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# **Update for PPRN on Constructs for Measuring Effectiveness in Port Service Delivery**

**Mary R Brooks**

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# Phase 3: Validating Service Delivery Effectiveness Metrics

User Group	Statements in AAPA 2012 Initiative	Statements in SEAPORT 2014
Shipping line	19 criteria	13 criteria
Cargo owners & freight forwarders	11 criteria	8 criteria
Supply chain partners	15 criteria	8 criteria

Used VIF Analysis to reduce the criteria set. (Schellinck & Books, 2015, J. of Logistics: Research & Applications)  
Cargo owners and freight forwarders are 2 sub-groups;  
same criteria, different patterns of use (Brooks & Schellinck, MPM, in press)

# What We Found in 2012

- Port user groups rate a port's effectiveness in service delivery differently, i.e., a port that is rated highly by the shipping lines may score poorly when rated by cargo owners or its own supply chain partners, or vice versa.
- No port excelled in serving all three user groups
- The pattern of performance gaps were different on the various criteria for each port.
- In all cases, the initiative identified criteria for targeted improvement for each user group—Cargo Interests, Shipping Lines, and Supply Chain Partners. Each port had a unique portfolio of factors to repair by investing for improvement, and many ports found a usable “market for awareness” opportunity.
- The report gave ports talking points for their discussions with suppliers.

# What We Found in 2013's Further Data Analysis

- Cargo Owners who book their own transport arrangements are a distinct sub-group from those who act as Agents for owners (freight fwdrs) on 5 of 13 criteria.
- Cargo Agents (freight forwarders) are more influenced traditional CRM criteria like responsiveness and information provision while Cargo Owners are more influenced by perceptions of port security.
- The two Cargo segments are best evaluated separately where possible.
- We learned enough to focus the Shipping Line criteria more tightly in 2014.
- Supply Chain Partners are a forgotten user group for some ports; with their own unique set of needs, as partners they need to be part of the solution in developing port strategic investments.

# Research from the 2012 AAPA Data Set

Schellinck, Tony and Mary R. Brooks (2016, in press), Does Superior Service Performance Provided to Shipping Lines Improve the Perceived Value of a Port? *International Journal of Shipping Transport and Logistics*, 8.

<http://www.inderscience.com/info/ingeneral/forthcoming.php?jcode=ijstl>.

Brooks, Mary R. and Tony Schellinck (2015, in press). “Measuring port effectiveness: What really determines cargo interests’ evaluations of port service delivery?” Accepted for publication in *Maritime Policy & Management*.

Schellinck, Tony and Mary R. Brooks (2015, in press). Developing an instrument to assess seaport effectiveness in service delivery, *International Journal of Logistics Research and Applications*, 1-15, DOI: 10.1080/13675567.2015.1059412

Brooks, Mary R. and Tony Schellinck (2015). Measuring port effectiveness: Does supply chain partner performance matter? *Transportation Research Record*, 2479, 42-48.

Brooks, Mary R. and Tony Schellinck (2013). Measuring Port Effectiveness in User Service Delivery: What Really Determines Users’ Evaluations of Port Service Delivery? *Research in Transportation Business & Management*, 8, 87-96.

## What Did We Learn in 2014's SEAPORT survey?

- Environmental changes can rapidly alter what is critical to your customers. This was true for both lines and cargo. Not enough data was collected to assess supply chain partners.
- The West Coast surge and labour challenges altered the determinance score of some criteria substantially, even for east coast ports.
- When customers are really unhappy, they use a broader response scale to relay their concerns, and fill in even more open text comments. (We did not cap the number of words and got an earful of constructive criticism and useful ideas to convey to ports.)

# 2015 Port Performance Research on Fluidity Measures



MARY R BROOKS  
TRANSPORTATION  
CONSULTING



## Port Performance Measures

Comments Off

27  
July  
2015

## Port Performance Measures: A Study for the Canada Transportation Act Review

To assist with the review of the Canada Transportation Act currently under way, the Canada Transportation Act Review Panel has contracted Mary R Brooks Transportation Consulting to evaluate port performance measures with specific reference to fluidity and congestion.

### About the Project

As global supply chains have become more complex, and as container shipping companies invest in ever larger vessels, ports have found it difficult to handle the ever-increasing volume of traffic associated with a single vessel call. This has impacts not just within the port perimeter but throughout the landside infrastructure network serving the port. As U.S. west coast ports faced labour challenges in the last year, this situation has become even more difficult for Canada's west coast ports.

The purpose of this research project is to address the measurement of fluidity and congestion by looking at what has been measured, is being discussed and is

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