



**THE NORTHWEST
SEAPORT ALLIANCE**
Gateway to Solutions

Breakbulk Business Update

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Breakbulk Business Overview

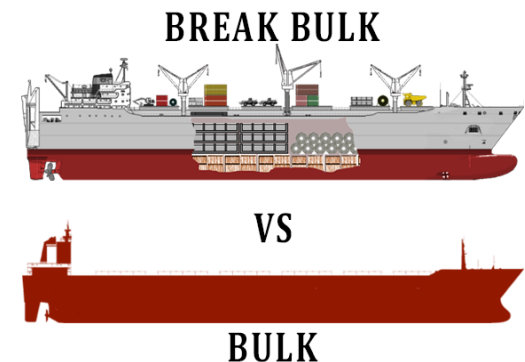
Breakbulk is a core part of the Northwest Seaport Alliance (NWSA) business portfolio. Both harbors have been handling this cargo since their inceptions. Breakbulk business compliments other NWSA business and adds to the economic vitality of the region, while creating a significant number of diverse jobs.

What is Breakbulk?

Breakbulk is cargo that either cannot fit, or isn't efficient to ship in containers, nor is it large quantities of unpackaged cargo in either liquid or granular form (bulk cargo).

Examples of Breakbulk Cargo Include:

Agricultural/Mining/Construction equipment,
Modules for energy projects, Tram Railcars



Current Breakbulk Handling Facilities



East-Blair 1 (EB-1) Terminal Features

- 18 acres
- Pier strength: 1,000 psf with 2,000 psf heavy lift section *
- On-dock Rail *
- Dedicated professional customer service group
- Near-dock processing facility for high and heavy cargo
- Easy access to I-5 for truck cargo *

* *Critical breakbulk facility feature*



Current Breakbulk Handling Facilities



Terminal 7 / Blair Terminal Features

- Used for military cargo and breakbulk overflow
- Available covered storage
- Near-dock rail access
- Easy access to I-5 for truck cargo *

* *Critical breakbulk facility feature*

NWSA Breakbulk Customers...Who Are They?

Ocean Carriers: Carriers have direct relationships with ports and guide customers to gateways that best meets their needs.



Beneficial Cargo Owners: BCO's have influence over port selection and work with carriers to create low-cost, quality supply chains.



NWSA Breakbulk Customers (continued)

Freight Forwarders: Forwarders secure end-to-end supply chain details for customers completing large projects or moving single pieces of cargo.



Engineering Procurement Construction Companies: EPC's perform all services for specific projects, spanning from design to site delivery.



Top NWSA Non-Container Commodities



1. Machinery/Construction Equipment
170,578 MT (2018)



3. U.S. Military
16,501 MT (2018)



2. Agriculture Equipment
23,978 MT (2018)



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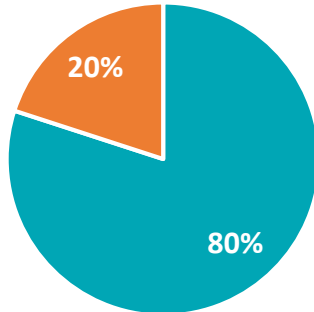
NWSA: U.S. Military Strategic Ports

- The Port of Tacoma serves as a strategic seaport.
- The Port of Seattle serves as an alternate strategic seaport.
- The NWSA relationship allows both ports to work cohesively in times of national emergency to serve both military and commercial customers.
- The NWSA handles 2-3 U.S. Military outloads per year.

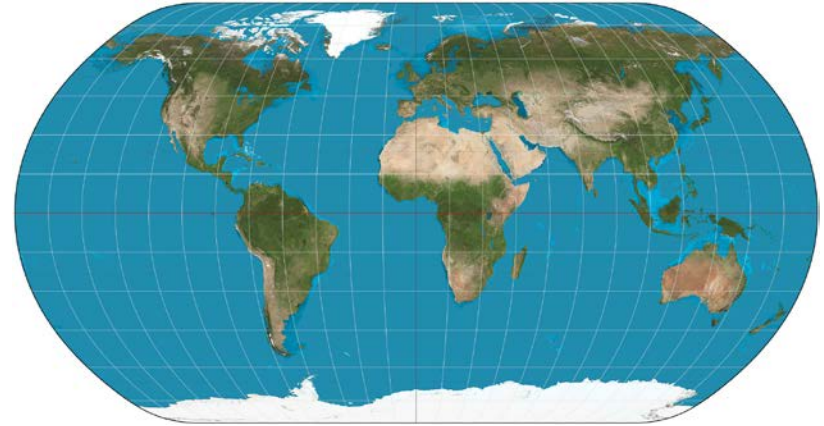
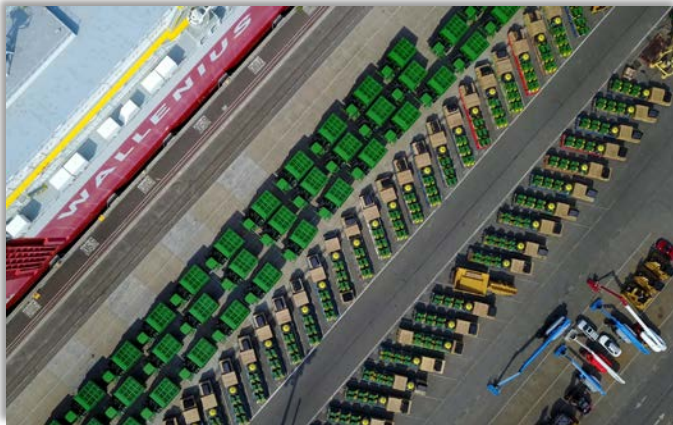


International Markets Served

NWSA Breakbulk Volume:



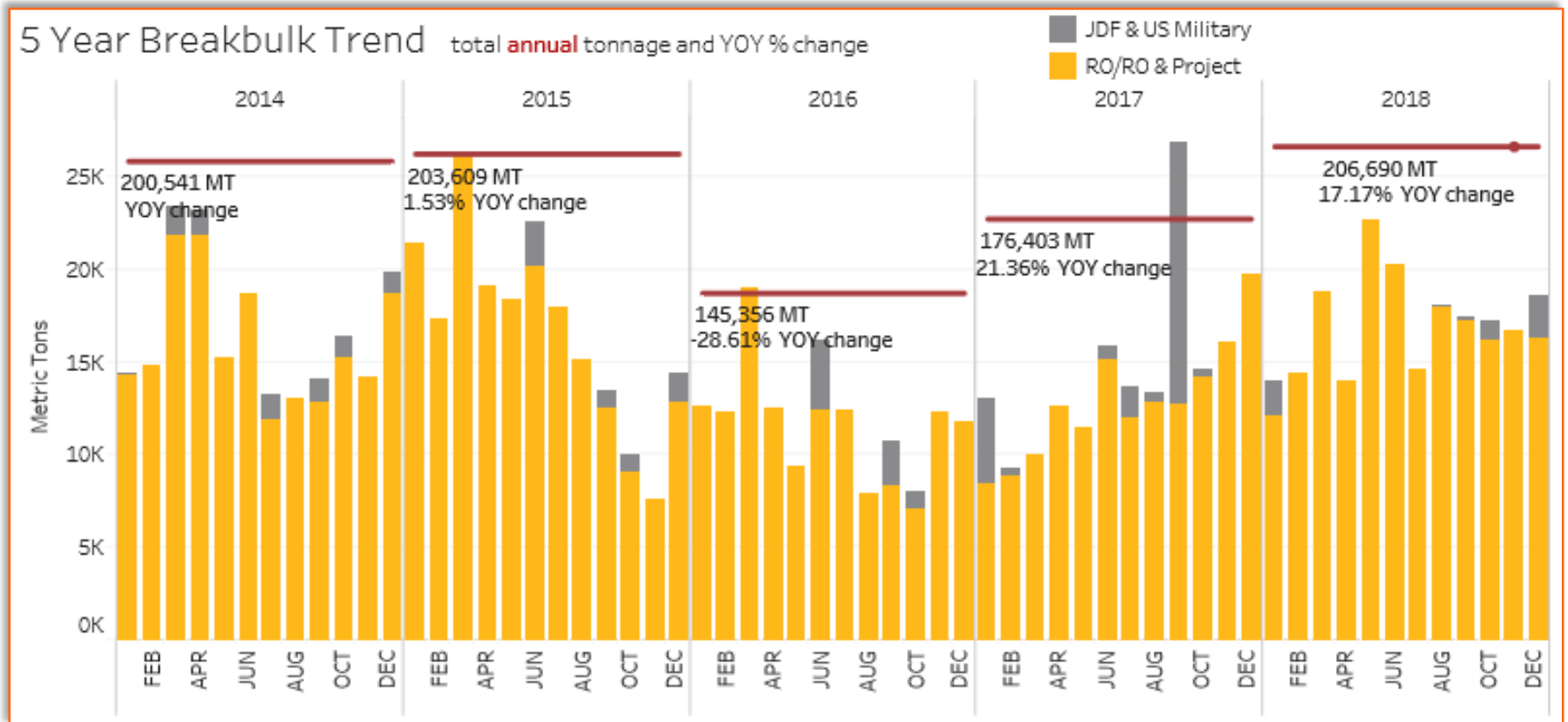
■ Import ■ Export



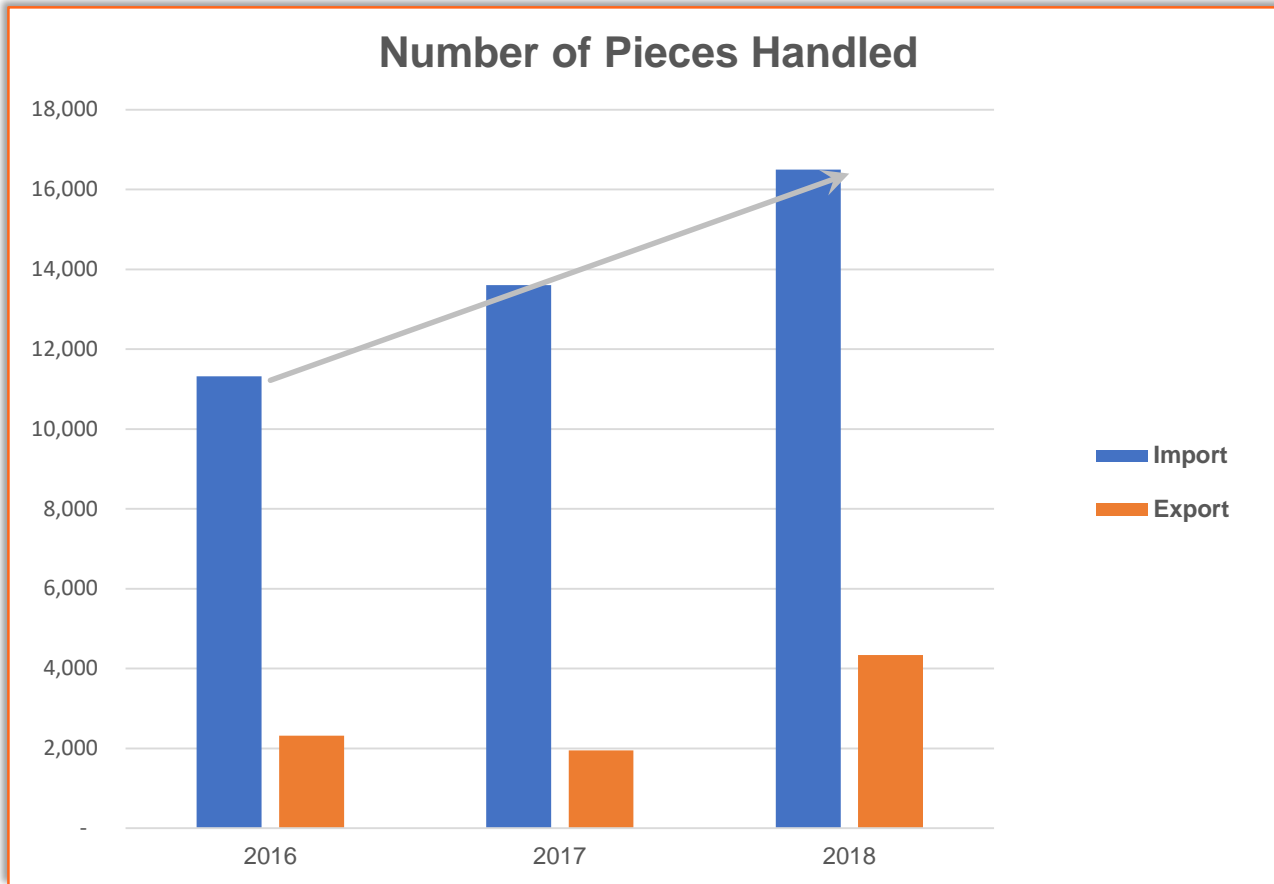
- **Top Countries of Origin**
 - Japan
 - Korea
 - Belgium
- **Top Countries of Destination**
 - Japan
 - Belgium
 - Panama



NWSA Breakbulk Tonnage Trend



NWSA Breakbulk Cargo Trends



Breakbulk Market Trends

- Near-sourcing of project cargo
- Containerized shipment of breakbulk equipment (SKD)
- Shipping on flat racks via container vessels



Breakbulk Market Key Drivers

- Renewable energy project demand
- Housing/construction market shift to "modulization"
- Increased demand from emerging markets
- Project cargo requirements



NWSA Competitive Advantages

- Geographical proximity to Asia
- Dual Class 1 rail service
- On-dock rail at breakbulk facilities
- Heavy-lift capability
- Experienced labor force
- NWSA customer service team support
- Served by most major Ro-Ro ocean carriers
- Service to Canadian markets

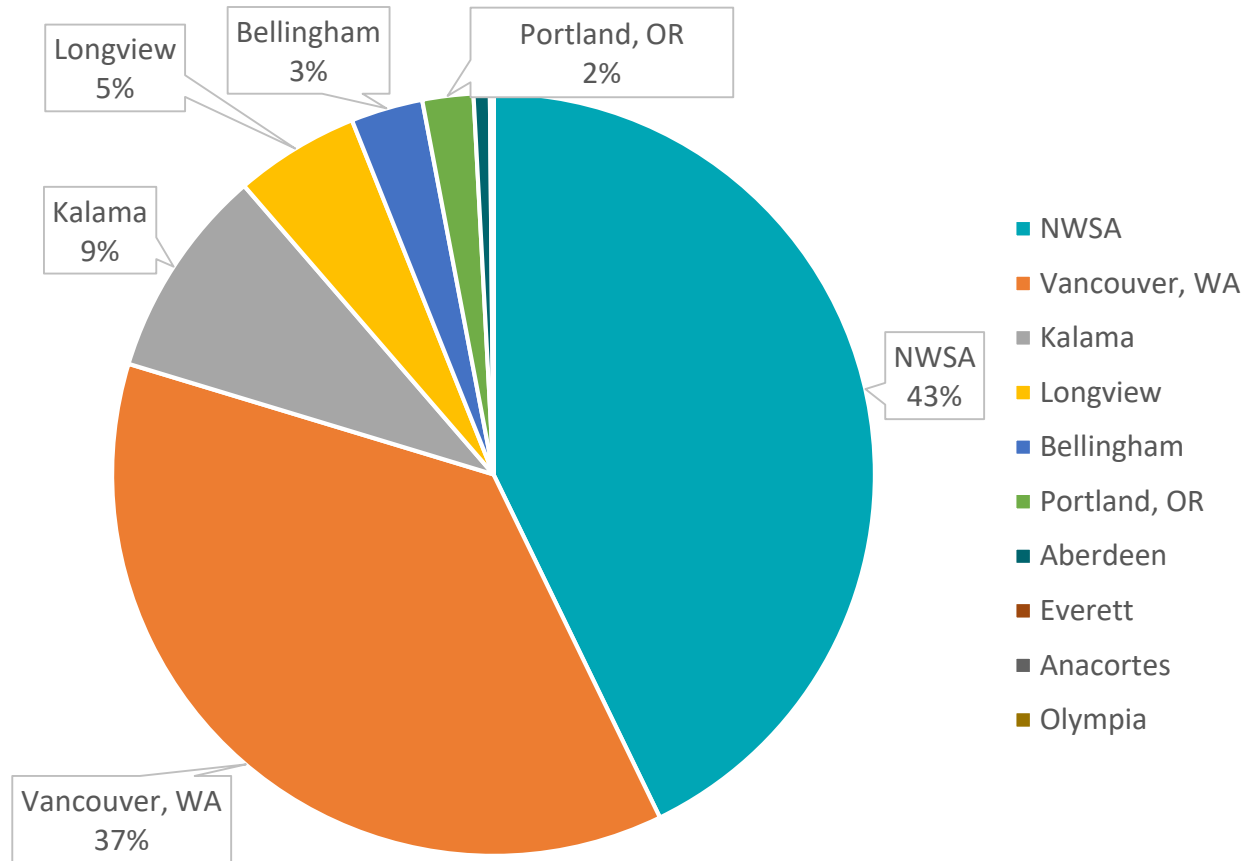


Competitive Landscape

Pacific Northwest Breakbulk Market Share (measured in metric tons)



- Import: 42% (1)
- Export: 44% (1)
- Total: 43% (1)



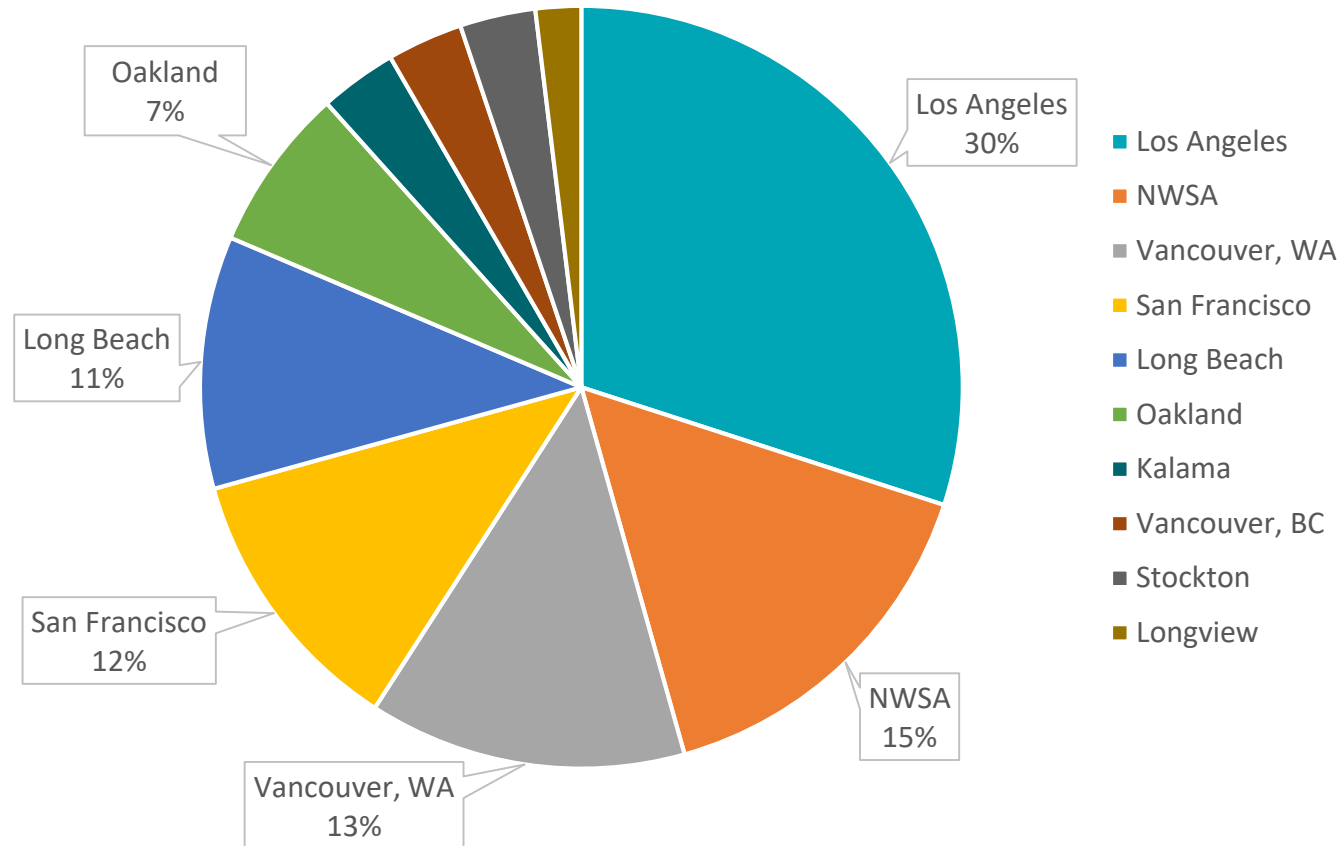
Source: 2017 PIERS data

Competitive Landscape

U.S. West Coast Breakbulk Market Share (measured in metric tons)



- Import: 15% (2)
- Export: 14% (2)
- Total: 15% (2)



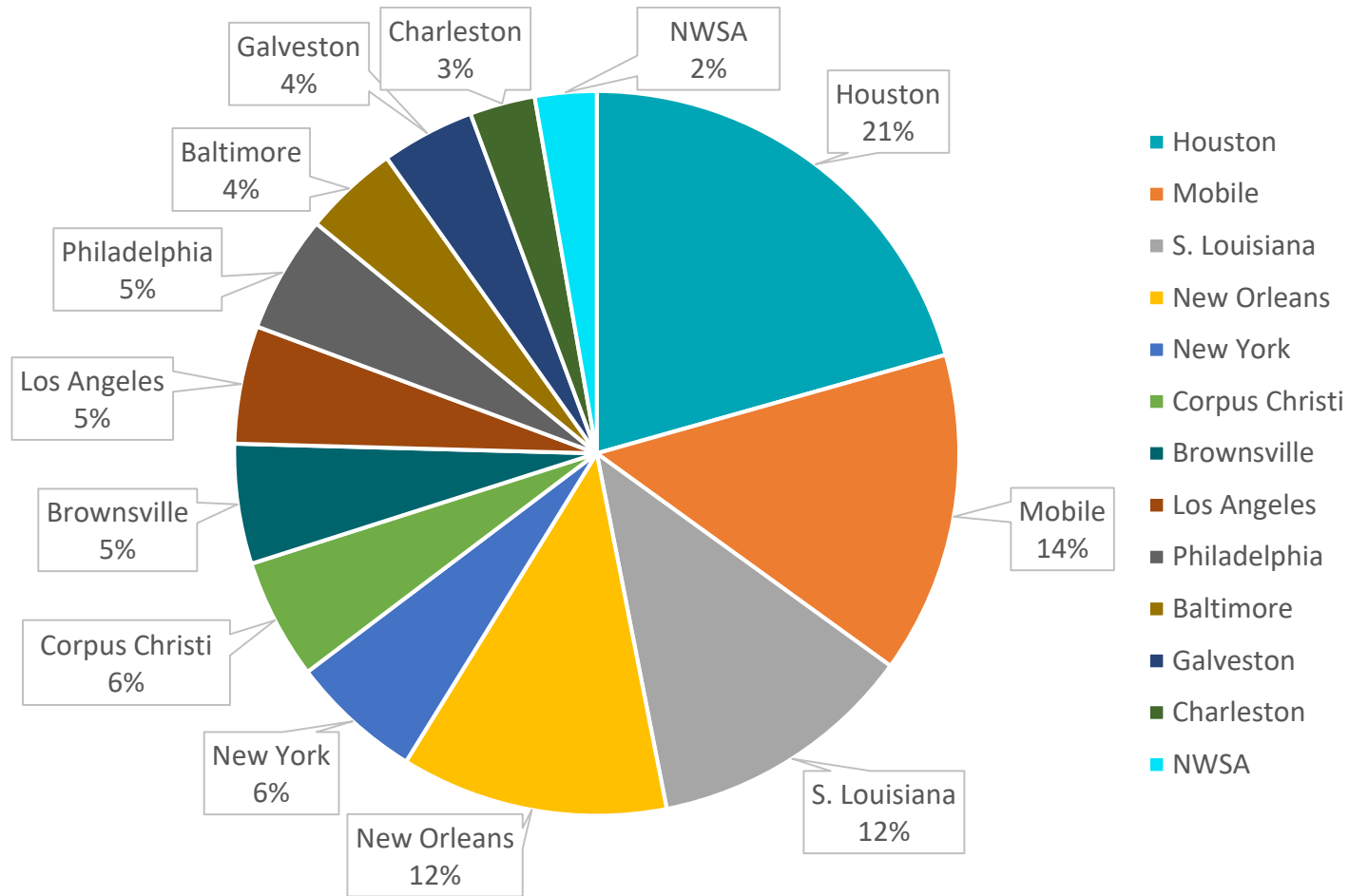
Source: 2017 PIERS data

Competitive Landscape

U.S. Breakbulk Market Share (measured in metric tons)



- Import: 2% (15)
- Export: 3% (12)
- Total: 2% (13)



Source: 2017 PIERS data

NWSA Breakbulk Commercial Strategy

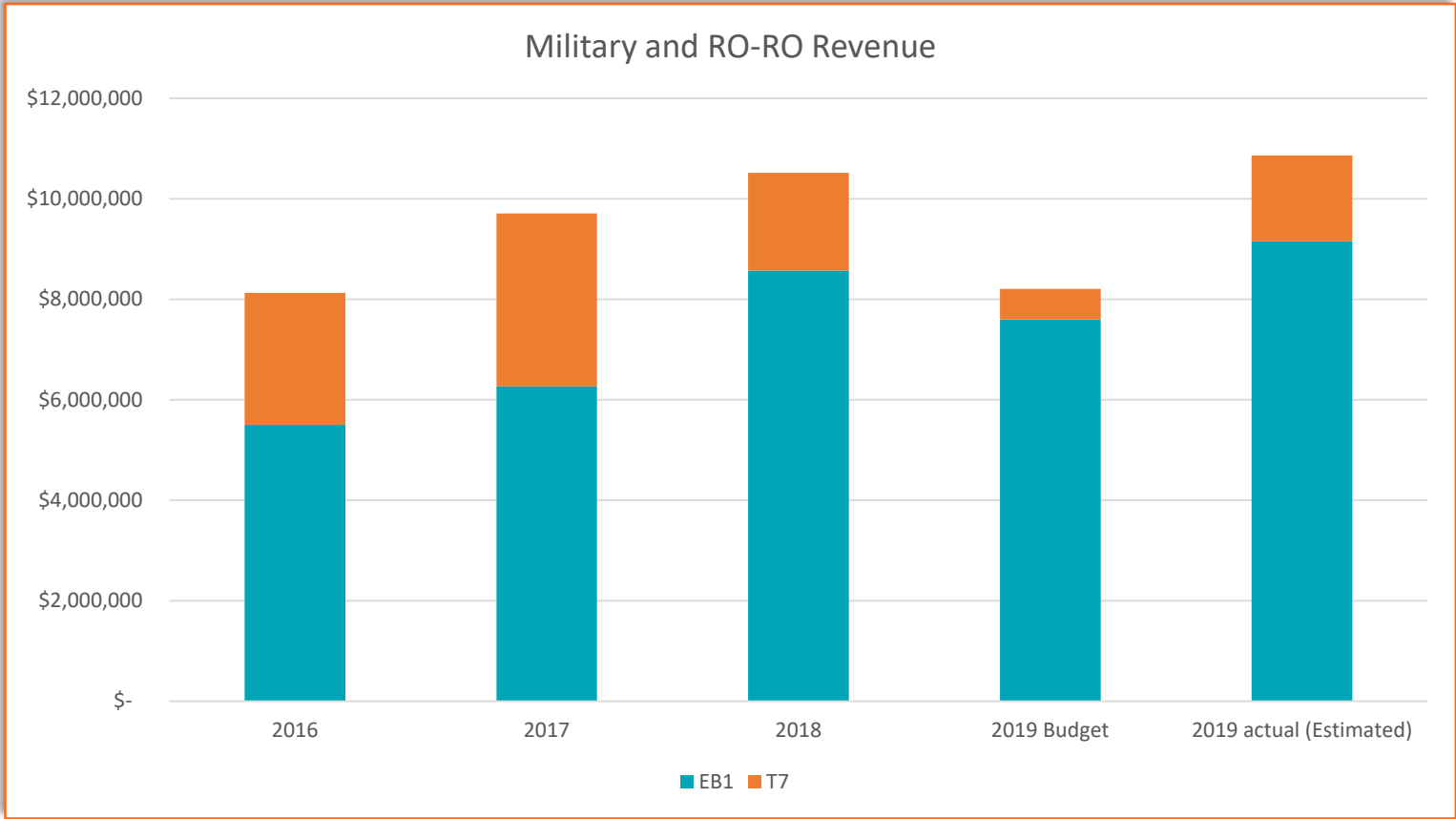
- Actively manage and grow key customer relationships
- Represent NWSA with targeted customer outreach at industry events
- Align stakeholders to fulfill needs of key customers and increase volume through NWSA gateway
- Strategic use of social media to promote NWSA breakbulk advantages has translated to new business



AMERICAS
Breakbulk



Financial Overview



NWSA Supported Breakbulk Jobs

- Rail Transportation: 1,690
- Truck Transportation, Logistics, Warehousing: 1,100
- Maritime Support Services: 440
- Navigation Services: 340
- Government: 200
- Terminal Operations, Stevedoring, Longshore: 110



Source: 2019 NWSA economic impact analysis



Conclusion

- Breakbulk has a rich history in Tacoma and Seattle with a bright future ahead.
- Breakbulk is a key component of the NWSA's diversified business portfolio.
- Unique in operation and customer base, breakbulk operations are a significant source of jobs.

