



The Mechanisms of Logistics Policy: Connectivity and Coordination in the Intermodal Sector

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Do you believe in magic?

- Promote trade, particularly exports.
- Attract foreign investments in logistics and related sectors.
- Improve the efficiency of the national economy by reducing logistics costs.
- Create employment and economic opportunities.
- Develop managerial capabilities and innovations in logistics.

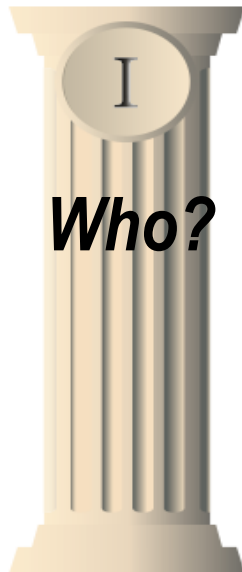


SILVER
SILVER

The Three Pillars of Logistics Policy: Realms of Intervention

Manufacturers.
Logistics service providers.
Shippers.
Terminal operators.
Carriers.
Retailers.
Wholesalers.
Regulators.
Civil society.

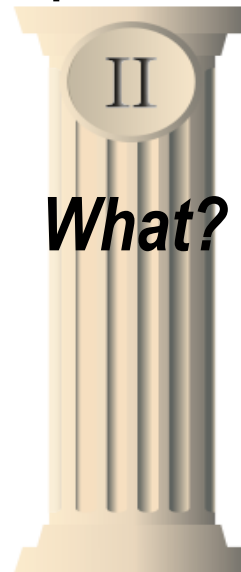
Actors



Who?

Trade (Customs).
Procurement.
Transformation.
Manufacturing.
Wholesale and retail.
Transport.
Storage.
Distribution.

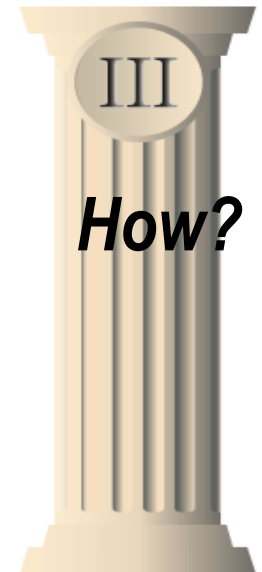
Operations



What?

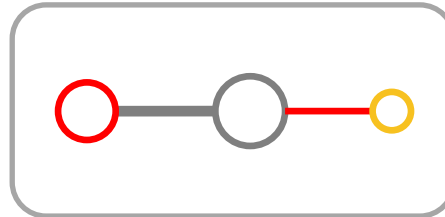
Capacity.
Costs.
Timeliness.
Reliability.
Safety and security.
Compliance.
Competitiveness and
openness.
Transparency.

Outcomes



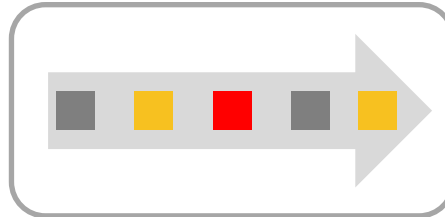
How?

Logistics Policy Bottlenecks



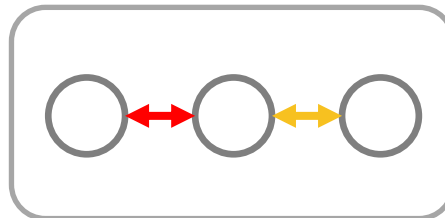
Capacity Bottlenecks

Lack of terminal or connector capacity.
Lack or absence of intermodal options.



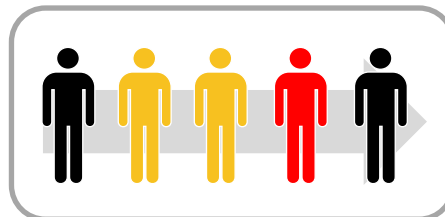
Operational Bottlenecks

Lack of logistical services.
Lack of logistical performance (cost, time and reliability).



Institutional Bottlenecks

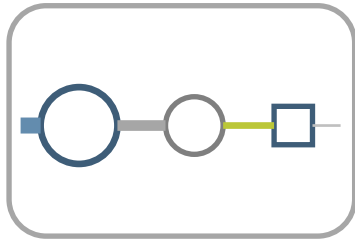
Lack of clear mandate and jurisdiction.
Lack of coordination and cooperation.



Skills Bottlenecks

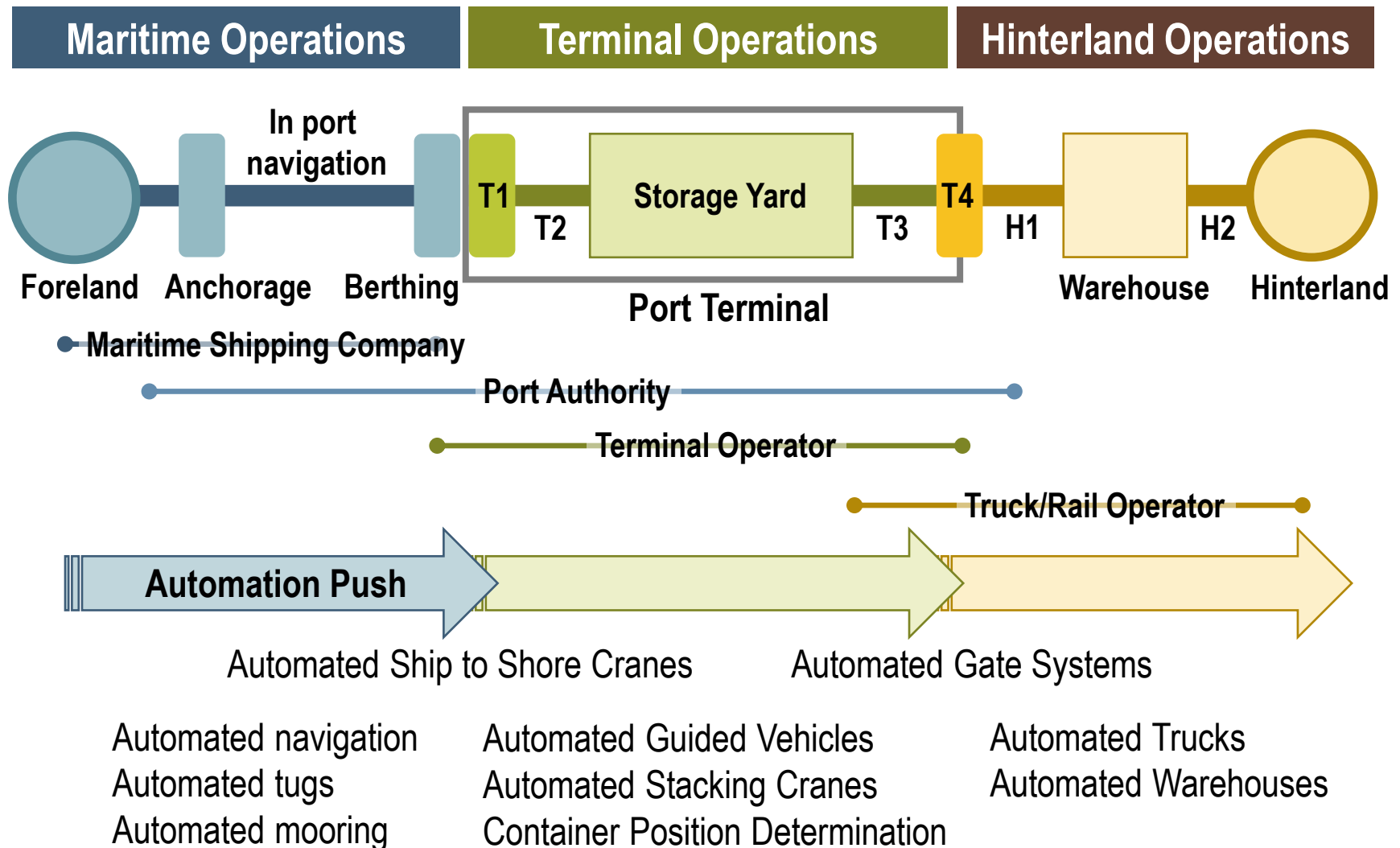
Lack of labor flexibility.
Lack of qualified labor.
Lack of training programs.

Transport Connectivity

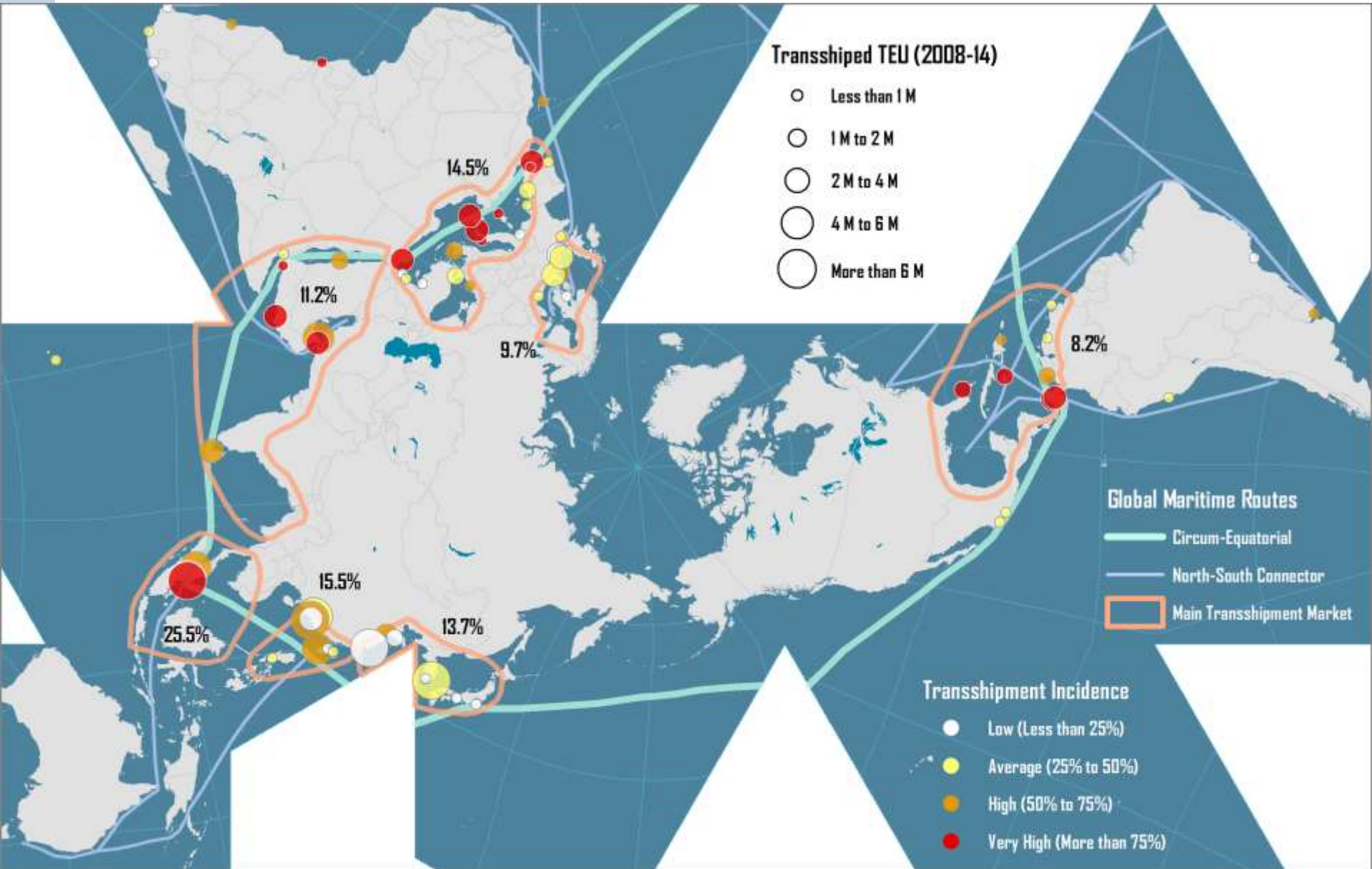


- Improving connectivity and interoperability of modes and terminals (intermodalism).
- Infrastructure and superstructure improvements (capacity and throughput).
- Synchronizing terminals and hinterland flows to increase throughput and reliability.

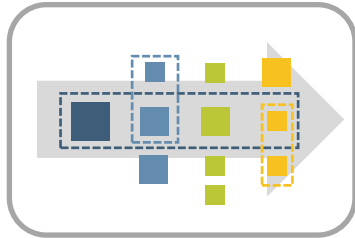
The Port Performance Value Chain



Transshipment Volume and Incidence by Major Ports, 2008-14

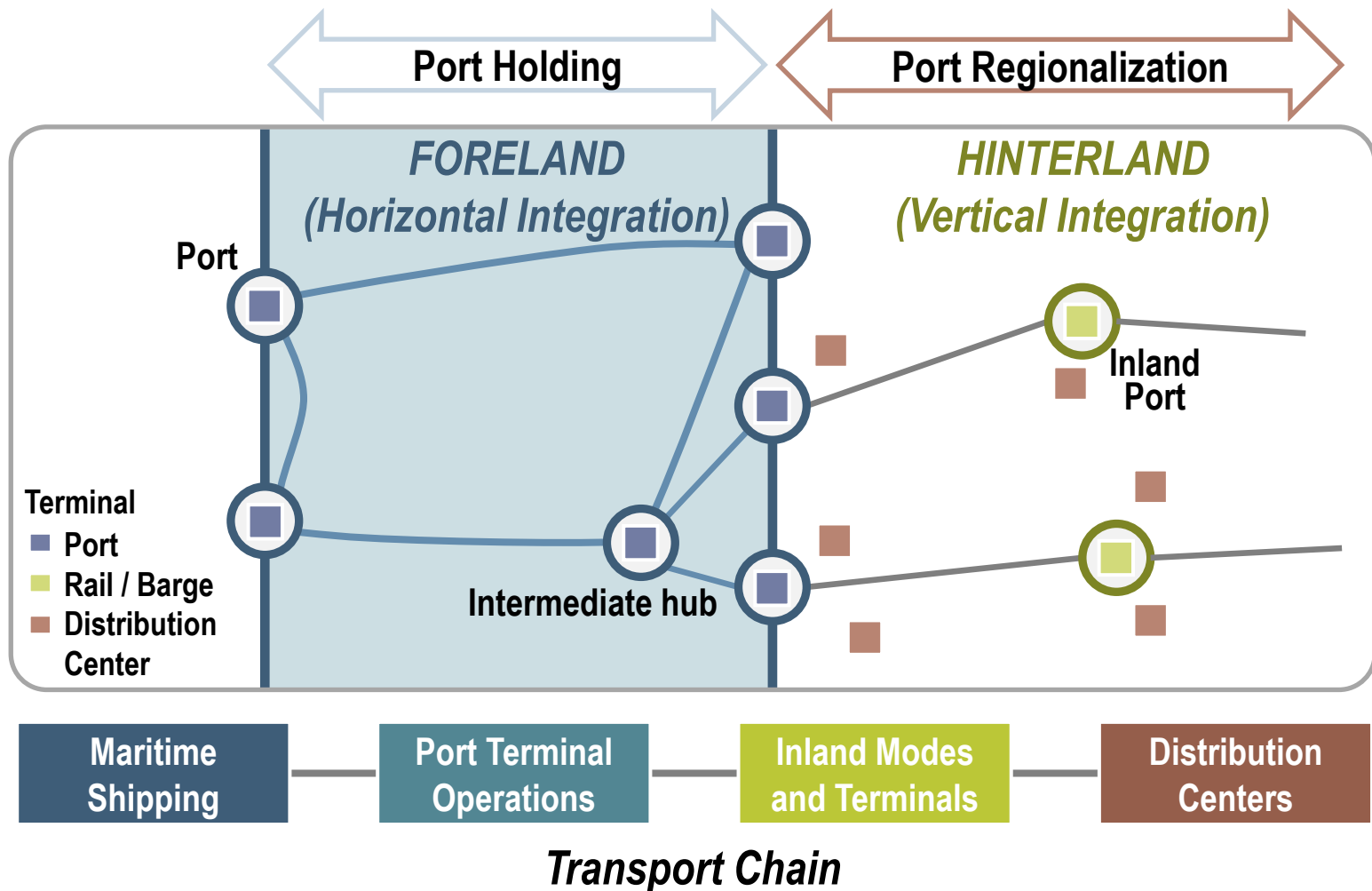


Commercial Integration

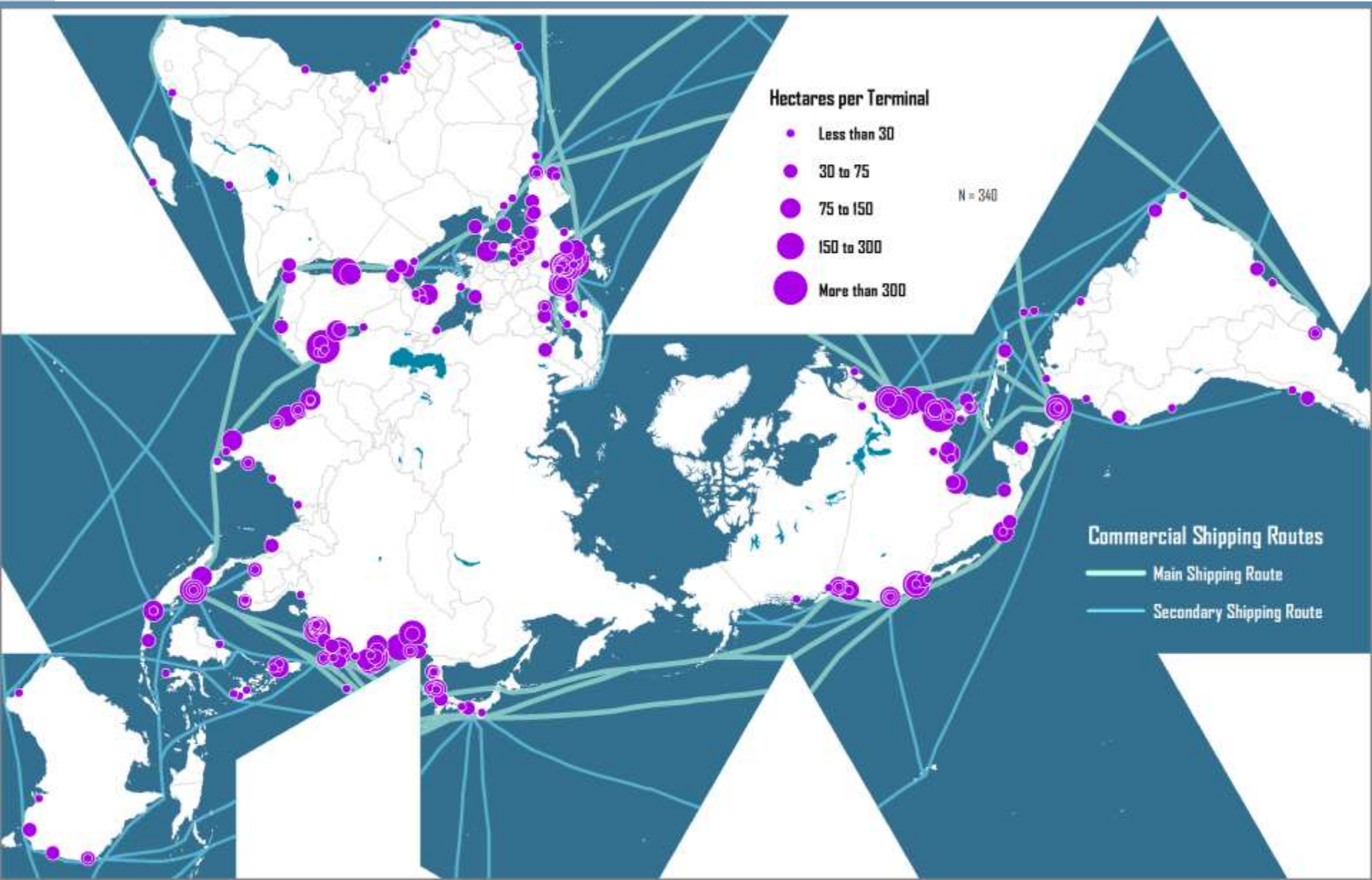


- Trade and commercial agreements. Mergers and acquisitions along the supply chain.
- Cost, time and reliability of transport and distribution services.
- Vertical and horizontal integration of actors and processes.

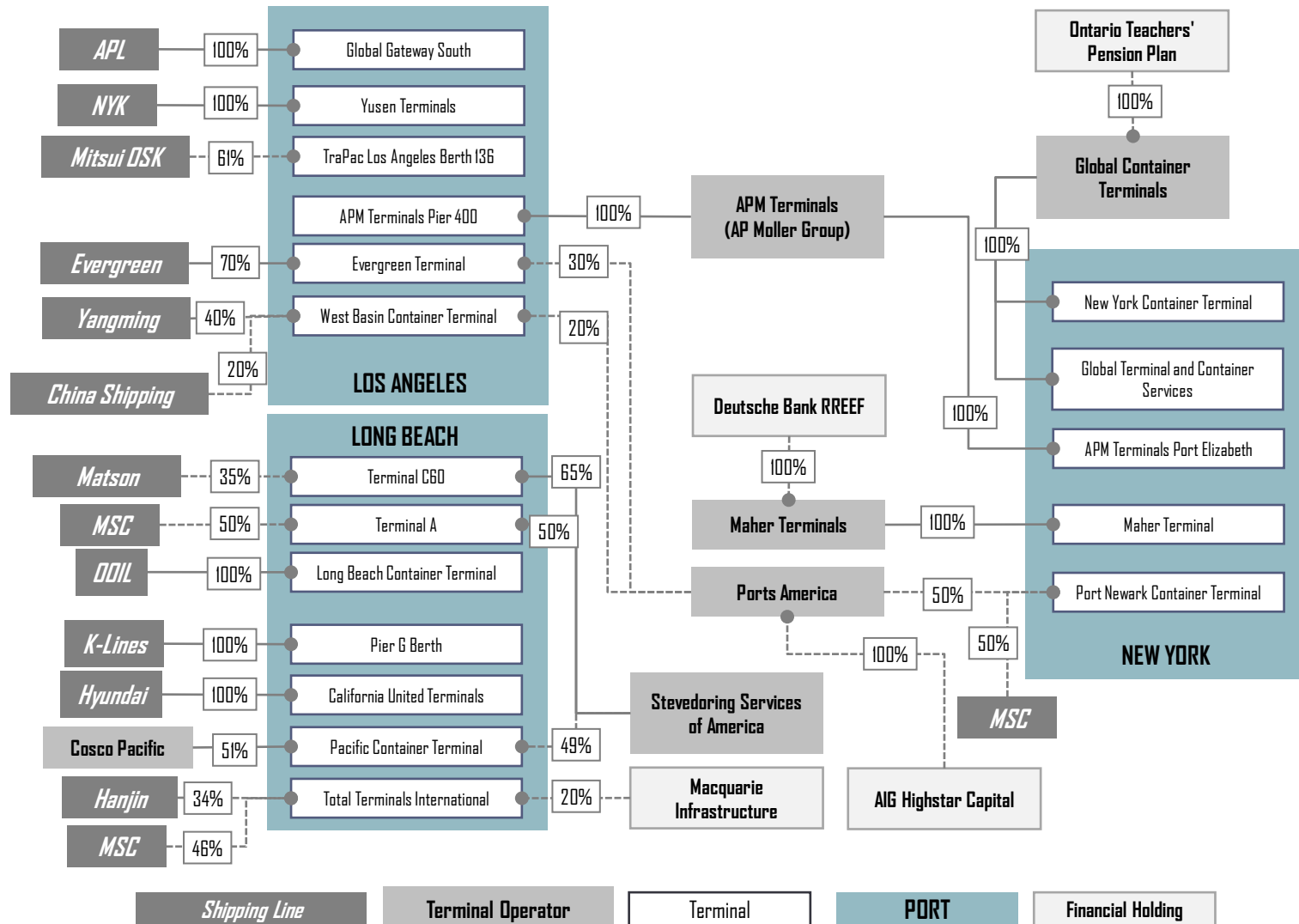
Vertical and Horizontal Integration in Port Development



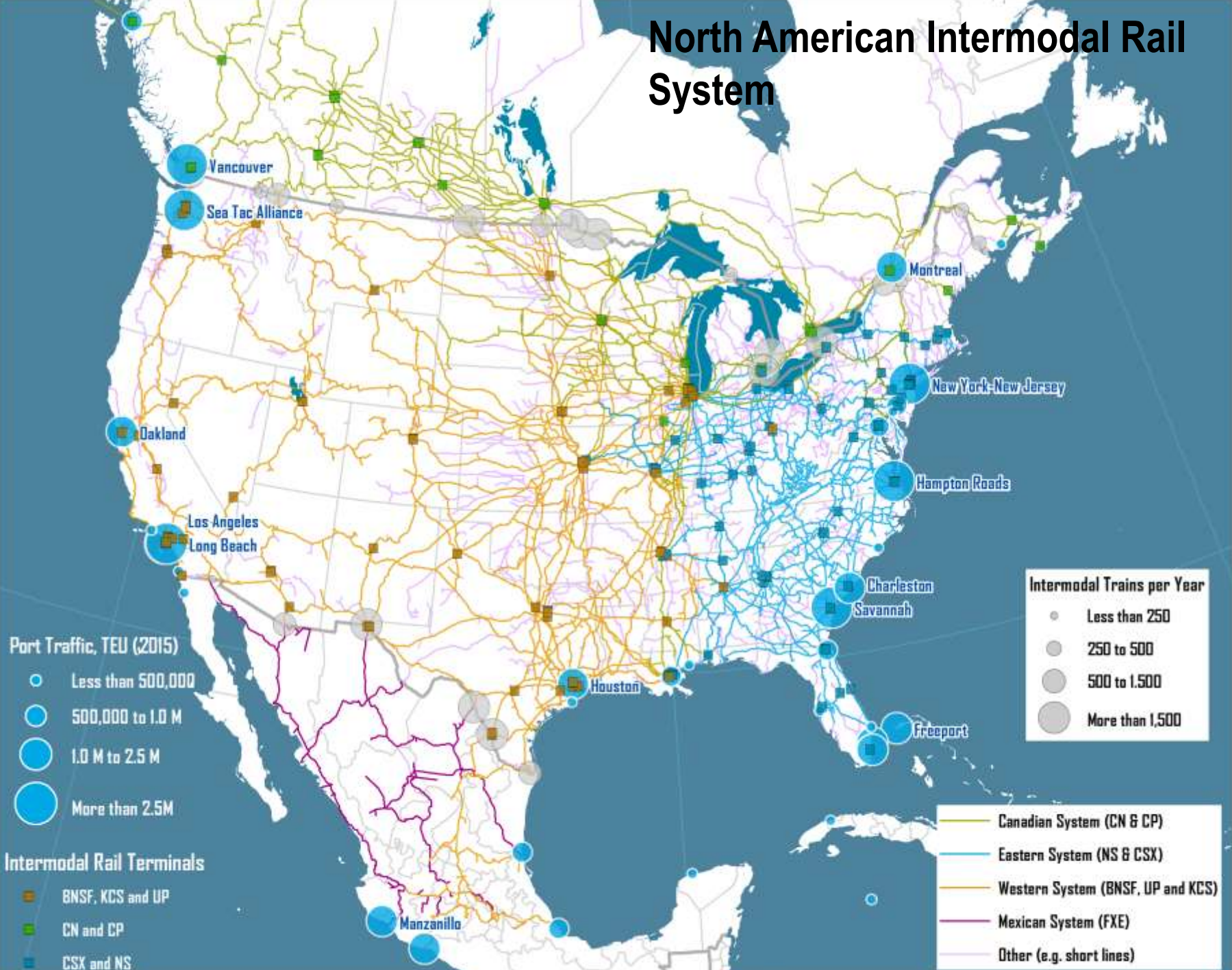
Container Terminal Surface of the World's Major Port Holdings, 2015



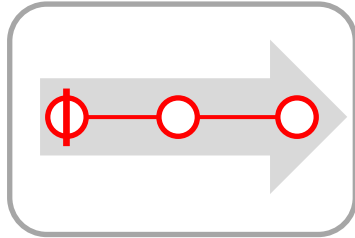
Inter-firm Relationships in the Three Main Container Ports of North America, 2015



North American Intermodal Rail System



Customs and Security Integration

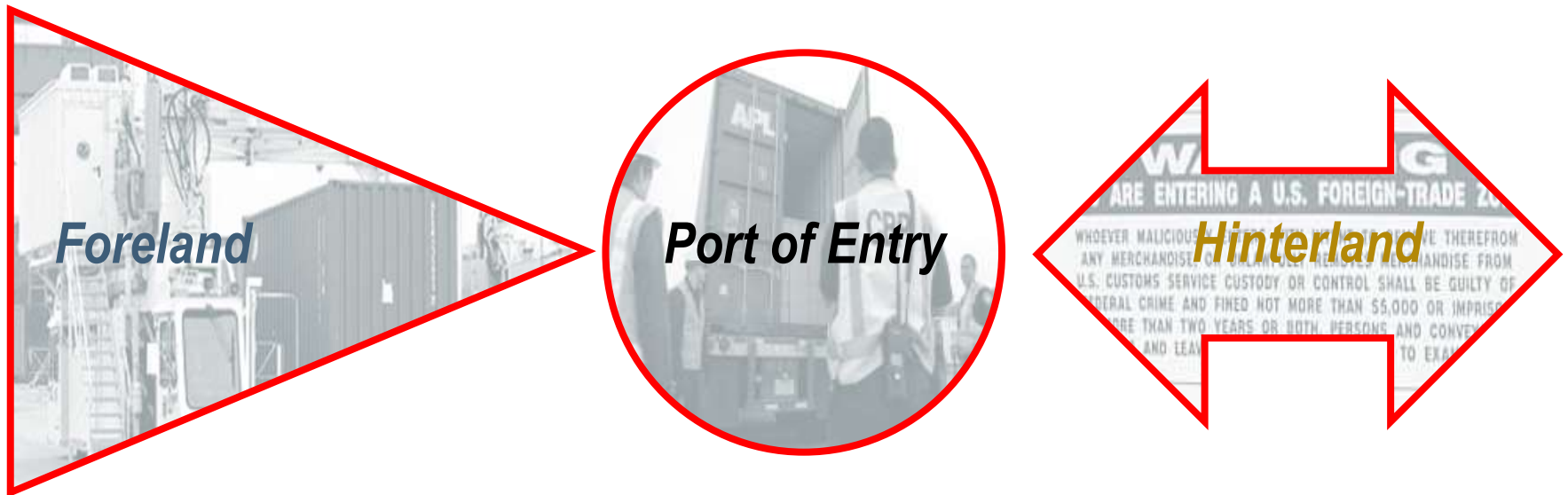


- Moving cargo more efficiently across borders through prescreening and inspections.
- Harmonization of customs and security procedures.
- Assessments of cargo contents, cargo integrity, route integrity and information integrity.

Customs Fraud by Misclassification of Goods



Security Along a Maritime Transport Chain



Advance cargo information
Pre-screening
Cargo tracking

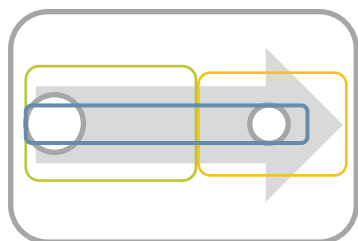
Scanning
Inspections
Single window

Inland custom facilities
Certifications (trusted traders)
Audits

Maritime Security Initiatives Implemented by the United States or the European Union

| Initiative | Type | Year | Description |
|--------------------------------------------------------------------------|------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Automated Targeting System (ATS) | Cargo screening | 1999 | Weighted model applied to inbound cargo manifests to assign risk factors. |
| Customs-Trade Partnership Against Terrorism (C-TPAT) | Certification | 2001 | Transferring some of the Customs responsibilities to importers and exporters to reinforce overall security levels. Benefits include reduced likelihood that containers of participating firms will be examined. |
| Container Security Initiative (CSI) | Cargo tracking and screening | 2002 | Increasing security related to ocean going containers by targeting and screening high risk containers bound for the US in a foreign port before they are loaded. |
| Megaports initiative | Cargo tracking and screening | 2003 | Installation of radiation detection equipment in key foreign ports. Reducing the illicit trafficking of nuclear and other radiological materials. |
| 24 hour rule | Advance cargo information | 2003 | Implementing the cargo-related information at least 24 hours before a container is loaded aboard the vessel at the last foreign port. |
| Standards to Secure and Facilitate Global Trade (SAFE) | Certification | 2005 | Implementing C-TPAT and CSI security practices with foreign trade partners. |
| EU Authorized Economic Operator (AEO) | Certification | 2008 | Identifying reliable traders and providing them with trade facilitation measures. |
| Importer Security Filing and Additional Carrier Requirements (ISF, 10+2) | Advance cargo information | 2009 | Implementing the collection of cargo-related information by requiring information from both the importer (10 information elements) and the carrier (2 information elements) to be transmitted at least 24 hours before the goods are loaded. |
| EU Pre-arrival and Pre-departure | Advance cargo information | 2009 | Advance information on goods brought into, or exported from the Customs territory of the EU (perimeter). |
| 100% scanning | Cargo screening | 2012 | Non-intrusive inspection of 100% of all inbound cargo containers. |

Regulatory Integration



- Promote modal choice and avoid subsidized modal preference.
- Harmonization of regulations across jurisdictions such as for vehicles, goods handling and transport, land use, labor and finance.

Regulations over Freight Transport Operations

Vehicles

- Registration
- Weight and size restrictions
- Emission standards

Facilities

- Zoning and permissible locations
- Technical standards

Goods

- Perishable goods (sanitary standards)
- Dangerous goods (safety standards)

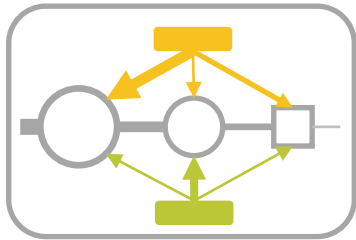
Labor

- Certification
- Working conditions
- Compensation and benefits

Finance

- Insurance requirements and liability
- Financing sources and conditions

Planning and Funding Integration



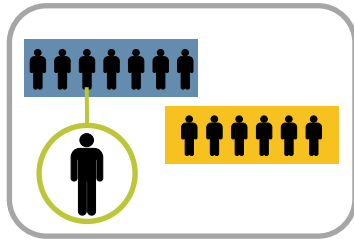
- Planning and funding of infrastructure provision from an integrated multi-modal and logistics chain perspective.
- Respective roles and competencies of the public and private actors.



Forms of Port Privatization

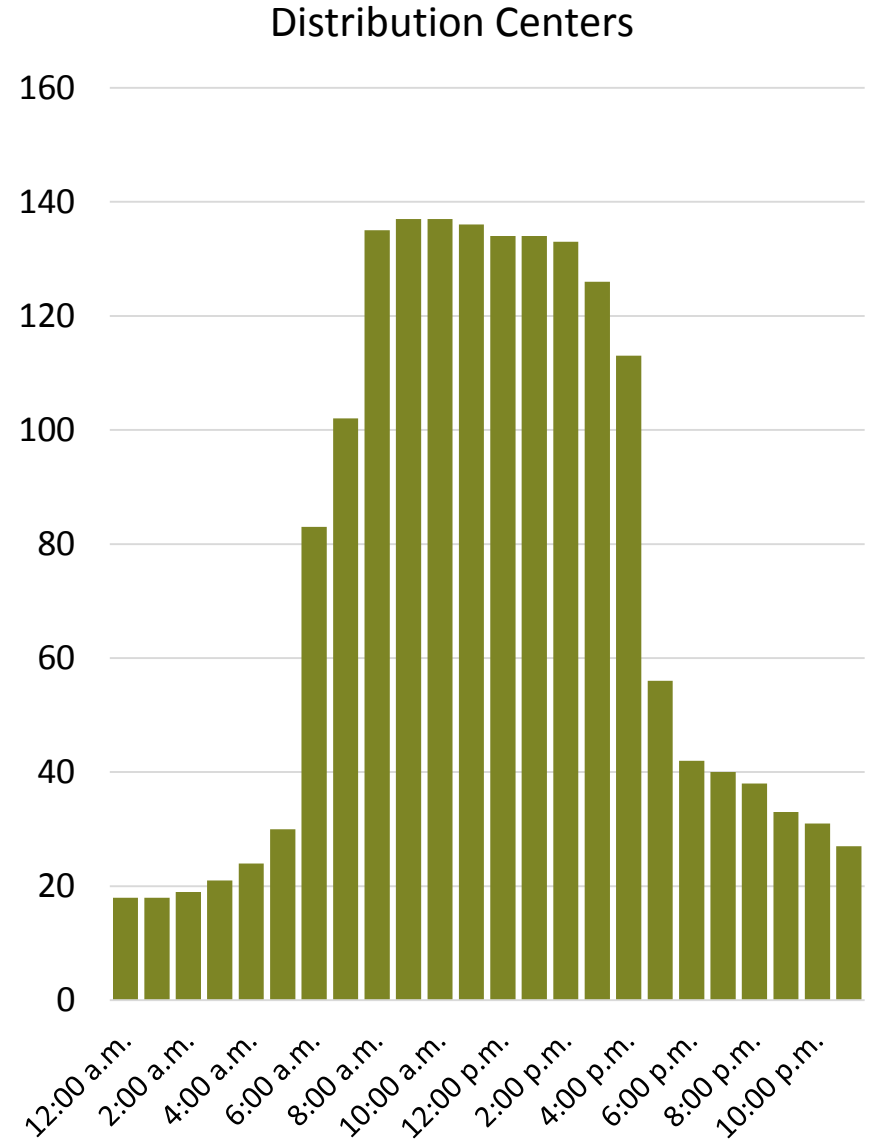
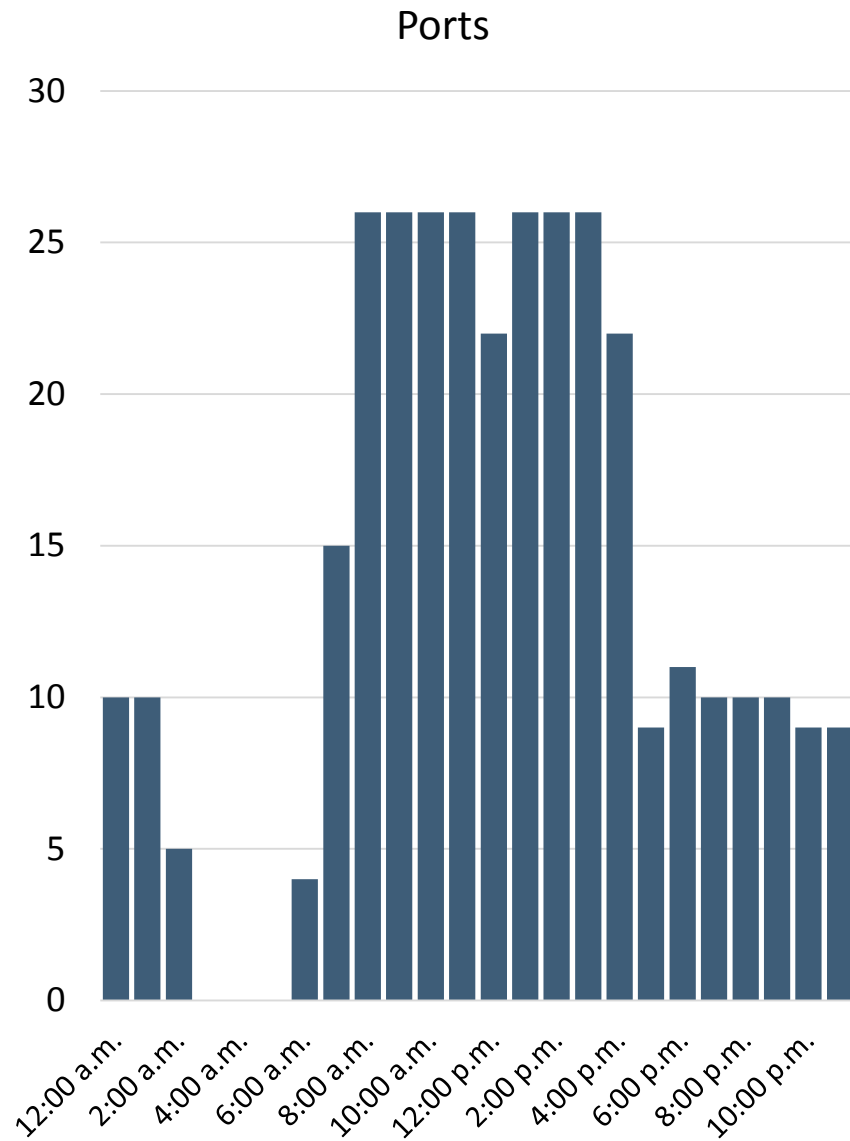
| Form | Public sector role | Private sector role |
|----------------------------------------------------------------|------------------------------------------------|---------------------------|
| Pure public | Owens and operate port | None (some services) |
| Landlord / Regulator | Owens port and regulate private sector | Operations |
| Greenfield concession (Build-Operate-Transfer) | Negotiation with private companies, regulation | Operations |
| Brownfield concession (Long-term lease of existing facilities) | Negotiation with private companies, regulation | Operations |
| Pure private | None (regulation) | Operations |
| Publicization | Owens and operates port | Operation and maintenance |

Work Practices Integration

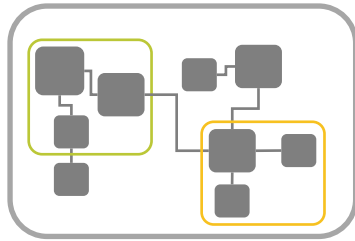


- Organizational (managing labor as a group) and skills (managing individual workers) competencies to move cargo efficiently.
- Operational window (working hours), minimal service levels and essential services.

Hours of Operation of Major Container Terminal Facilities and Distribution Centers, United States

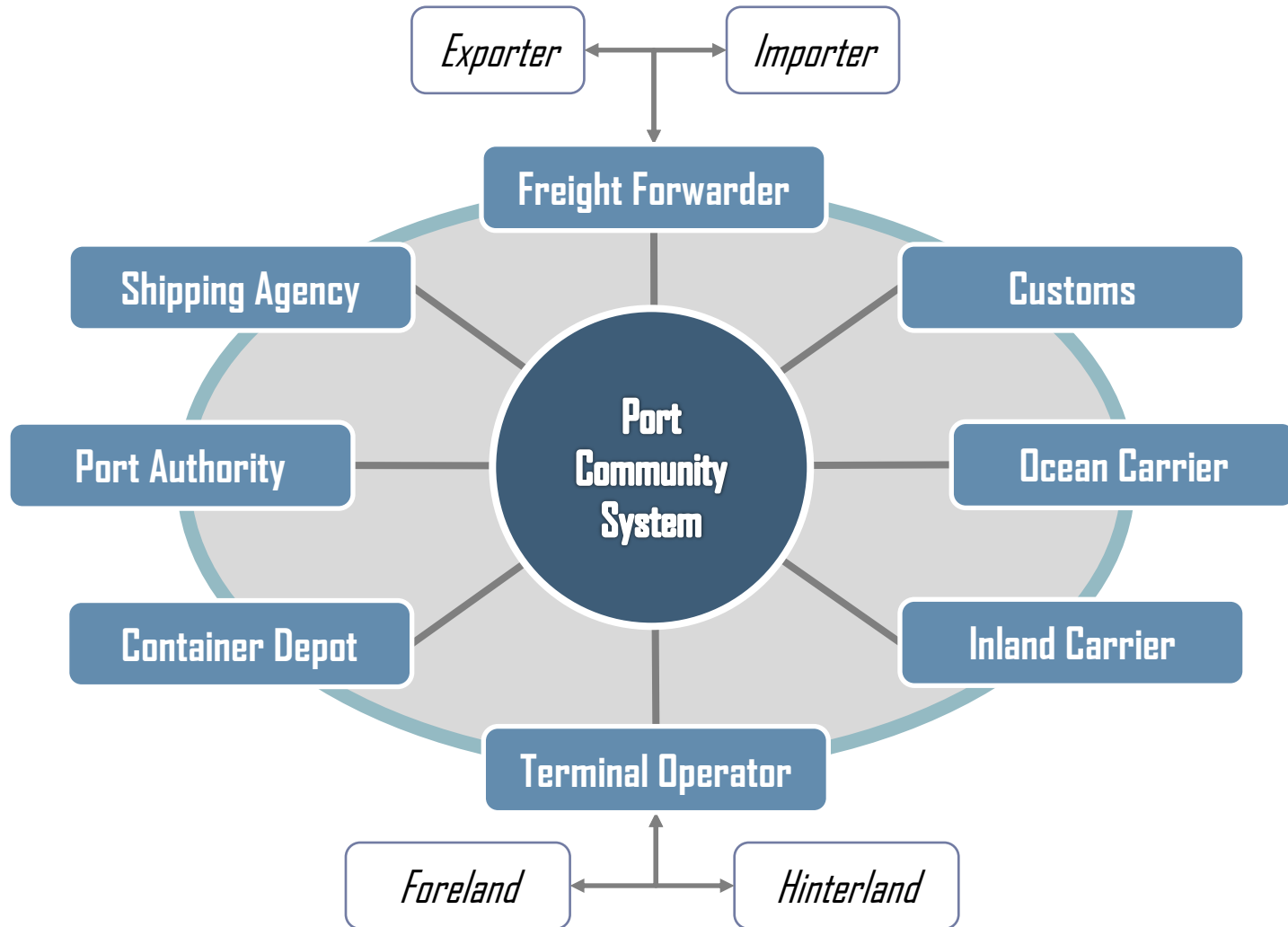


Information Systems Integration



- Interconnectivity of information systems with single windows.
- Asset tracking, status monitoring, customs facilitation, freight status information and transport network status information.

Port Community System



Conclusion: Integration versus Compliance

- Do you still believe in magic?
- A wide array of realms for logistic policy, but effectiveness and outcomes difficult to assess.
- Commercial integration versus regulatory compliance.
- As usual, coordination (PPP) remains a challenge.

COMPLIANCE