



PROJECTED NEW ANNUAL VESSEL TRANSITS

1 Discovery LNG	732 *
2 Woodfibre LNG	80
3 Nanaimo Port Authority	222 *
4 Fibreco Export increase in vessel size +	18
5 Neptune Terminals	104
6 G3 Terminal	224
7 Centerm Container	130
8 Canada's TMX Pipeline	696
9 Pacific Coast Terminals	88
10 Fraser Surrey Docks	160
10 Fraser Surrey Docks	364
11 WesPac LNG	136
12 Vancouver Airport Fuel	96
13 Roberts Bank Terminal 2	520
14 Westshore Terminals	62
15 GCT Deltaport increase in vessel size	222 *
15 GCT Deltaport	222 *
16 Phillips 66 & REG	TBD
17 Marathon (formerly Tesoro)	120
18 Cruise Seattle	TBD
19 Seaport Alliance increase in vessel size +	TBD
20 Par Pacific (formerly US Oil)	72 *+ TBD
21 Puget Sound Energy LNG	TBD
22 Grays Harbor	42 *
TOTAL PROJECTED NEW TRANSITS	4,088 + TBD
2018 TRANSITS	12,120
TOTAL 2018 + NEW TRANSITS	16,208 + TBD

* = Estimate

Salish Sea Vessel Traffic Projections: New and Expanding Terminals and Refineries		Proposed Approved & Recent Annual Increase in Capacity	Proposed Approved & Recent Annual Increase in Transits	Project Status Summary
1	Discovery LNG, Campbell River, BC	20 MTPA	VTRA*: 732	LNG export license issued in June '15.
2	Woodfibre LNG, Squamish BC	2.1 MTPA	80	LNG export license issued '13. EA certificate re-issued 3-7-18.
3	Nanaimo Port Authority & Western Stevedoring – Cars	50,000 EU car imports	222*	\$19M CAD conversion project. 2019 start of phase 1. Projected 12,000 vehicles to be processed in 1 st year. 400-500 cars delivered per carrier.
4	PoV: Fibreco Export – Expansion to add Grain	1 MMTA Pellets 2 MMTA Grain	18 + increase in vessel size	112 transits in 2016. Wood pellet and chip exporter expanding to export wood pellets plus grain.
5	PoV: Neptune Terminals - Coal	6 MMTA	104	Increase from 12.5 to 18.5 MMTA. Permit extended to Jan. 2020.
6	PoV: G3 Terminal – Grain	8,000,000 MT	224	Conversion/expansion increase from 112 to 336 annual transits. Due fall 2019
7	PoV: Centerm Container Terminal	600,000 TEU	130	Increases capacity from 900,000 to 1,500,000 TEUs and from 470 to 600 annual transits. Construction from 2019-2021.
8	PoV: Trans Mountain Pipeline Expansion – Crude Oil	590,000 BPD	696	Expansion from 300,000 BPD to 890,000 BPD and from 120 to 816 annual transits. Cabinet decision due 6-18-19.
9	PoV: Pacific Coast Terminals-Potash	2,800,000 tonnes	88	Permit issued 2015. Construction continues.
10	PoV: Fraser Grain Terminal Ltd./Fraser Surrey Docks - Grain	3.5 MMT	160	Increase from 0.5 MMT to 4 MMT. Permit issued 11-9-18. Construction to be completed late 2020.
10	PoV: BHP Billiton /Fraser Surrey Docks – Potash	8 MTPA	312 - 416	Project proposal under preliminary review. Project would include an additional 8-10 trains and 3-4 vessels per week.
11	PoV: WesPac Tilbury Pacific LNG (+138 LNG bunker transits)	3.5 MTPA	136	LNG export license issued 2015. Application for Environmental Assessment Certificate filed 3-21-19.
12	Vancouver Airport Fuel Facility Consortium – Fuel Oil	–	72 - 120	Aviation fuel transport from WA State to BC via tank vessels for pipeline transport to Vancouver, BC airport. Construction thru 2021.
13	PoV: Roberts Bank 2 Container Terminals	2,400,000 TEUs	520	New container ship terminal north of Roberts Bank. Environmental Assessment began 11-8-13. Review Panel hearings began 5-14-19.
14	PoV: Westshore Terminals - Coal	3,000,000 MT	62	Increase from 33,000,000 MT to 36,000,000 MT. 540 annual transits in 2012. Permit extended to 6-30-2019.
15	PoV: Global Container Terminals (GCT) Deltaport	600,000 TEUs	Increase in vessel size	Increase from 1,800,000 TEUs to 24,000,000 TEUs. Infrastructure upgrades expected to be completed 4 th quarter 2019.
15	PoV: GCT Deltaport – Containers	2,000,000 TEUs	222*	Increase from 2,400,000 to 4,400,000 TEUs. VFPA rejected GCT's 4 th berth proposal. This matter is currently before the courts.
16	Phillips 66 & Renewable Energy Group, Ferndale WA – Fuel Oil	18,000 BPD	TBD	Proposed '19: Large-scale renewable diesel facility, co-located at Phillips 66 refinery.
17	Marathon (formerly Tesoro) Refinery, Anacortes WA -Xylene	15,000 BPD	120	Permit issued in '17 for the manufacture and export of xylene. Permit appeal in process.
18	Port of Seattle, WA – Cruise Seattle	2019: 1.2 M passengers	TBD	Pier 46 new cruise terminal due 2022. \$200M construction for larger, 5,000 passenger ships.
19	NW Seaport Alliance, Seattle and Tacoma WA – Containers	2,202,374	Increase in vessel size + TBD	TEUs in 2018: 3,797,626. 2025 projection: 6M TEUs. Pier 4 Tacoma upgrades and Terminal 5 Seattle conversion for 18,000 TEU vessels.
20	Par Pacific purchased US Oil & Refining Co, Tacoma, WA – Oil	74,000 BPD*	72* + TBD	New refinery owner plans to transport crude oil from WA to HI as well as refined products to and from WA and HI. Estimate is for crude oil only and assumes Aframax transport of 50% of HI refineries' capacity.
21	PSE LNG, Tacoma, WA	89-178 M gallons	TBD	LNG vessel fuel for existing vessel traffic only?
22	Grays Harbor: BHP Billiton – Potash (application being revised)	8 MTPA	42*	Project includes 416 vessel transits per year. Estimate assumes 10% of vessels will bunker in Port Angeles.
Transit totals by product/vessel type: Cars = 222, Coal = 166, Container = 872+TBD, Grain = 402, Cruise = TBD, LNG = 948+TBD, Oil = 984+TBD, Potash = 494				
Total Projected New, Approved, & Proposed Vessel Transit Increases		4,088	34% Increase in Annual Vessel Traffic	
2018 Total Vessel Transits in the Salish Sea		12,120	<i>Vessel traffic projections:</i> 94% British Columbia / 6%+TBD Washington State	
2018 Transits + Projected New, Approved, & Proposed Annual Transits		16,208		

No local barge traffic, anchoring, cueing, and/or bunkering (ship fueling) transits included. Only OGV traffic included except for VAFFC traffic.

Abbreviations: *=Estimate, bbl=barrels, BPD=barrels per day, CAD=Canadian dollar, EA=Environmental Assessment, EU=European Union, HI=Hawaii, LNG=liquefied natural gas, M=million, MT=metric tonnes, MMT=million metric tonnes, MMTA=million metric tonnes per annum, MTPA=million tonnes per annum, OGV=Ocean-Going Vessel, PoV =Port of Vancouver, PSE=Puget Sound Energy, TBD=To Be Determined, TEU=twenty-foot equivalent unit, VAFFC=Vancouver Airport Fuel Facility Consortium, VFPA=Vancouver Fraser Port Authority, VTRA=Vessel Traffic Risk Assessment, WA=Washington