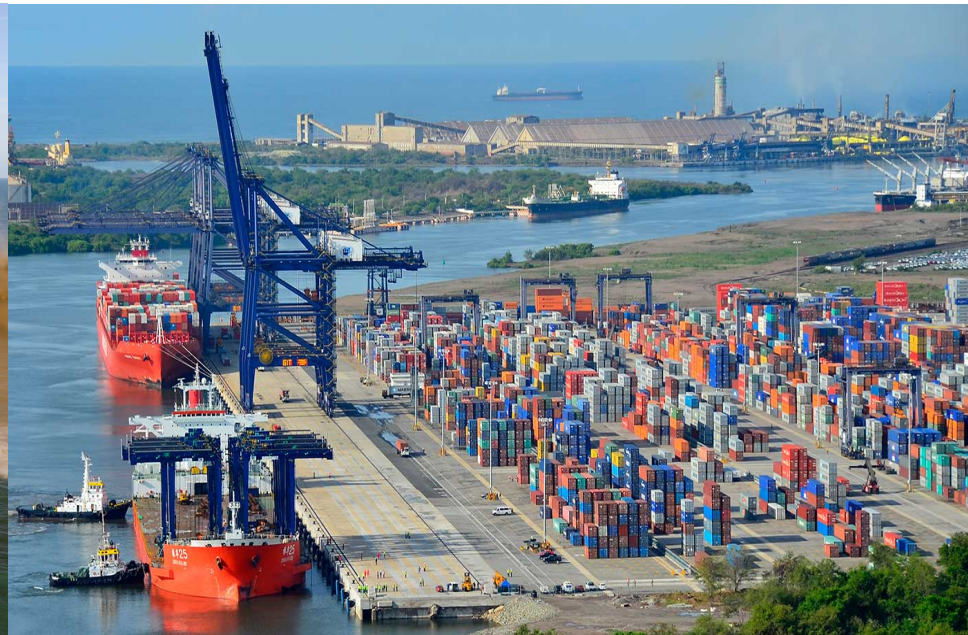


Economic Overview of Port Competitiveness & Infrastructure in the Caribbean



**Western Dredging Association (WEDA)
Eastern Chapter Annual Meeting
October 27-29, 2015**

Ernesto Fernandez
Senior Consultant
Inter-American Committee on Ports (CIP)
Efernandez@oas.org



Inter-American Committee on Ports

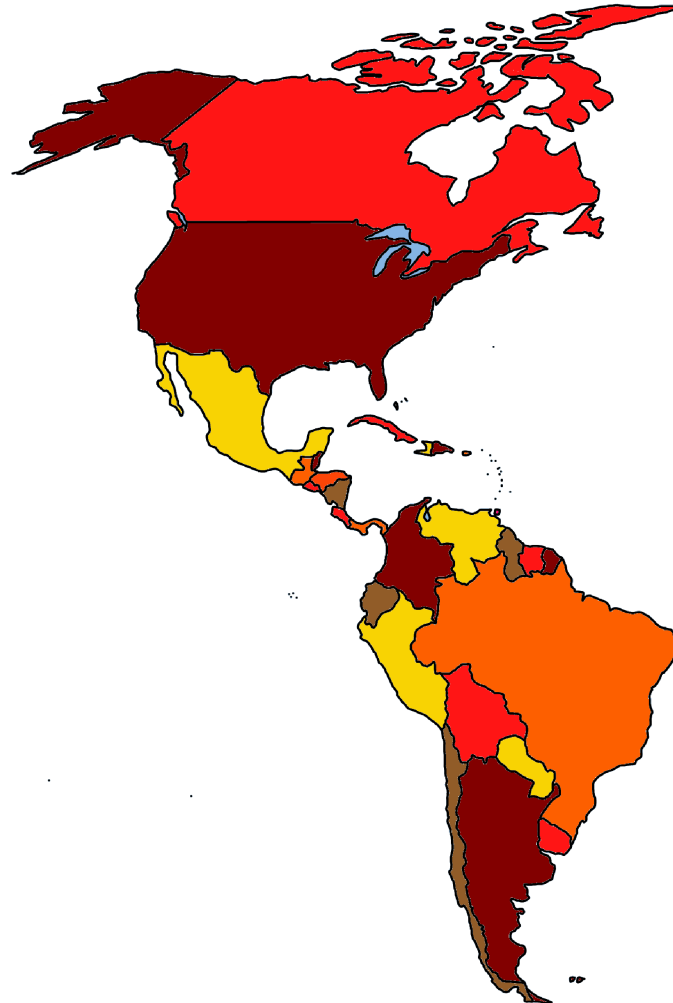
#OAS_CIP #OEA_CIP www.portalcip.org

The Inter-American Committee on Ports (CIP)



Organization of
American States

1. Antigua and Barbuda
2. Argentina
3. Bahamas
4. Barbados
5. Belize
6. Bolivia
7. Brazil
8. Canada
9. Chile
10. Colombia
11. Costa Rica
12. Cuba
13. Dominica
14. Ecuador
15. El Salvador
16. Grenada
17. Guatemala
18. Guyana



19. Haiti
20. Honduras
21. Jamaica
22. Mexico
23. Nicaragua
24. Panama
25. Paraguay
26. Peru
27. Dominican Republic
28. St. Kitts and Nevis
29. St. Vincent and the Grenadines
30. St. Lucia
31. Suriname
32. Trinidad and Tobago
33. United States
34. Uruguay
35. Venezuela

CIP Structure



Organization of
American States

CHAIR: Uruguay

VICE CHAIRS: Barbados and Colombia

**INTER-AMERICAN COMMITTEE
ON PORTS**

**SECRETARIA
T**

**EXECUTIVE BOARD
(CECIP)**

**Logistics,
Innovation and
Competitiveness**

**Sustainable Port
Management
and
Environmental
Protection**

**Port Protection
and Security**

**Public Policy,
Legislation and
Regulation**

**Tourism, Island
Ports and
Waterways,
Ship Services
and Navigation
Control**

**Corporate
Social
Responsibility
and Women in
Ports**

Mexico

Venezuela

**United
States**

Uruguay

Argentina

Panama

The Inter-American Committee on Ports (CIP)



Organization of
American States

The CIP promotes hemispheric cooperation between the Member States, with the participation of the private sector, for the development of competitive, secure and sustainable ports.

1

Permanent Inter-American governmental forum at the highest level.

2

Capacity Building to promote and improve technical and managerial skills of port officials.

3

Technical Assistance, Regional Cooperation and Associate members.

4

Dissemination and promotion of the Americas Ports, and active cooperation and collaboration with the private sector.

A few of our Associate Members



Organization of American States

North American Marine Environment Protection Association



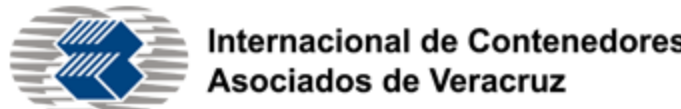
Uruguay Hub Logístico

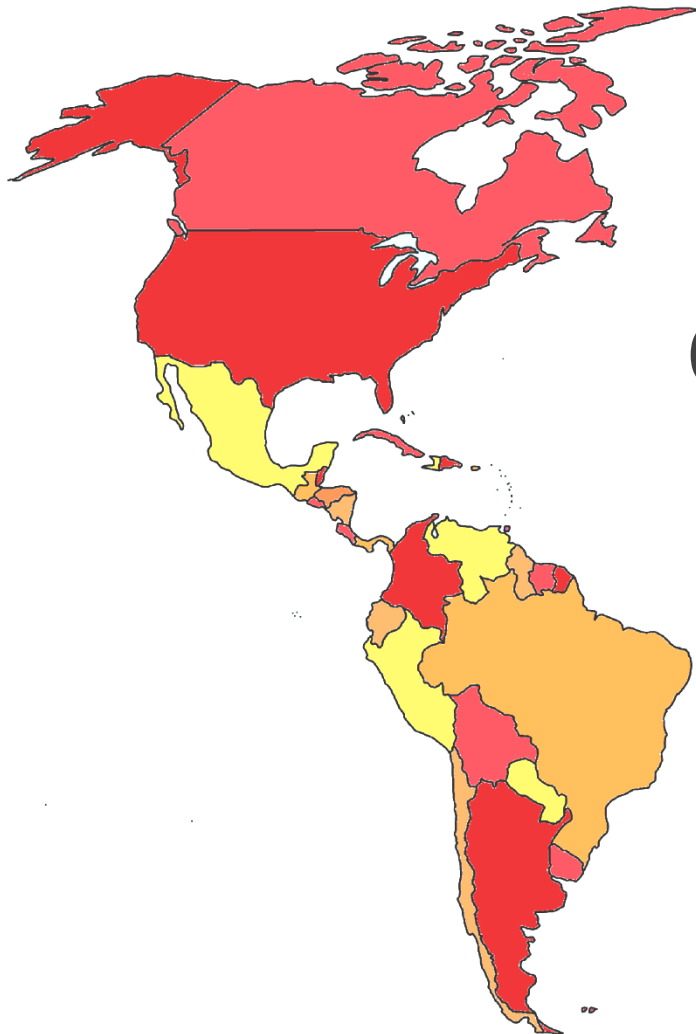


KONGSBERG



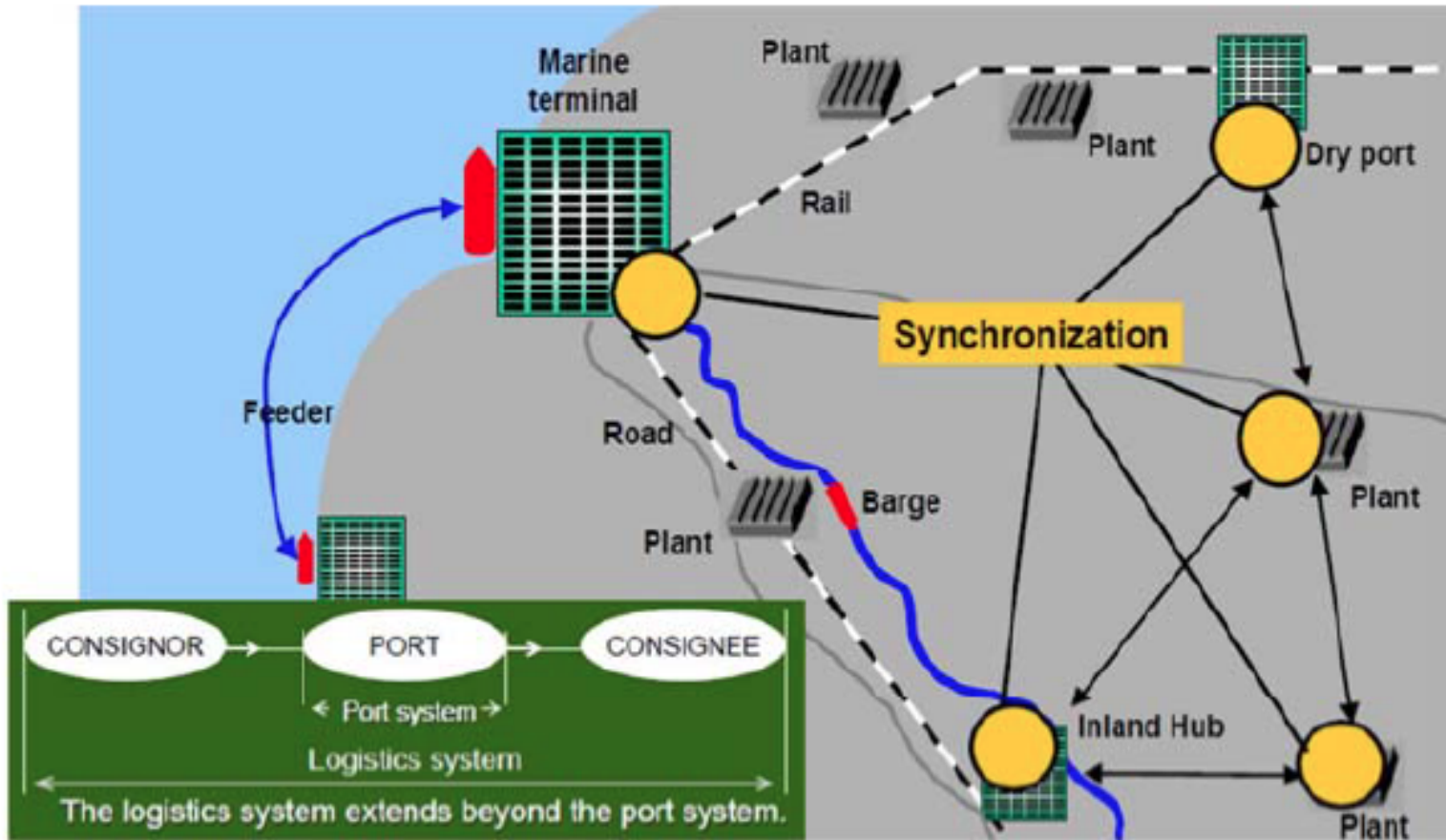
Puertos del Estado





Competitiveness— Latina America and Caribbean

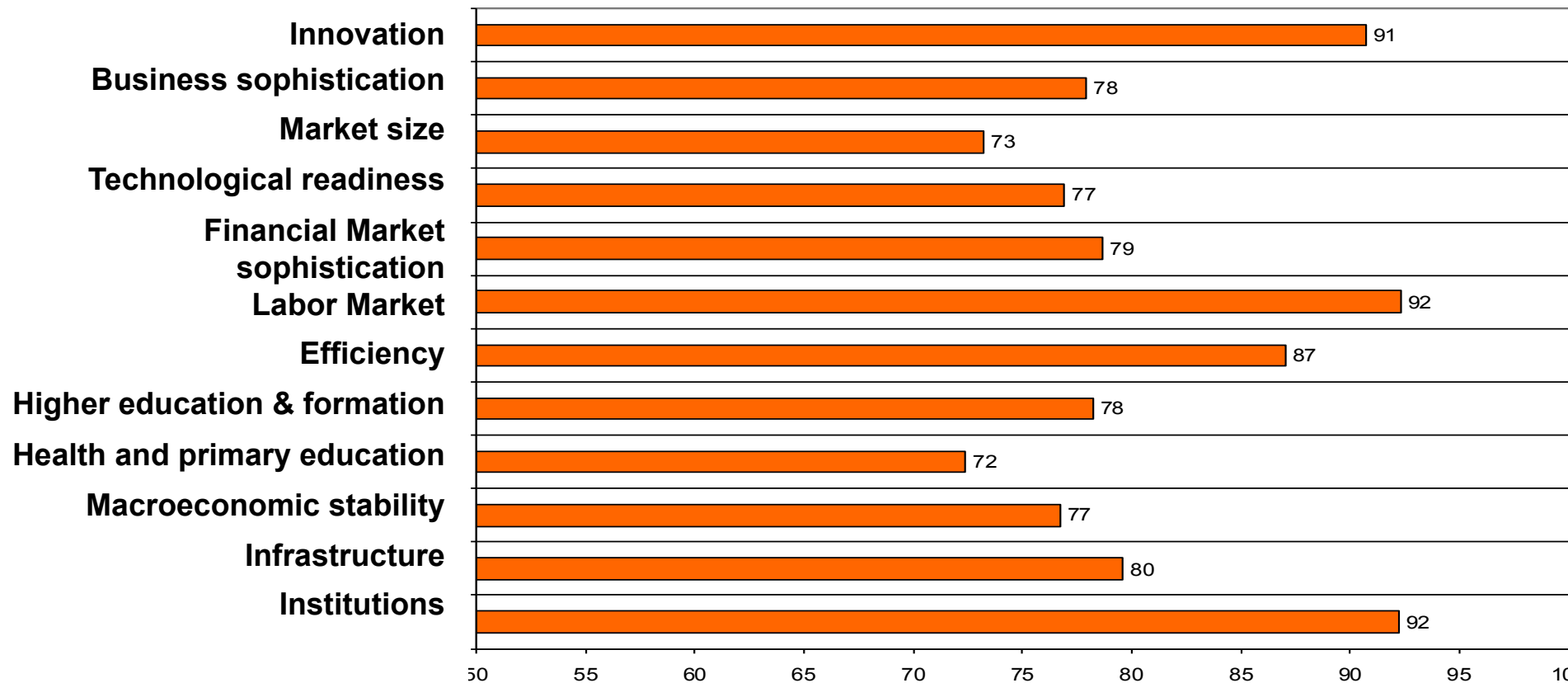
..... What is port competitiveness?



..... Determined by the costs, speed and efficiency in which each factor of the logistic chain and processes are utilized

“Competitiveness is the the set of *institutions, policies y factors* that determine the level of *productivity* in a country.”

Global Competitiveness Index 2014-2015 LAC among 144 países



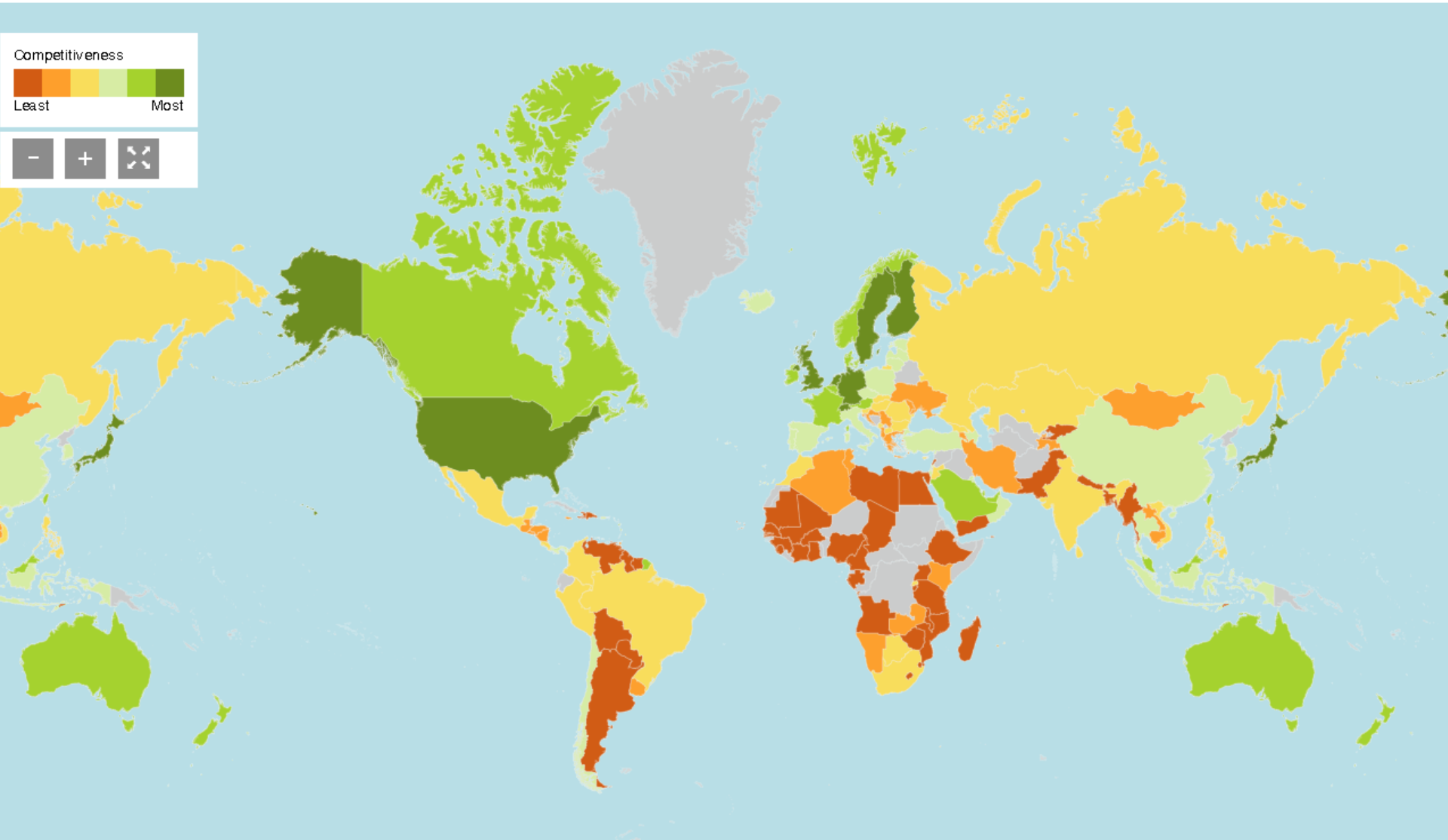
Competitiveness ALC



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American States



The Global Competitiveness Index 2014-2015



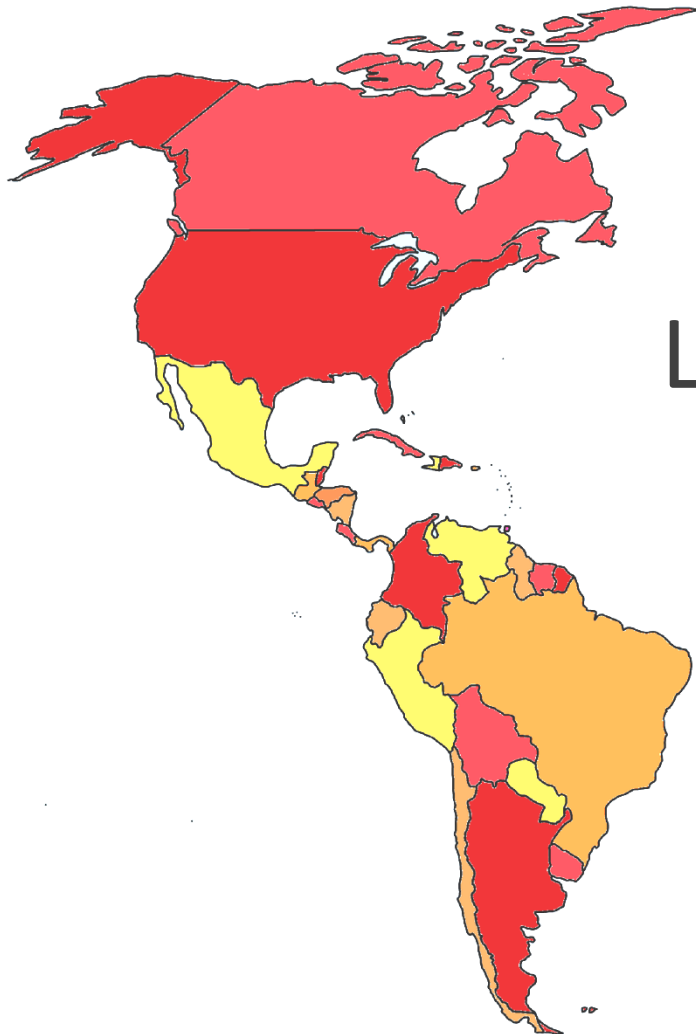
Global Competitiveness Ranking 2014-2015



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Latin America and the Caribbean



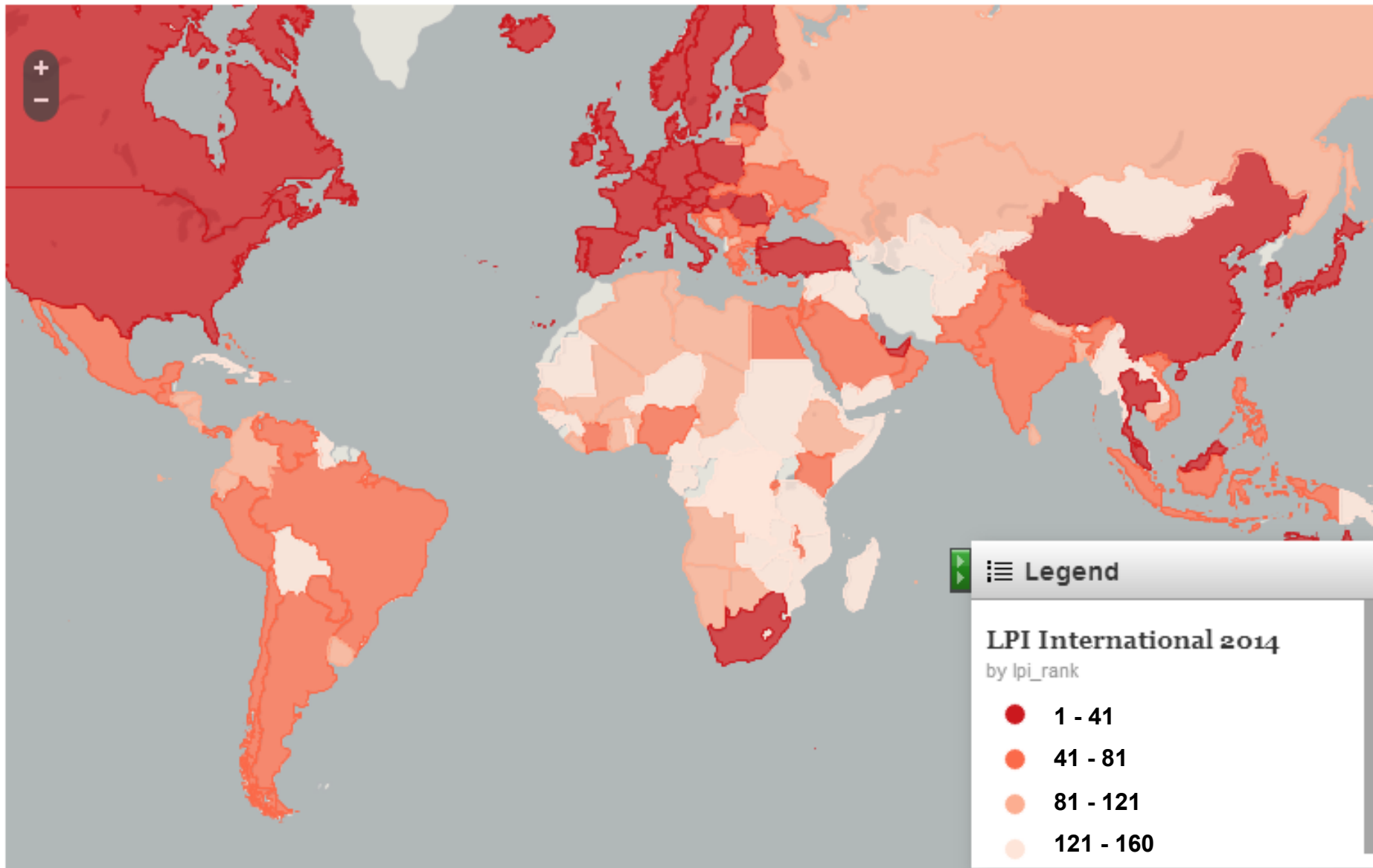


Logistics – Latina America and Caribbean

Logistics Performance ALC



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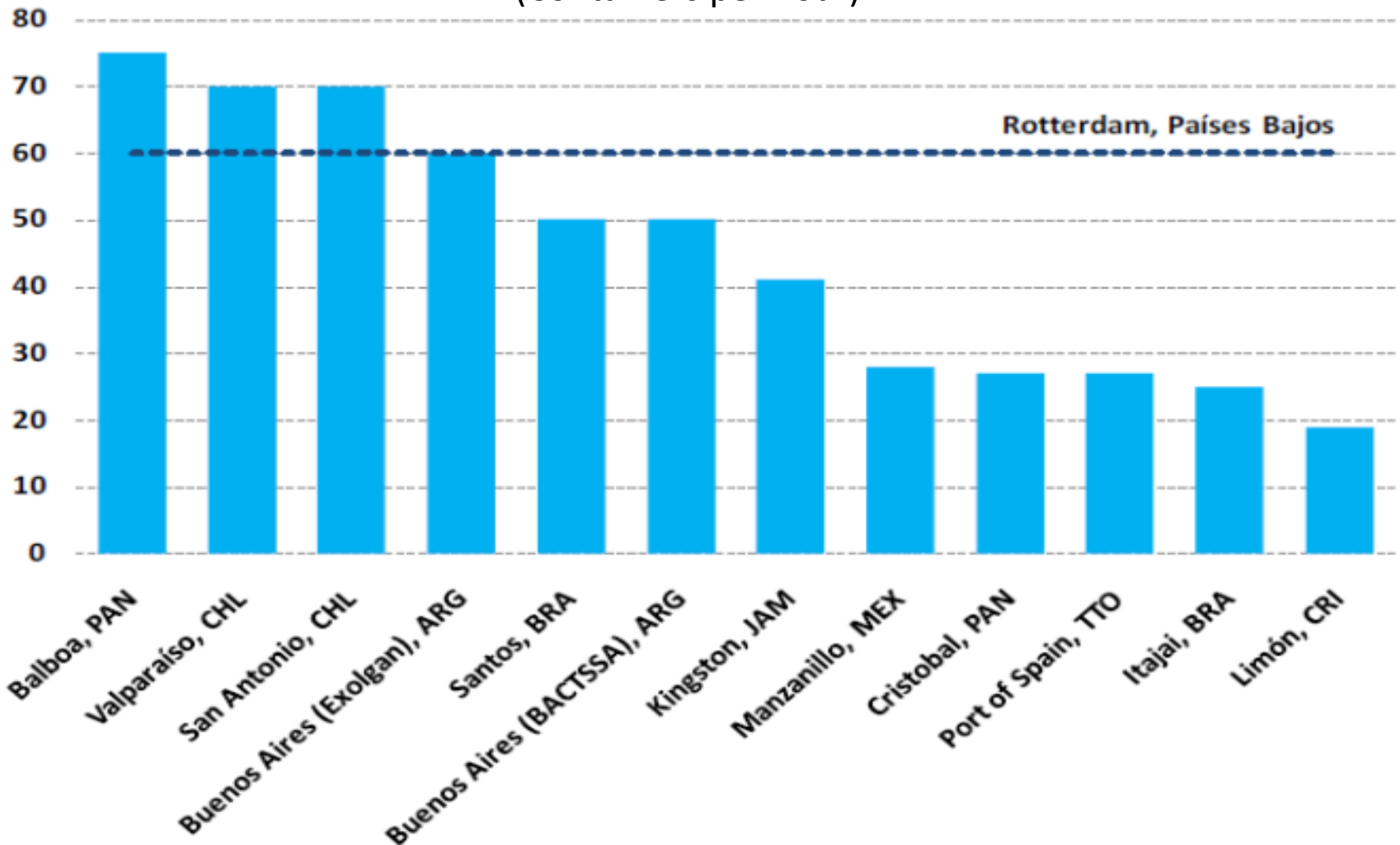


Port Productivity LAC (2009)



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(Containers per hour)



Transport Cost

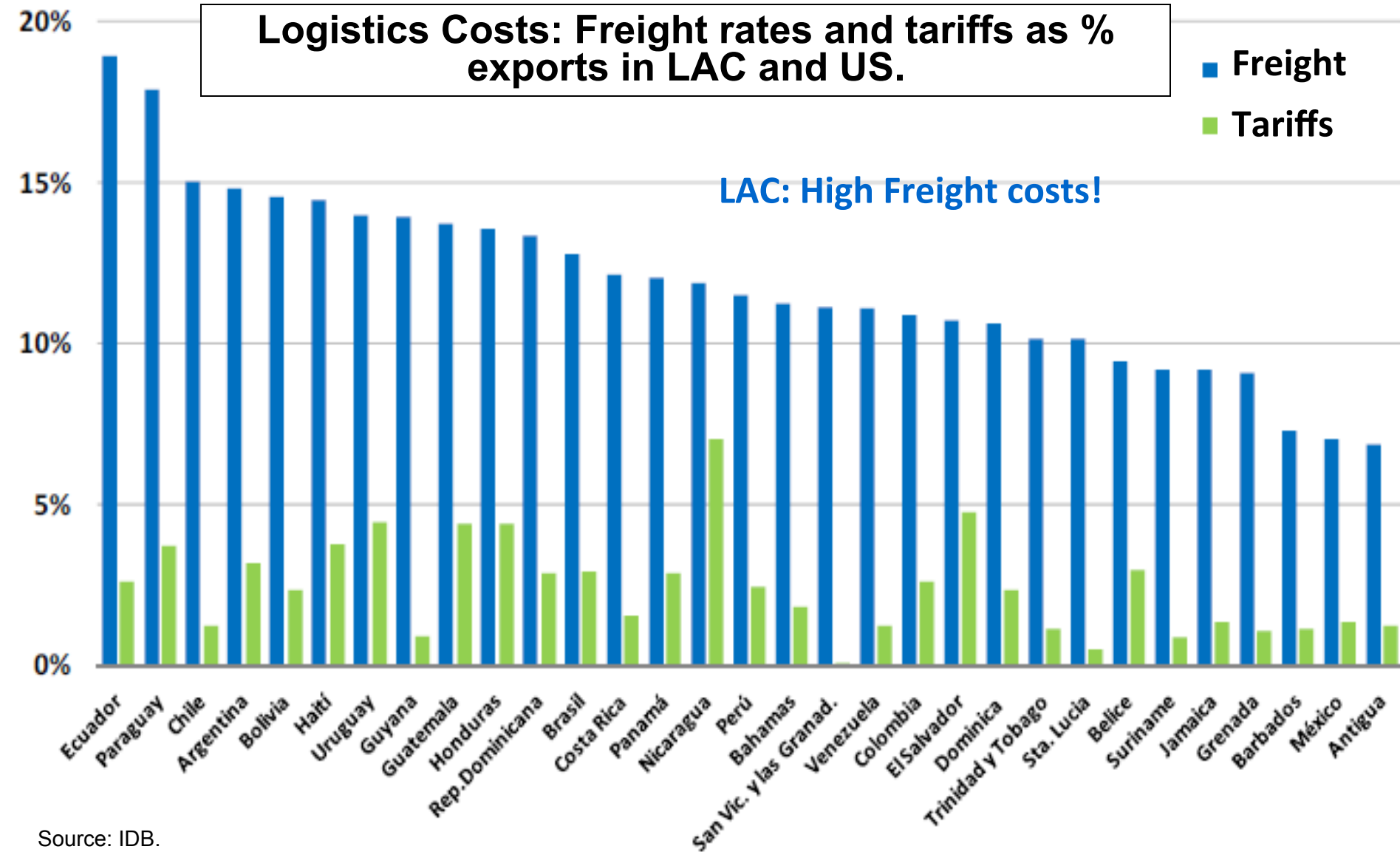


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Logistics Costs: Freight rates and tariffs as % exports in LAC and US.

■ Freight
■ Tariffs

LAC: High Freight costs!

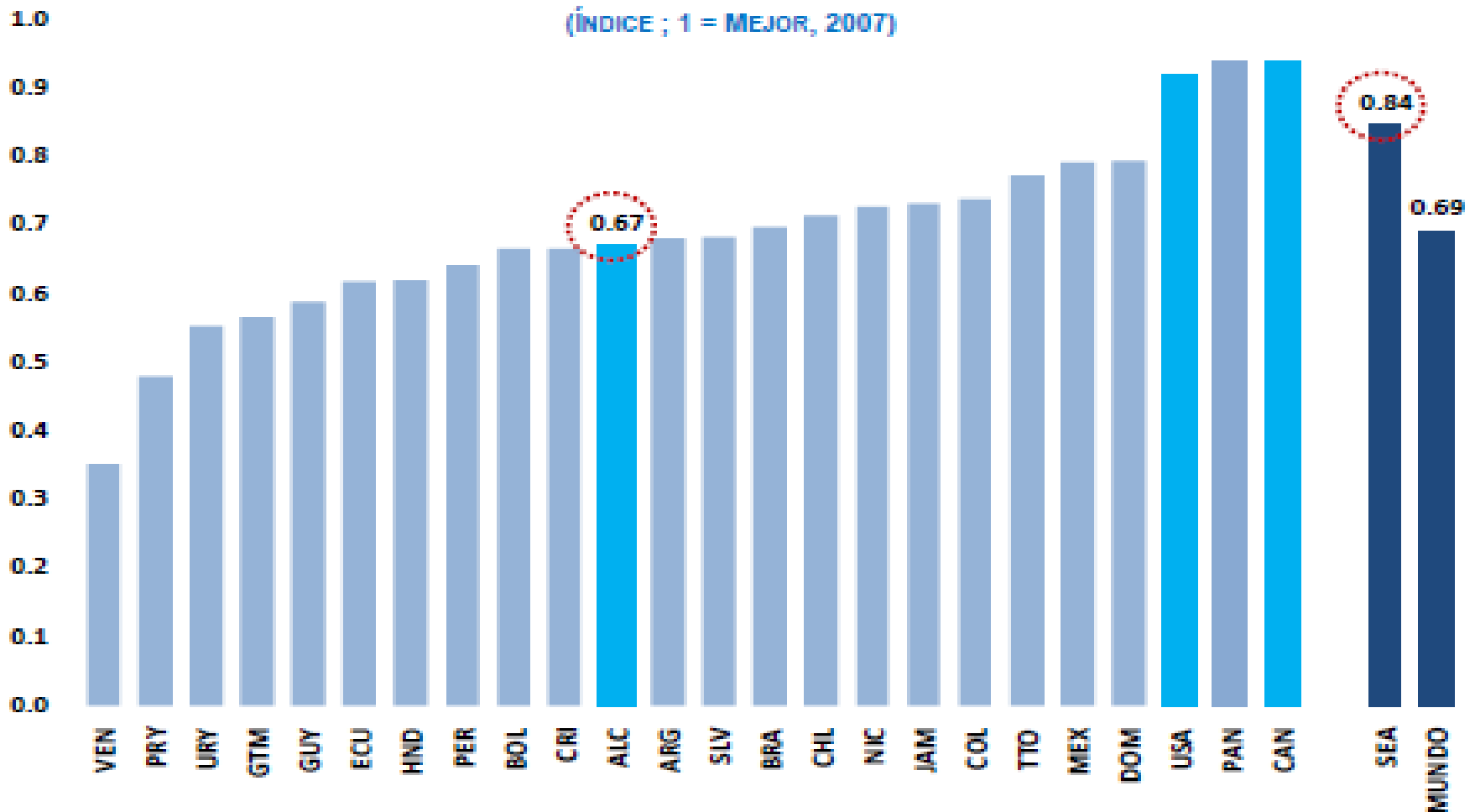


Trade Facilitation

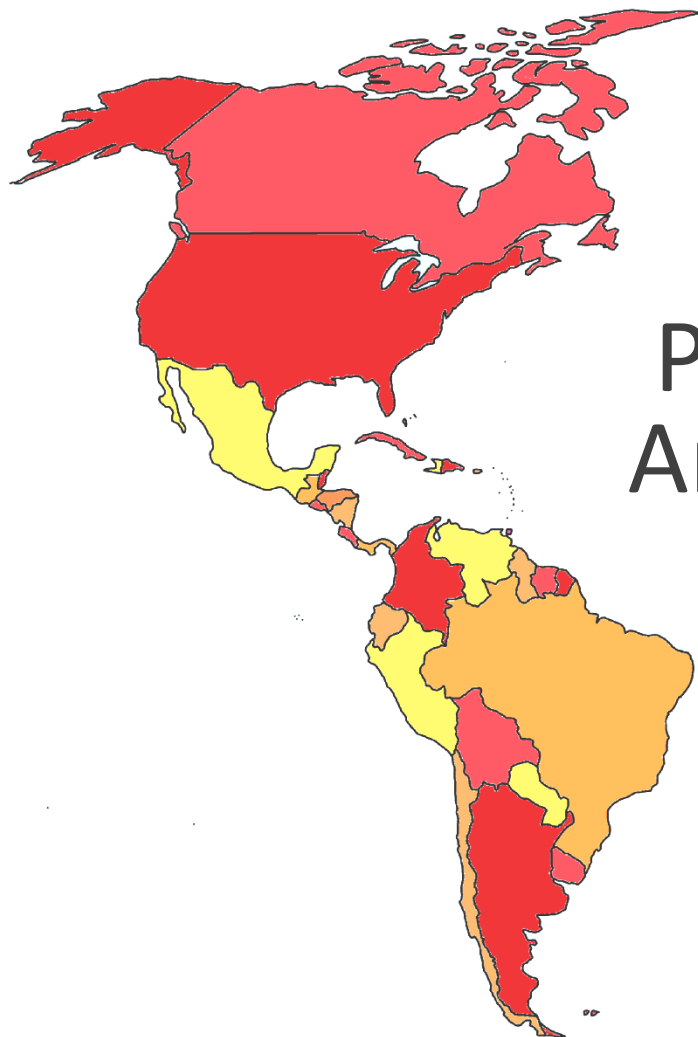


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American States

Trade Facilitation and Cross Border Efficiency Index



Source: Portugal-Perez, A y J.S. Wilson, 2010, "Export Performance and Trade Facilitation Reform: Hard and Software Infrastructure"

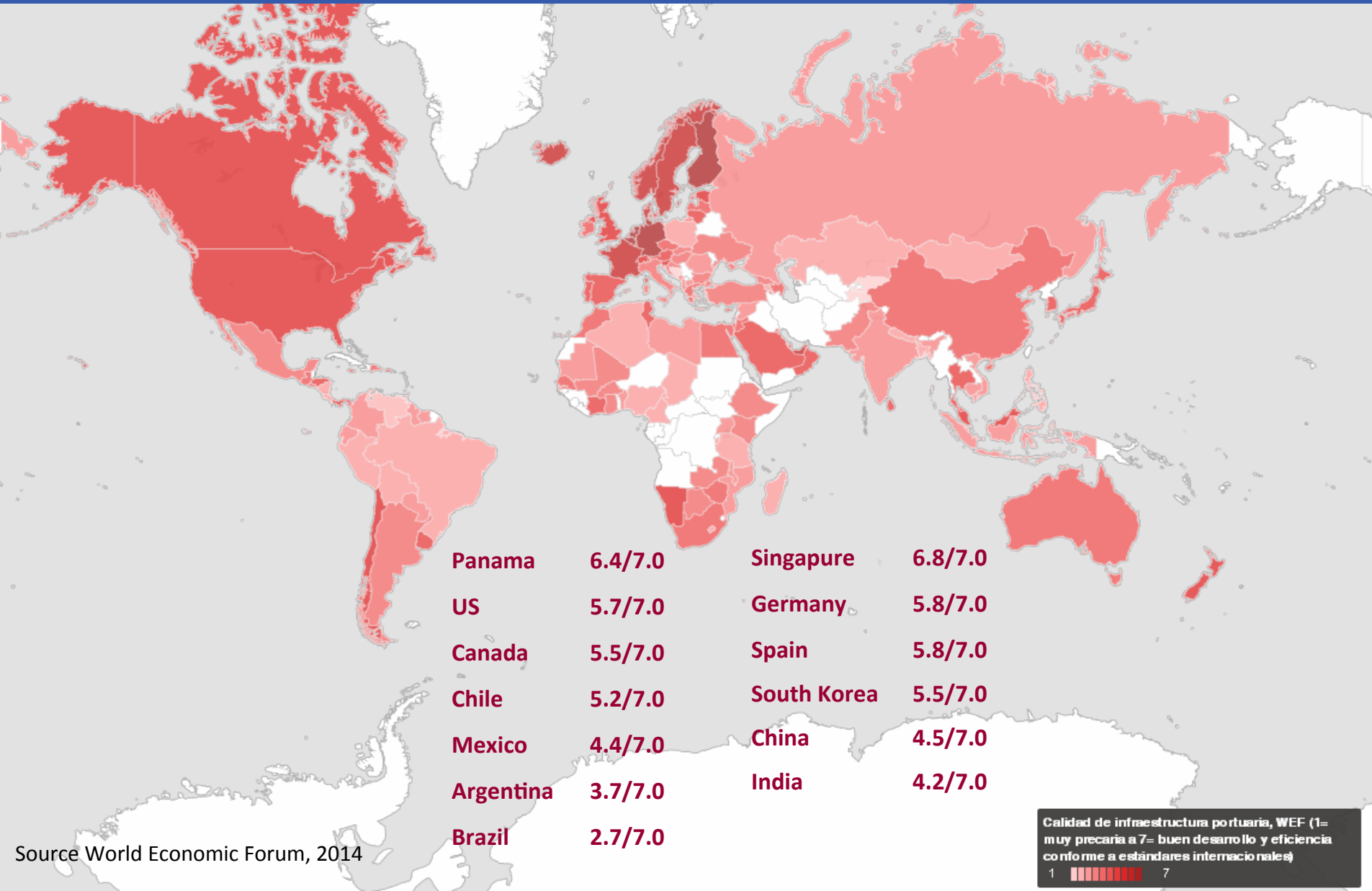


Port Infraestructure–Latin America and the Caribbean

Port Infrastructure Quality, World (2010-2014)



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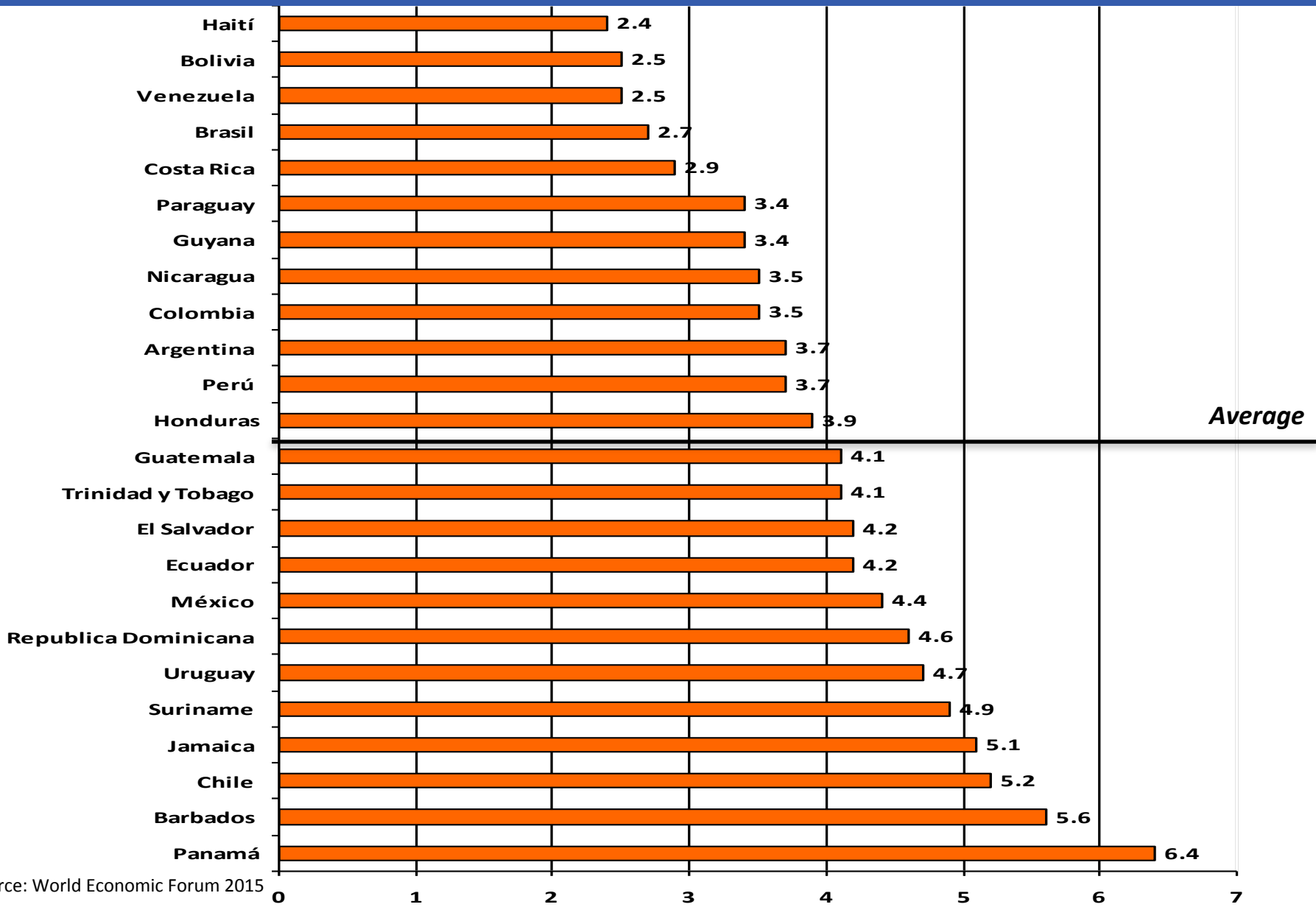
Calidad de infraestructura portuaria, WEF (1= muy precaria a 7= buen desarrollo y eficiencia conforme a estándares internacionales)

1 7

Port Infrastructure in LAC



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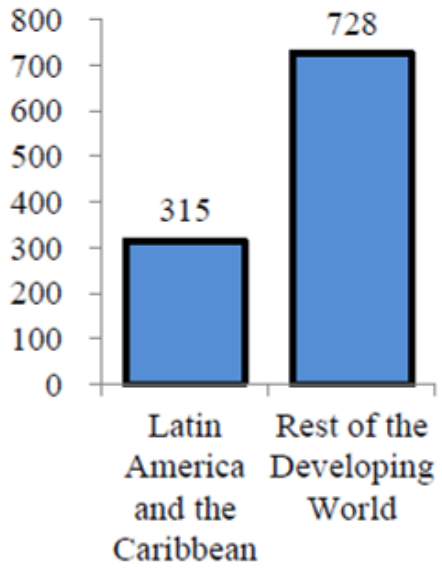


Source: World Economic Forum 2015

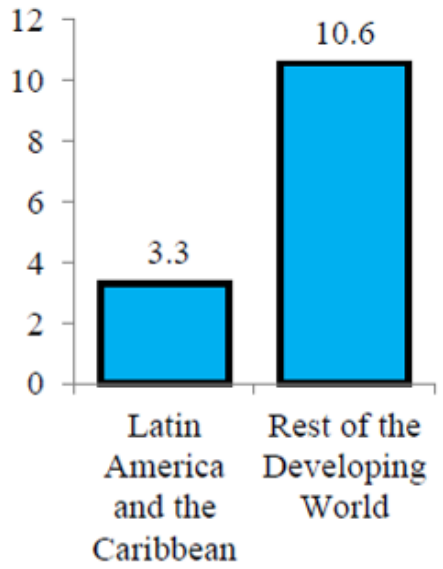
Average Infrastructure Assests



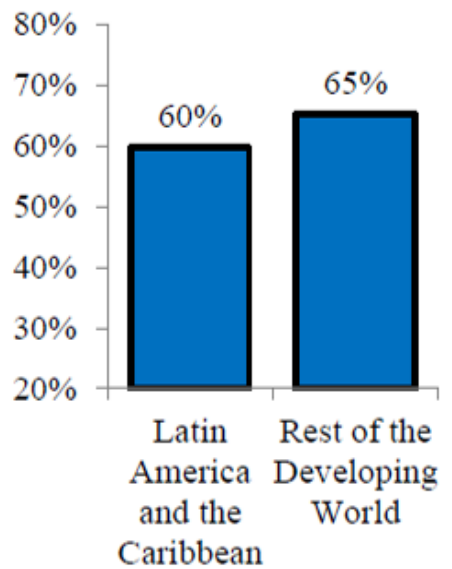
Average Total Length of Berths (meters)



Average Number of STS Gantry Cranes



Share of Private Participation in Ports



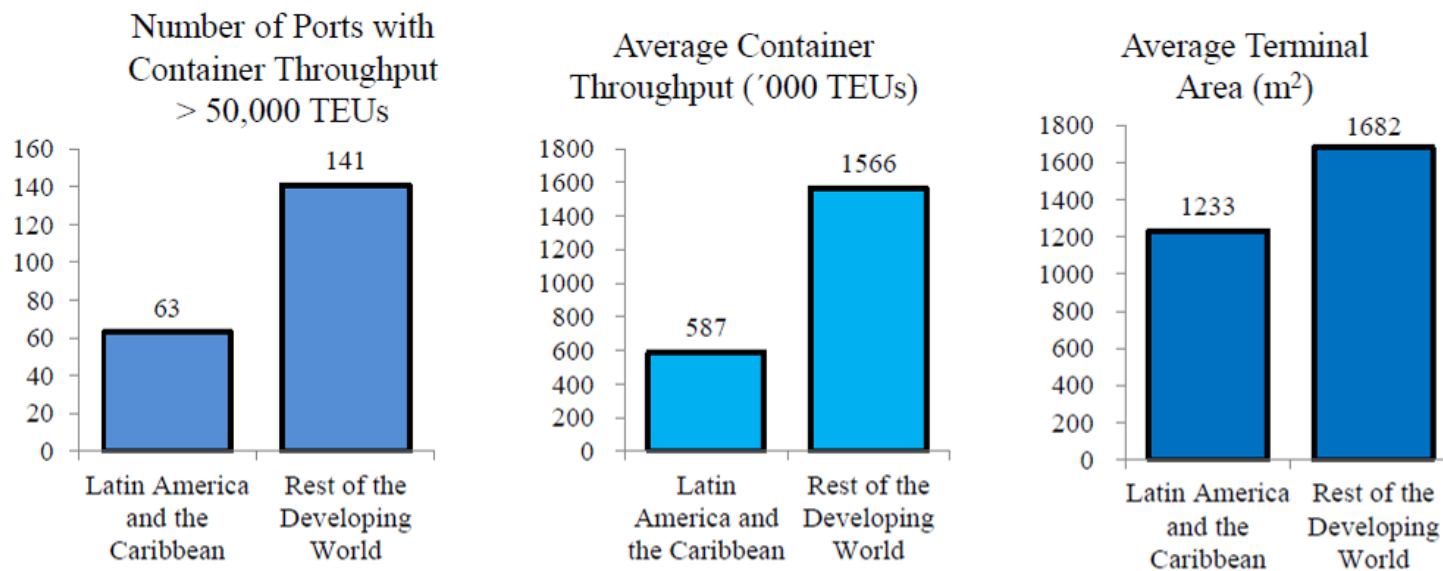
50% of LAC ports have rail connection, the same proportion as in the developing world.

Average Cargo Transshipment LAC and rest of Developing World



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The average port in LAC handles less throughput than the average port in the rest of the developing world...



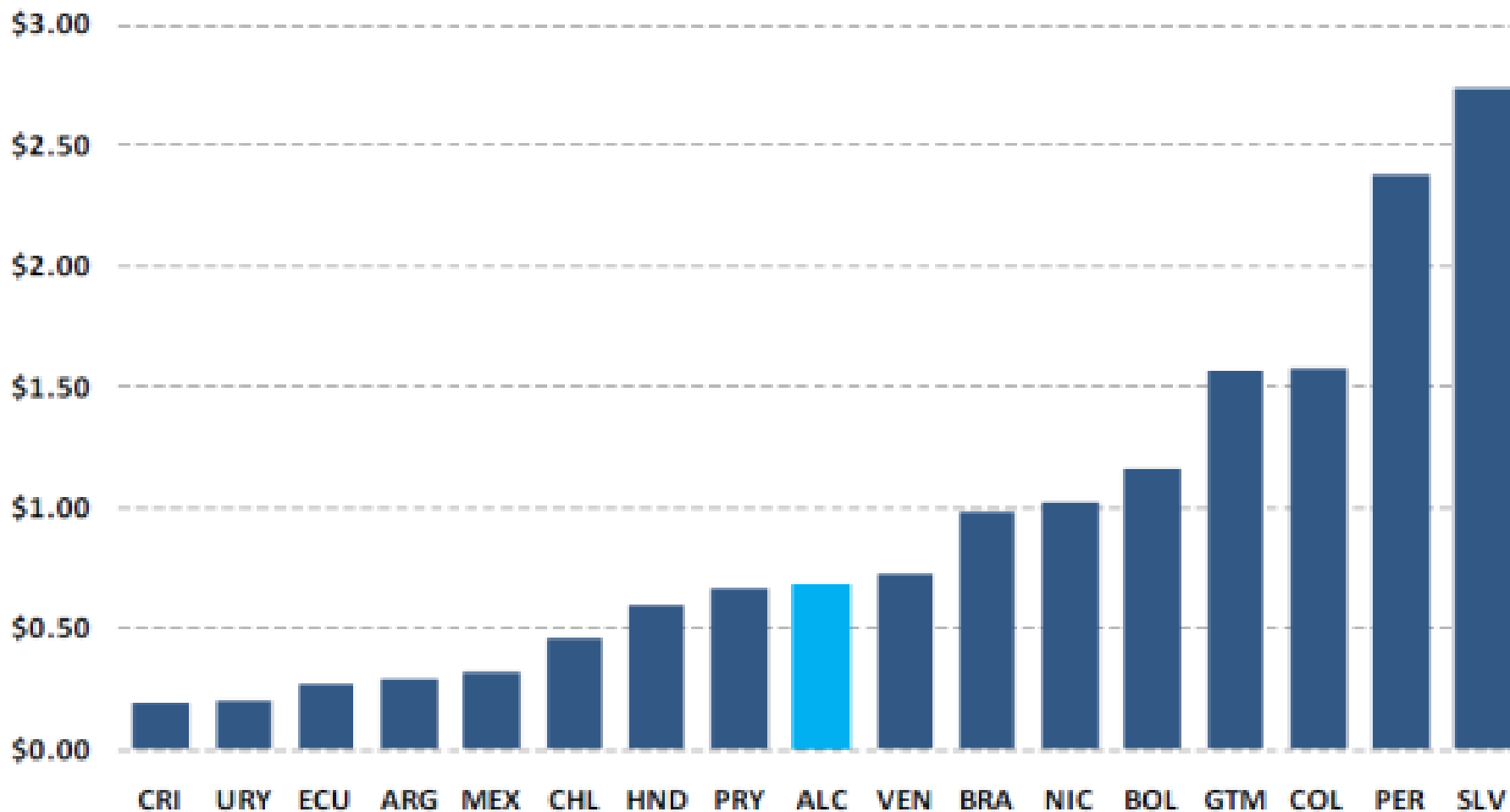
LAC: 37 million TEUs in 2010, 14% of the developing world total.

Transport Investment Infrastructure efficiency



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American States

(Net GDP gains per each dollar invested in transport infrastructure, through 2020)

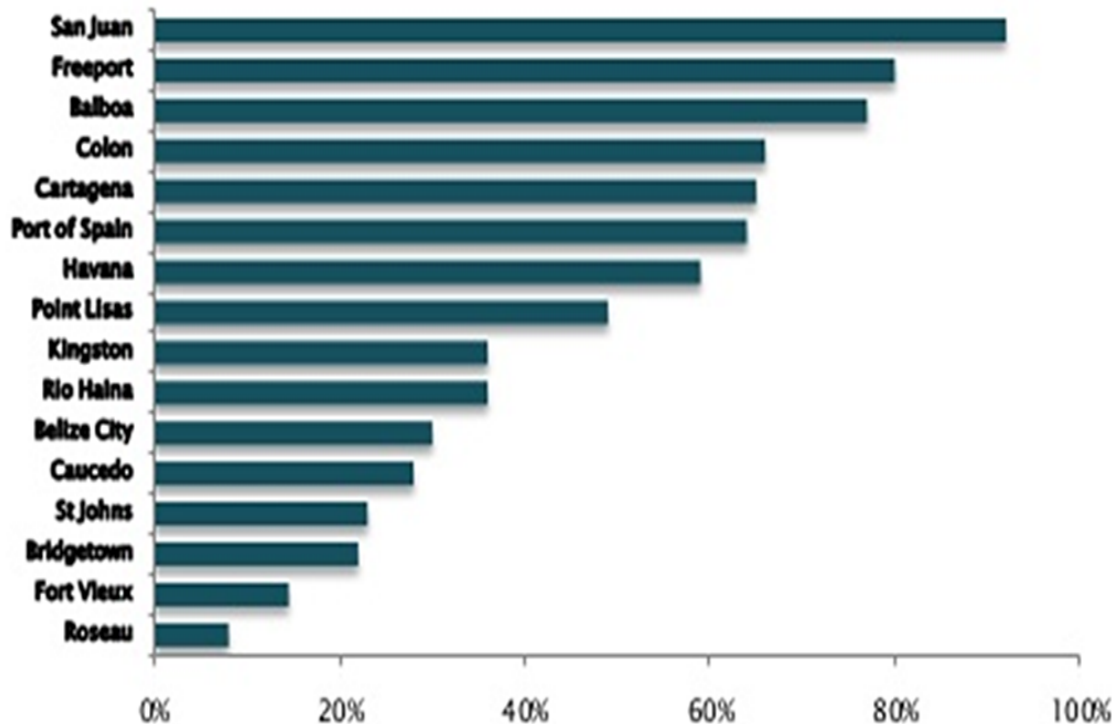


source: Model MEG INT-IDB

Transport Investment Infrastructure Efficiency

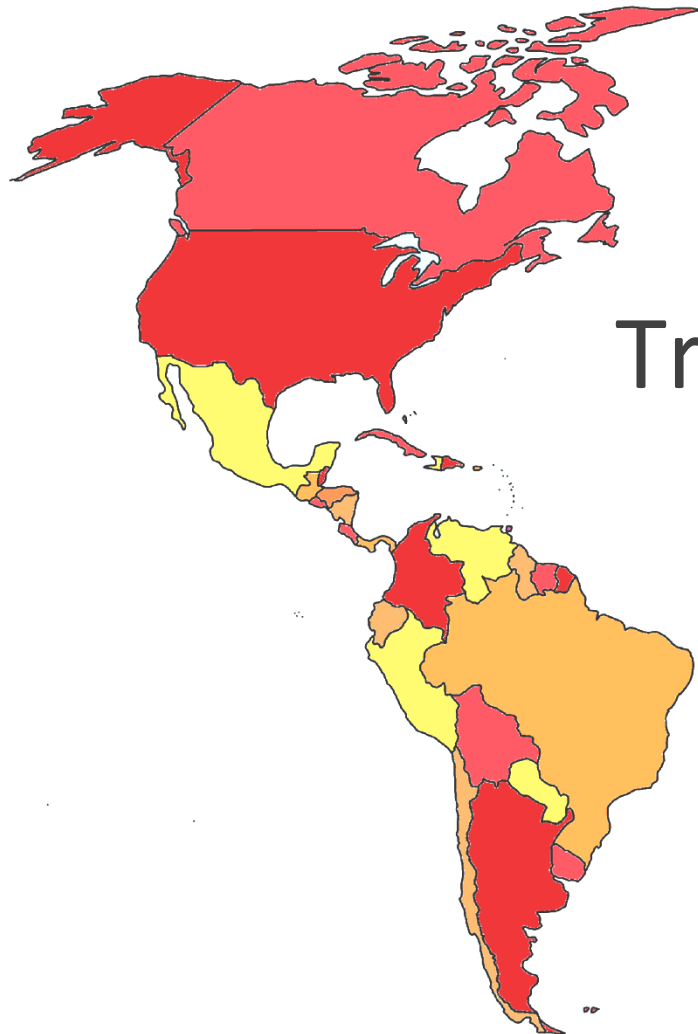


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In terms of utilization of utilization of equipment and yard berth areas, some port have room to grow, because they work at capacity, while other do not. This is something to think about when considering expansion.

Efficiency Scores based on Utilization of Infrastructure

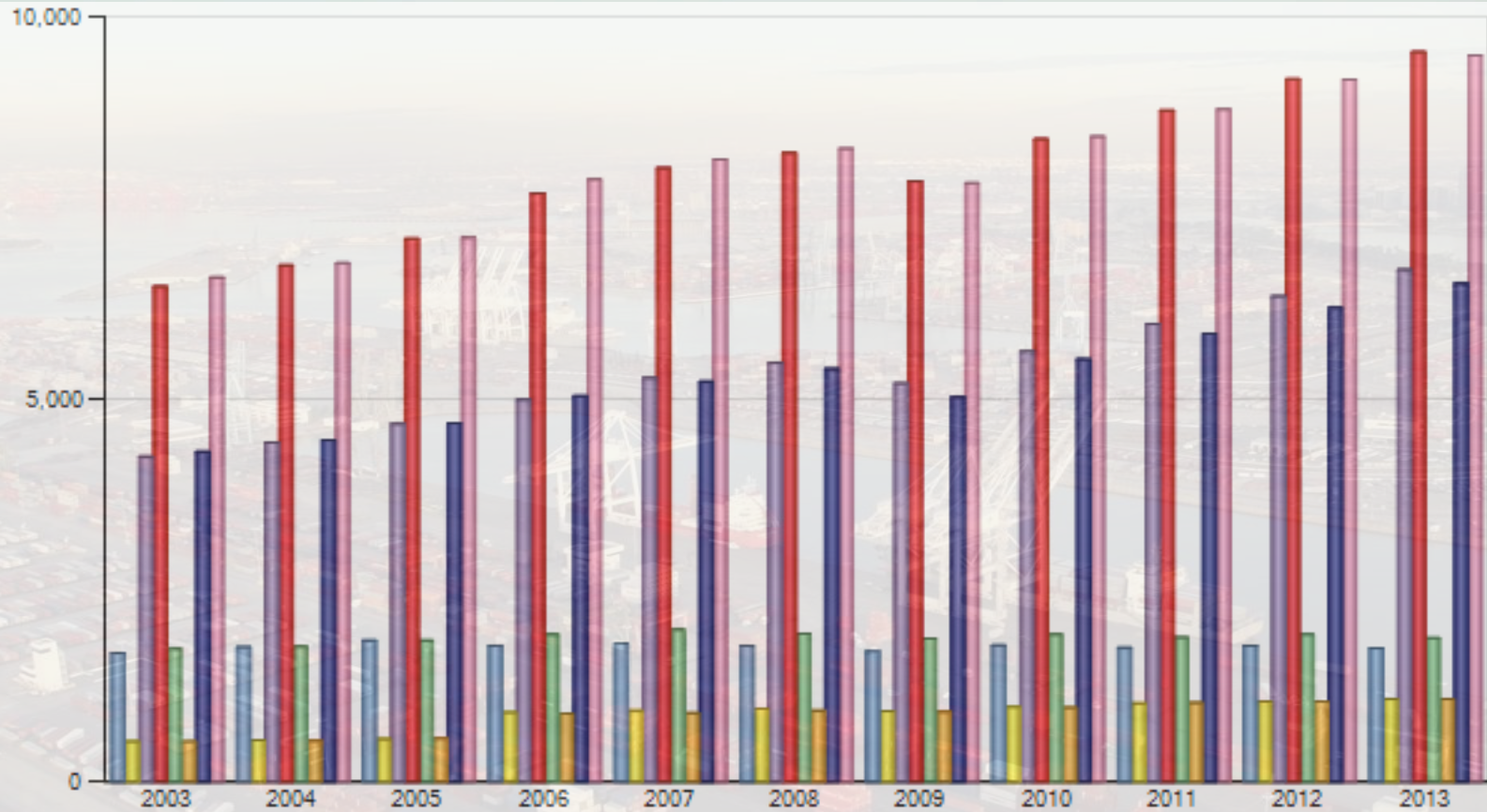


Trends— Latina America and Caribbean

World's Merchandise - UNCTAD



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YEAR

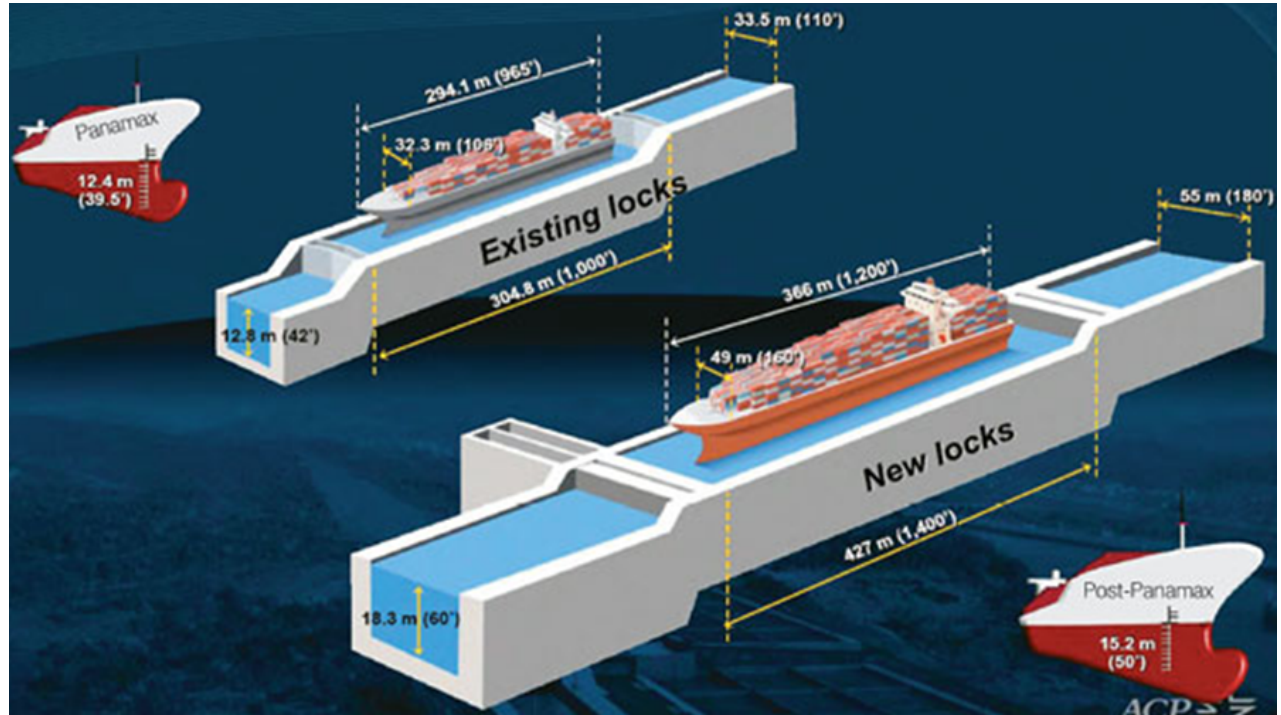
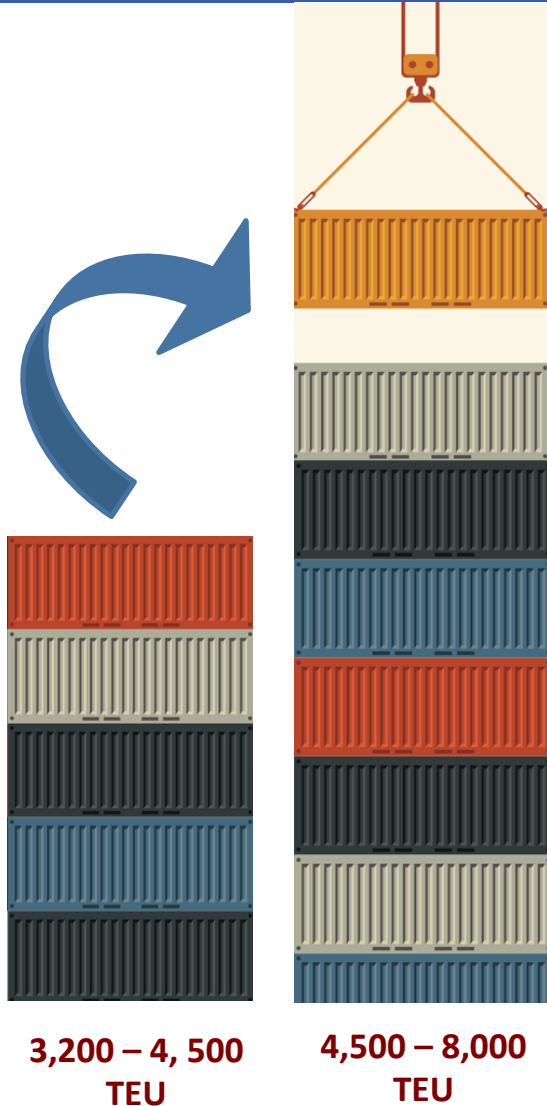
CARGO TYPE

- Crude Oil loaded
- Petroleum products and gas loaded
- Dry cargo loaded
- Total goods loaded
- Crude Oil unloaded
- Petroleum products and gas unloaded
- Dry cargo unloaded
- Total goods unloaded

Ship Size and Panama Canal Expansion



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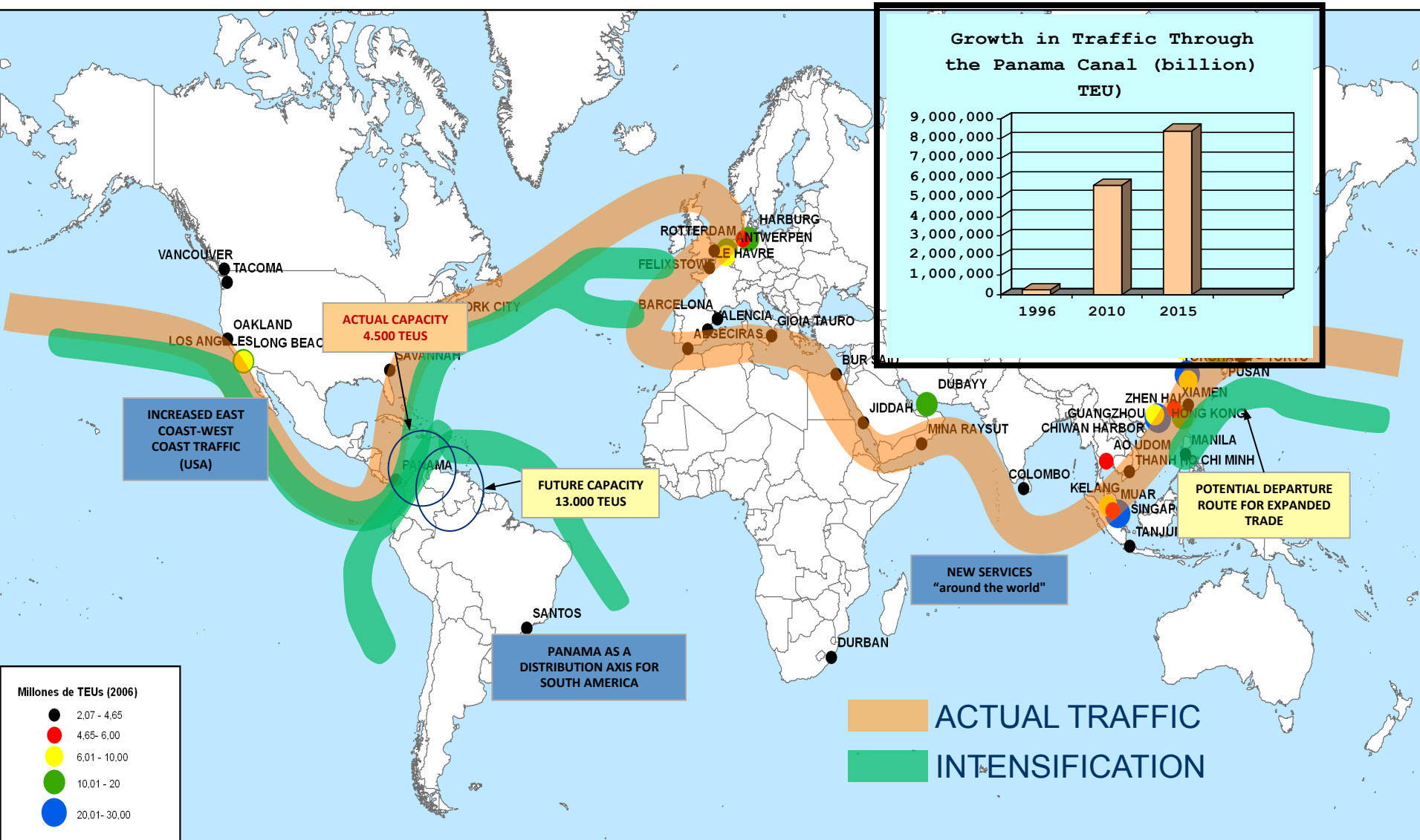
Vessel carrying as much as 14,000 TEU will also be able to cross.

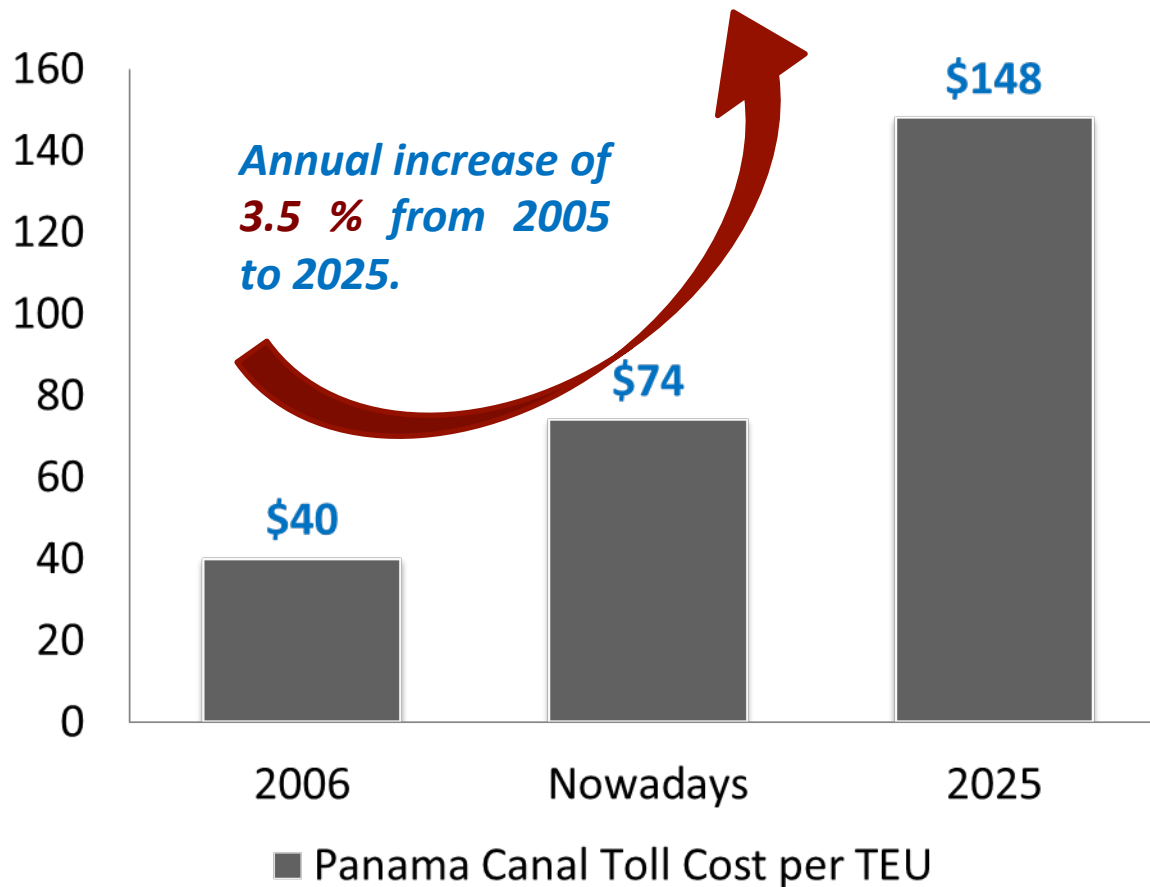
Panamax	Post - Panamax
Length: 294.1 m	Length: 366 m
Beam: 32.3 m	Beam: 49 m
Draft: 12.4 m	Draft: 15.2 m

Maritime Routes



Possible impact on International Maritime Routes







Competing routes (Suez Canal) could take away potential benefits from all ports in the region.

At the same time, handling fees in Caribbean ports are two to three times higher than in similar ports in other regions, which lead to an overall cost of transport and insurance in the Caribbean basin around 30 per cent higher than the world average.



Panama Canal

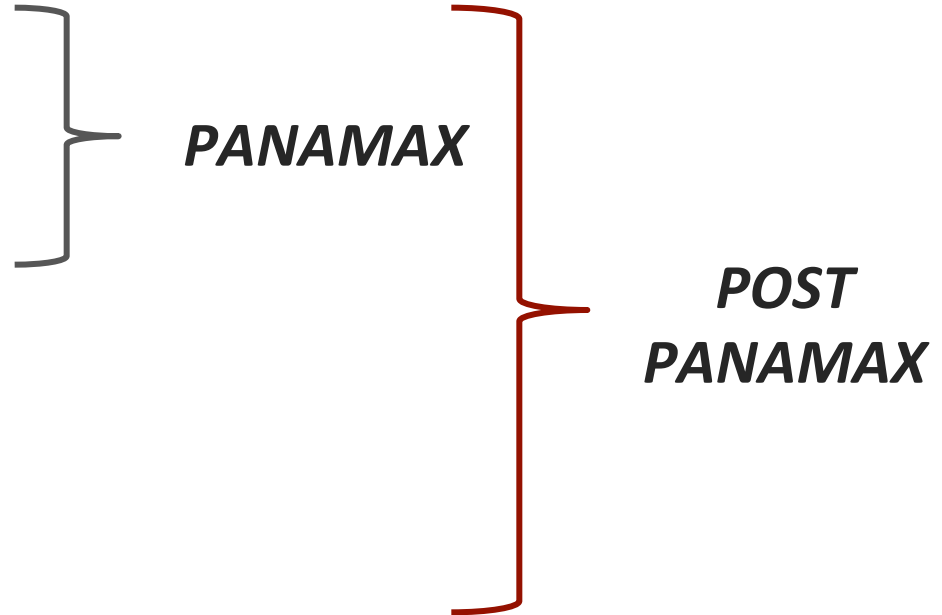
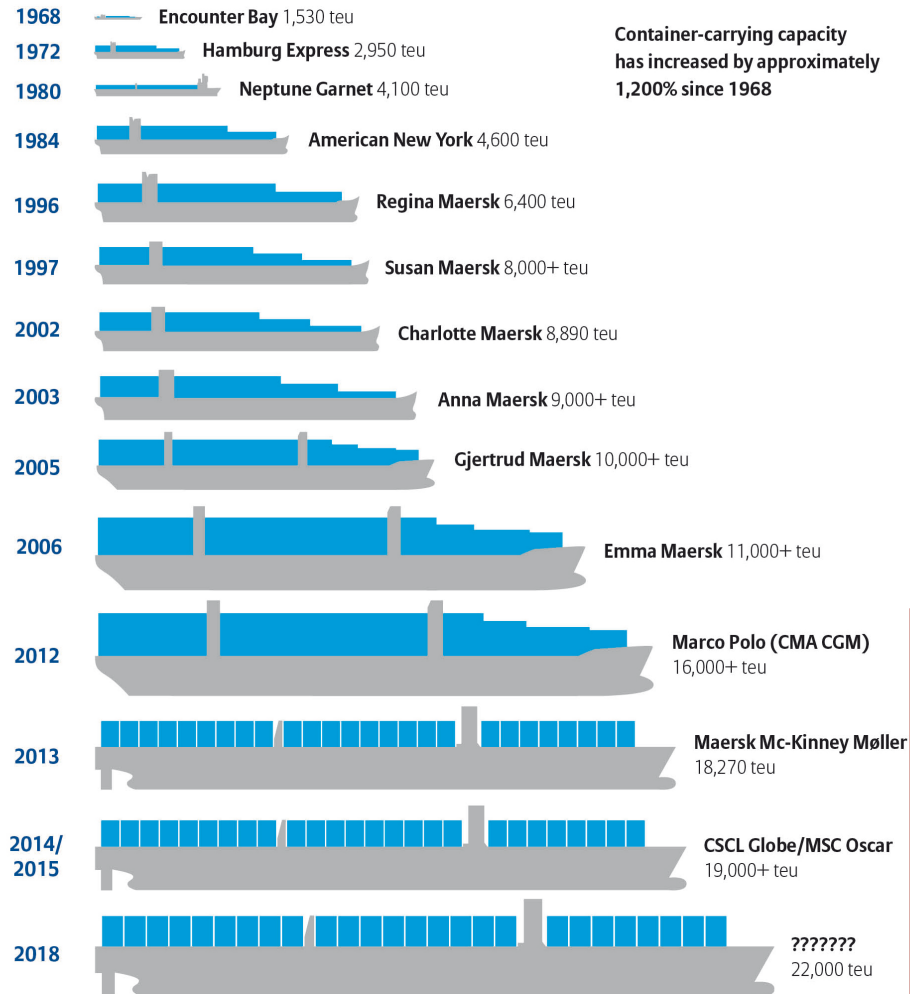
 The expansion of the Panama Canal is expected to generate a sustained increase in the demand for Transshipment through the Caribbean.


 The Panama Canal expansion will allow for an average of **3% PER YEAR GROWTH** in the volume of cargo transiting.







50 years of Container Ship Growth



 As a consequence, the Canal's throughput capacity will about double, from 300 million PCUMS tons to 600 million PCUMS tons, implying a huge change in transshipment activities.

 Ports will required depths of about 50 feet to receive the larger ships that will transit the canal once expansion is completed.

 Only Freeport in Bahamas and Balboa/Colon in Panama have sufficient depth at this time.

Source: Panama Port Authority; The Economist 2014.

Situation of Cargo Shipping



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Global Container Shipping accounts for **98%** of total Trade.

17% of Containerized Shipping involves direct connection between ports, the rest relies on transshipment.

Caribbean Ports serve as important transshipment centers for containerized shipping through the Panama Canal, which represent the **6%** share of total World Trade.

Latin America and the Caribbean Port Ranking



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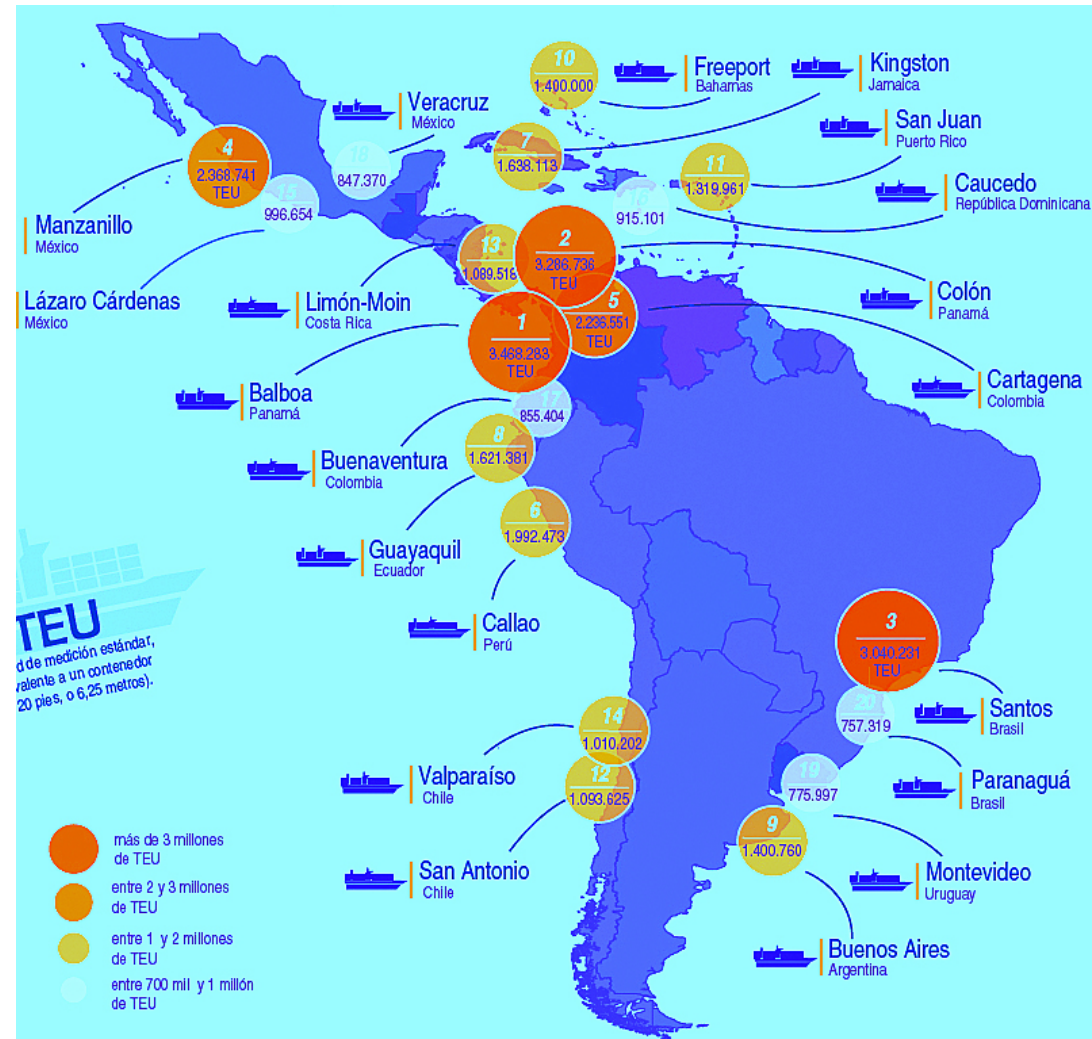
#1 BALBOA: 3,468,283 TEU

#2 COLON: 3,286,736 TEU

#3 SANTOS: 3,286,736 TEU

#4 MANZANILLO: 3,286,736 TEU

#5 CARTAGENA: 3,286,736 TEU

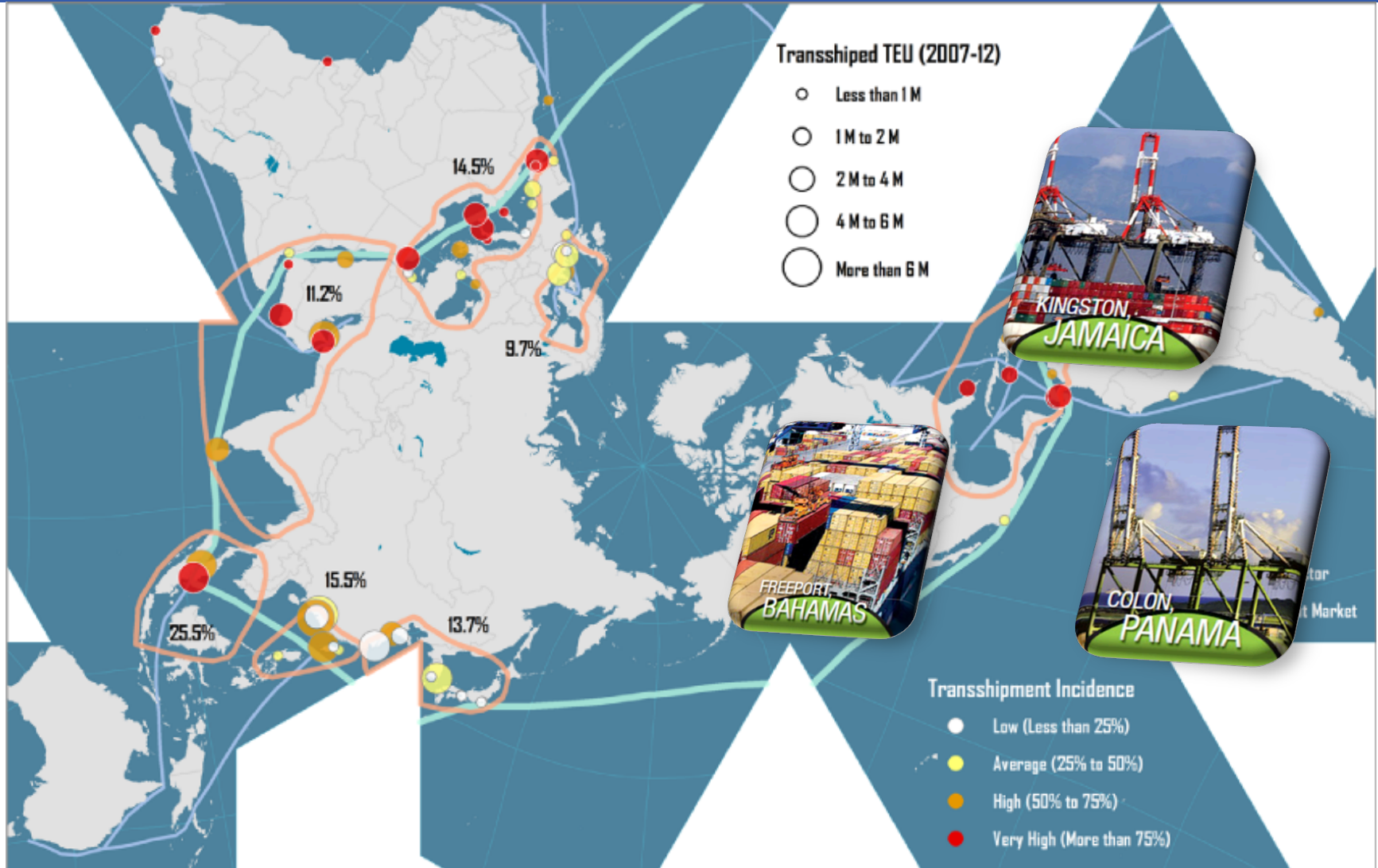


Fuente: CEPAL, Perfil Marítimo y Logístico de América Latina y el Caribe, junio 2015. <http://bit.ly/1ILORgy>

Transshipment Hubs



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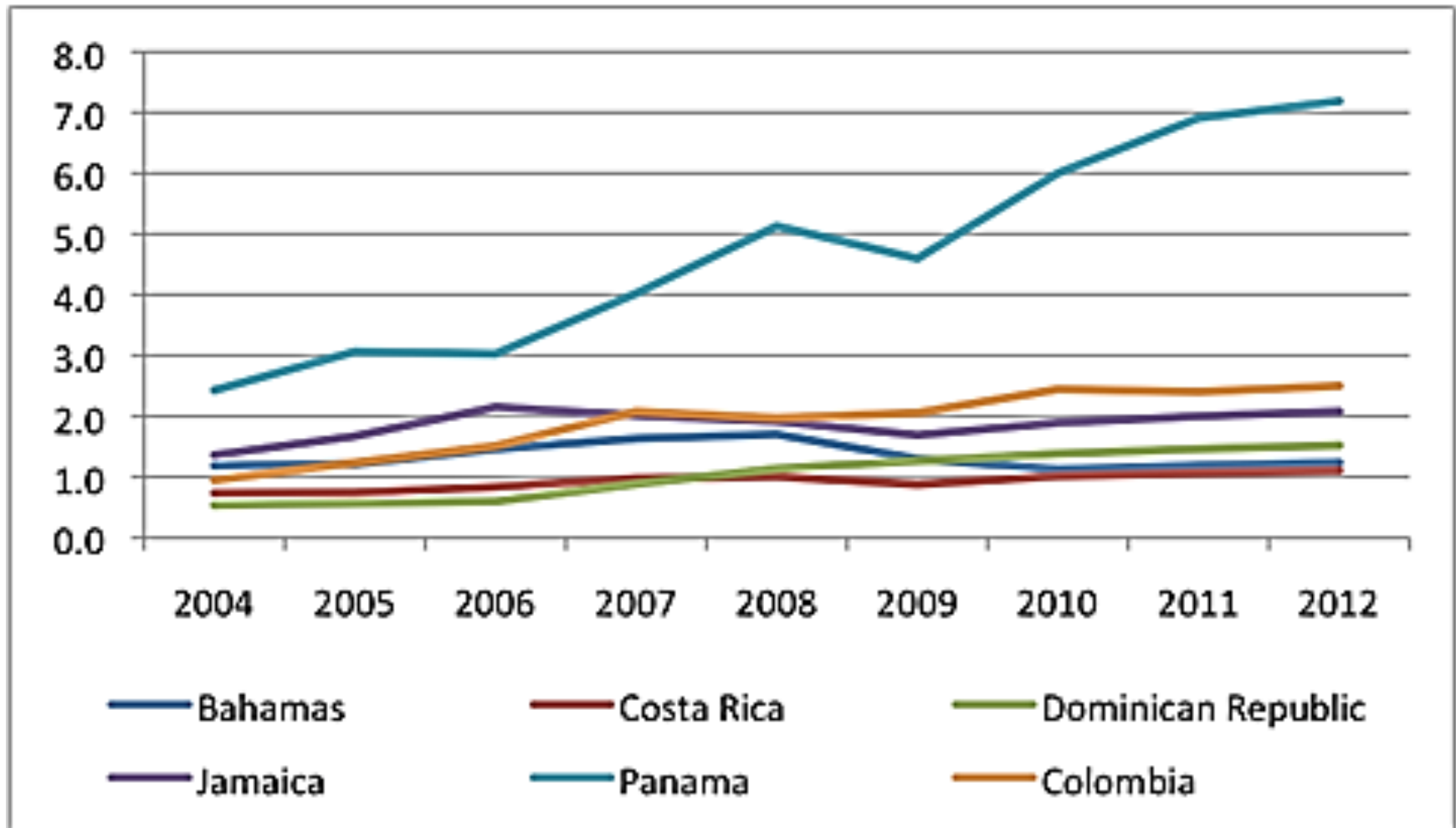


Source: Drewry Shipping Consultants.

Evolution of Transshipment



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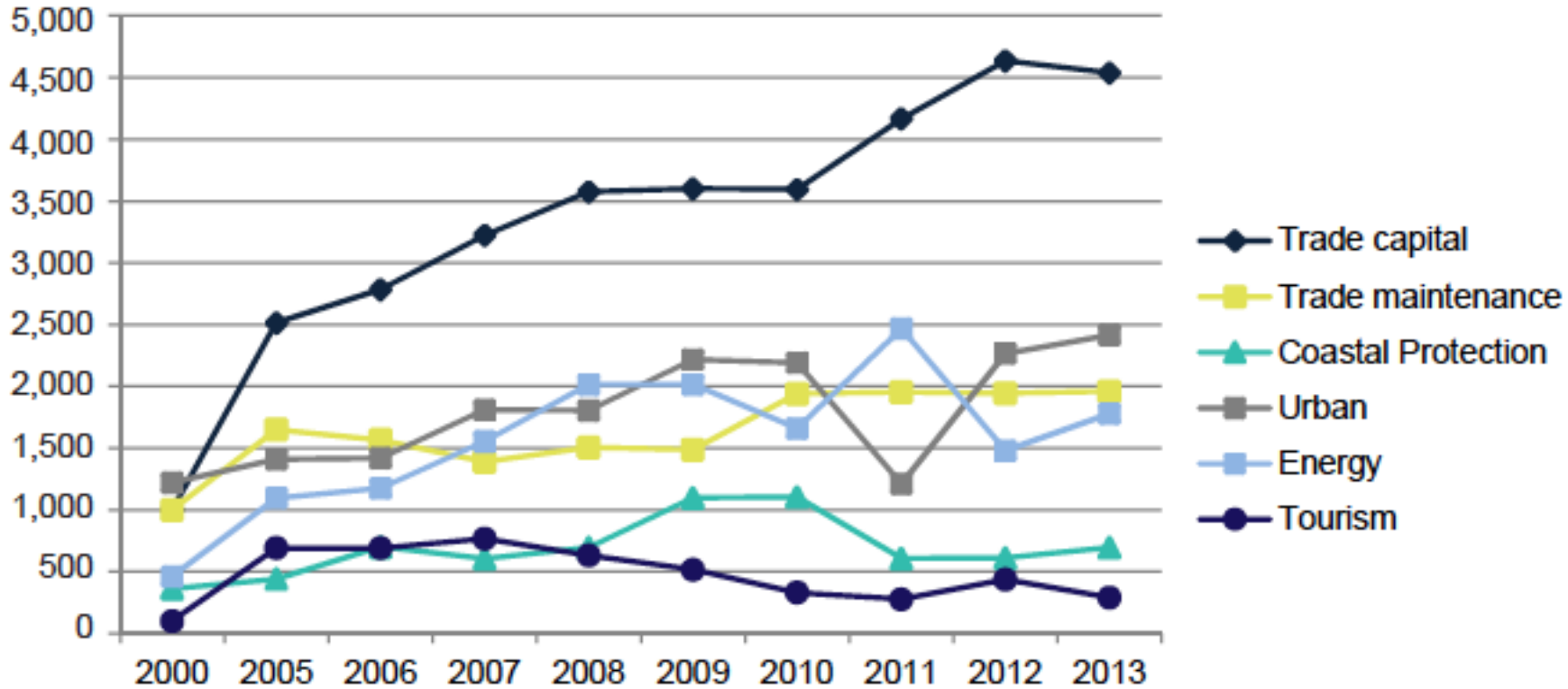


Source: World Bank Indicators.

Dredging Data by sector



DEVELOPMENT TURNOVER PER DRIVER IN € MLN

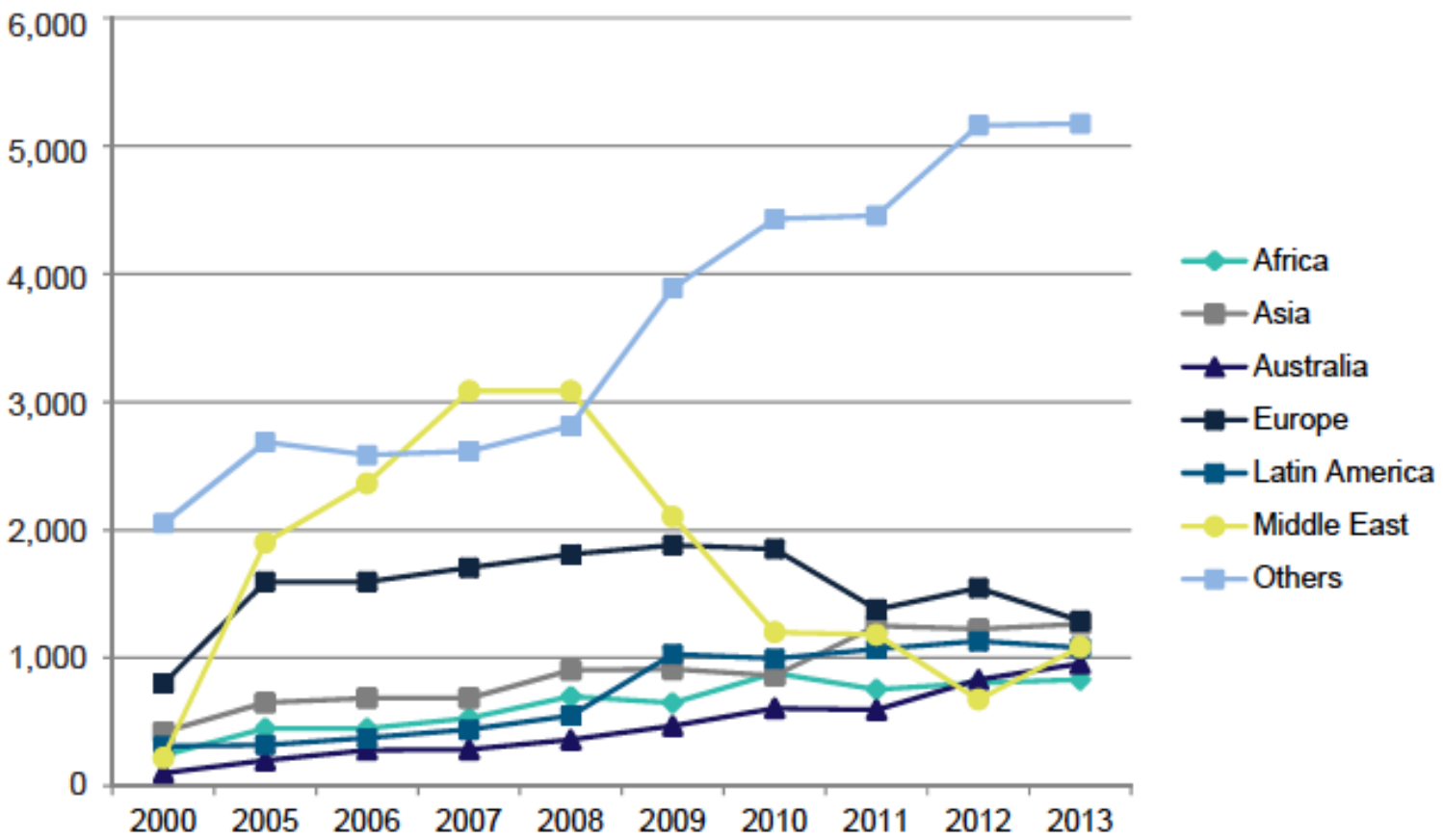


Fuente: IADC

Dredging data by region



DEVELOPMENT TURNOVER IN € MLN PER REGION



Fuente IADC

The Importance and Impact of Cruise Ship Tourism: Key Facts



Organization of American States

Increased Capacity

292 vessels
453,211 Passengers

2
0
1
4



298 vessels
486,385 Passengers
(7.5% increase)

2
0
1
5

Global Cruise Market in 2015= US\$ 39.6 billion

(Generated by higher prices and capacity)

Passengers in 2015

Origin	Percentage
North America	67.3%
Rest of the World	2.9%
Europe	29.8%



Passengers in 2019

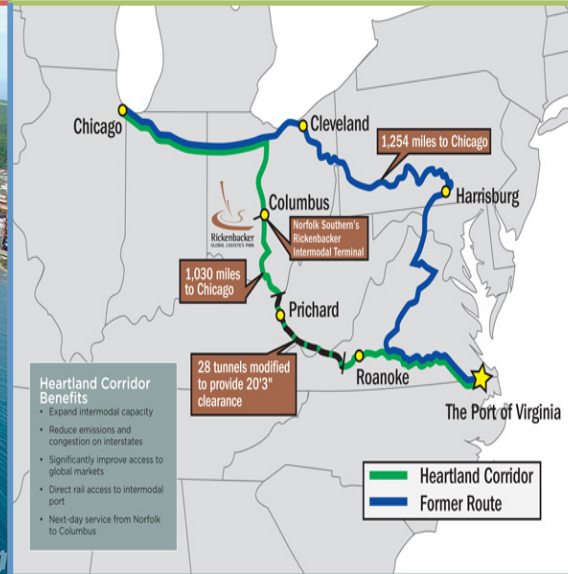
Origin	Percentage
North America	55.8%
<u>Rest of the World</u>	<u>19.1%</u>
Europe	25.1%

Source: Cruise Market Watch

Countries Assuming the Panama Canal Expansion Challenge



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Dominican Republic is spending at least \$150 million on its Caucedo multi-modal container port to prepare for the expanded Panama Canal, and is expected to increase its annual handling capacity to 2.3 million TEU.

In the United States, railroads serving the east coast are investing in their capacity to ship goods inland, anticipating that the Canal expansion will attract traffic at the expense of the more crowded west coast ports and railroads. For example, Norfolk Southern recently completed its Heartland Corridor project, which dramatically increased its capacity for intermodal traffic and reduced transit times between Norfolk, Virginia and Chicago.

COMPAS a Colombian terminal operator in alliance with AMP terminals will operate and invest US \$ 200 million in the port of "La Heroica", in Cartagena, Colombia, in order to expand the capabilities of the terminal and to manage the ships that would pass through the expanded Panama Canal. This investment will be directed to operational improvements and modernization of equipment to triple its capacity.

Countries Assuming the Panama Canal Expansion Challenge



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Mexico will invest in port infrastructure a total of US\$5 Billion: i) \$823 million for the Expansion Port Altamira ii) \$1.9 million for the Veracruz Port, iii) \$820 Million for the Modernization of the Mazatlán Passenger Terminal, iv) \$380 million for the Tuxpan Por, and v) \$445 million for Lazaro Cardenas



Brazil will invest US\$64 billion transport infrastructure, including US\$26 billion for marine ports and inland ports and waterways.



As part the of Colombia strategy to prepare for the expansion Panama Canal is investing also in port infrastructure in the Magdalena River to bring cargo to the hinterland.

Countries Assuming the Panama Canal Expansion Challenge



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The Bahamas is investing US\$250 million in the expansion of the Freeport Container Port. The port will have a total quay length of 1,536 meters, a yard area of 63 hectares and a depth of 15.5 meters (50.8 feet), 9 post-panamax cranes and one super post panamax quay crane. (Boost annual handling of 1 million containers)



The Port of Mariel in Cuba has been dredged to 59 feet, and is undergoing a \$900 million expansion, largely financed by the Brazilian government, which will include a 465-km² special development zone and a container terminal of unspecified capacity. However, until the US Congress lift the trade embargo it will be impossible for Mariel to service trade destined for the United States.



Port Moin in Costa Rica is investing US\$992 million to be completed by 2018. Increase capacity to 1.3 million TEU/year.

Countries Assuming the Panama Canal Expansion Challenge



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Nicaragua is planning to invest \$50,000 millions in a new transoceanic canal to be completed by 2019. It will have a length of 278 Km , up to 500 meters wide and it will accommodate up to 23,000 TEU vessels.

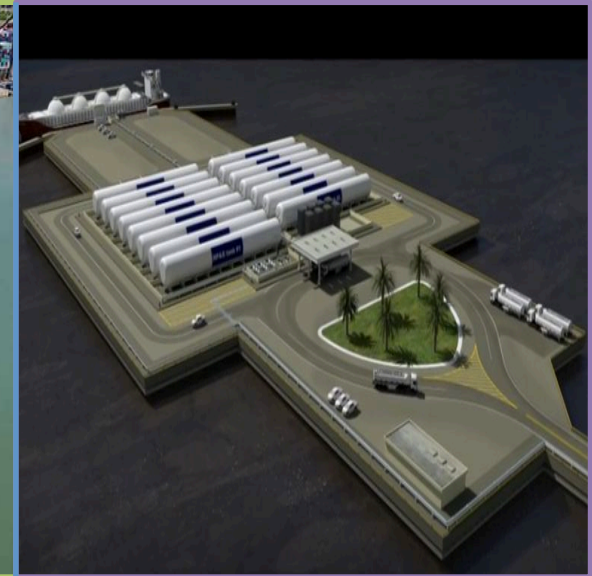
It will dredge up to 5,500 millions m3. (10 times more than Panama Canal in 100 years)



Jamaica is investing more than US \$660 million to expand the transshipment terminal in Kingston

Dredging to accept vessels of up to 14.2 metres within five years.

Jamaica is also investing with China US\$1.5 billion in a new container terminal for transshipment.



Haiti is also investing in LNG port terminal that will be capable of receiving ships of 10,000 to 60,000 cubic meters capacity. The cost is put at US\$123 million and the project is a privately led initiative by Haytrac Power and Gas S.A. Barbados, Haiti, Jamaica and Cuba are all said to have plans to buy LNG.



“Port Legislation is outdated vis a vis the new trends in port operations”

Alberto Díaz, President of the ANP Uruguay and Chairman of the Executive Board of the CIP

“Port legislation must be updated, be modern and flexible to be able to address the challenges of the maritime industry: bigger ships, increase in cargo, new technologies, modern infrastructure, new processes and management. “

Jorge Durán, Chief of the CIP Secretariat

Dredging Services Legislation



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Different options:

New and
Maintenance
Project
development
Financial
resources
Project design—
Advance
consultations

Contractual Risks:

Public
procurement
procedures
Type of Contracts
(lump sum,
turnkey, etc)

Operational risks:

Equipment
selection
Feasibility studies
Transparency,
Outreach and
consultations
with
stakeholders
Navigations aids
(buoying)

Environmental risks:

Material handling
(insurance)
Discharge areas
Contingency
plans

Benefits for users:

Guarantee of
depth
Increase cargo
capacity
Reduction of
navigation time
Reduction of
freight costs



- **Ports in LAC countries are in a process both investing and modernizing their infrastructure, as well as updating their legislation and policies to cope with the global trends and demands.**
- **Global trends (increase in trade, large containerships, Panama Canal Expansion) will have an impact on competitiveness but also on the environment**
- **Competitiveness requires a modern, well-managed, cost effective port system.**
- **The presence of an appropriate regulatory framework is essential for private-sector participation in infrastructure projects**
- **The private sector is the primary catalyst for change. It is important to emphasize the public-private partnerships, where the private sector is the leader on innovation and competitiveness**
- **The CIP promotes this dialogue and creates a hemispheric relevant community of practice.**



Organization of
American States

THANK

YOU!

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(CIP)
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Inter-American Committee on Ports

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