

APPENDIX J

REVIEW OF ONE-POINT TOLL COLLECTION POLICY

1.0 OVERVIEW

Per legislative direction included in the 2008 Transportation Budget, The Washington State Department of Transportation Ferries Division (WSF) was asked to “develop pricing policy proposals and evaluate the one-way fare policy in effect on some routes” (section 225 (8)(a)(iii)). The one-way fare policy for passengers (and vehicles in certain instances) is thought to have some negative effects: (1) it may lead to some lost revenues to the ferry system; (2) it affects how customers use the ferry system, where there are drive-around options; and (3) it potentially hinders WSF’s ability to implement adaptive management pricing strategies. In light of recent long range planning efforts and the specific direction included in ESHB 2358 to evaluate pricing strategies designed to manage demand, the 2008 Legislature requested further analysis of the one-way fare policy (i.e. “one-point toll collection”) in effect on many routes.

2.0 ONE-POINT TOLL COLLECTION: WHERE & WHY

The WSF system carries over 23 million passengers per year. Given the high volume of sailings, the unique geography of the Puget Sound, and the operating expenses associated with fare collection, WSF collects fares in only one direction on many routes in the system. One-point toll collection has been an efficient way to minimize costs for both riders and WSF. Costs associated with toll collection include transaction times for consumers and WSF staff, operating costs to the ferry system, and capital costs for toll collection infrastructure. By not building and staffing additional toll booths at many terminals, WSF has achieved substantial cost savings.

One-point toll collection is based on the assumption that passengers departing from a terminal where passenger tolls are not collected will be returning to their point of origin via a westbound ferry, subsequently paying the fare at the westbound terminal. The premise is the same for vehicles, though one-point toll collection for vehicles exists only on island routes that do not have a drive-around option.

Exhibit 1 summarizes toll collection policies by route.

Exhibit 1 Fare Collection Policy by Route

Route	Passengers	Vehicles
Vashon Island routes	1-point toll collection (collected to going to Vashon)	1-point toll collection (collected to going to Vashon)
Central Sound	1-point toll collection (collected Westbound)	Collected each way
Port Townsend-Keystone	Collected each way	Collected each way
Mukilteo-Clinton	1-point toll collection (collected Westbound)	Collected each way
San Juan Islands	1-point toll collection (collected to going to Islands)	1-point toll collection (collected to going to Islands)
International service	Collected each way	Collected each way

Source: Berk & Associates, 2008

3.0 EFFECTS OF ONE-POINT TOLL COLLECTION

To date, the assumption has been that the total cost savings associated with one-point toll collection outweigh potential negative effects. The negative impacts can be divided into two categories - those that affect current operations and those that may have an impact on the potential for new operational and pricing strategies.

The impacts associated with current operations are the result of travel behavior effects of the one-point toll collection of passenger fares on routes where there is a drive-around option. As a result, the relevant cost savings is the avoided cost of collecting passenger fares on the Central Sound routes (Fauntleroy-Southworth, Seattle-Bremerton, Seattle-Bainbridge, Edmonds-Kingston) and the Mukilteo-Clinton route.

In 2004, as part of a review of the one-point toll collection policy for the Tariff Policy Committee, WSF estimated that these avoided costs would amount to \$2.2 M in annual terminal operating costs and approximately \$900,000 in one-time costs for terminal modifications to install fare collection equipment. Updating these costs to reflect inflation since 2004 would result in annual operating cost savings of \$2.5M and a one-time capital cost savings of \$1M.

However, these cost savings are offset by lost revenue on routes where there is a drive-around option, and customers choosing to travel more frequently in the eastbound direction.

Traffic Imbalance

As a result of one-point toll collection, the system experiences more eastbound than westbound trips on average. It is difficult to measure this imbalance precisely, since information on eastbound passengers is not collected on affected routes. Using vehicle traffic as a proxy for passenger traffic, the 2004 analysis found that:

- There was a considerable imbalance in travel on several routes, in particular Fauntleroy-Southworth and Seattle- Bremerton
- The imbalance in travel had been exacerbated by the increase in fares. During the period studied total travel declined, and westbound trips declined faster than eastbound trips
- The “free” passenger fares in the eastbound direction seemed to lead to higher eastbound traffic

The 2006 Origin-Destination Survey corroborated these findings. It noted that the vast majority of ferry travelers in 2006 make a round trip on the same day. A high percentage of people (93%) taking round trips use the same ferry on their return trip, with four percent returning on another ferry route, and the remaining three percent driving around. While there is more variance at the route level, the 3% systemwide average reflects the imbalance in traffic caused by the one-point toll collection policy.

With the recent opening of the Tacoma Narrows Bridge (TNB), driving around has become a more attractive option to commuters whose destination is either Bremerton or Southworth, as these commuters now have easier access and shorter drive times. A roundtrip that includes an eastbound ferry ride and a westbound drive over the Tacoma Narrows Bridge is also increasingly attractive given that TNB also has a one-point toll collection policy in the opposite direction. To use TNB, eastbound drivers are tolled but westbound drivers are not. Therefore, by taking an eastbound ferry and returning westbound over the TNB, a passenger pays no toll (though there would be a charge for the vehicle on the eastbound ferry trip).

Revenue Effect

The imbalance in traffic described above results in some amount of “lost” passenger revenues for the ferry system. The precise amount of revenue lost is difficult to calculate. Eastbound passenger information is not collected on affected routes, and therefore the true passenger traffic imbalance is unknown. Assuming vehicle trips are a reasonable proxy for passenger trips, it is still not appropriate to assume that 100% of eastbound passengers would take a westbound trip if they paid half of the fare at each terminal. Some riders are likely to be lost off the system entirely due to price sensitivity, while others simply make one-way trips and return via non-ferry modes due to the unique nature of their trips.

Assuming the vehicle and passenger eastbound/westbound traffic imbalance are the same (with one to two passengers per vehicle) and assuming all eastbound trips should have a corresponding westbound trip, lost passenger revenues are likely in the range of \$1-2 million annually. For the reasons stated above, this estimate probably overstates the amount of revenue that could be recaptured if tolls were collected in both directions.

While this number is not insignificant, it represents a very small portion of the system's total annual fare revenues. Furthermore, the combined capital and operating costs required to implement toll collection at every terminal are estimated at to be greater than this amount.

4.0 ONE-POINT TOLL COLLECTION AND ADAPTIVE MANAGEMENT STRATEGIES

In addition to revenue impacts, the one-point toll collection policy needs to be evaluated in the context of adaptive management strategies being considered for inclusion in the Draft Long-Range Plan.

Pricing Strategies

Part of the recent long range planning efforts included analysis of pricing strategies like peak period surcharges and off peak discounts, designed to change passenger behavior and alleviate congestion during the peak. To the extent that fares are not collected at every terminal and a pricing signal cannot be sent, the one-point toll collection policy could render these types of pricing strategies ineffective. A peak period surcharge could not be enacted to reduce congestion during the morning commute off of Vashon Island, for example, without a different toll collection policy.

Pricing strategies that would be impacted by one-point toll collection, like peak period surcharges, are geared towards vehicle traffic (where capacity constraints are most severe). Vashon Island routes and the San Juan Islands routes are the only ones in the system with a one-point toll collection policy for vehicles. If it were determined that congestion pricing should be implemented to better balance demand, then fares would need to be collected in both directions. However, at this time congestion pricing is not recommended. Rather, the principal demand leveling strategy (at least initially) is proposed to be a vehicle reservation system.

Operating Strategies

A reservation system is the key adaptive management strategy put forth in the Draft Long-Range Plan. With the potential implementation of a reservation system, WSF will need to evaluate and potentially modify toll collection policies more broadly for both vehicles and passengers. A fully integrated reservation system is tied to fare collection, with the expectation that fares will be collected at the time of reservation. This raises a number of questions regarding fare collection that go well beyond one-point toll collection policies.

An extensive reservation system pre-design that includes examination of fare collection policies (including one-point toll collection) to identify where changes would need to occur and the cost of those changes is expected during the 2009-11 budget cycle. Until that effort is complete, firm recommendations on what, if any, changes are needed to the one-point toll collection policy are premature.

5.0 NEXT STEPS

If it proceeds with a reservation system, WSF will need to ensure that the system is fully integrated with fare collection systems and policies. It is expected that some modifications to fare collection policies will be proposed as part of the reservation system pre-design effort. Depending upon what those modifications are, one-point toll collection may become less of an issue. If not, WSF may need to revisit one-point toll collection policies in conjunction with other fare collection changes needed to successfully implement a reservation system.