



AAPA 2019

VIRGINIA

REVOLUTIONIZING AMERICA'S FIRST PORT



OUTSIDE THE GATE FLUIDITY

Discussion Leader:

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TRADELENS

An open and neutral blockchain-powered platform that is digitizing the global supply chain and transforming trade

- + TradeLens is ushering in a new era in global supply chains—one where all parties can collaborate, share data, and realize the benefits of digitization.
- + Data is published directly from the source so the right people can securely manage their supply chain in near real-time.
- + TradeLens breaks down longstanding data and processing silos that exist among trading partners and simplifies the flow of documentation that accompanies every shipment.
- + Currently, the platform handles 13 million events and more than 100,000 documents every week and growing.
- + The platform is being driven by a broad collaboration of industry players under the leadership of IBM and Maersk

GLOBAL TRADE IN NUMBERS



\$16+ TRILLION IN GOODS

Are shipped across international borders each year



80% OF THE GOODS

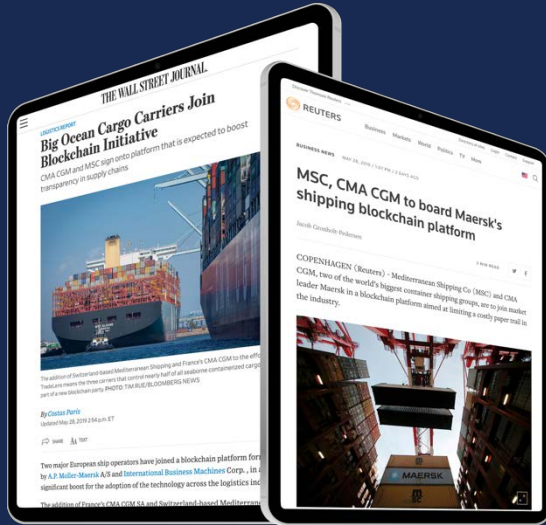
Consumers use daily are carried by the ocean shipping industry



By reducing barriers within the international supply chain,

**GLOBAL TRADE
COULD INCREASE
BY NEARLY 15%**

OUR JOURNEY



January 2018
Beta release of the platform and launch of Early Adopter Program; trials underway

August 2018
Formal launch of TradeLens

Ocean carrier additions:
Maersk Line, Safmarine, Hamburg Sud, Sealand join

Ocean carrier additions:
PIL, Namsung and Boluda join

September 2018
TradeLens limited-availability release

Ocean carrier additions:
Seaboard Marine and KMTTC join

Ocean carrier additions: ZIM joins

Ocean carrier additions:
CMA and MSC join

August 2018
TradeLens processing 2 million events per day and 100 thousand documents per week; supporting more than 150 ecosystem members

June 2019
Hapag Lloyd and ONE agree to join. Five of the largest six carriers now plan to be on the TradeLens platform by the end of 2019.

GLOBAL TRADE IS HIGHLY INEFFICIENT AND BURDENED BY PAPER-BASED PROCESSES

+ Data trapped in organizational silos

Information is held in paper and various digital formats across dozens of service providers along the supply chain, requiring complex, cumbersome, and costly peer-to-peer messaging. The result is inconsistent information across organizational boundaries, latency in obtaining shipment visibility, and blind spots that hinder the efficient flow of goods.

+ Manual, time-consuming, paper-based processes

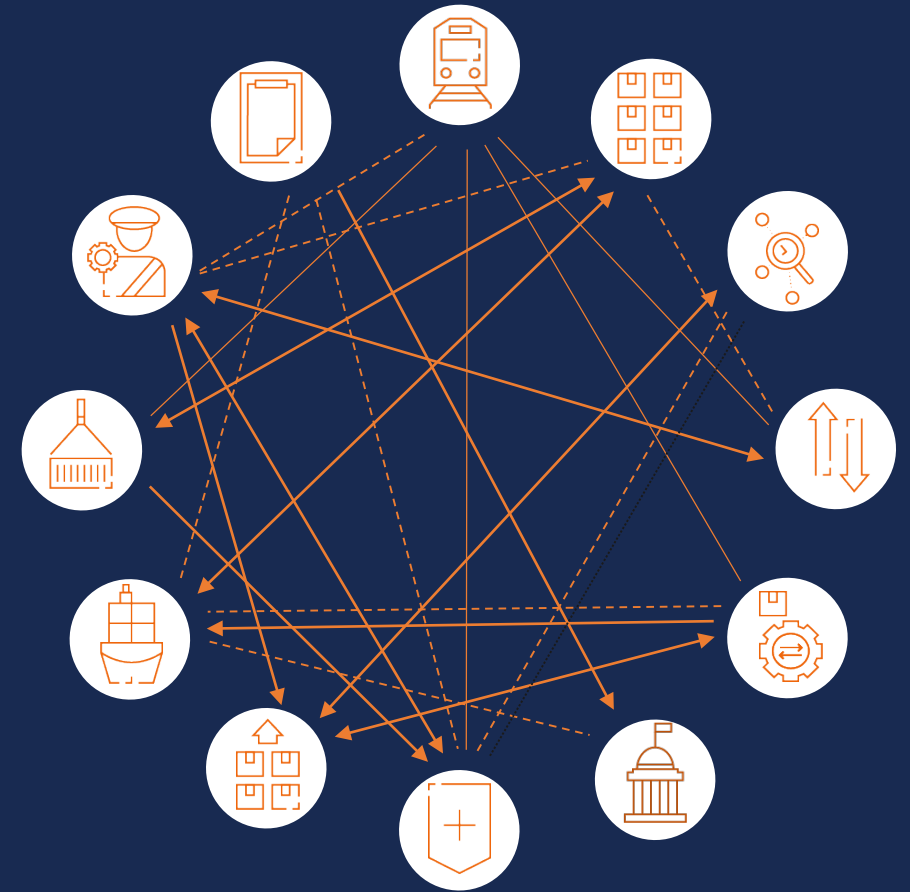
The collection and processing of up-to-date data, as well as inefficient trade document exchange, requires manual checks and frequent follow-ups and results in errors, delays and high compliance costs. Late filings are common due to missing information.

+ Clearance takes too long and is often subject to fraud

Risk assessments by customs authorities lack sufficient and trusted information resulting in high inspection rates, added prevention measures against fraud and forgery, and delayed customs clearance.

+ High costs and poor customer service

These challenges have significant downstream repercussions. The inability to forecast and plan effectively, address supply chain disruptions in near real-time, and share trusted information across the supply chain leads to excessive safety stock inventory, high administrative costs, operational challenges, and ultimately poor customer service.



OUR MISSION

DIGITIZE THE GLOBAL SUPPLY CHAIN

+ Connect the ecosystem

Bring together all parties in the supply chain - including shippers, freight forwarders, intermodal operators, ports and terminals, ocean carriers, customs and other government authorities, and others - onto a blockchain-based platform with a secure permission and identity framework.

+ Drive true information sharing

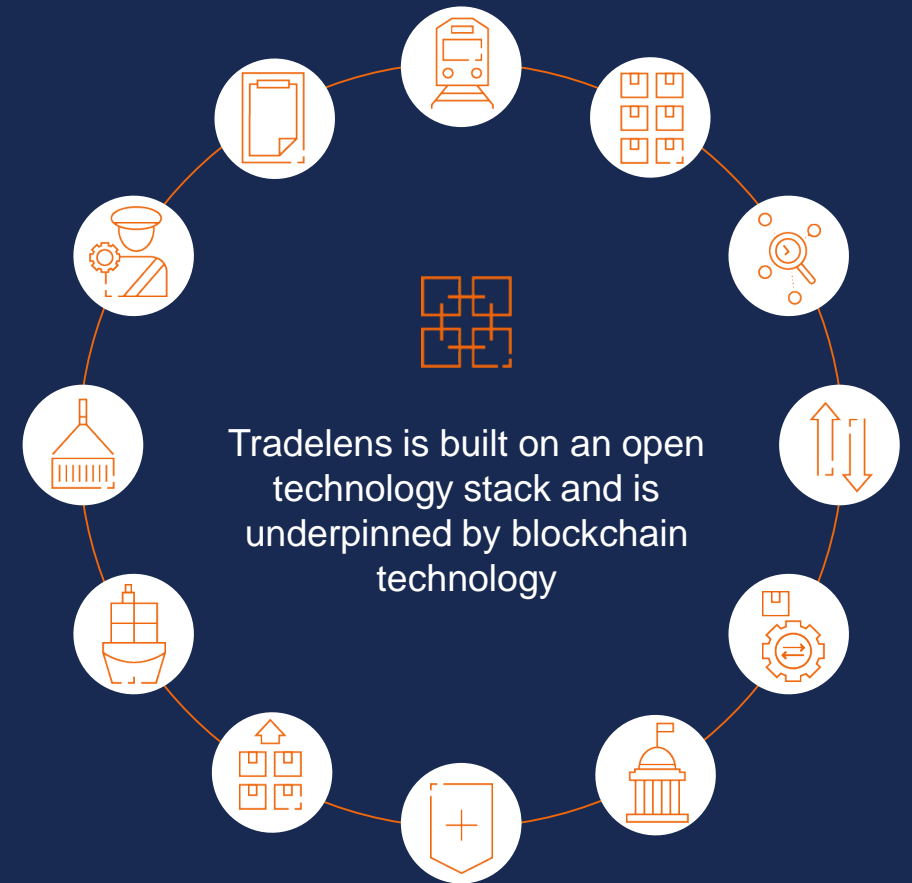
Provide for the seamless, secure sharing of near real-time, actionable supply chain information across all parties to a trade - encompassing shipping milestones, cargo details, trade documents, the structured data embedded in trade documents, customs filings, sensor readings, and more.

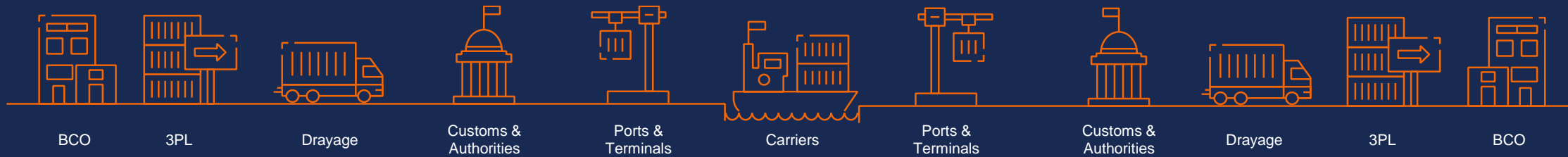
+ Foster collaboration and trust

Enable the digitization and automation of the cross-organization business processes integral to global trade, including import and export clearance, with blockchain ensuring secure, auditable, and non-repudiable transactions.

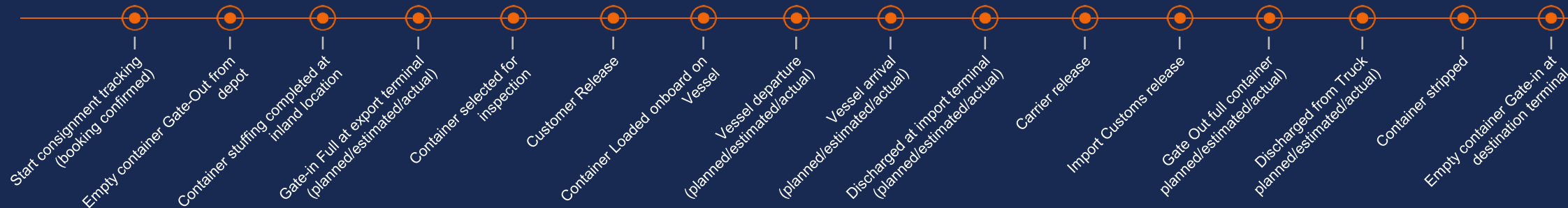
+ Spur innovation

Lay the foundation for ongoing improvement and innovation through an open, publicly - available API, the use of standards and promotion of interoperability, and the launch of an Application Marketplace that parties can use to build and deploy TradeLens-powered applications for themselves, their partners, and their customers





SHIPPING MILESTONES AND SHIPMENT DATA*



STRUCTURED AND UNSTRUCTURED DOCUMENTS*



TRADELENS BLOCKCHAIN BUSINESS NETWORK



Florida Ports Council

AAPA Annual Convention | October 13-16 | Norfolk, VA


Outside the Gate Fluidity



Florida Seaports



What is FSTED?

- Florida Seaport Transportation and Economic Development (FSTED) Program
 - FSTED Council a public entity created by statute and charged with carrying out the state's economic development mission through implementation of seaport capital improvement projects at the local level.
 - FSTED Council is administered by the Florida Ports Council
 - Council members include:
 - Port Directors of the 15 publicly owned seaports
 - Representative from the Department of Transportation (FDOT)
 - Representative from the Department of Economic Opportunity (DEO)
- 

First Mile, Last Mile Connectivity: Road

- **PortMiami Tunnel** linked the Port directly with the U.S. Interstate, providing quicker and easier access for both cruise passengers and containerized cargo traffic
- **Port Tampa Bay Crosstown Connector** – dedicated express truck ramp linking the Port directly with interstates, enhancing connectivity to customers in West Central Florida and beyond

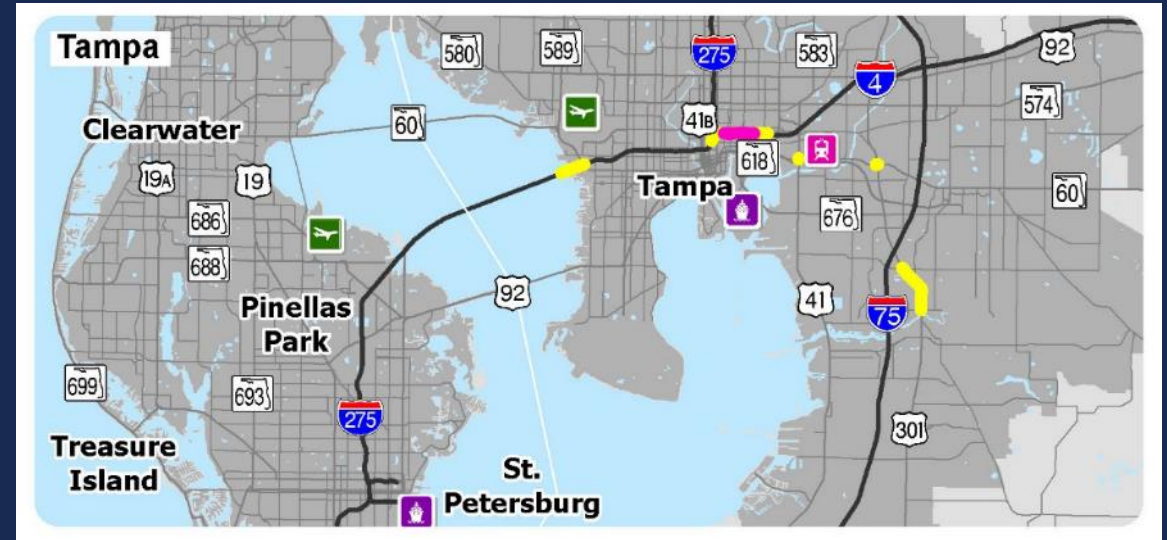
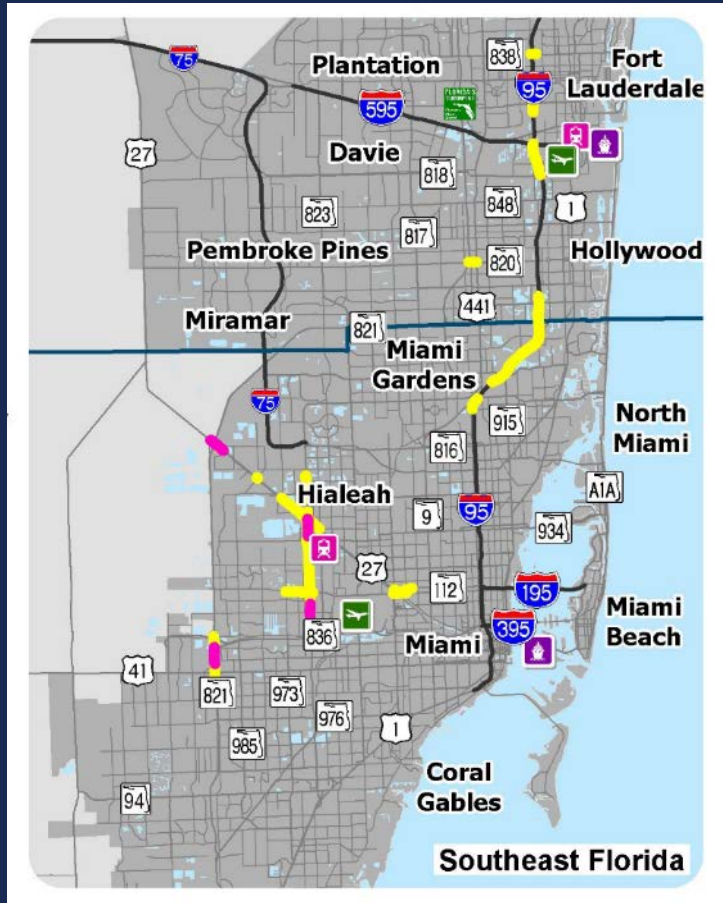


First Mile, Last Mile Connectivity: Rail

- **JAXPORT Talleyrand Marine Terminal Development & Expansion** – this terminal provides direct switching service for Norfolk Southern and CSX rail lines and has improved capacity at the Port.
- **Port Manatee** rail improvements for an on-port track rebuild in partnership with FDOT. The Port's short line railroad directly connects to the CSX Corp. mainline, which is less than 1 mile from the port's north gate.



First Mile, Last Mile: Future Projects



Truck Bottlenecks

 Top 10 Truck Bottlenecks

 Top 100 Truck Bottlenecks

 Intermodal Rail Terminal



Commercial Airport



Seaport



Spaceport

Outside the gate fluidity in Washington state

Roger Millar – Washington Secretary of Transportation

John Wolfe – CEO Northwest Seaport Alliance

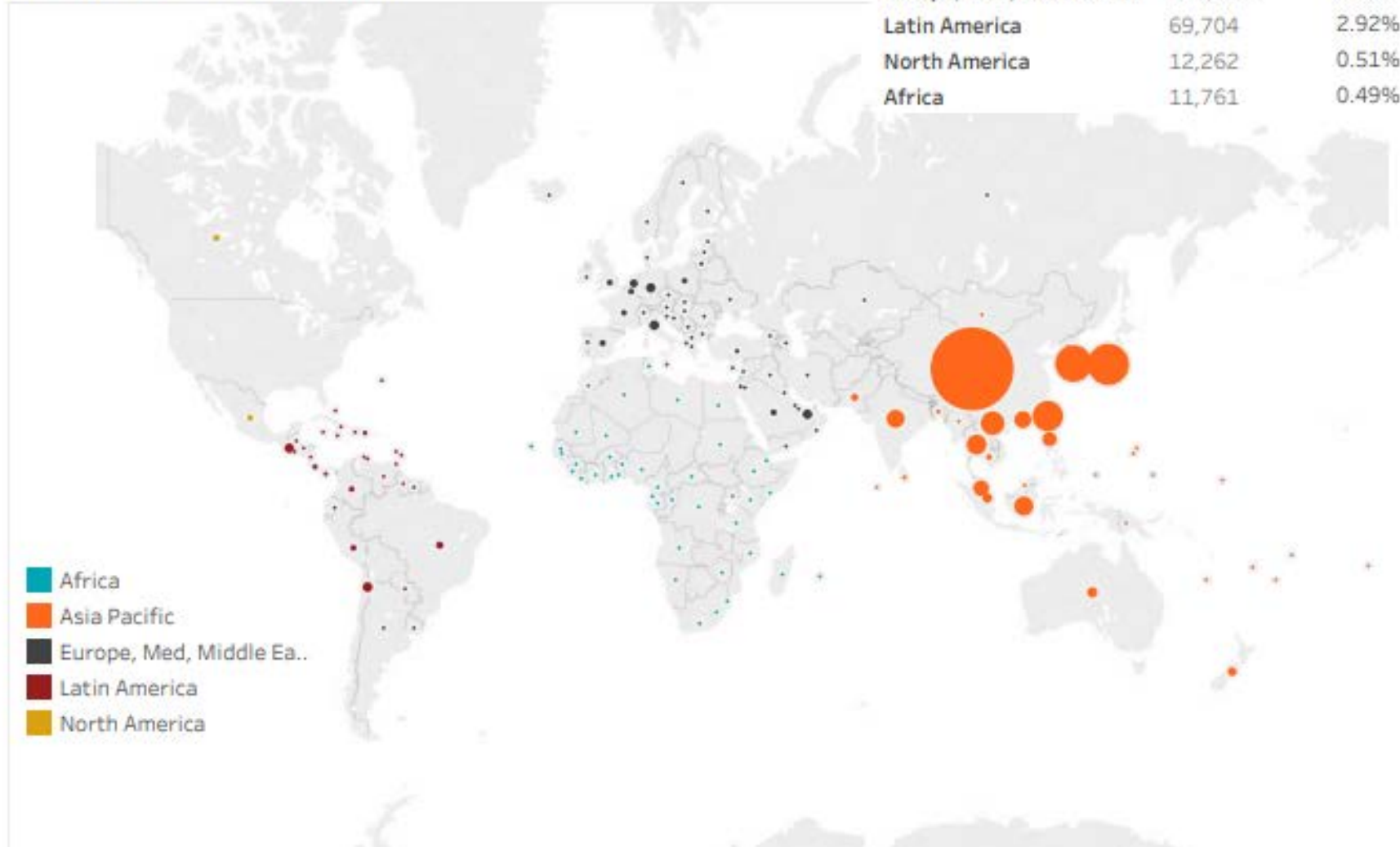


Global trade relations

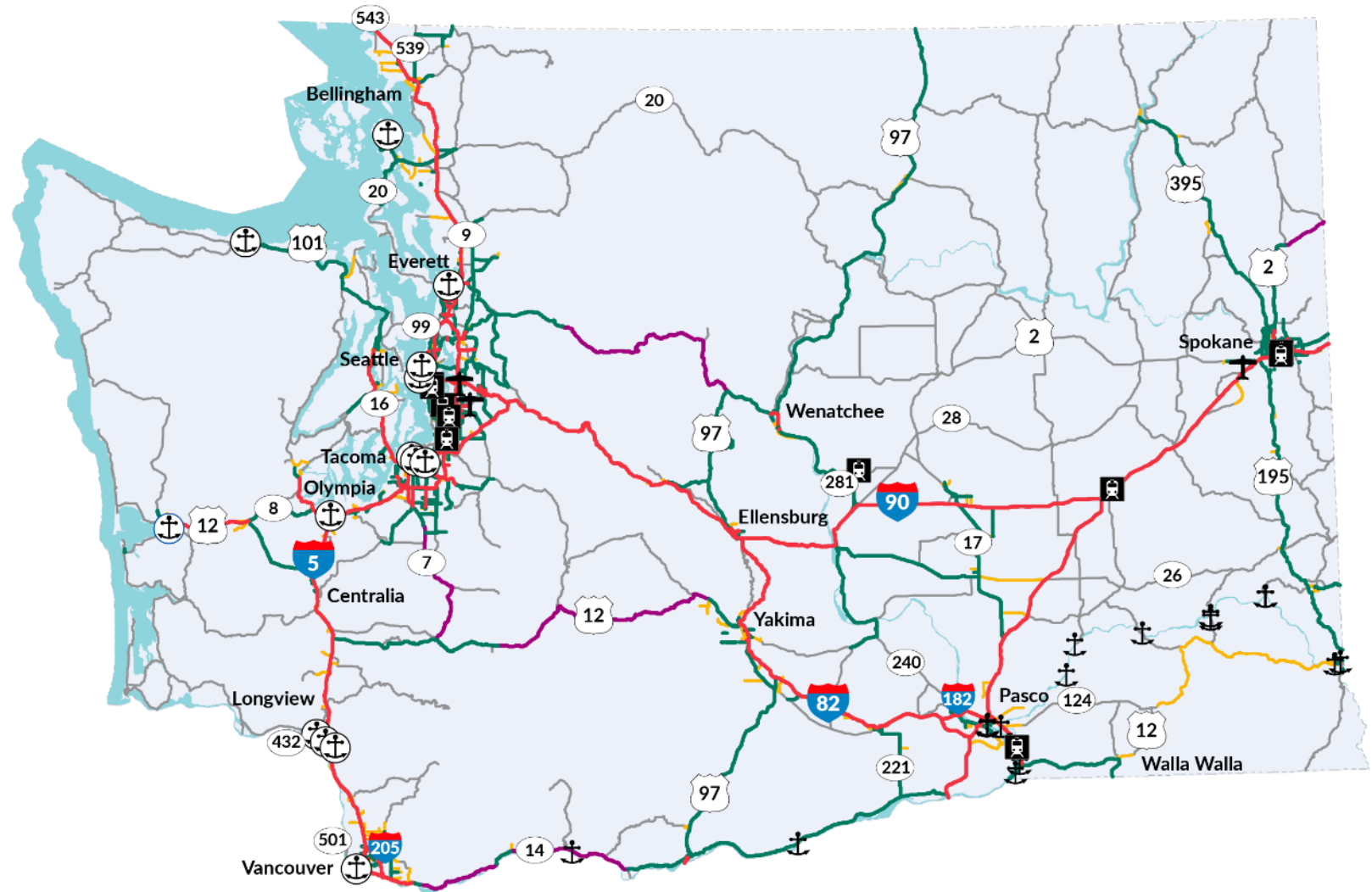
2018 NWSA Trading Partners by Volume

TEUs, PIERS data, combined import/export

Asia Pacific	2,174,795	91.11%
Europe, Med, Middle East	118,506	4.96%
Latin America	69,704	2.92%
North America	12,262	0.51%
Africa	11,761	0.49%



Freight corridors in Washington



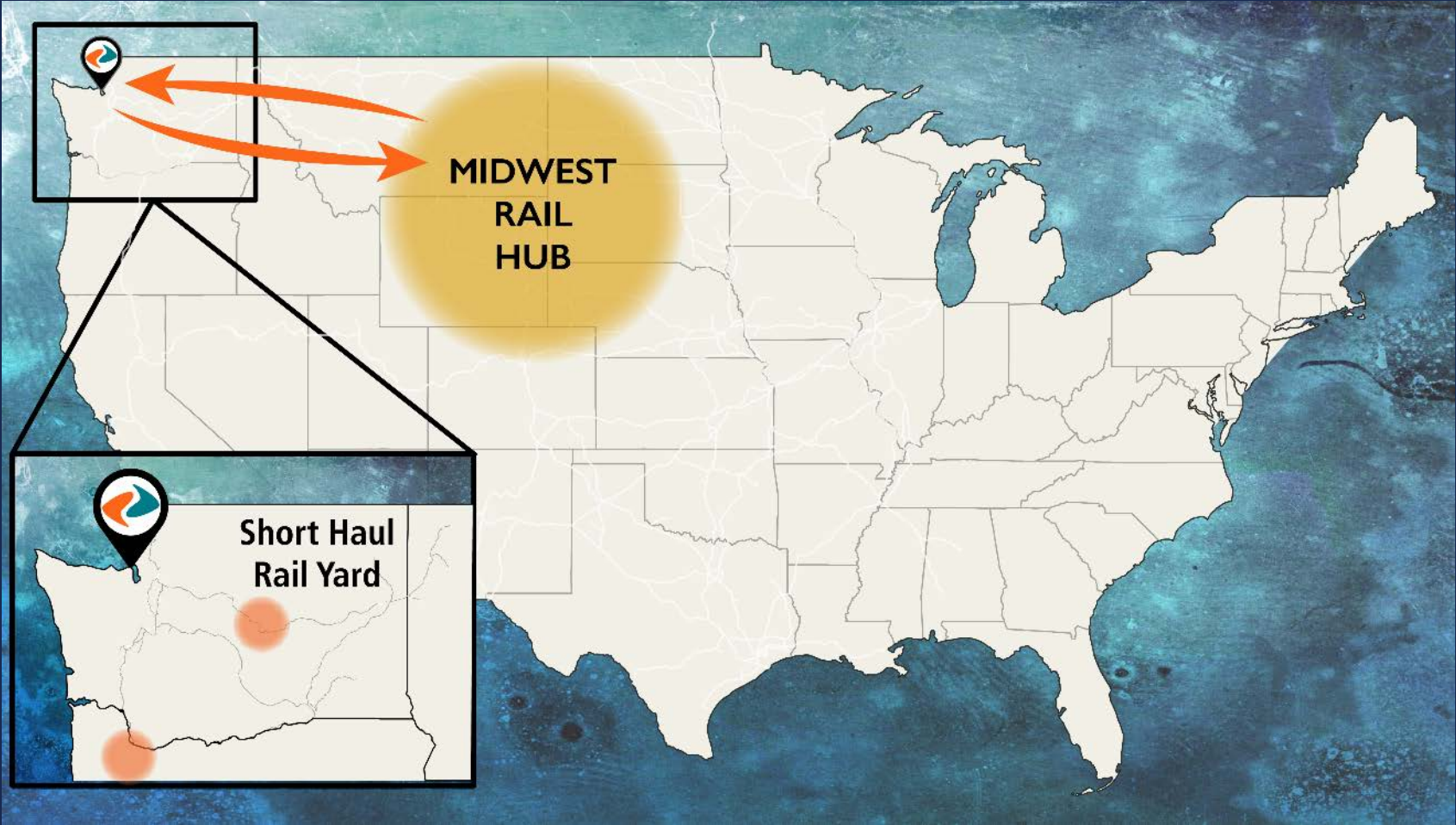
LEGEND

- Major Cargo Airports
- Major Marine Ports
- Rail Intermodal Terminals
- Barge Loading Facilities

WSDOT Truck Freight Economic Corridors

- T-1 Corridors
- T-2 Corridors
- Alternative Freight Routes
- First/Last Mile Connector Routes to T-1/T-2 Corridors

Maximizing export potential

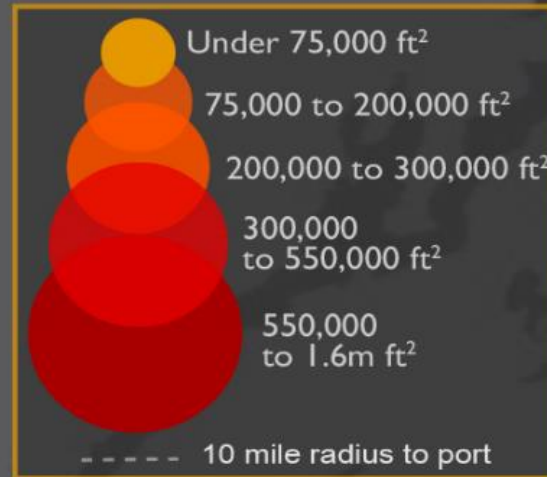


Connecting two major highways to ports in Seattle and Tacoma

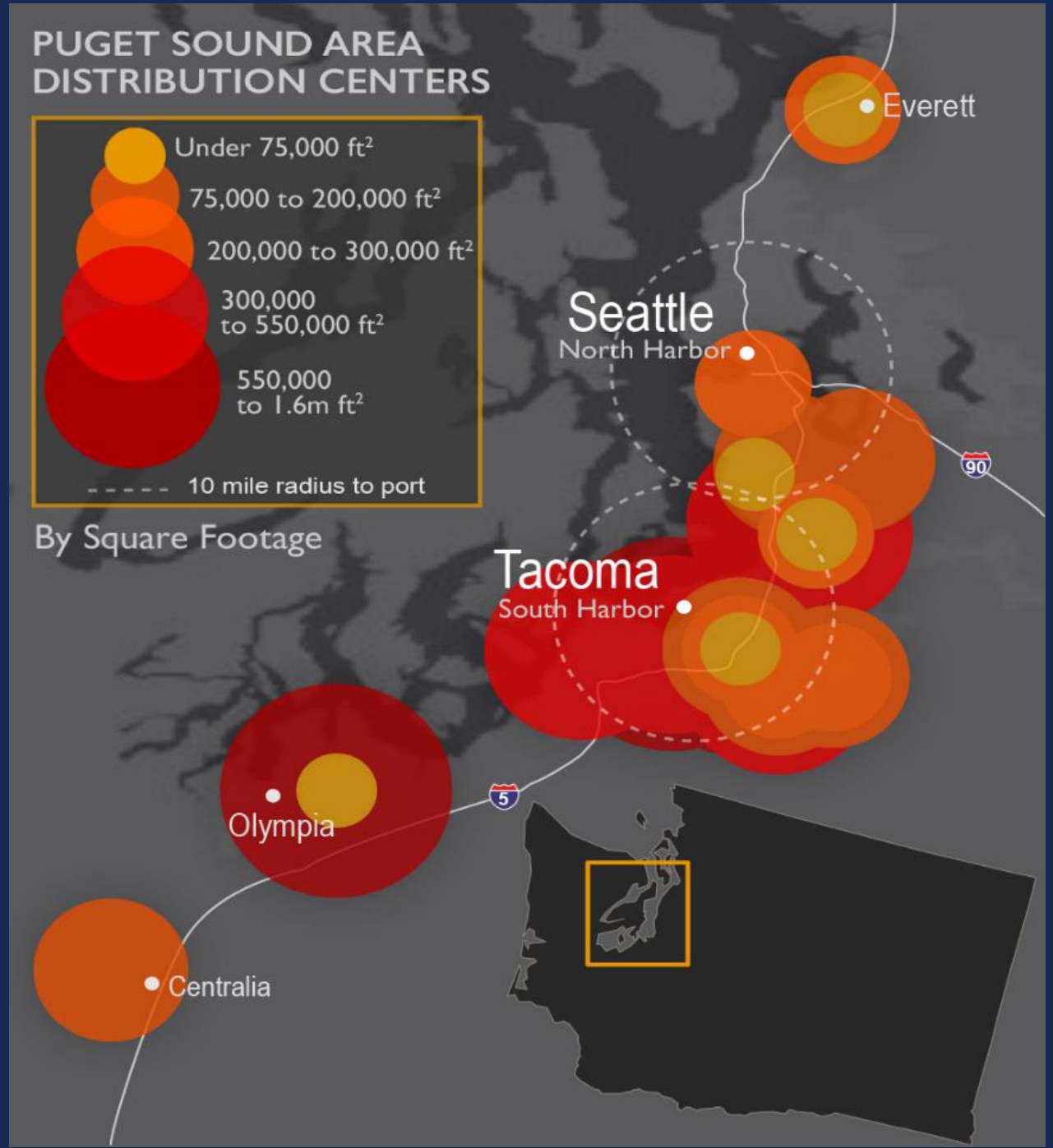


Connecting ports and distribution centers

PUGET SOUND AREA DISTRIBUTION CENTERS



By Square Footage





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