and Dam: Soo Locks and Seaway.
Value Creation	GDP for Canada and the US
System Performance	Reliability, Safety, Season Length, Travel Time, Bottlenecks

# Major Challenges

Two major challenges prevent us from getting a “full view” of the GLSLS maritime transportation system.

- Fragmented management of system.
- Historically, limited collection or release of data.



Source: Worldportsource.com

# Major Gaps

Identifying and overcoming the asymmetry of maritime data between the US and Canada will be important to improving GLSLS performance measurement in the future.

Topic	Gaps Noted
Freight Volume	Canada has limited tonnage data after 2011.
Freight Value	No data on value of domestic movements.
Incidents and Spills	US incident data quality is lower for post-2015.
Taxes	No unified tax collection or disbursement data.
Infrastructure Condition	Lack of easily-usable channel dimension data.
Pilotage	Limited data on performance of US pilotage system.
Investment	Data fragmented between locations.
Value Creation	Limited granularity of data.

# Presentation Map

Background and Objectives of Report

Major Findings



**Recommendations**

Discussion

# Performance Measurement Best Practices

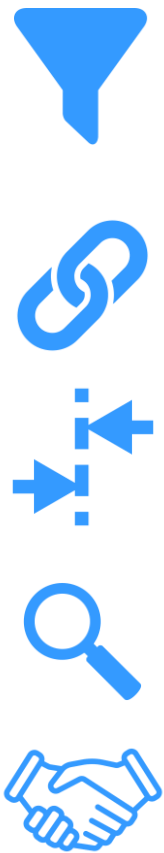
Transportation system performance measures should be “SMART”—Specific, Measurable, Attainable, Realistic, and Timely.

- Measure what matters
- Select a limited set of measures
- Measures should be feasible to report

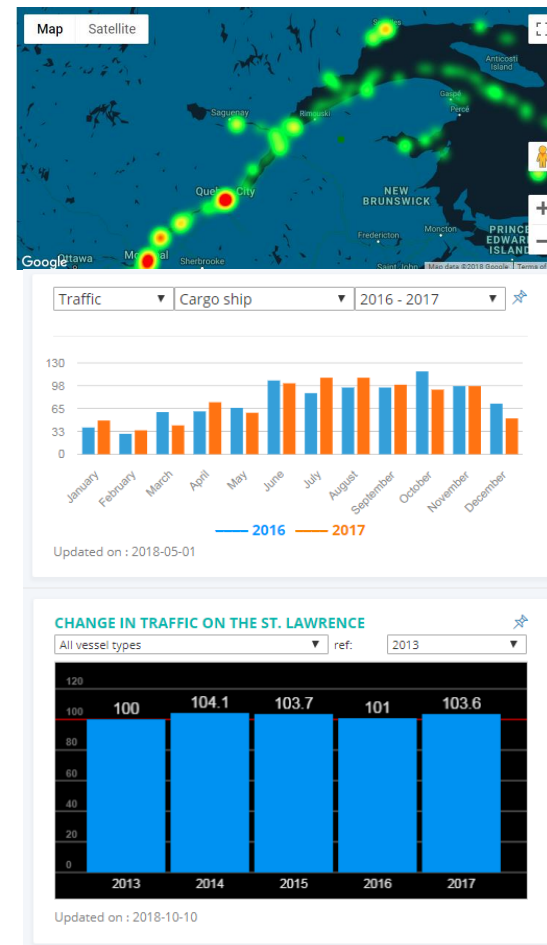


Source: Eric Oberhart

# Next Steps (Near Term)



- Focus on limited number of measures.
- Link each new measure to the MTS' three key goals
- Confirm geographic boundaries
- Consider measuring at select ports/locations
- Explore partnership with the Maritime Information System



Source: Maritime Information System

# Long Term Recommendations

- Develop relationships with data-producing agencies.
- Continue creating in-depth system studies.



Source: Eric Oberhart

# Presentation Map

Background and Objectives of Report

Major Findings

Recommendations



**Discussion**



# Questions & Discussion



**Donald Ludlow**  
**Project Director**  
dludlow@cpcstrans.com



**Eric Oberhart**  
**Project Manager**  
eoberhart@cpcstrans.com