

Container Transportation Benefit Study

Columbia River Channel Improvement Project

Presented to the
Channel Improvement Project
Technical Review Panel

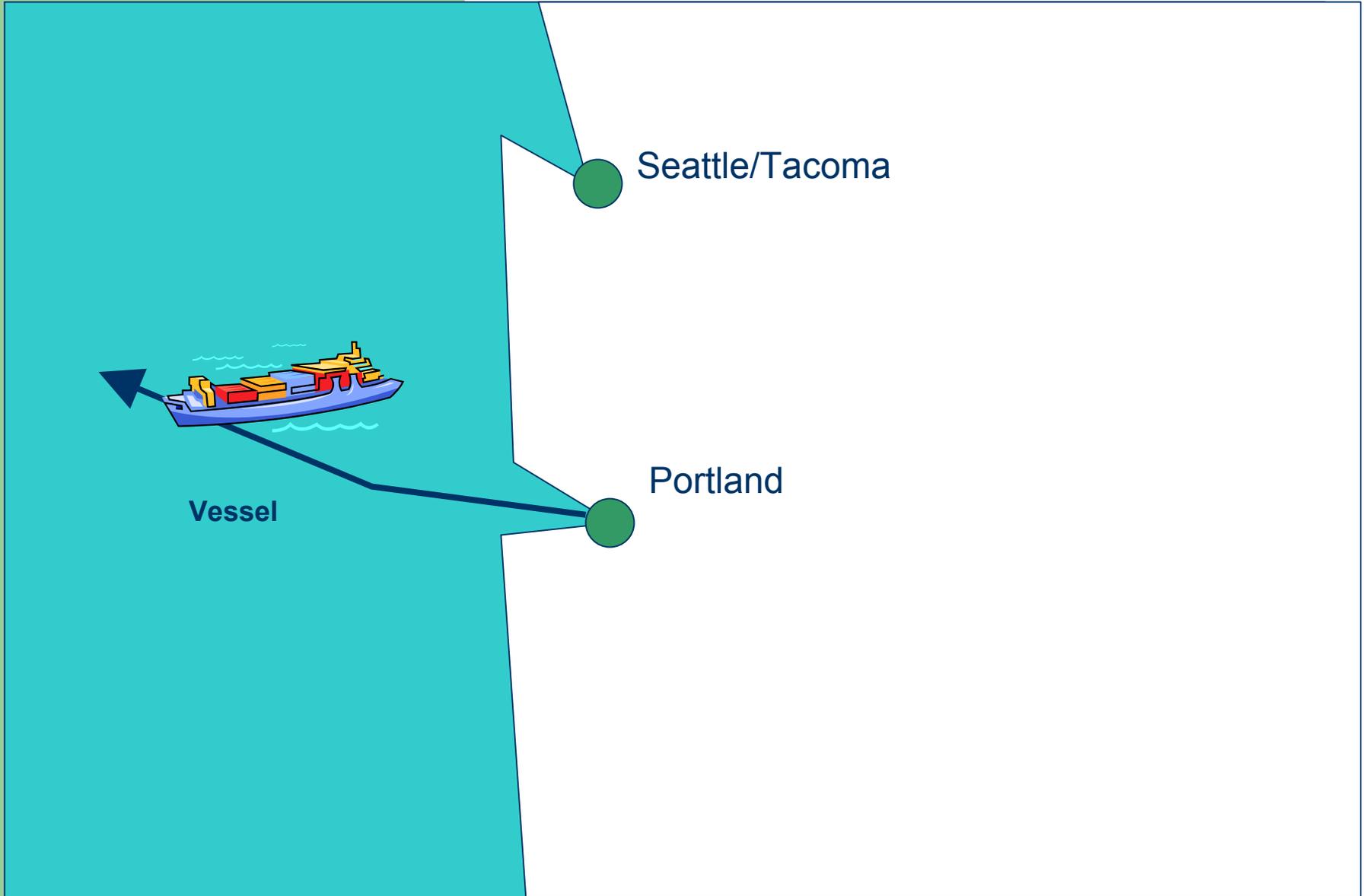
Prepared By:
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Port of Portland

August 5, 2002

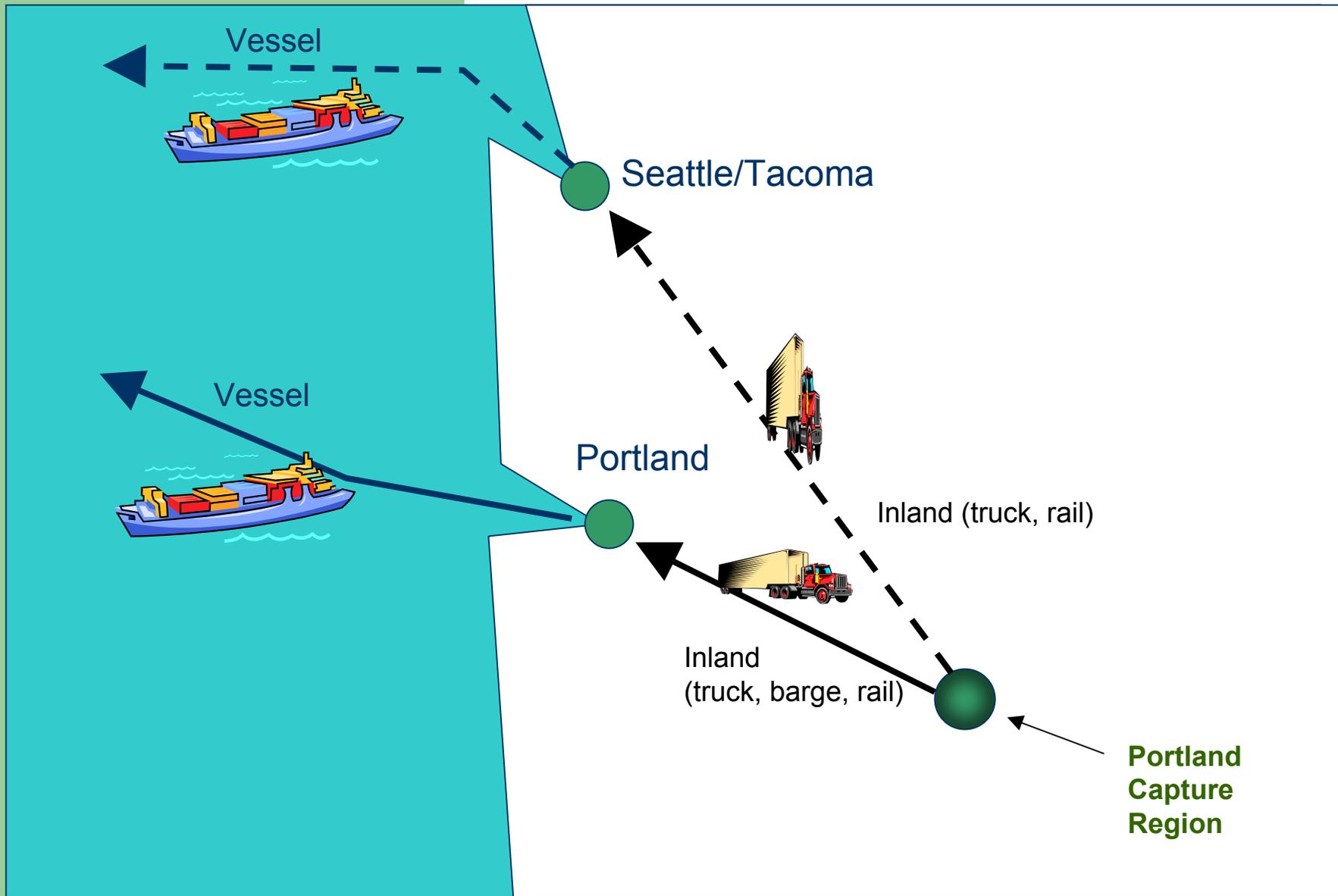
Main Points of Presentation

- Corps' study: calculates container benefits in terms of **vessel operating** cost savings.
- This study: in addition to vessel costs, what does it cost to get the cargo to the vessel? Does the channel project produce national benefits by reducing those inland costs?
- Our finding: the **inland transportation** benefits of the project for container cargo are significant.

Corps' SEIS



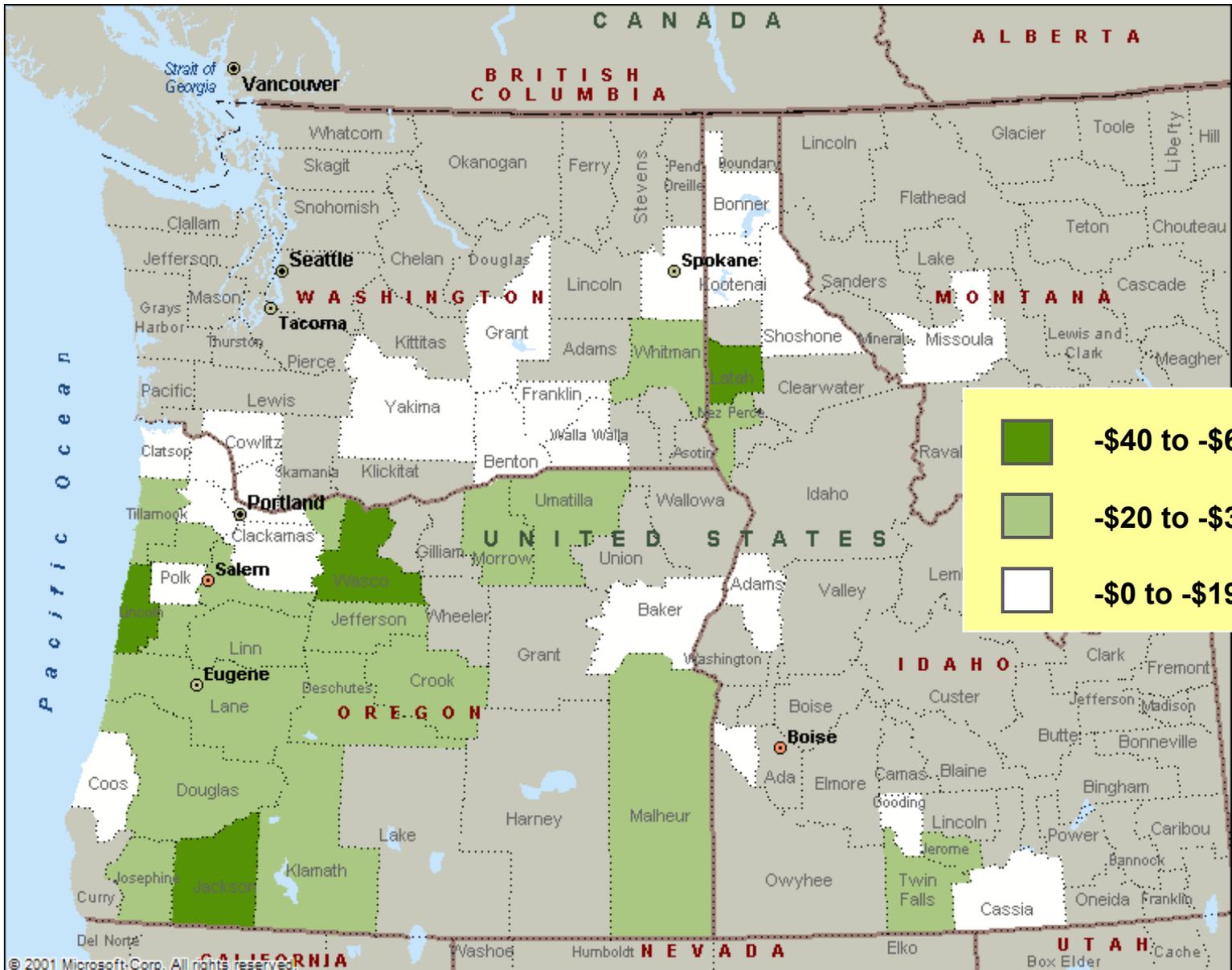
Multi-port Study



Data

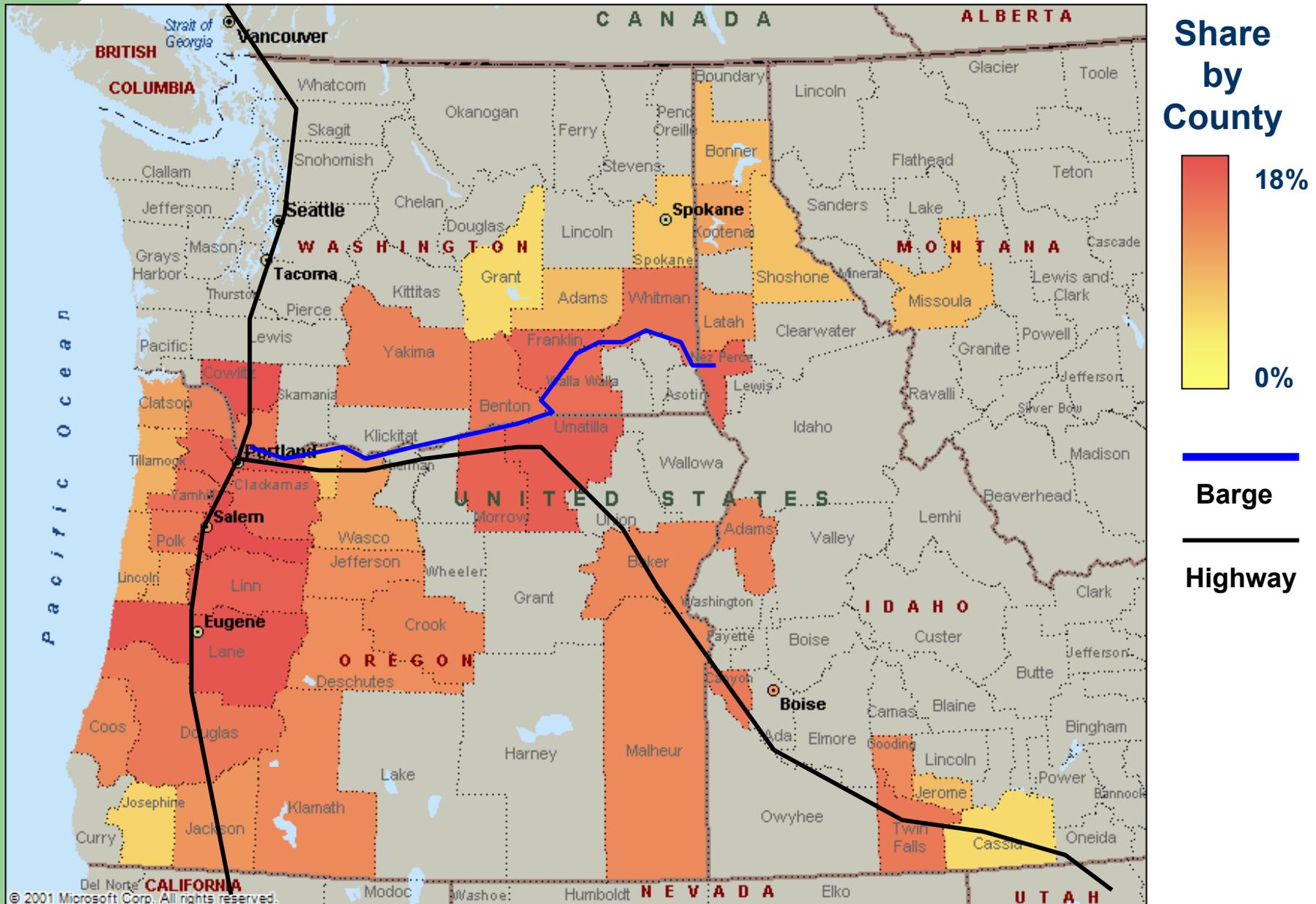
- Container Transportation Cost-Benefit Analysis
 - *Origins & destinations of cargo within region*
 - *Inland rates (truck, barge, and rail)*
 - *HDR Engineering/Martin Associates, 2000*
- Lower Columbia River Cargo Forecasts
 - *Container cargo forecasts*
 - *With and without project / direct and indirect shares*
 - *DRI-WEFA / BST Associates, 2002*
- Supplemental Feasibility Report/EIS (SEIS)
 - *Vessel operating costs*
 - *Corps, 2002*

Difference, Inland Transportation Cost per Export Ton -- Portland vs. Puget Sound

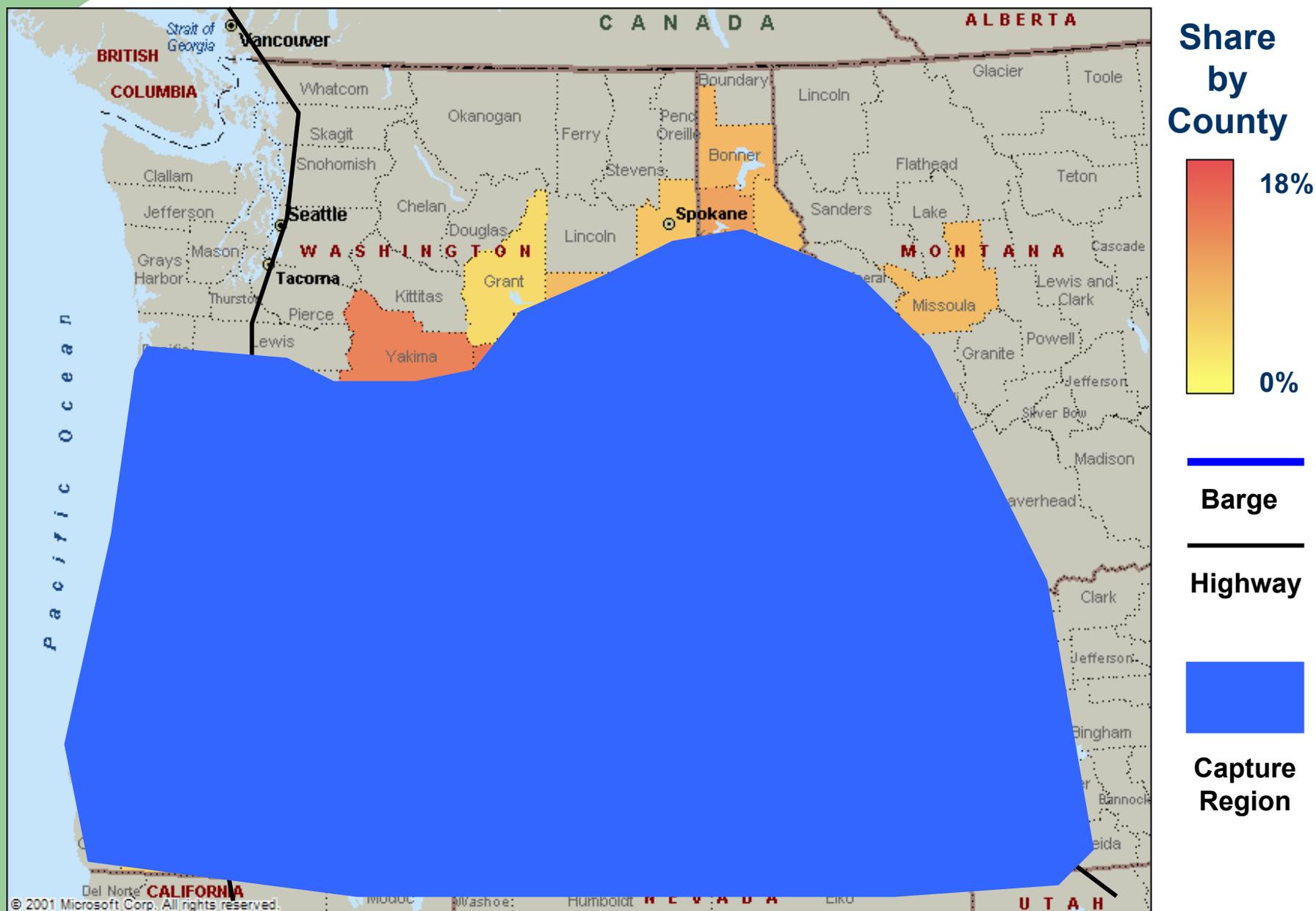


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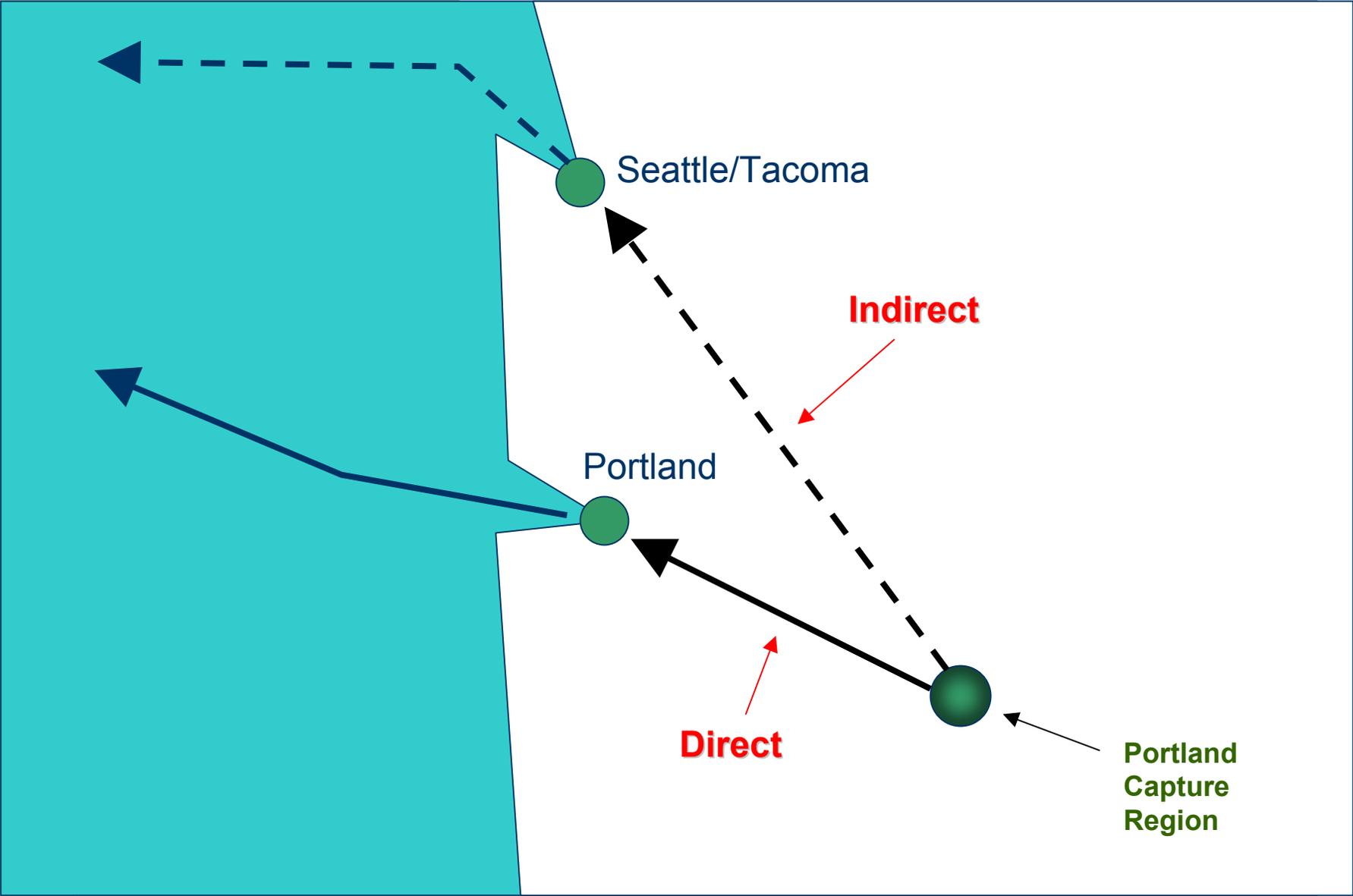
Distribution of Portland Capture Region Transpacific Export Container Cargo



Distribution of Portland Capture Region Transpacific Export Container Cargo



Multi-port Study



Exports in 2020

(Projected Portland Capture Region Market Size = 5.2 million tons)

	With Project			Without Project		
	Portland (Direct)	Puget Sound (Indirect)	Total	Portland (Direct)	Puget Sound (Indirect)	Total
Cargo Distribution Short Tons (Millions)	3.1	2.0	100%	2.1	3.1	100%
Cost Per Short Ton Inland Vessel Total	\$27.45	\$44.43		\$30.13	\$44.43	
Costs (millions)						
Inland	\$47.9	\$68.6	\$116.5	\$31.4	\$105.5	\$137.0
Vessel	\$38.4	\$20.7	\$59.1	\$30.7	\$31.9	\$62.6
Total Cost (millions)	\$86.3	\$89.3		\$62.1	\$137.4	

Difference (Export Benefit) = \$23.9 million

Summary of Benefits

Average Annual Benefit	
Inland	\$25,253,000
Vessel	\$ 3,162,000
Total	\$28,414,000

Conclusions

- Project will generate a national container cargo benefit of \$28.4 million annually.
- Inland transportation cost savings are significant when calculating the national benefit.
- Our study is consistent with the experience of regional shippers, who endure higher transport costs to move their cargo to more distant ports.

Comments on the draft report?

Please send written comments to:

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You may also send comments electronically to: dalyj@portptld.com.

When should you send us comments?

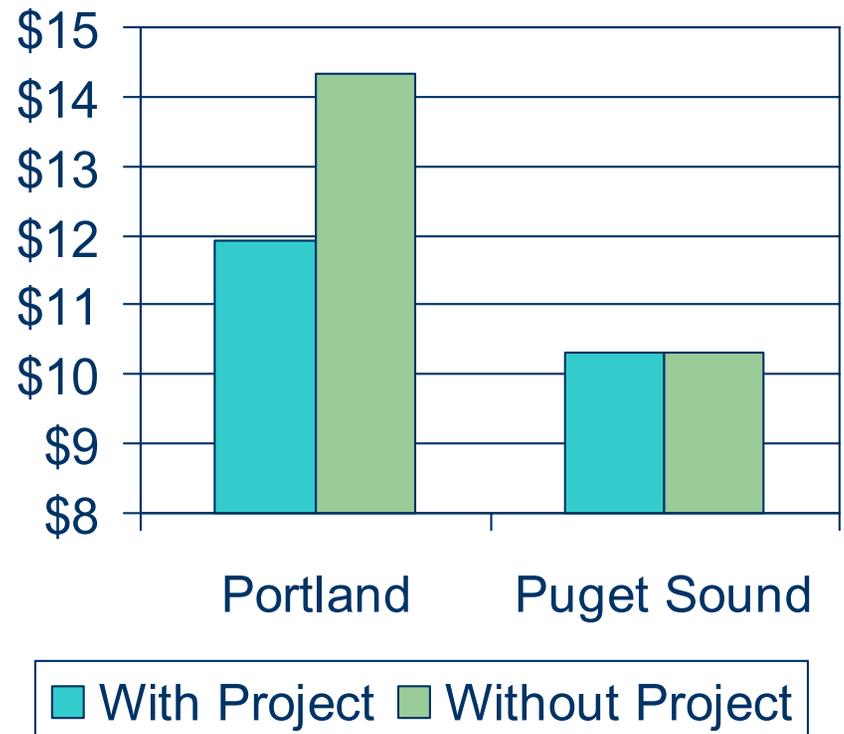
We would like to receive comments by August 30, 2002.



Vessel Transportation Costs

Vessel Operating Cost
per Ton

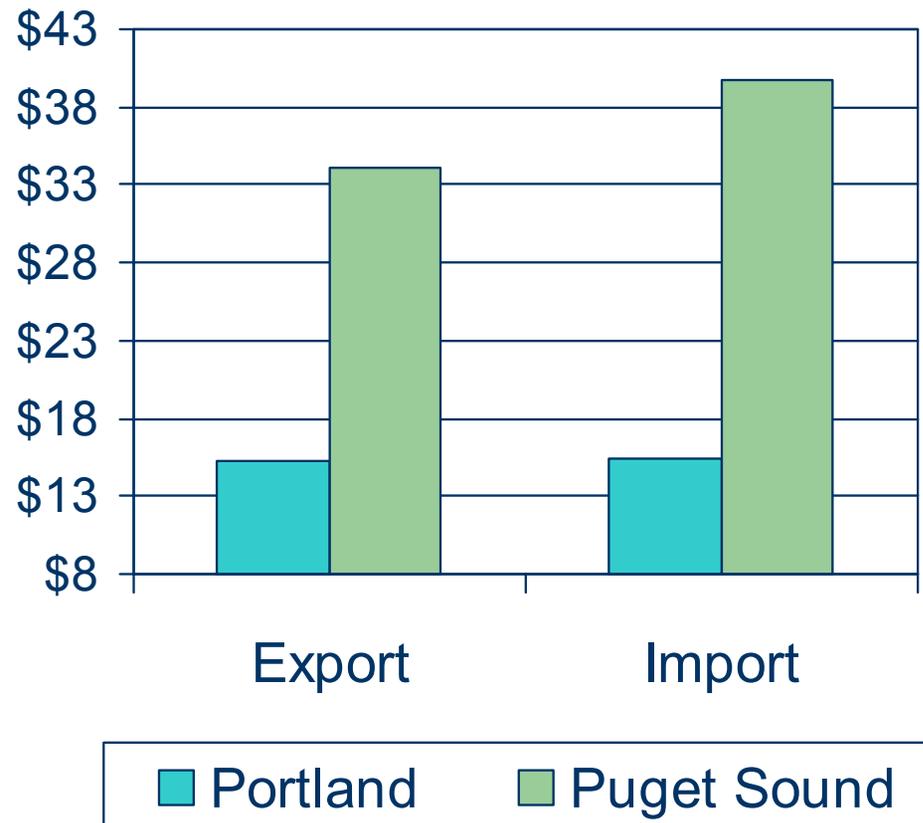
- Channel project reduces Portland vessel cost \$2.50 per ton.
- Puget Sound vessel costs are lower due to better utilization and no draft constraint.



Inland Transportation Costs

Average cost per ton to transport Portland-region cargo is \$19 higher for exports and \$24 higher for imports.

Inland Transport
Cost Per Ton

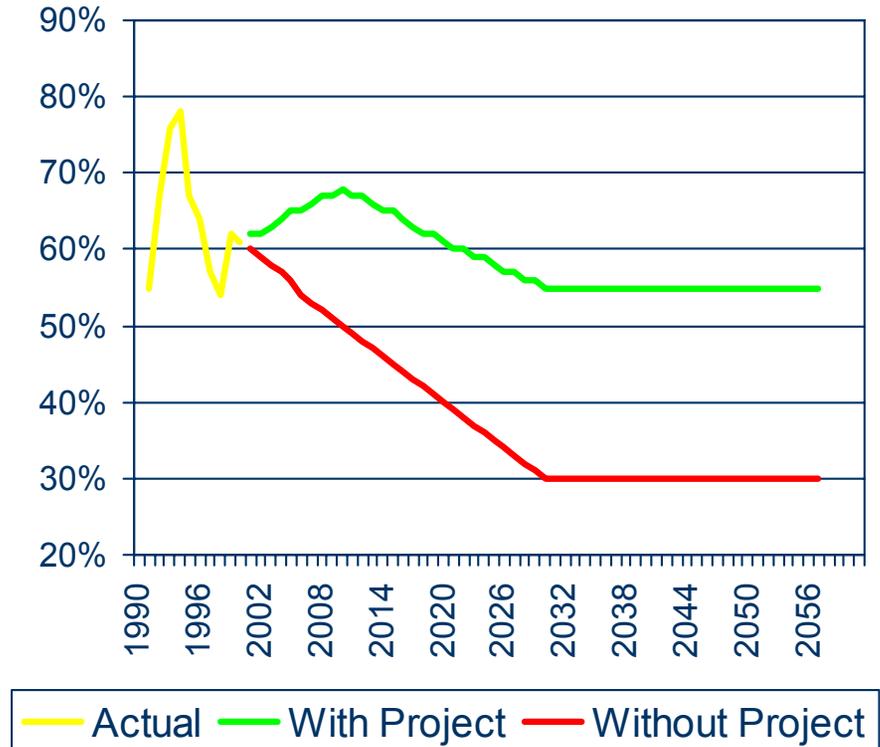


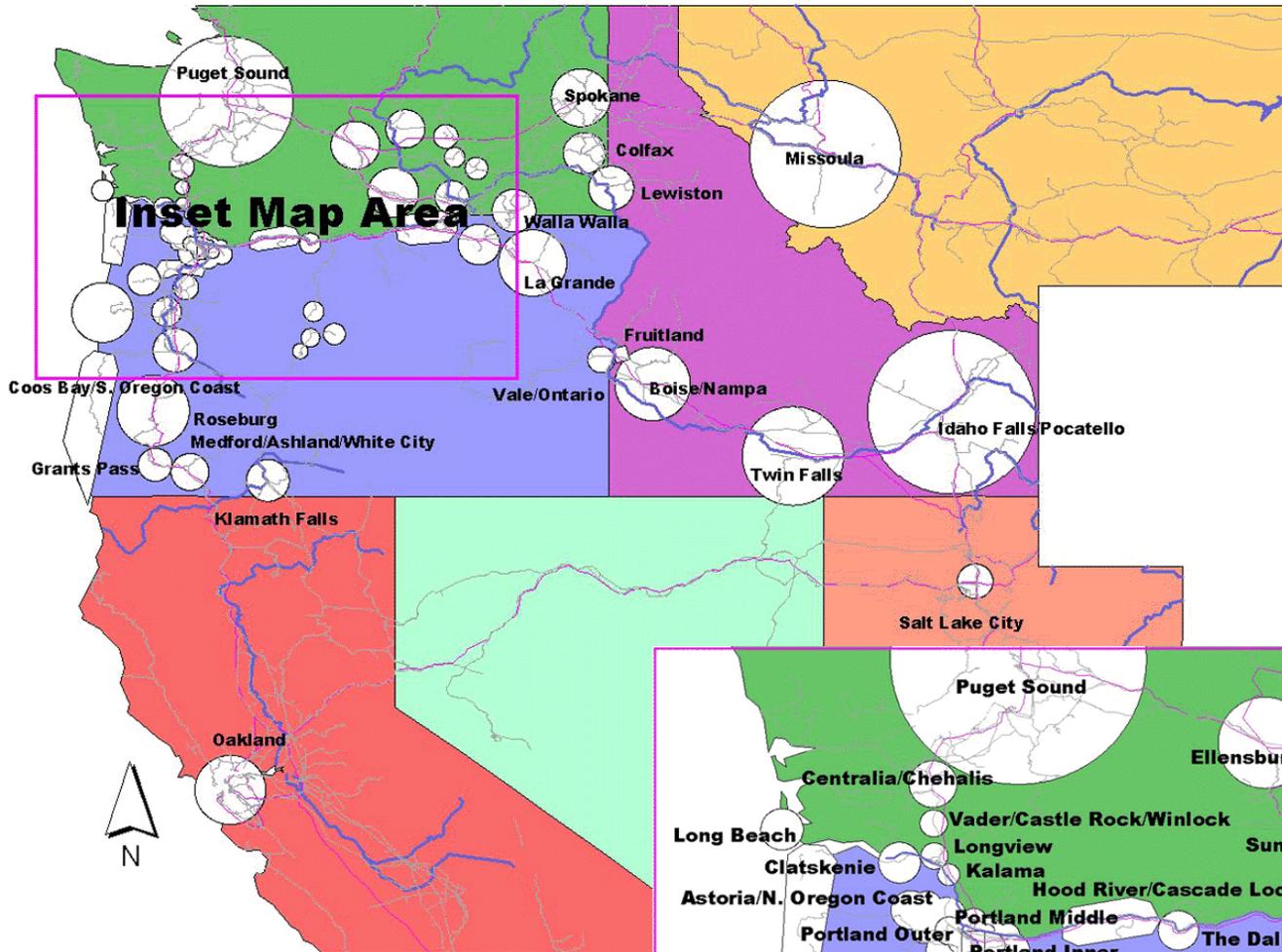
Direct/Indirect Cargo Distribution

Portland Direct

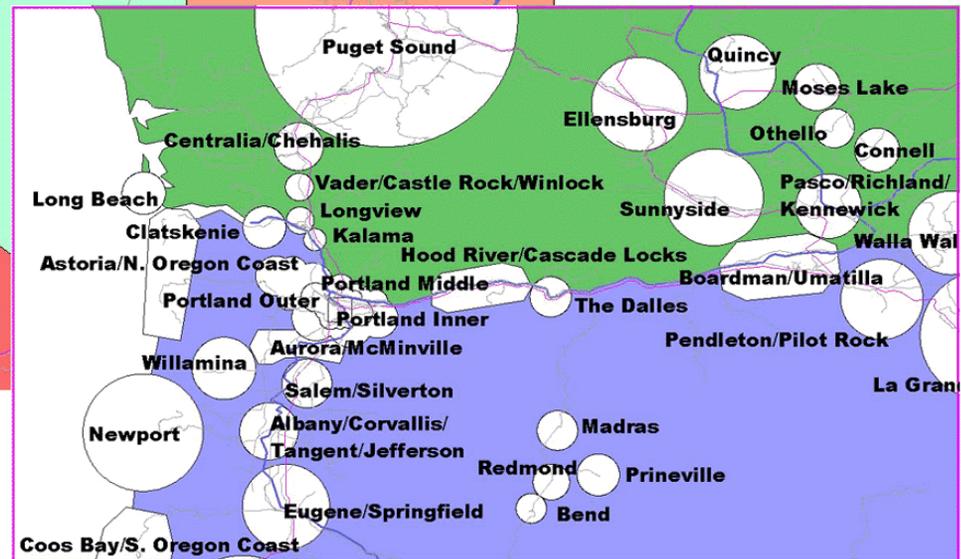
Share of Container Market

- Project changes the distribution of cargo between Portland (direct) and the Puget Sound (indirect)
- Direct share is greater in the with-project scenario.





Zone sizes reflect the area assumed to operate under the same rate structure. Size is not related to the number or value of commodities shipped.



Total Transportation Costs

(millions of dollars)

Year	With Project	Without Project	Difference (Benefit)
2010	\$149.8	\$169.6	\$19.8
2020	\$215.2	\$243.9	\$28.7
2030	\$303.4	\$345.2	\$41.8

Transpacific Export Ton Distribution, Last Port

