

TARIFF REVIEW CYCLE 2013 ISSUE PAPER

Tariff Route Equity

March 19, 2013

FAC-T DISCUSSION GUIDE

Issues Summary

There have been concerns raised over the years that the travel shed adjustments used in the Tariff Route Equity policy are not equitable. For example, the Seattle-Bremerton route is only marginally longer than Anacortes/Orcas Island, but because of the travel shed adjustment, the Bremerton fare is substantially lower. On the other hand, the Edmonds-Kingston route is the same essentially the same distance as the Fauntleroy-Southworth and Port Townsend-Coupeville routes, but the TRE adjustment results in a higher fare for Kingston.

The rationale for these travel shed adjustments is to avoid using pricing to push traffic to one terminal or another among routes with reasonable substitutes. In the case of the Central Sound fares, setting all of the routes to the Seattle-Bainbridge fare helps balance traffic among the routes and recognizes that many customers do choose to use one or the other routes based on factors beyond price.

Over time there has been the suggestion that, to be equitable, the Central Sound routes should pay in proportion to the length of the route as other routes in the system do. Doing this would make the fares align more closely with some of the underlying cost factors of providing these services, but would likely have a significant impact on the travel patterns using these routes and the overall fare revenues.

Policy Options

The question of TRE fares in the Central Sound has come up again and as such the Department has decided that it is time to review the implications of charging the TRE fare on each of the Central Sound routes. This preliminary assessment takes a first cut look at the potential revenue impacts based on different assumptions about ridership reaction to the change.

Analysis

The analysis focuses on initially evaluating the potential revenue impacts of applying TRE fares to the Central Sound Routes. The assumption in this analysis is that only vehicle fares would change since there is a lot of value in having a common monthly pass product for commuters in the Central Sound. At this stage of the process, the goal was to do a threshold level assessment that considers the revenue implications in three separate steps:

1. Revenue impact assuming no change in ridership (either shifts to other routes or travel changes as a result of new prices).
2. Revenue impact assuming the only changes are based on the price elasticity of demand for the ridership on each route. In other words, a higher price on Seattle-Bremerton would lead to fewer trips on that route, but there is no assumption that these trips are captured elsewhere (i.e. there is no substitution, just price response)
3. Conceptual assessment of overall substitution shifts based on response to the higher fare at Bremerton and the lower fare at Kingston.

Revenue Implications of Scenarios 1 and 2

	Seattle- Bainbridge	Seattle- Bremerton	Edmonds- Kingston	Total Central Sound
FY 2012 Vehicle Ridership	1,944,000	647,000	2,033,000	4,624,000
FY 2012 Vehicle Revenue	\$36,861,000	\$13,943,000	\$32,637,266	\$83,441,266
Current Car & Driver Fare	\$12.90	\$12.90	\$12.90	
TRE Car & Driver Fare	\$12.90	\$18.85	\$9.95	
<i>Percent Change</i>	0.0%	46.1%	-22.9%	
Scenario 1: No Ridership Changes				
Annual Ridership	1,944,000	647,000	2,033,000	4,624,000
Annual Ridership Impact	-	-	-	-
<i>Percent change</i>	0.0%	0.0%	0.0%	0.0%
Annual Revenue	\$ 36.9 M	\$ 20.4 M	\$ 25.2 M	\$ 82.4 M
Annual Revenue Impact	\$ 0.0 M	\$ 6.4 M	(\$ 7.5 M)	(\$ 1.0 M)
<i>Percent change</i>	0.0%	46.1%	-22.9%	-1.2%
Scenario 2: Ridership Changes due to Price Elasticity				
Annual Ridership	1,944,000	565,637	2,157,727	4,667,364
Annual Ridership Impact	-	(81,363)	124,727	43,364
<i>Percent change</i>	0.0%	-12.6%	6.1%	0.9%
Annual Revenue	\$ 36.9 M	\$ 18.1 M	\$ 26.6 M	\$ 81.5 M
Annual Revenue Impact	\$ 0.0 M	\$ 4.1 M	(\$ 6.1 M)	(\$ 1.9 M)
<i>Percent change</i>	0.0%	29.7%	-18.5%	-2.3%

If we assume no change in ridership, there would be an overall revenue loss to the system of \$1.0 million, while accounting for potential price effects would increase the loss to \$1.9 million. In other

words the trips drawn to Edmonds-Kingston (due to the lower price) would not be enough to offset the lost revenues from both the lower price at Kingston and the lost ridership at Bremerton.

Revenue Implications of Scenario 3

	LOW	HIGH	
Shift from Brem to Bain	5.0%	7.5%	
Shift from Bain to Edmonds	2.5%	5.0%	
Shift from Brem to TNB	2.5%	5.0%	

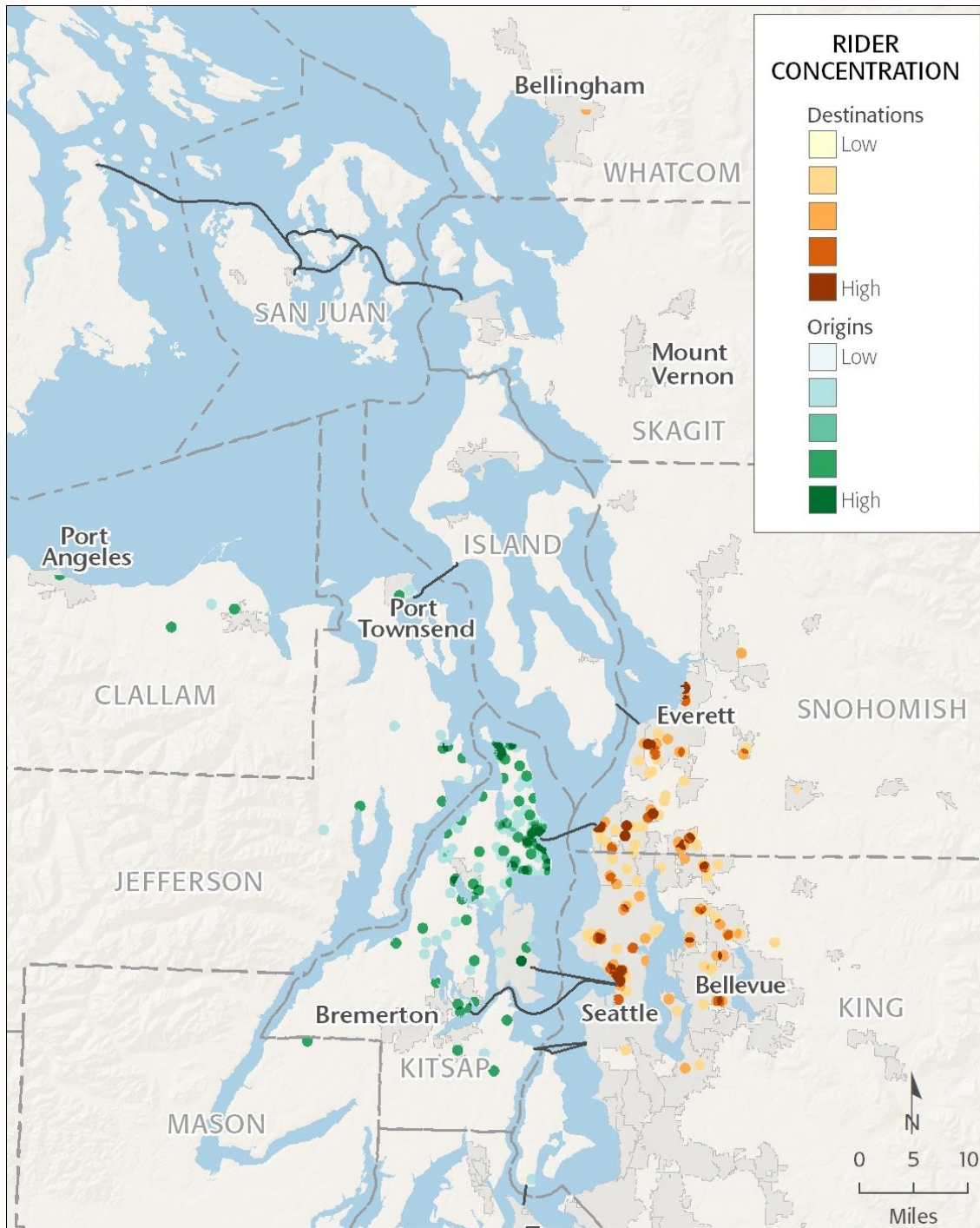
	Seattle- Bainbridge	Seattle- Bremerton	Edmonds- Kingston	Total Central Sound
FY 2012 Vehicle Ridership	1,944,000	647,000	2,033,000	4,624,000
FY 2012 Vehicle Revenue	\$36,861,000	\$13,943,000	\$32,637,266	\$83,441,266
Current Car & Driver Fare	\$12.90	\$12.90	\$12.90	
TRE Car & Driver Fare	\$12.90	\$18.85	\$9.95	
<i>Percent Change</i>	0.0%	46.1%	-22.9%	
<u>Low Estimate of Potential Shifts</u>				
Annual Ridership	1,927,750	598,475	2,081,600	4,607,825
Annual Ridership Impact	(16,250)	(48,525)	48,600	(16,175)
<i>Percent change</i>	-0.8%	-7.5%	2.4%	-0.3%
Annual Revenue	\$ 36.5 M	\$ 18.8 M	\$ 25.8 M	\$ 81.1 M
Annual Revenue Impact	(\$ 0.3 M)	\$ 4.9 M	(\$ 6.9 M)	(\$ 2.3 M)
<i>Percent change</i>	-0.9%	35.2%	-21.1%	-2.7%
<u>High Estimate of Potential Shifts</u>				
Annual Ridership	1,895,325	566,125	2,081,600	4,543,050
Annual Ridership Impact	(48,675)	(80,875)	48,600	(80,950)
<i>Percent change</i>	-2.5%	-12.5%	2.4%	-1.8%
Annual Revenue	\$ 35.9 M	\$ 17.8 M	\$ 25.8 M	\$ 79.5 M
Annual Revenue Impact	(\$ 0.9 M)	\$ 3.9 M	(\$ 6.9 M)	(\$ 3.9 M)
<i>Percent change</i>	-2.6%	27.9%	-21.1%	-4.7%

Given the limited availability of current information about customers and potential travel shifts, we have looked at a couple of scenarios involving relatively modest changes in traffic patterns resulting from the price changes. In the low scenario, a 5% shift from Bremerton to Bainbridge, a 2.5% shift from Bainbridge to Kingston and a 2.5% shift from Bremerton to the Tacoma Narrows Bridge would result in an overall loss of \$2.3 million to the system.

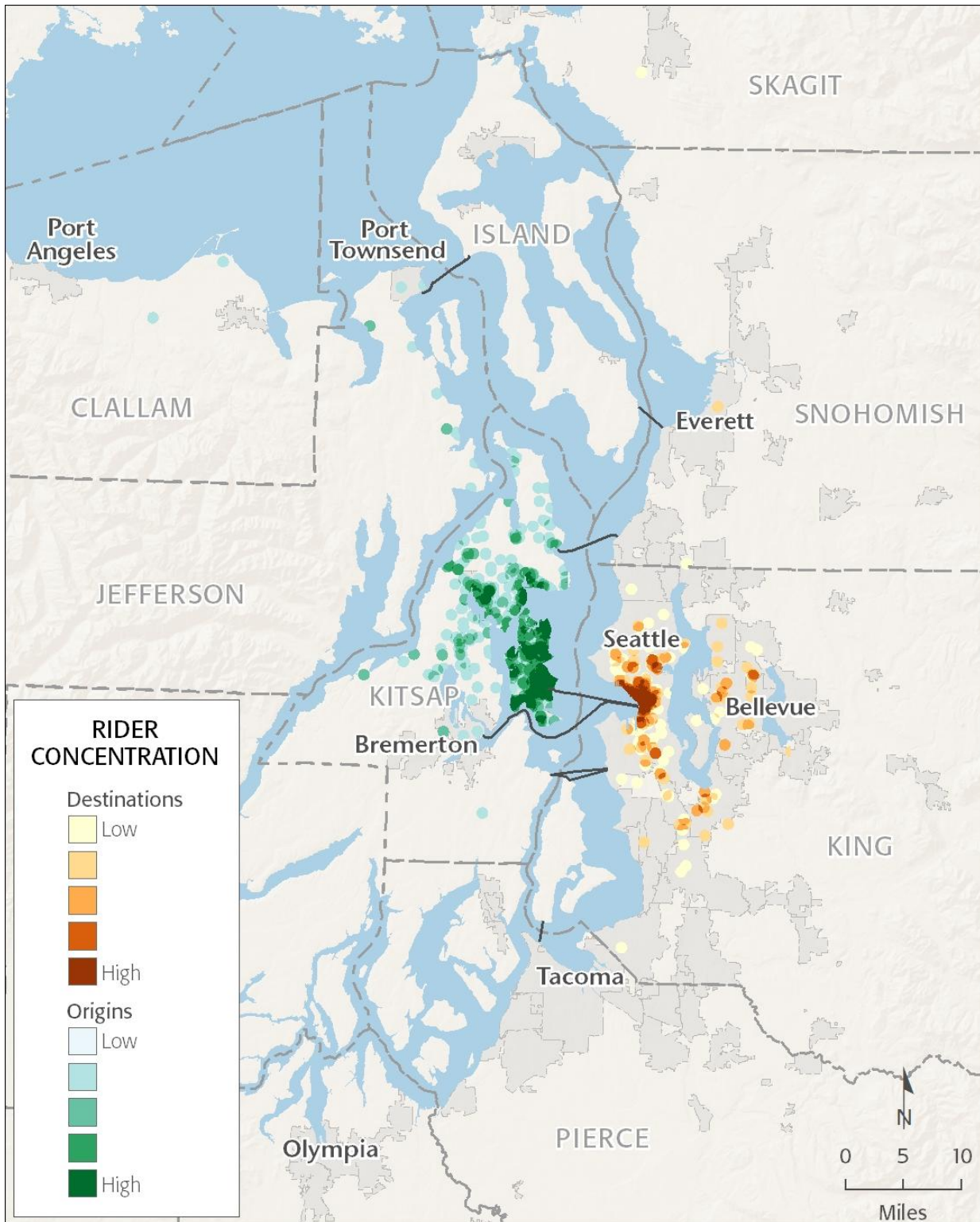
A somewhat higher reaction where 7.5% of Bremerton shifts to Bainbridge, 5% of Bainbridge shifts to Kingston and 5% of Bremerton shifts to the TNB would result in \$3.9 million in revenue losses to the system.

To provide context for these shifts, please review the maps on the following pages showing the primary commute flow for each route to illustrate the degree to which origins and destinations extend throughout the travel shed.

Edmonds-Kinoston Commute Pattern (2006)



Seattle-Bainbridge Commute Pattern (2006)



Seattle-Bremerton Commute Pattern (2006)

