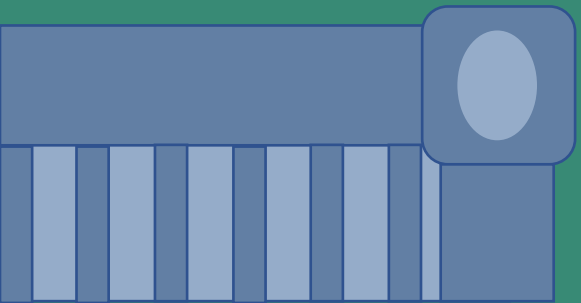


Drayage Trucking Dynamics of the Pacific Northwest



Pacific Northwest

Oregon Facts:

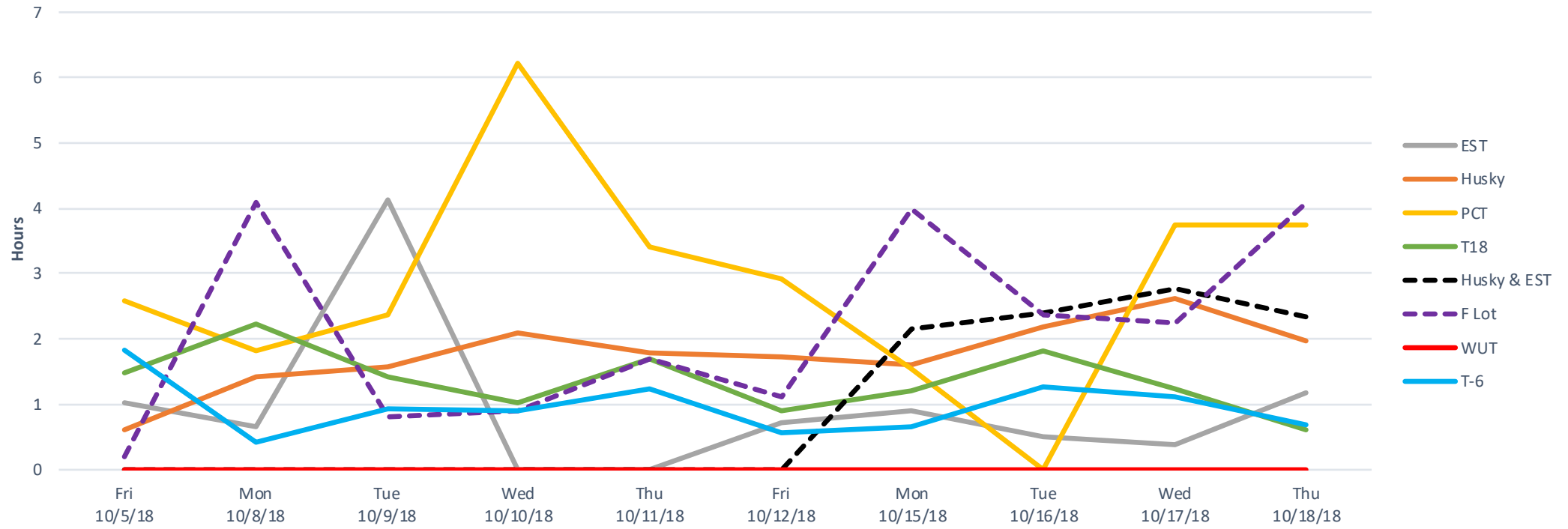
- Ninth largest state
- 98,378 square miles
- If Oregon was a county it would be 77th largest
- GDP 158.2b



Washington Facts:

- Twentieth largest state
- 71,362 square miles
- GDP 331.b

Dwell Times North & South Harbor



	10/5/18	10/6/18	10/7/18	10/8/18	10/9/18	10/10/18	10/11/18	10/12/18	10/13/18	10/14/18	10/15/18	10/16/18	10/17/18	10/18/18		Week 41	Week 42	2 Week Avg.
	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu		Does not include weekends		
	Mostly Dual Transactions																	
EST	1.02			0.65	4.13			0.73			0.91	0.49	0.37	1.19		1.933	0.738	1.186
Husky	0.61	1.45		1.41	1.57	2.09	1.79	1.73			1.59	2.18	2.62	1.98		1.487	2.020	1.729
Husky & EST											2.16	2.39	2.77	2.33			2.413	2.413
F Lot	0.2			4.09	0.81	0.89	1.69	1.11			3.98	2.38	2.26	4.09		1.536	2.764	2.150
WUT																		
PCT	2.57			1.83	2.38	6.22	3.41	2.93			1.55		3.73	3.73		3.282	2.985	3.150
T18	1.47			2.23	1.42	1.02	1.7	0.89			1.22	1.81	1.23	0.61		1.568	1.152	1.360
	Mostly Single Transactions																	
T-6	1.83			0.42	0.92	0.89	1.25	0.56			0.66	1.26	1.1	0.7		1.062	0.856	0.959
NWC	1.62			1.02	1.24	1.43	1.19	0.89			0.6	0.68	1.04	1.04		1.300	0.850	1.075

Driver Shortage

It is a problem!



Hours of Service Rules

Property-Carrying Drivers

11-Hour Driving Limit

- After 10 consecutive hours off duty.
- Off duty time can be split into a 8hr. and a 2hr. period.

14-Hour Limit

- Driver may not be on duty beyond the 14 consecutive hour after coming on duty, following 10 consecutive hour off duty period.

Rest Breaks

- After or before 8hrs. consecutive is reached a driver must take a 30min consecutive rest period.

60/70-Hour Limit

- Option 1: 60hrs. in 7 days – Driver can't work more than 60hrs. in 7 consecutive days.

We don't use this

- Option 2: 70hrs. In 8 days - Driver can't work more than 70hrs. In 8 consecutive days. This option doesn't work well for drayage operations.

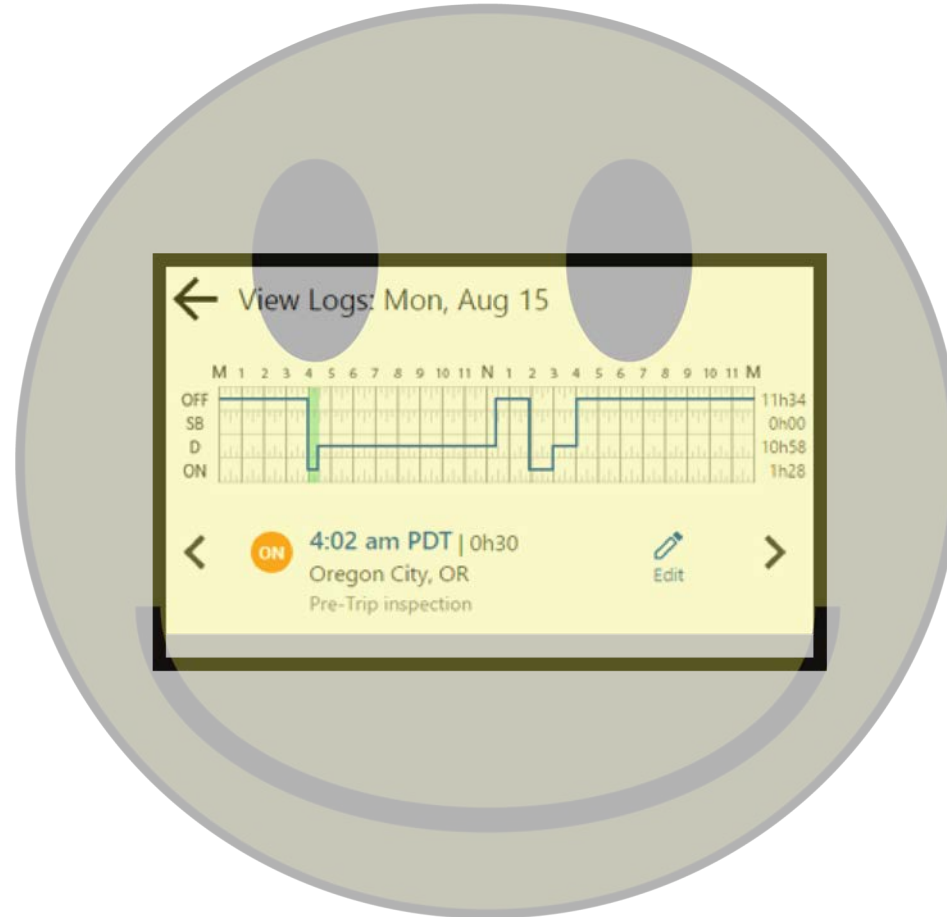
34-Hour Reset

- Once a driver reaches their maximum hours they must be off-duty for 34 hrs. uninterrupted.

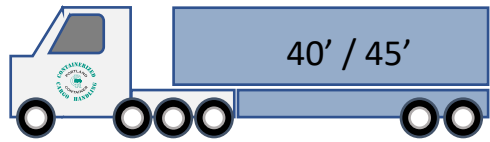


ELDs

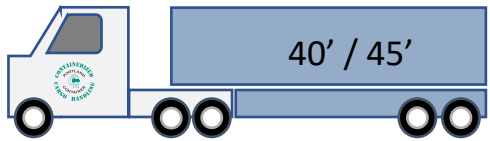
Electronic Logging Device



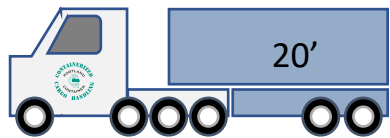
Getting the Right Equipment



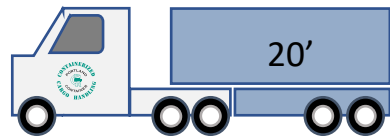
Max Cargo Weight – 46,000 lbs.



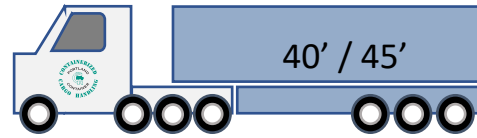
Max Cargo Weight – 42,500 lbs.



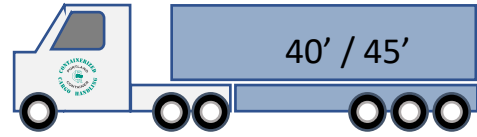
Max Cargo Weight – 38,500 lbs.



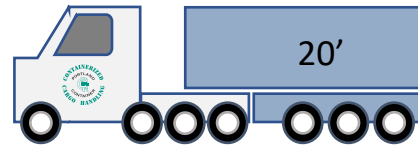
Max Cargo Weight – 38,500 lbs.



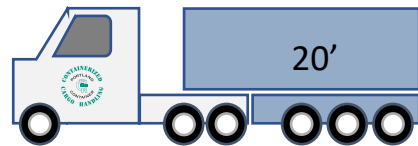
Max Cargo Weight – 55,000 lbs.



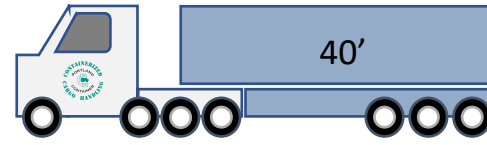
Max Cargo Weight – 45,000 lbs.



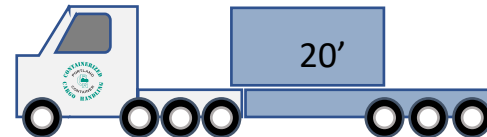
Max Cargo Weight – 43,000 lbs.



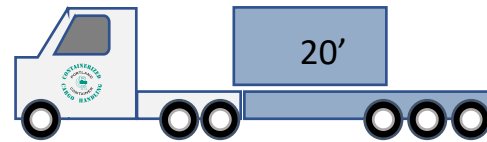
Max Cargo Weight – 43,000 lbs.



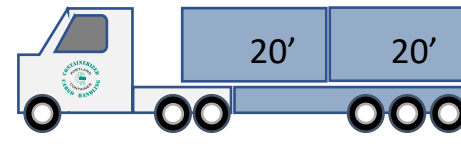
12-pin Max Cargo Weight – 48,000 lbs.



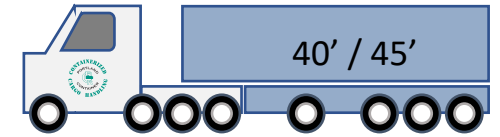
Max Cargo Weight – 48,000 lbs.



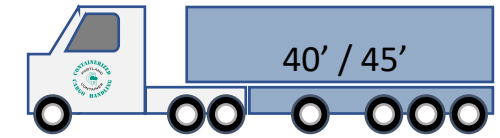
Max Cargo Weight – 48,000 lbs.



Empties Only



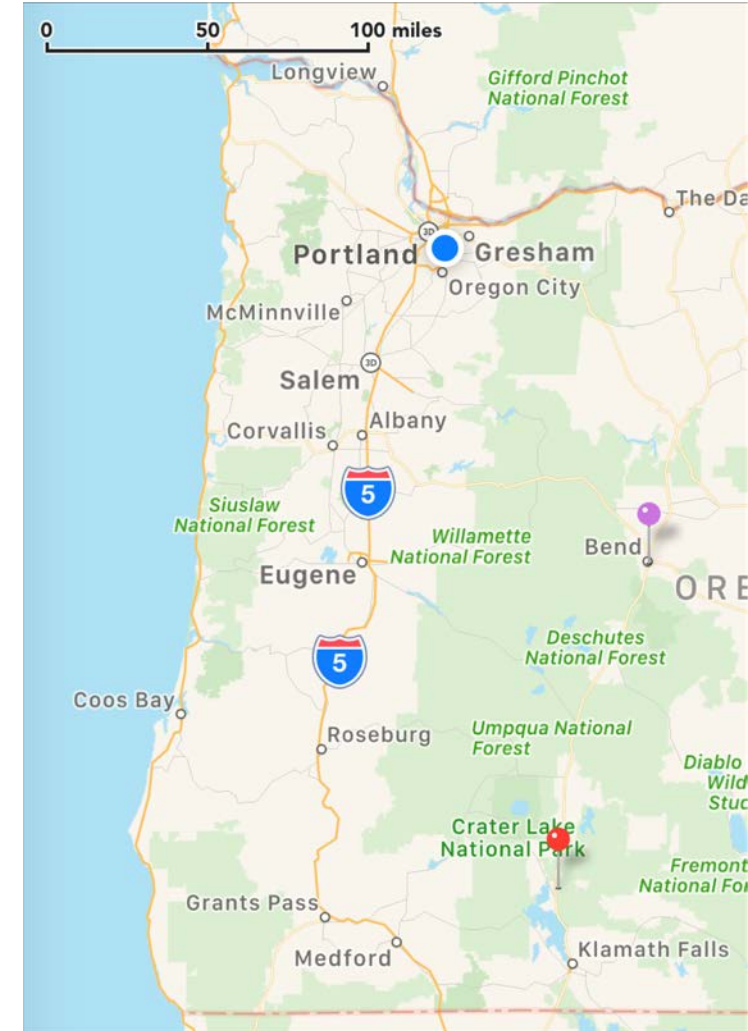
Max Cargo Weight – 57,000 lbs.



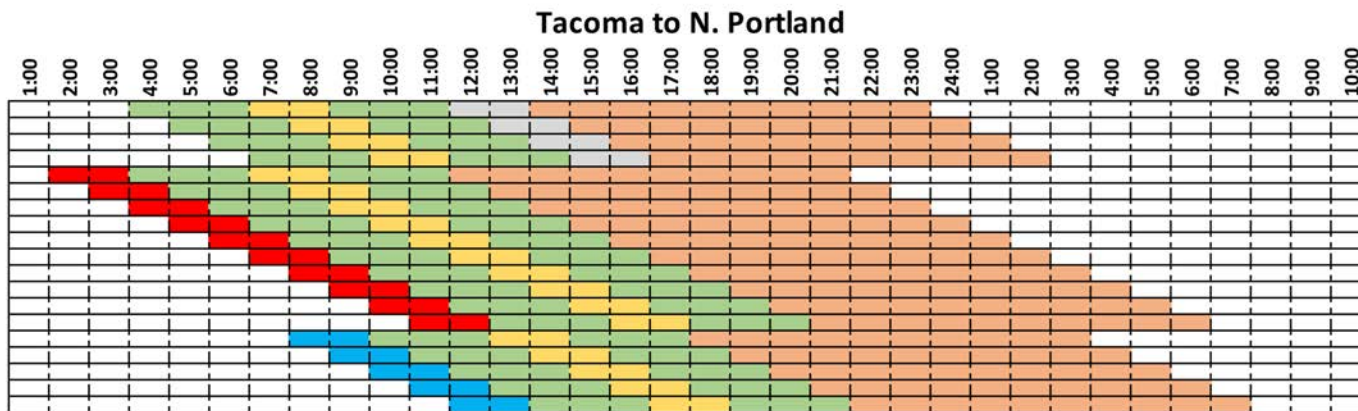
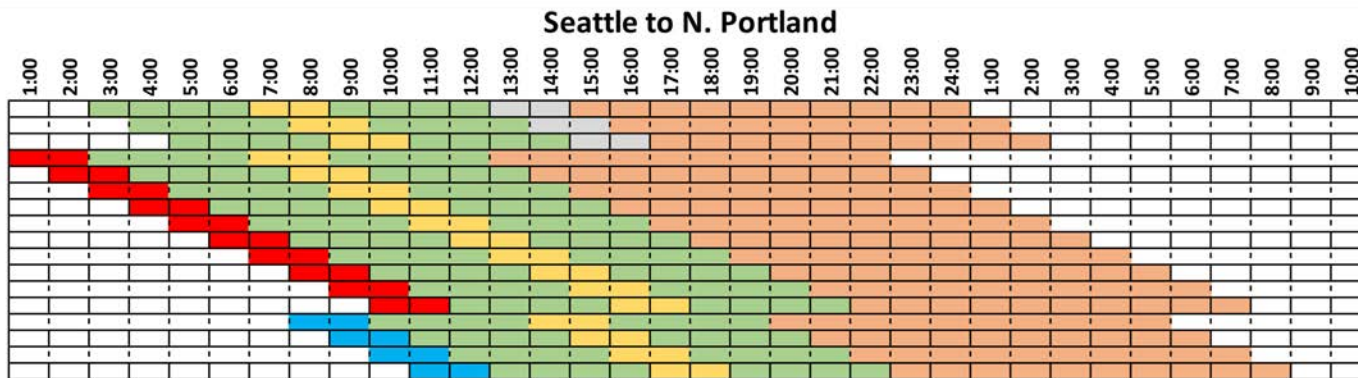
Max Cargo Weight – 48,000 lbs.

Distance & Time

To	From	Miles	Drive Time
Seattle	Portland	173	4 hrs.
Tacoma	Portland	144	3 hrs.
Seattle	Tacoma	30	1 hr.
Portland	Clackamas	23	1 hr.
Portland	Albany	71	2.5 hrs.
Portland	Eugene	127	3 hrs.
Portland	Bend	184	4 hrs.
Portland	Chiloquin	253	6 hrs.



Direct



PRE-PULL ALT
DRIVER

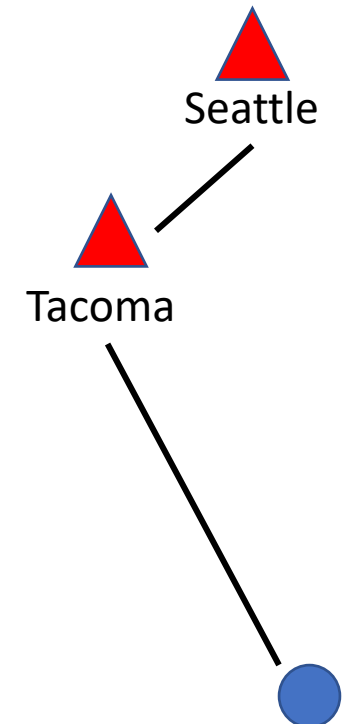
MTO / CY

DRIVING

LOAD /
UNLOADING

PRE-PULL

OFF-DUTY



Hub & Spoke

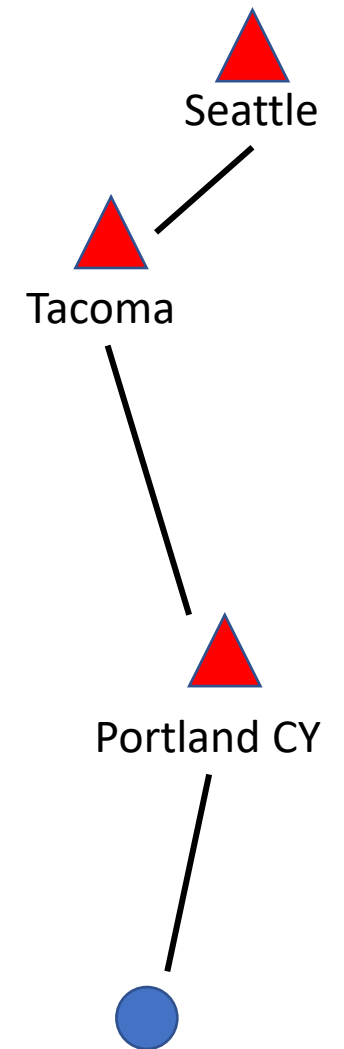
More flexible scheduling of assets

Greatly reduces the risk of running out of service hours

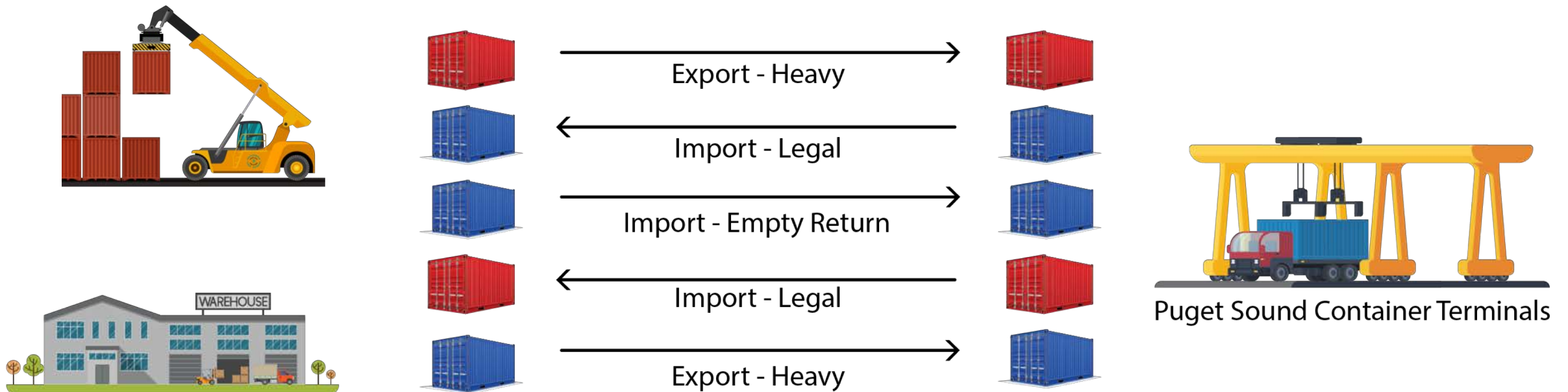
Drop & Pick Possible

Street turn and OCP bookings possible

Adds one to two additional transit days

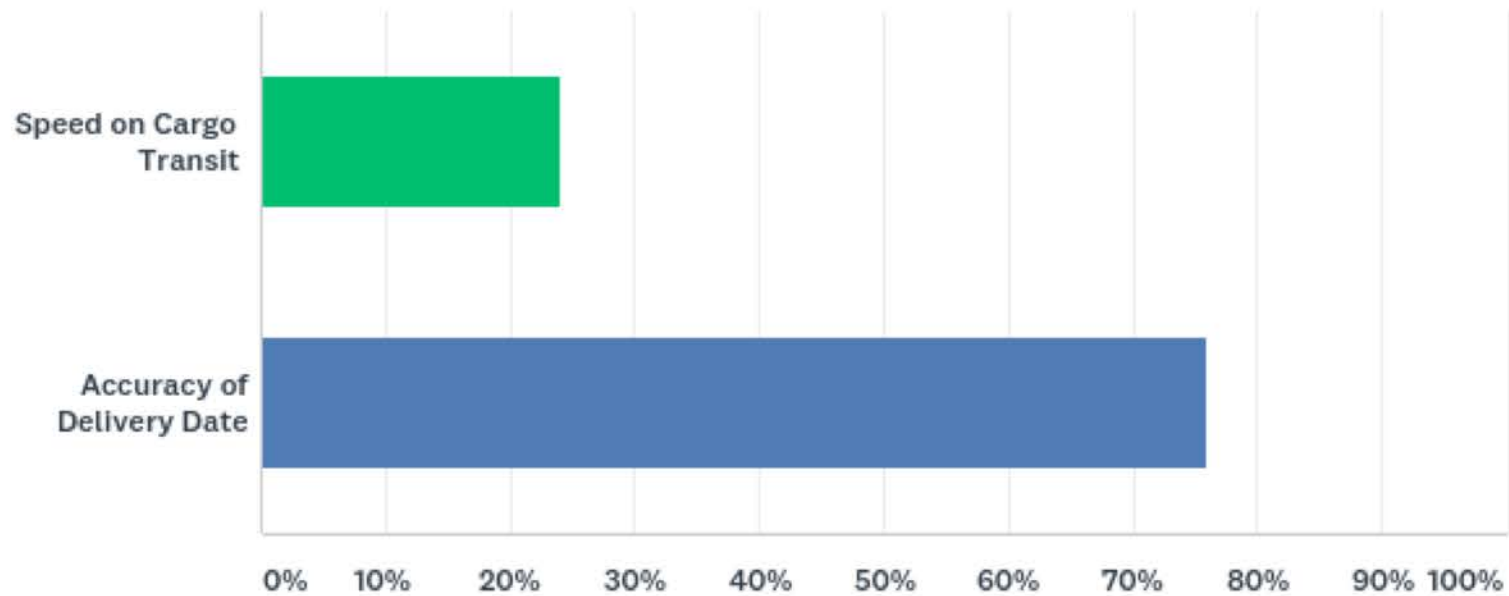


Mixing Cargo Flows



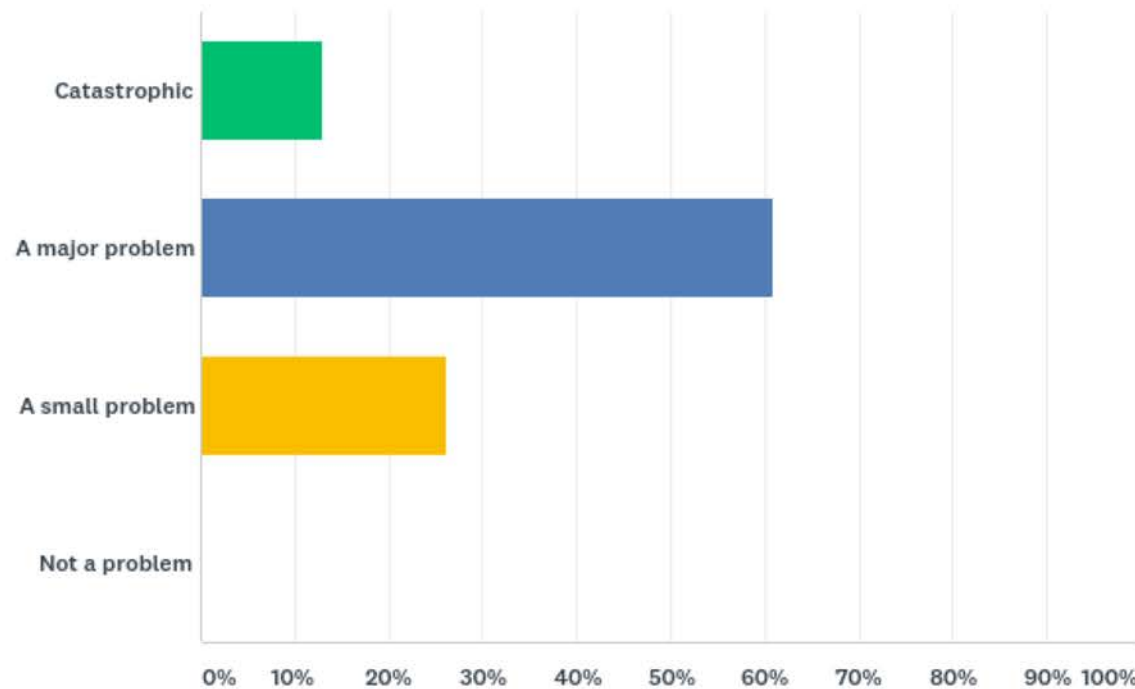
2017 End of Year Survey

Q1 What is more important to your operation?



2017 End of Year Survey

Q13 When a shipment is late it is ...



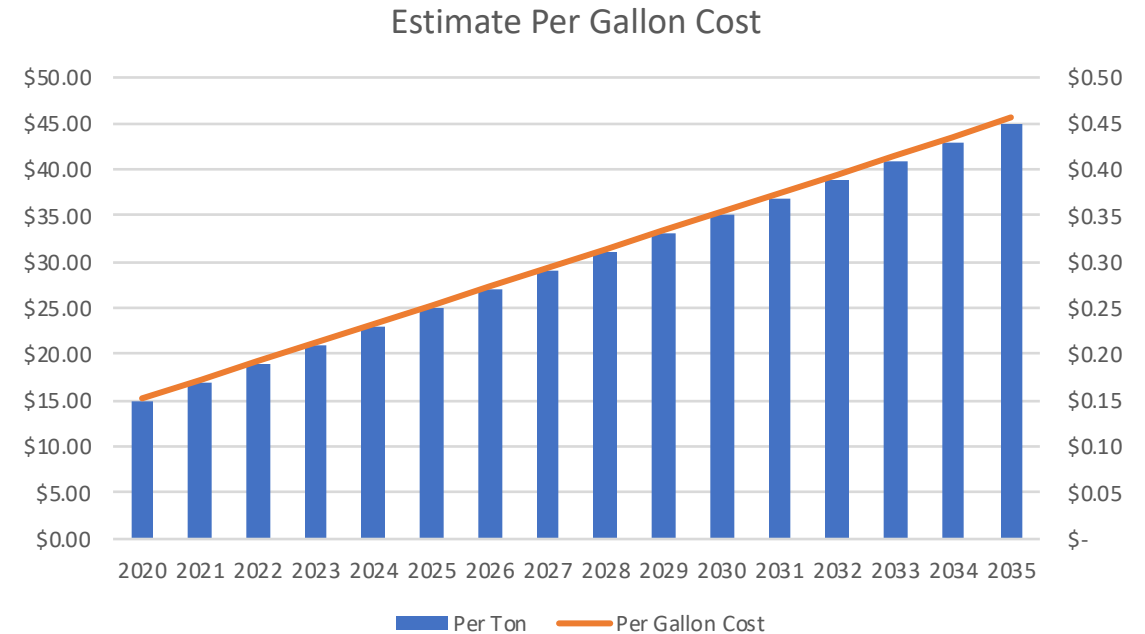
- The clean truck course was set in 2007
- Many assumptions were made
- NWSA inherited the program
- The original deadline was December 31, 2017, now December 31, 2018
- The number of trucks in the gateway has dropped in the last thirteen months from 4,281 to 3,538
 - Currently 1,256 of the 3,528 trucks are not compliant
- Right now work is beginning on the 2030 emissions goals



Washington SB 1631

Initiative 1631 would impose a carbon tax of \$15 per metric ton of CO₂ emitted in Washington state, increasing by \$2 per year plus inflation, to over \$40 per metric ton in about ten years.

- 22.38 pounds of CO₂ are produced by burning a gallon of diesel fuel
- One metric ton (2,205 lbs.) is equal to 98.52 gallons of diesel



Does not include adjustment for inflation





Ask what am I or my customers doing that makes
your costs increase.

Relationships are critical, trust is essential,
and collaboration will lead to not just cost
savings, but, also a better product for your
customers.

