

THE NORTHWEST SEAPORT ALLIANCE
MEMORANDUM

MANAGING MEMBERS
ACTION ITEM

Item No. 5A
Date of Meeting September 3, 2019

DATE: August 13, 2019
TO: Managing Members
FROM: John Wolfe, CEO
Sponsor: Dustin Stoker, Chief Operations Officer **Project**
Manager: Bob Meyer, Director of Port Operations
SUBJECT: Lease two (2) Reachstackers

A. ACTION REQUESTED

Request Managing Members of the Northwest Seaport Alliance (NWSA) authorization for the Chief Executive Officer or their delegate to enter into a lease for two (2) Reachstackers in an amount to not exceed \$995,000 plus sales tax (approximately \$101,500 at 10.2%) for a term of five years.

B. SYNOPSIS

The Northwest Seaport Alliance (NWSA) manages and operates the East Blair One (EB1) Breakbulk Terminal in the South Harbor. This activity includes the receipt and delivery of cargo from the Ocean Carrier as well as to truck or rail carriers. The types of cargo handled at EB1 vary from personal automobiles and agricultural equipment to large transformers. Whereas much of the cargo is rolling stock, many pieces are static (non-drivable) and require Cargo Handling Equipment (CHE) to transport in the terminal yard as well as load or receive from the carriers.

The loading and unloading of trucks/rail cars require the operation of CHE ranging from small fork lifts to large top picks and/or mobile cranes. Today, the main CHE used to handle static cargo are two (2) leased top picks that are 34 years old and at the end of their useful/serviceable life. In order to properly deliver high levels of service to our customers, minimize equipment downtime and the cost of repairs staff is recommending leasing two (2) new reachstackers. The primary benefits of equipment replacement and enhancement are:

- Reduce the risk of equipment failure while enhancing service delivery to the customer
- Improve our competitive position to attract incremental new business
- Expand operational flexibility and capability by increasing our lift capacity from 55 to 81 metric tons
- Alignment with our cargo handling equipment performance targets for the Northwest Ports Clean Air Strategy (NWPCAS)

C. BACKGROUND

The NWSA has a long-standing agreement with Jones Stevedoring to lease 1980 vintage environmentally unrated equipment: two (2) used Top Picks and one (1) used Hustler yard tractor for the handling of static cargo at EB1. The lease agreement was entered in June 2012 and originally intended to be short-term, month-to-month deal. The agreement does not support NWSA environmental modernization as policy under the Northwest Ports Clean Air Strategy (NWPCAS).

According to our agreement with Jones Stevedoring, it is the responsibility of the NWSA to keep equipment in good working order, replace worn parts, pay all costs, expenses, fees incurred including repairs, maintenance, moving storage and servicing for all pieces of leased equipment. It is also the responsibility of the NWSA to allocate resources to maintain equipment (both in use and not in use) costing the NWSA additional time and money with no value recouped.

Annually the NWSA leases the equipment for \$66,000. Over the past six (6) years, the Port of Tacoma and NWSA have spent approximately \$396,000 in lease fees, with an additional \$269,000 in preventative maintenance, repairs and labor hours. Maintenance leadership expects an additional \$60,000 for upkeep and maintenance in the near future.

Most recently, on December 30th, 2018, one of the top picks was down for unforeseen maintenance work requiring over \$60,000 in repair. This had significant service impacts on our customers at EB1. It is assumed that the second Top Pick will require comparable repairs in 2019/2020 as both Top Picks are similar in age and use. These outages contribute to additional time and money associated with rental and downtime operational procedures.

The growth in the Breakbulk business (through July 2019 18.3% year-over-year) is putting heavy pressure to manage terminal capacity to ensure operations run smoothly. As cargo size and business continues to grow at EB1, our terminal capacity remains the same. Space and configuration are key to optimizing operations. With the current leased equipment, we are falling below our potential. Top Picks, unlike Reachstackers, are limited in their ability for over width cargo, making it more difficult for labor to effectively utilize space available on terminal. It can prove challenging and unsafe when operations are expected to maximize the space they have, with limited resources.

D. FINANCIAL IMPLICATIONS

Financial Impact

We anticipate the annual operating expense will be increase by \$125,000 primarily from the new lease. The 2019 forecast operating income before depreciation of the breakbulk business at T7/EB1/ 3701 Taylor Ave is estimated to be between \$3.0 million and \$3.2 million.

The replacement of the older leased equipment with the new equipment will reduce the risk of significant repair and maintenance expenses in older, higher polluting equipment, and is consistent with State law requiring the use of Tier 4 environmentally compliant equipment.

E. ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS

No Action Alternative: Staff's review of this alternative revealed the below listed risks:

- Additional costs to maintain the aging equipment
- Risk of losing business with extended equipment downtime
- If equipment fails it will result in increased cost to bring in an outside equipment to meet current customer obligations
- Marginalizes our competitive position to attract incremental new business
- Out of alignment with the NWPCAS
- Not meeting environmental standards we are establishing for tenants via new lease language

Other Marine Terminal Tenant's Lease Language:

"Cargo Equipment: Lessee shall reasonably meet the Cargo Handling Equipment sector goals and targets of the Northwest Ports Clean Air Strategy. Cargo handling equipment purchased after the effective date of this lease shall meet EPA Tier 4 emission standards or the current Tier standard in effect on the date of equipment purchase or employ zero emissions technology."

State Legislation:

As of June 1, 2018, RCW 194-29 requires all local governments, including ports, to the extent practicable, to satisfy 100% of their fuel usage for operating publicly owned vehicles, vessels, and construction equipment from electricity or 100% biofuel. The rule requires government entities to justify noncompliance with the rule and have a plan for resolving non-compliance where electric or biofueled options are not practicable. The rule only applies to new purchase or leases of vehicles or equipment – and so applies here, to the lease/purchase of the two Reachstacker.

Recommended Action:

1. Lease two (2) reachstackers with Tier 4 Final engines (supporting the Northwest Ports Clean Air Strategy)
2. Terminate the current lease with Jones Stevedoring
3. Revise tariff language to include pricing for cargo weighing between 27-55 MT and 55-81 MT

Overview of this action:

- Upgrading the equipment may or may not pay-off in the next five (5) years depending on how much incremental cargo we can capture
- Maintenance costs should be limited to small repairs
- In compliance with Washington State RCW 194-29
- In alignment with the Northwest Ports Clean Air Strategy
- Meets environmental standards we are setting for tenants in our new lease language

F. ENVIRONMENTAL IMPACTS / REVIEW

Environmental Tier Definitions:

Tier 1: Engine built between 1996-2000

- Tier 2:** Engine built between 2001-2005
- Tier 3:** Engine built between 2006-2010
- Tier 4 Interim:** Engine built between 2011-2013 (while phasing in emission standards)
- Tier 4 Final:** Engine built 2014 onwards
- Hybrid:** Diesel-Electric engine

Air Quality Impacts

Expected emissions from the existing top picks, and hypothetical Tier 3, Tier 4f, and Tier 4f hybrid Reachstackers were modeled using the EPA’s Diesel Emission Quantifier (DEQ) Tool¹. This analysis demonstrates the environmental benefits of Tier 4 equipment over existing (Tier 0) and Tier 3 options, as emissions for the Tier 4 equipment would be greater than 99% lower than the existing equipment and 97% lower than Tier 3 equipment.

Expected emissions from the existing top picks and prospective Reachstacker options are shown in the table below. The emission numbers show for each option are for 1 unit. Emissions may be doubled to determine the impacts of two units. Each unit was assumed to operate for 250 hours annually.

	Existing Top Pick		Reachstacker	
	Tier 0 (1985)	Tier 3 (2010)	Tier 4f (2018)	Tier 4 Hybrid (2018)
Engine Hp	210	350	355	281
Emissions (pounds per year)				
PM_{2.5}	45.17	12.45	0.38	0.30
NO_x	557.66	122.61	11.34	8.98

The DEQ uses the engine model year and “emissions Tier” to reference emission rates for air pollutants (PM2.5, NOx, and VOCs) from a database. These emission rates are multiplied by the activity level, as determined from user input hours of operation and maximum engine horsepower.

G. ATTACHMENTS TO THIS REQUEST

- Computer slide presentation

H. PREVIOUS ACTIONS OR BRIEFINGS

- None

¹ <https://cfpub.epa.gov/quantifier/index.cfm?action=main.home>

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**THE NORTHWEST
SEAPORT ALLIANCE**
Gateway to Solutions

Breakbulk Reachstacker Lease

Presenter: Bob Meyer
Title: Director, Port Operations

Action Requested

Request Managing Members of the Northwest Seaport Alliance (NWSA) authorization for the Chief Executive Officer or their delegate to enter into a lease for two (2) Reachstackers in an amount to not exceed \$995,000 plus sales tax (approximately \$101,490 at 10.2%) for a term of 5 years.



Background

- **Current: Lease two (2) top picks from Jones Stevedoring**
 - Vintage 1980 and environmentally unrated
 - Equipment is at the end of its useful/serviceable life → spent over \$250K in maintenance and repair over the past 6 years
 - Anticipate over \$60K in additional repairs in the short-term
 - Limited lifting capacity and capability (54 metric tons)
- **Growth in breakbulk business (18.3% YOY through July 2019) is putting heavy pressure to manage terminal capacity**
- **Top Picks do not meet the NWSA's policy under the Northwest Ports Clean Air Strategy (NWPCA)**



Top Pick – Current Operations



Reachstacker – Future Operations



Alternatives Considered and Their Implications

No Action Alternative:

- **Additional costs to maintain aging equipment**
- **Increase cost and risk of losing business due to equipment failure**
 - Significant cost impact to bring in outside equipment to meet current customer obligations
- **Marginalizes our competitive position to attract incremental new business**
- **Out of alignment with NWPCAS**
- **Not meeting environmental standards we are establishing for tenants via new lease language**



Alternatives Considered and Their Implications (continued)

Recommended Action:

- Lease two (2) reachstackers with tier 4 final engines
- Terminate current lease with Jones Stevedoring
- Revise tariff language to include pricing for cargo weighing between 27-55 MT and 55-81 MT

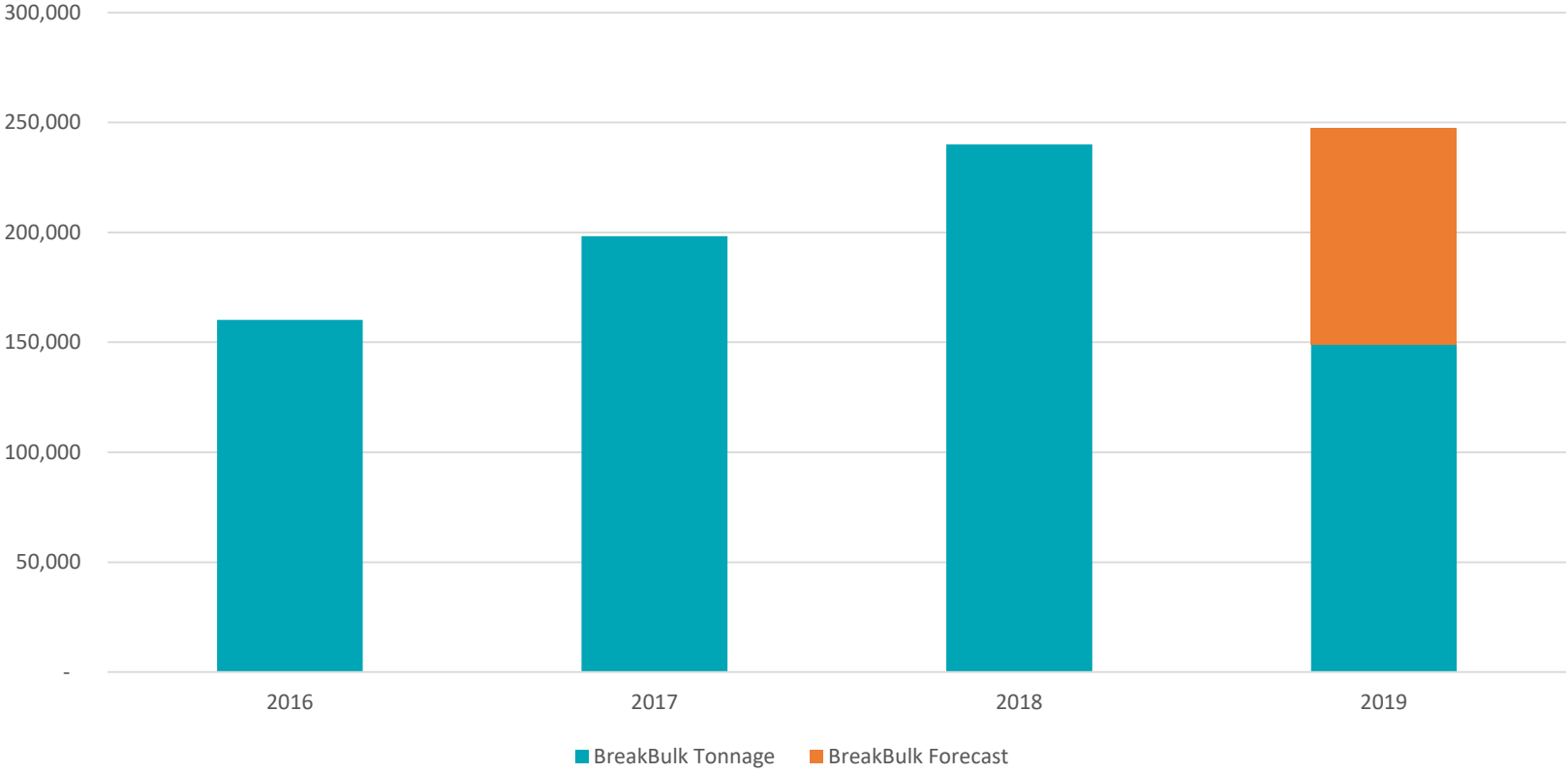
Overview of this action:

- Upgrading of equipment may not payoff in next 5 years
- Maintenance costs should be reduced
- In compliance with RCW 194-29
- In alignment with the NWPCAS
- Meets standards we set forth with tenants in our new lease language



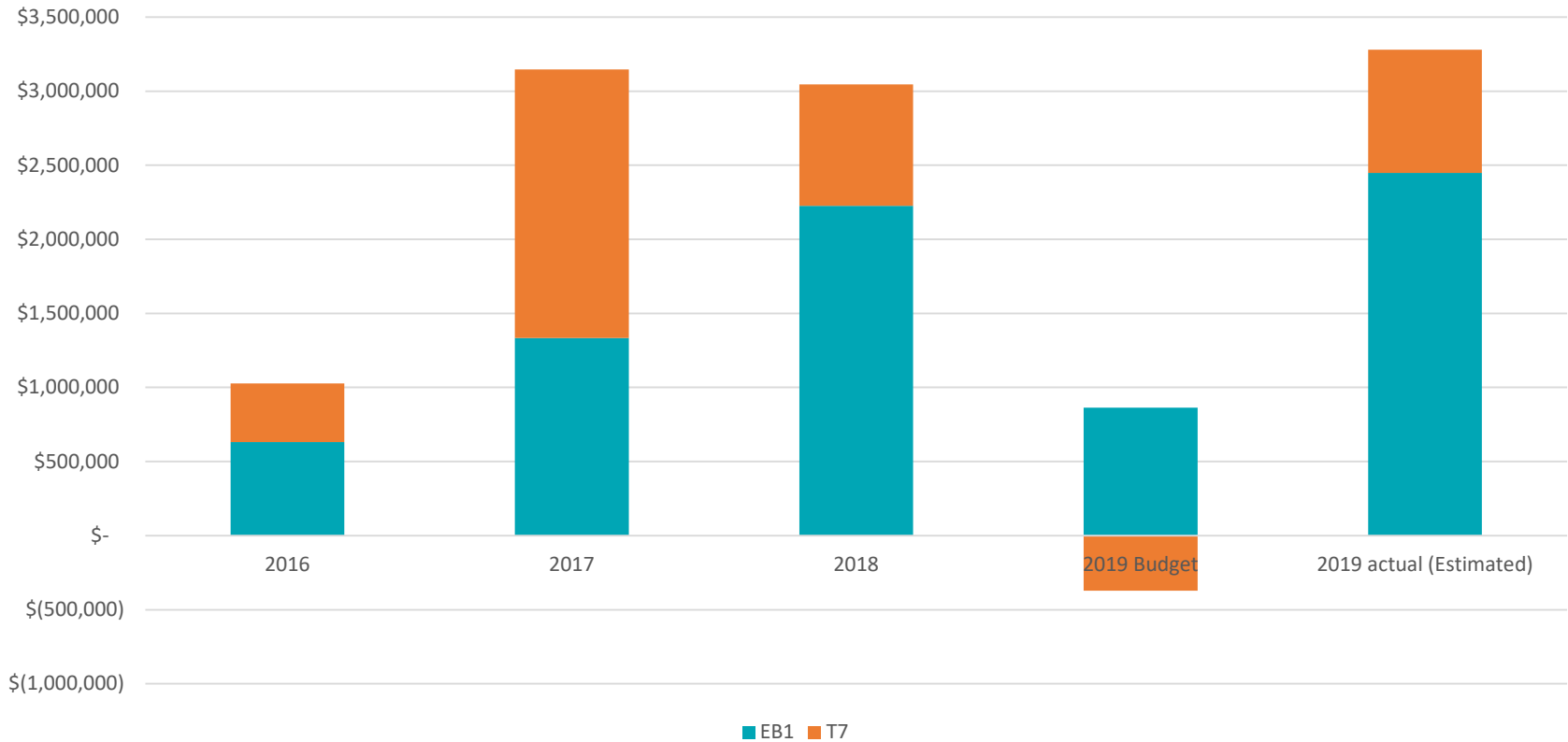
Breakbulk Tonnage

NWSA Breakbulk Tonnage (Short Tons)



NWSA Breakbulk Financial Contribution

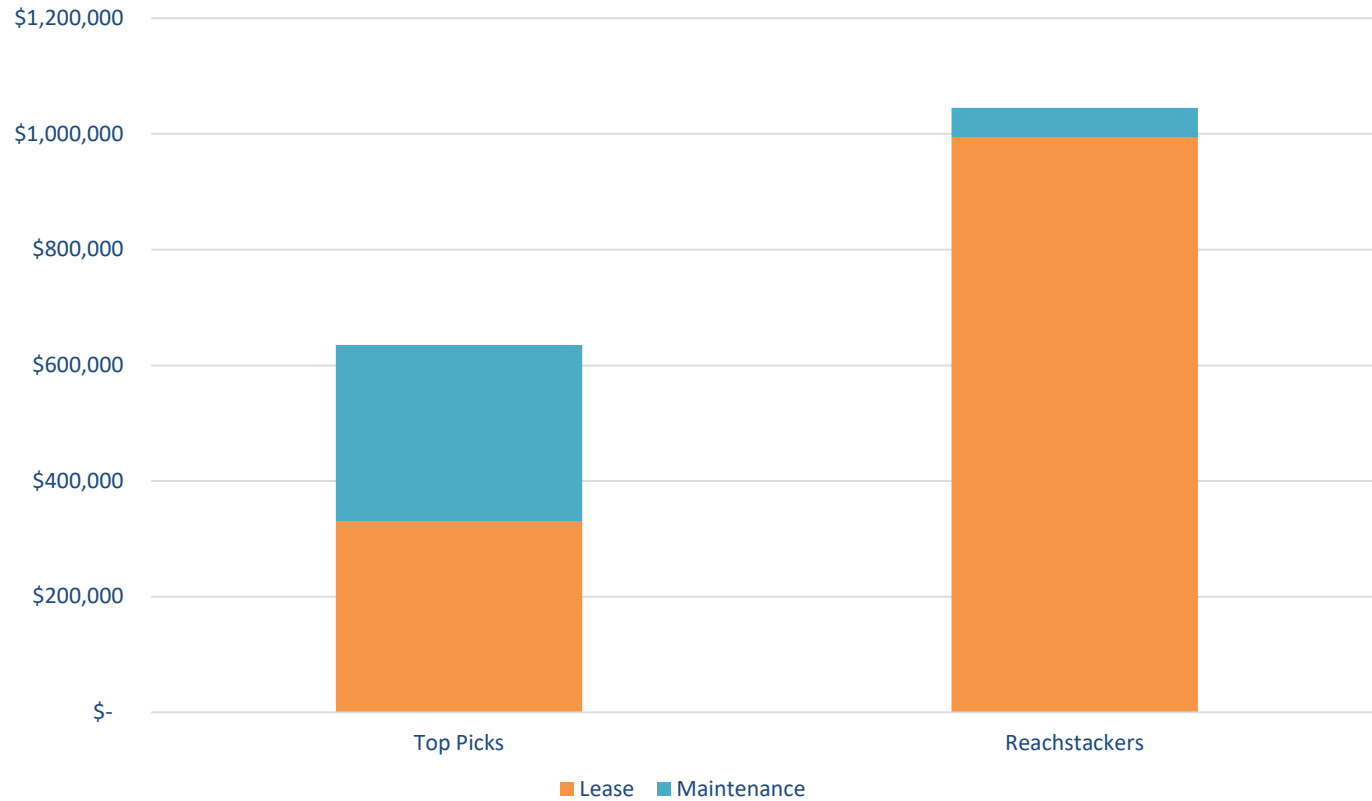
Military and RORO Operating Income Before Depr



2019 budget and actuals included one-time expenses for environmental cap repair at 3701 Taylor Ave for BB support (included with T7)



Cost Comparison



Financial Implications

Financial Impact

- **Operating expense will be increased by \$125,000**
- **The 2019 forecast operating income of the breakbulk business is estimated to be between \$3.0 million and \$3.2 million**

The replacement of the older leased equipment with the new equipment will reduce the risk of significant repair and maintenance expense from the older equipment and is consistent with State Law requiring the use of Tier 4 environmentally compliant equipment



Environmental Impact/Review

Air Quality

- Purchasing Tier 4 equipment would reduce emissions by greater than 99% relative to the existing equipment
- Tier 4 equipment is 97% cleaner than Tier 3

	Existing Top Pick		Reachstacker	
	Tier 0 (1985)	Tier 3 (2010)	Tier 4f (2018)	Tier 4 Hybrid (2018)
Engine Hp	210	350	355	281
Emissions (pounds per year)				
PM_{2.5}	45.17	12.45	0.38	0.30
NO_x	557.66	122.61	11.34	8.98

* Emission calculations are for 1 unit, total impacts from the project are double what is shown above



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