



The Caribbean ports after the opening of the new locks of the Panama Canal

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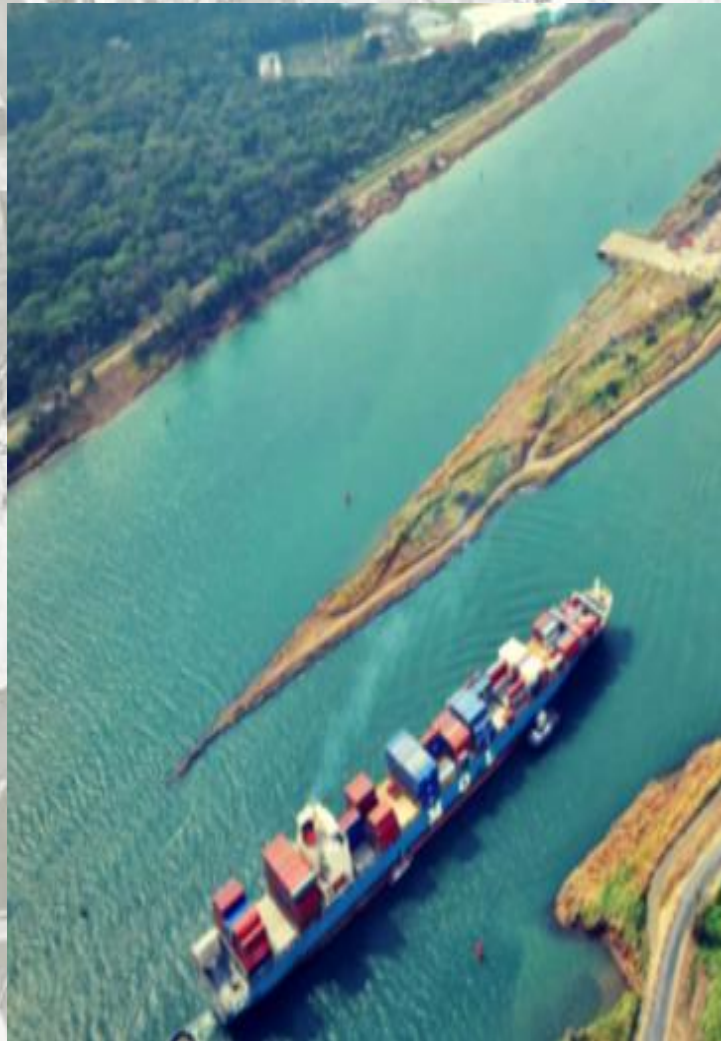


**The Expansion of the
Panama Canal
&
its Implications for Port Development
in the Caribbean Region**

**Presenter: Ricardo Gonzales
CEO PPOS**

17th August 2018

Overview



With the opening of the expanded Panama Canal in 2016, maritime transport in the Caribbean basin witnessed significant changes in the shipping line patterns & particular structural changes.

As such Caribbean region Maritime transport is challenged by:

- Financial constraints,**
- High Transportation cost,**
- Port Infrastructure provision,**
- Port Superstructure/Equipment provision**

The economic stability of the Caribbean Region largely depends on the safe & efficient transport of 235 million tons more of cargo that is expected to transit the Panama Canal annually.

Panama Canal

The expanded Panama Canal will effectively double the transit capacity, based on the following:

- Vessel Length Overall from 304m to 366m
- Vessel Beam from 32m to 49m
- Vessel Draft from 12.4M to 15.3m
- Cargo tonnage from 62,000 metric tons to 140,000 metric tons of bulk.
- TEU nominal capacity from 5,000 TEUs to 13,000 TEUs.
- Deadweight tonnage from 85,000 dwt to 180,000 dwt.
- Total annual tonnage capacity from 275 million tons to 600 million tons

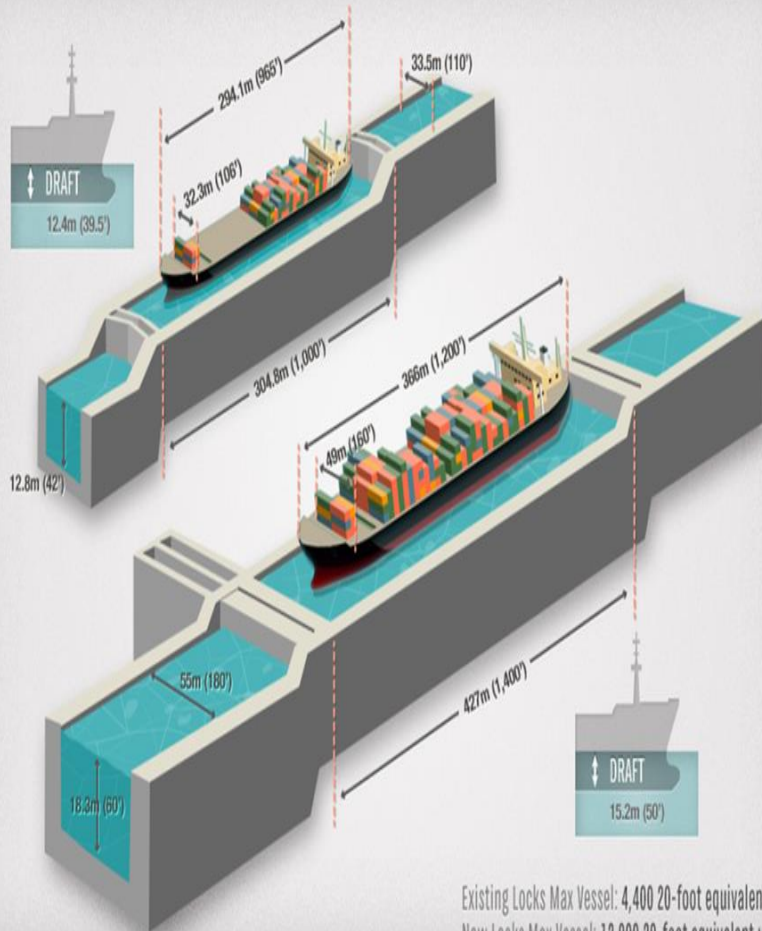


Panama Canal (CONTINUED)

The vessels in service deployment in the Caribbean region were expected, as follows:

- **First Post Expansion (medium term):** POST II vessels up to 9,000 TEUs.
- **Second Post Expansion (long term):** New Panamax (NPX) vessels up to 13,000.
- **Post II vessels** require a dredged depth of 13m & the **NPX vessels** require a dredged depth of 16m

PANAMAX AND POST-PANAMAX VESSEL SIZE COMPARISON

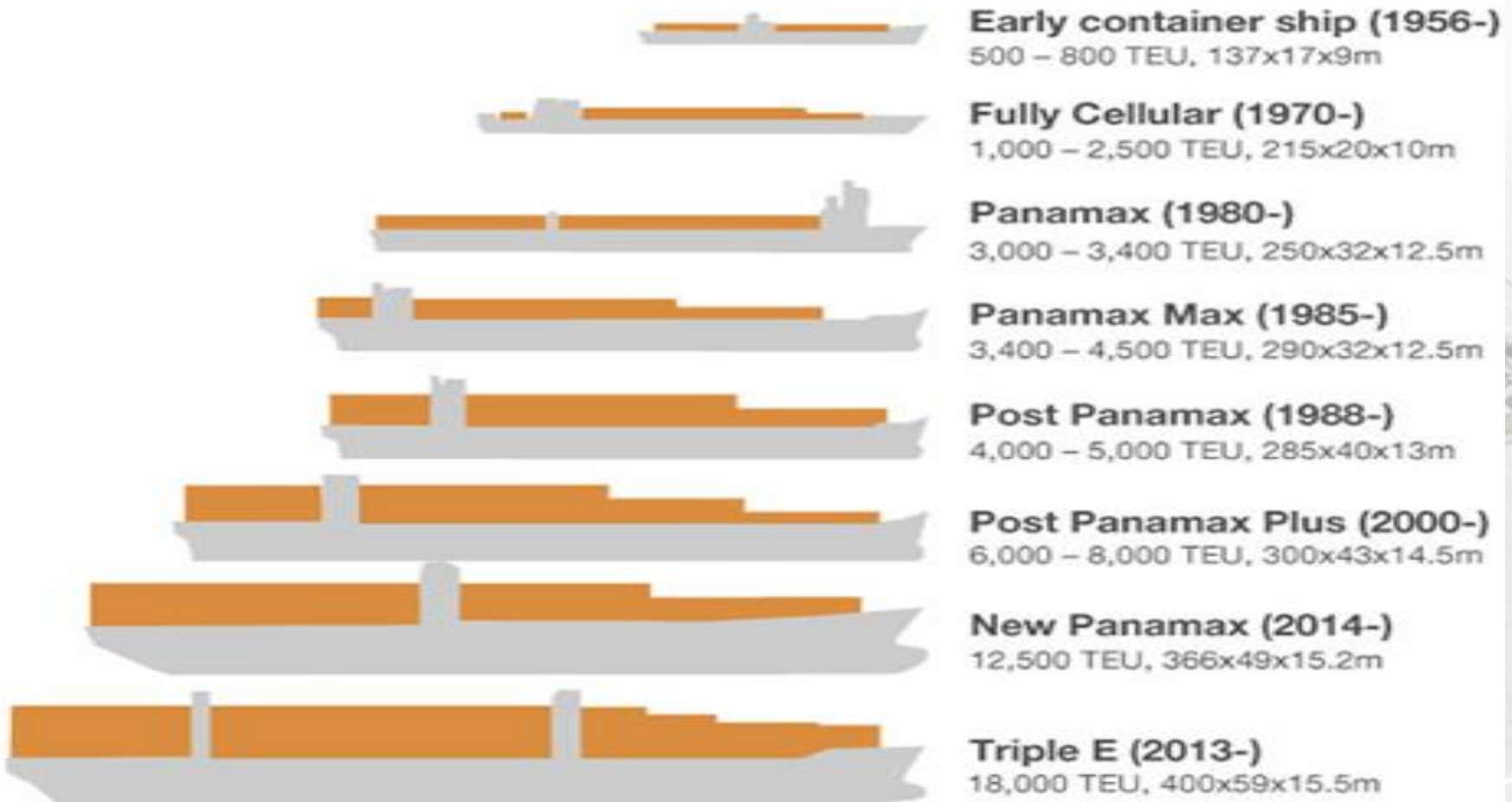


Existing Locks Max Vessel: 4,400 20-foot equivalent units
New Locks Max Vessel: 12,000 20-foot equivalent units

Panama Canal (CONTINUED)

Evolution of container ships

TEU: twenty-foot equivalent units,
length x width x depth below water in metres



Panama Canal (Impact on the Caribbean)

The planned expansion of port infrastructure in the Caribbean region may add:

- A total of 11,785 metres of new berths,**
- 1,735 hectares of developed lands for terminals,**
- Logistics hubs,**
- Special economic zones,**

Infrastructural cost was estimated at US\$7.8 B,

This, exceeds the US\$5.3 B capital cost of the Panama Canal.

Panama Canal

(Impact on the Caribbean) (CONTINUED)

The estimated cost of port infrastructure is projected in the following:

- US\$7.792 B, of which US\$5.970 B, or 75% is expected to be sourced from private sector investment,**
- US\$1.822 B, or 25% is expected to be sourced from public sector investment,**
- Of the total private investment interest of US\$5.970 B, an estimated US\$ 3.75 B, or 63% of the investment is proposed to come from the major private terminal operators & US\$2.220 B, or 37% is proposed to come from China.**

If all of these projected plans are implemented by the major hub ports the following developments will occur:

- Major over capacity in regional ports,**
- Excessive competition among the major container hubs for container traffic in the Caribbean region,**

Panama Canal

(Impact on the Caribbean)(CONTINUED)

The evolution of the Global shipping lines & Alliances will enable the following:

- Less choice of ports & terminals in the short to medium term,**
- The selection of major hub ports will increase the demand for transshipment services.**
- Investment in the development of marine & port infrastructure,**
- Entering into a long term lease of ports & terminal,**
- Entering into concession agreements to operate terminal facilities capable of accommodating the larger size deeper draft POST II & NPX vessels.**

The Hub & Spoke services will experience the following developments :

- Mainline to feeder vessels, used to serve smaller spoke ports from main hubs,**
- Relay services: Mainline to Mainline services, used to link together deep sea services at key nodal points,**

Panama Canal

(Impact on the Caribbean) (CONTINUED)

A study conducted by *Nathan Associates Inc.* estimated that the capacity of the major primary hub ports in the Caribbean & Central American region are as follows:

- 12.23 million TEUs, which is about 30% more than the present traffic of 9.39 million TEUs.**
- Transshipment trade accounted for 5.99 million TEUs or 64% of trade.**
- Domestic import/ export trade accounted 3.4 million TEUs or 36% of trade**

This level of port over- capacity is common in the port industry.

Panama Canal

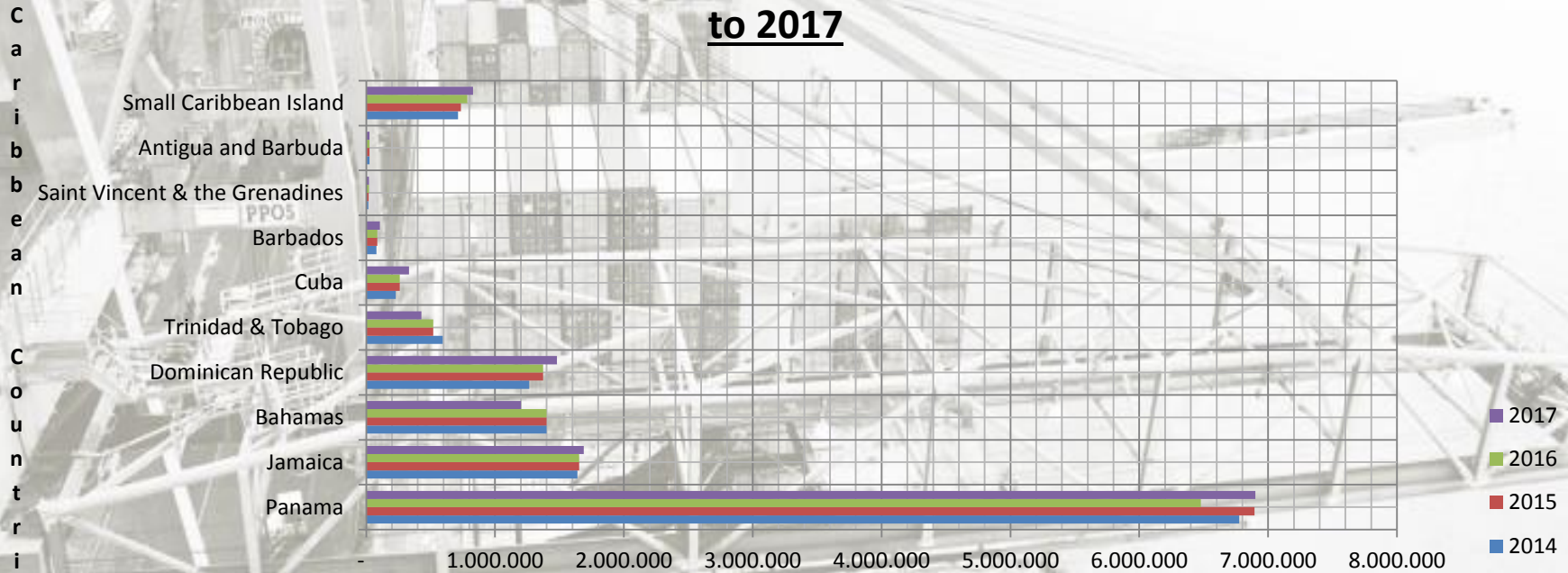
(Impact on the Caribbean) (CONTINUED)

Another estimate prepared by *Adrian Beharry* which included the secondary hub ports, showed the following:

- Existing capacity in the region may be more in the vicinity of 16.85 million TEUs, or about 80% more than the present traffic of 9.39 million TEUs.
- Long term expansion plans proposed by the respective ports showed that when completed there will be an increase port capacity by an additional 25.5 million TEUs, which would result in a projected total port capacity of about 42.34 million TEUs.

Container Port Traffic

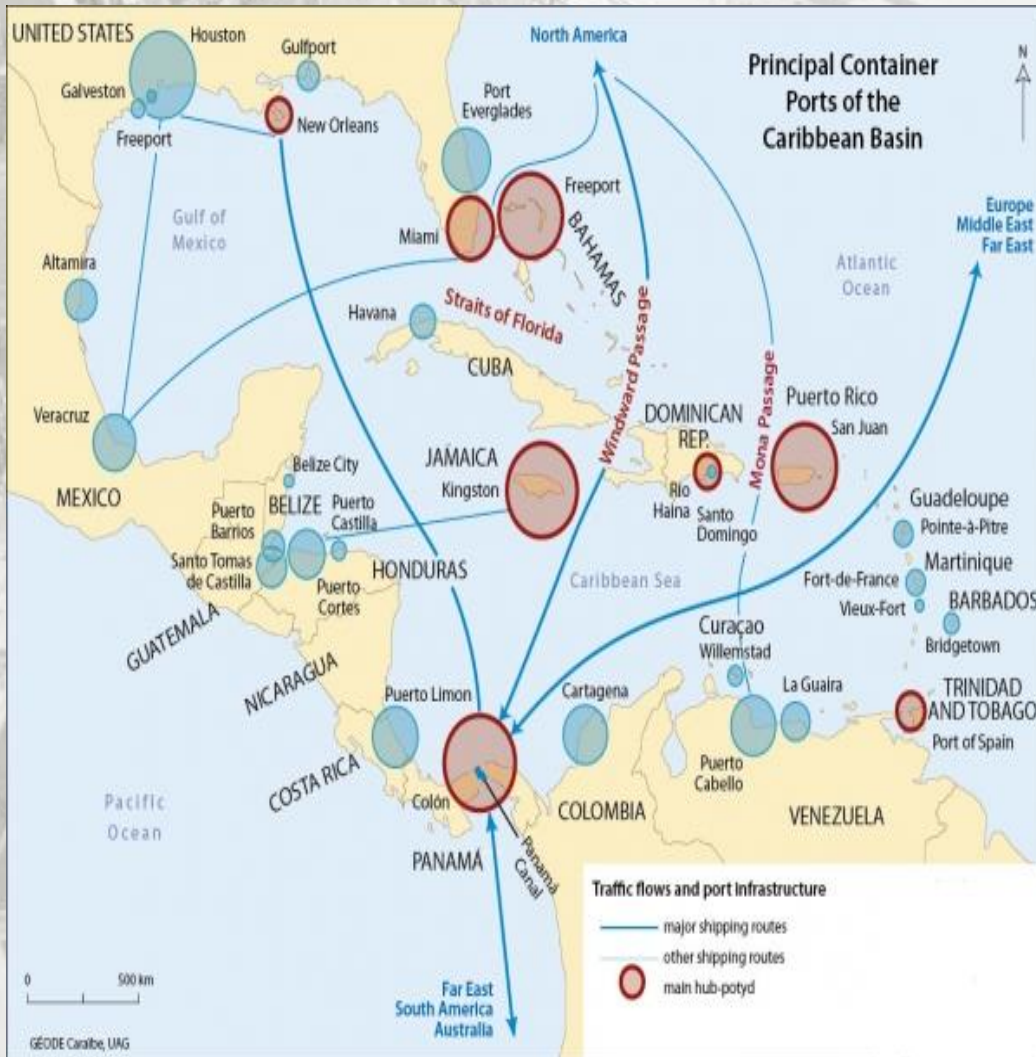
Container Throughput at Ports of the Caribbean Region between 2014 to 2017



	Panama	Jamaica	Bahamas	Dominican Republic	Trinidad & Tobago	Cuba	Barbados	Saint Vincent & the Grenadines	Antigua and Barbuda	Small Caribbean Island
2017	6.900.000	1.689.000	1.200.000	1.480.299	427.427	332.000	105.321	21.675	25.456	828.233
2016	6.477.000	1.653.300	1.400.000	1.371.800	520.900	260.000	86.500	19.941	25.456	783.727
2015	6.894.700	1.653.300	1.400.000	1.371.800	520.900	260.000	86.500	18.620	25.456	734.739
2014	6.774.700	1.639.100	1.400.000	1.265.400	594.300	230.000	78.400	16.737	26.500	712.692

Container TEU

Development - Post Panama Canal Expansion



Caribbean Countries that took pro-active measures from the expansion of the Panama Canal:

- Jamaica- Kingston
- Bahamas-Freeport
- Dominican Republic- Caucedo
- Cuba-Mariel

Caribbean Countries that recently commenced development because of the Panama Canal expansion:

- Antigua & Barbuda
- St Vincent & the Grenadines
- Barbados

No Development - Post Panama Canal Expansion

Caribbean Countries that have not commenced development post Panama Canal:

1. Anguilla,
2. Aruba,
3. British Virgin Islands (Tortola, Virgin Gorda, Anegada, Jost Van Dyke)
4. Caribbean Netherlands, BES islands (Bonaire, Sint, Eustatius, Saba)
5. Cayman Islands,
6. Curacao,
7. Dominica,
8. Grenada,
9. Guadeloupe,
10. Haiti,
11. Montserrat,
12. Saint Barthelemy,
13. Saint Kitts & Nevis,
14. Saint Lucia,
15. Saint Martin,
16. Saint Maarten,
17. **Trinidad & Tobago,**
18. Turks & Caicos Islands,
19. United States Virgin Islands (Saint Croix, Saint John, Saint Thomas)

Trinidad

Trinidad continues to analyze their prospects for Port expansion to meet the demands of the structural changes as a consequence of the expanded Panama Canal.

Trinidad & Tobago plan is to develop its secondary hub port status in relation to transshipment trade with Guyana, Surinam, Venezuela & Brazil.



The Caribbean Islands Challenges

The background of the slide is a faded, high-angle photograph of a port crane structure. The crane's complex metal framework, including beams and cables, is visible against a light sky and the surface of the ocean. The overall tone is light and professional.

- **Structural Changes**
- **Financing for infrastructure**
- **Financing for Superstructure & Equipment**
- **Port Master Planning**
- **Port Institutional Reform**

Conclusion



WHAT NEXT ?

- Seek Investment,
- PPP as an option,
- Port Collaboration,
- Be competitive,
- Be innovative,
- Port Community System,



**“THANK YOU
&
ANY QUESTIONS?”**

**Presenter: Ricardo Gonzales
CEO PPOS**

References

- 1) CIBC FIRST CARIBBEAN INFRASTRUCTURE CONFERENCE, JUNE, 2014, THE EXPANSION OF THE PANAMA CANAL IMPLICATIONS FOR PORTS IN THE CARIBBEAN REGION, DISCUSSION PAPER ADRIAN BEHARRY.
- 2) The role of Panama Canal in global shipping, Author(s):[Mariner Wang](#), (Graduate School of Management, Ritsumeikan Asia Pacific University, Beppu, Japan)
<https://www.emeraldinsight.com/doi/full/10.1108/MABR-07-2017-0014>
- 3) UNCTADstad
- 4) The Caribbean: one port geography, many markets, different expectations, PortEconomics.eu
<https://www.porteconomics.eu/2014/10/21/the-caribbean-one-port-geography-many-markets-different-expectations/>
- 5) Seattle Terminal Visited by Largest Ever Ship 06 Apr 20, www.porttechnology.org
[https://www.porttechnology.org/news/seattle terminal visited by largest ever ship](https://www.porttechnology.org/news/seattle-terminal-visited-by-largest-ever-ship)