



**Washington State
Transportation Commission**

**Long-Term Ferry
Funding Study**



*Ferry Funding Recommendations
Final Report*

February 2009



STATE OF WASHINGTON

TRANSPORTATION COMMISSION

PO Box 47308, Olympia, Washington 98504-7308 • (360) 705-7070

Fax: (360) 705-6802 • E-Mail: transc@wsdot.wa.gov •

<http://www.wsdot.wa.gov/commission>

March 2, 2009

The Honorable Christine Gregoire
Office of the Governor
P.O. Box 40002
Olympia, Washington 98504-0002

The Honorable Members
Senate Transportation Committee
P.O. Box 40482
Olympia, Washington 98504-0482

The Honorable Members
House Transportation Committee
P.O. Box 40600
Olympia, Washington 98504-0600

Dear Governor Gregoire, Senators, and Representatives:

We are pleased to submit to you the Final Report of the Commission's Long-Term Ferry Funding Study as required under the 2007-09 Transportation Budget (*ESHB 1094, Section 206*). The Commission was asked to submit ferry funding recommendations based on long range plans and other data prepared by Washington State Ferries. It is reasonable to note that long range forecasts, especially in out years, can be impacted by events and circumstances which could change assumptions used in the report. However, the Commission's central conclusion is that over the next 22 years a substantial investment of capital is needed to keep the state ferry system viable, and to provide safe, reliable service to its current and future customers.

The critical assets of the system – ferries and terminals – have limits to their useful life. High levels of maintenance and preservation may extend the useful life of these assets; but those life-extending costs and the eventual replacement costs require substantial capital funding each biennium of the planning horizon. Policy makers are challenged to identify new revenues derived from state and local sources as well as operating income. We believe a local component is important in order to increase statewide support. While we think local funding initiatives would be preferable, after extensive consideration the Commission concludes that the most reliable “local” source in the foreseeable future will be ferry fares.

The Commission is mindful of the current economic difficulties, the decline in public revenues, and growing costs of assets and operations. While we understand the tremendous budget pressures that exist, our hope is that a sustainable, medium to long-term fiscal solution for ferries can be reached this biennium.

Sincerely,

Dan O'Neal
Chair, Washington State Transportation Commission

final report

Ferry Funding Recommendations

prepared for

The Washington State Transportation Commission

prepared by

Cambridge Systematics, Inc.
555 12th Street, Suite 1600
Oakland, California 94607

date

February 2009

Table of Contents

Executive Summary	ES-1
1.0 Introduction	1-1
1.1 Impetus for the Study - Brief History of the Ferry Funding Crisis	1-1
1.2 This Study	1-3
2.0 WSF's Funding Need	2-7
3.0 Background on Funding Sources Considered.....	3-1
3.1 State Sources	3-1
3.2 Local Sources	3-11
3.3 Ferry System Operating Income.....	3-27
3.4 Federal Sources	3-39
4.0 Alternative Funding Scenarios.....	4-1
4.1 Preferred Funding Alternative	4-3
4.2 Financing the Long-Range Plan.....	4-5

Appendices available on the attached CD:

**Appendix A. Phase I Report on Long-Term Ferry Funding Study
February 2008**

Appendix B. Phase I Overview and Study Update Presentation May 2008

**Appendix C. Part II Technical Memorandum - Initial Screening of Ferry
Funding Sources July 2008**

**Appendix D. Initial Screening of Ferry Funding Sources Presentation
July 2008**

Appendix E. Update on Funding Study Presentation September 2008

List of Tables

Table 3.1	Evaluation Results From Initial Screening Process	3-2
Table 3.2	State Tax and Fee Levels Necessary to Close the Funding Gap	3-6
Table 3.3	Rationale for Discarding, Setting Aside, or Retaining State Sources of Funds	3-9
Table 3.4	Assumptions Used in State Tax and Fee Revenue Forecasts	3-11
Table 3.5	Pros, Cons, and Legal Restrictions of Funding Sources Selected for Detailed Analysis.....	3-18
Table 3.6	Illustrative Tax and Fee Levels Necessary to Close Scenario A Operating Gap and Scenario B Total Gap, Motor Vehicle Excise Tax	3-25
Table 3.7	Illustrative Tax and Fee Levels Necessary to Close the Operating Gap, Local Registration Fee	3-26
Table 3.8	Illustrative Tax and Fee Levels Necessary to Close the Operating Gap, Local Property Tax.....	3-26
Table 3.9	Illustrative Tax and Fee Levels Necessary to Close the Operating Gap, Utility Tax	3-26
Table 3.10	Assumptions Used in Local Tax and Fee Revenue Forecasts	3-27
Table 3.11	Summary of Types of Fare Increases.....	3-35
Table 4.1	Funding Alternatives to Address Scenario A Operating and Capital Needs.....	4-2
Table 4.2	Funding Alternatives to Address Scenario B Operating and Capital Needs.....	4-3

List of Figures

Figure ES.1	Scenarios A and B Operating and Capital Needs and Sources of Funds	ES-4
Figure ES.2	Fare Revenue Per Biennium Under Different Fare Increase Scenarios <i>Millions of YOE Dollars</i>	ES-6
Figure ES.3	Local Tax Revenue Generation Potential Compared With Ferry Funding Gaps	ES-8
Figure ES.4	Potential Yield of State Funding Sources Relative to 22-Year Average Funding Gap	ES-10
Figure ES.5	Commission Preferred Funding Alternative.....	ES-11
Figure 1.1	Washington State Ferries Operating and Capital Budgets, 1995 to 1997 <i>Prior to Removal of the Motor Vehicle Excise Tax</i>	1-2
Figure 1.2	Washington State Ferries Average Fuel Costs, FY 2003 to 2008.....	1-3
Figure 1.3	Ferry Financing Legislation Overall Work Program, 2006 to 2009.....	1-5
Figure 2.1	Scenarios A and B Operating and Capital Needs.....	2-8
Figure 2.2	Scenario A Capital Revenue and Unfunded Capital Need <i>Millions of Year of Expenditure Dollars</i>	2-9
Figure 3.1	Potential Yield of State Funding Sources Relative to 22-Year Average Funding Gap, <i>2008 Dollars</i>	3-3
Figure 3.2	Yield of Selected State Sources <i>Year of Expenditure Dollars, Millions</i>	3-5
Figure 3.3	Passenger Vehicle Registration Amounts by State.....	3-8
Figure 3.4	Responses to Question Regarding How Ferry System Costs Should Be Distributed	3-14
Figure 3.5	Yield and Reliability of Local Funding Sources.....	3-15
Figure 3.6	Tradeoff Between Ferry District Size and Political Feasibility	3-20
Figure 3.7	Local Tax and Fee Revenue Generation Potential Compared With Ferry Funding Gaps	3-24
Figure 3.8	Local MVET Levels Necessary to Raise Equivalent of Ferry Funding Gap	3-25
Figure 3.9	Fare Revenue Per Biennium Under Different Fare Increase Scenarios <i>Millions of YOE Dollars</i>	3-29

Figure 3.10	Historical Ferry Fares Indexed to Inflation	3-30
Figure 3.11	FY 2009 Projected Fare Revenues by Category <i>In Millions</i>	3-33
Figure 4.1	Commission Preferred Funding Alternative.....	4-4
Figure 4.2	Capital Outlays and Revenue by Biennium <i>In Millions of Year of Expenditure Dollars</i>	4-6
Figure 4.3	Interest Payments by Biennium <i>In Millions of Year of Expenditure Dollars</i>	4-7

Executive Summary

The Ferry Funding Crisis

Washington State Ferries (WSF) is facing a funding crisis that extends beyond the current dilemma of how to close the gap between operating income and rapidly rising operating costs. More dramatic and more threatening to the system's existence is the large unmet capital funding needed to perform necessary preservation work and to replace aging vessels. Simply put, unless a source of substantial new revenue is tapped, the ferry system will face certain cuts in service and, over time, declining condition of both the fleet and terminal facilities.

Prior to 2000, WSF obtained a large share of its operating and capital revenue from the Motor Vehicle Excise Tax (MVET). The Washington State Legislature eliminated the MVET in 2000 in response to a voter initiative. Since then, the ferry system has continued operations in large part by delaying major maintenance and replacement of ferry vessels and terminals. Money intended for capital preservation and reinvestment has been redirected through ad hoc administrative transfers from the capital account to cover rising fuel and labor costs that could not be met despite substantial fare increases since 2000.

As a result of deferred preservation and maintenance, some existing vessels are badly in need of repair or replacement. Over the past 18 months, deferred maintenance has resulted in several unanticipated service interruptions. Declining vessel condition will continue to increase the incidence of unscheduled emergency repairs and maintenance, causing more frequent service interruptions and cancellations. If spare vessels in good operating condition are unavailable, even relatively minor problems may cause service interruptions. Vessels declining to the worst condition will need to be taken out of service for safety reasons. Without dedicated, sustained funding for vessel maintenance and preservation, there may not be enough capacity to maintain the current schedule of operations, or to provide the level of reliability that customers depend on.

In addition to capital preservation, ferry operations face long-term funding challenges as well. Rising fuel prices have raised the cost of operations and simultaneously depressed ridership and fare revenue. Although fuel costs have moderated in recent months, they remain a major point of uncertainty.

Current evaluations of fare elasticity suggest that if fares are raised to help pay for increased operating costs, total fare revenue could increase despite some reductions in ridership. However, if fares are raised too high, or service is cut to save on costs, ridership and revenue loss can be expected. Reduced ridership and revenues and increasing costs could over time create a downward spiral seriously disrupting business, commuter, recreational, and tourist travel alternatives in the Puget Sound region.

The Funding Need

In its most recent estimates, WSF has indicated that it requires a total of approximately \$4.5 billion dollars for both capital and operating expenses over the next 22 years to maintain the existing system with minor service enhancements (WSF Long-Range Plan Scenario A)¹. This shortfall includes \$1.1 billion that WSF assumes will be covered by administrative transfers to the capital program, and \$88 million it assumes will be covered by administrative transfers to the operating program. In considering these totals, there is little need to differentiate between a capital and operating shortfall. Only a small fraction of the total funding gap can be attributed to the operating program; over 90 percent of the gap is in the capital program.

To provide a reduced level of service involving service cuts on several intrastate routes and elimination of the Anacortes-Sidney route (Long-Range Plan Scenario B), WSF estimates it will require \$1.3 billion in additional funds, along with the \$1.2 billion in capital and operating transfers mentioned above, for a total of \$2.5 billion over 22 years.

This Study

The state legislature initiated this study in response to WSF's funding crisis. Legislative budget proviso contained in ESHB 1094 Section 206 required the Washington State Transportation Commission to evaluate ways of meeting WSF's **long-term** funding needs, as described in its Long-Range Plan, and to evaluate "state, regional, or local" funding options. The legislature also required this study to be coordinated with a number of concurrent studies mandated by Engrossed House Substitute Bill 2358, "The Ferry Bill."

This report is the culmination of the Long-Term Ferry Funding Study. It is the fourth and final in a series of reports prepared over the last year. The main text of this report includes extensive analysis of the pros and cons of different ways of funding WSF's long-term needs, arranged in the following sections:

- **Section 1.0** provides an **introduction** that describes the history of the ferry funding crisis, and the impetus for this study;
- **Section 2.0** describes funding **needs estimates** provided by WSF in its Draft Revised Long-Range Plan (January 31, 2009 version).
- **Section 3.0** describes in detail the **pros, cons, and revenue generation potential of possible funding sources**, grouped into state, local, ferry system, and Federal sources.

¹ Plan A includes minor capital improvements, such as those necessary to allow a reservation system.

- **Section 4.0** presents alternative funding scenarios for combining various revenue sources to meet WSF's funding needs, and presents the Commission's **funding recommendations**.

This executive summary focuses on presentation of the Commission's findings and recommendations. For greater detail and background information on the recommendations, the reader should refer to the main text of the report.

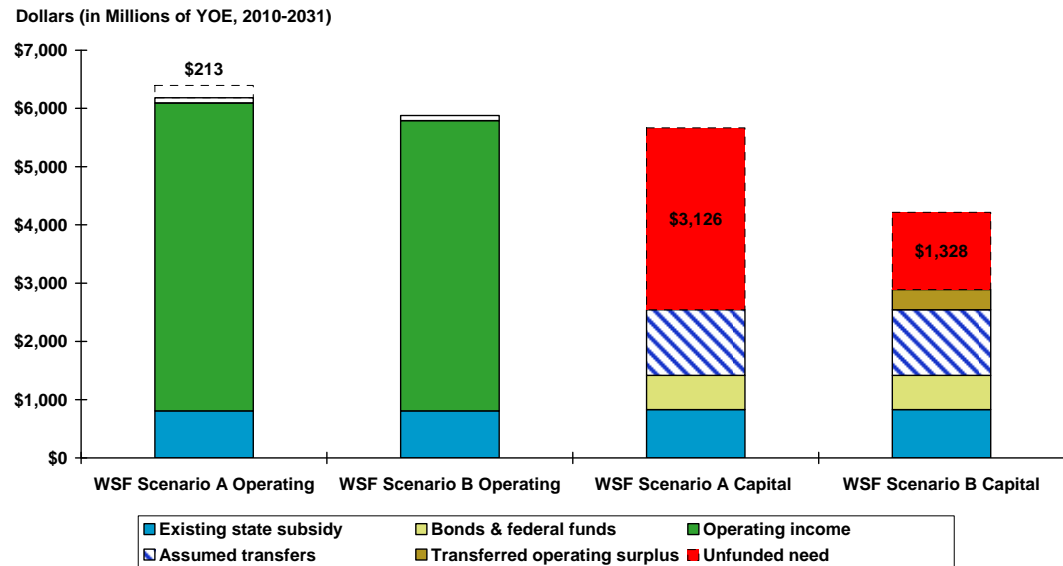
Commission Findings and Recommendations for Funding WSF's Long-Term Needs

Finding: Long-Term Capital Funding Is the Most Critical Need

WSF's most pressing funding need is in the long-term capital program. While several successive analyses by WSF and the Joint Transportation Committee (JTC) staff have provided different estimates of the cost of necessary capital preservation and reinvestment, it is very clear that long-term capital needs are substantial. There are explainable differences in these scenarios about the timing of specific capital expenditures for both terminals and vessels, sizing of new vessels, and assumptions regarding cost escalation over time. However, the inescapable message is that for WSF to continue to provide a level and quality of system service comparable to current offerings, significant new capital funding is needed.

The most current WSF Long-Range Plan figures available at the time of publication of this report (January 31, 2009 Draft Revised Long-Range Plan) show unfunded capital need over the 22-year timeframe to be approximately \$4.2 billion, after applying existing sources of dedicated state and Federal funds. The Long-Range Plan assumes that administrative transfers from other transportation accounts to the ferry capital account will cover \$1.1 billion of this need, leaving at least \$3.1 billion in unfunded capital need. In contrast, the projected cumulative operating deficit over the same 22-year period is approximately \$213 million, or only about 5 percent of total unfunded need. Figure ES.1 illustrates the unfunded operating and capital need for both Scenarios A and B of the WSF Long-Range Plan.

Figure ES.1 Scenarios A and B Operating and Capital Needs and Sources of Funds



Source: Washington State Ferries Draft Revised Long-Range Plan, January 31, 2009.

Finding: Ferry Fares Are Not a Viable Source of Capital Funding

Fare increases are a certainty in the future in order to help manage the gap between operating expenses and available operating revenues. WSF has assumed average fare increases of 2.5 percent per year on top of modest 1 to 2 percent per year growth in ferry ridership, in estimating future fare revenue. This level of fare increase still leaves the \$213 million cumulative operating deficit shown in Figure ES.1. Thus, fare increases of more than the 2.5 percent assumed by WSF would be needed just to close the operating funding gap.

Even much more aggressive fare increases are not a viable source of capital funding for the WSF Scenario A. Due to fare elasticity of ferry users, it is unlikely that fares could be raised high enough to fully fund capital needs of the system. Net fare revenues would likely start to decline due to decreasing ridership if fares were raised to the levels necessary to make a meaningful contribution to long-term capital financing needs.

Recommendation: Increase Ferry Fares and Other Operating Revenues to Close Operating Funding Gap

The Commission recommends incremental fare increases above the WSF assumed 2.5 percent per year, sufficient to close the operating gap and eliminate the need for additional operating subsidy above that already provided by dedicated state sources, including gas taxes and vehicle registration fees. Increasing fares will also serve as a meaningful, locally based contribution to ferry funding to complement state sources.

Allowing fares to rise over time to eliminate the operating gap would result in farebox recovery ratio eventually reaching 97 to 99 percent by 2031. The remainder of operating costs would be paid with ancillary revenues, such as advertising, concessions, etc., as well as existing state sources dedicated to subsidize operations, which the Commission recommends continue in the future.

In addition to periodic (annually or less frequent as needed) fare adjustment, the Commission concurs with the WSF recommendation to implement a fuel surcharge. The surcharge would be adjusted periodically to reduce the impact of changes in fuel price on the operating budget, and would be included in the price of passenger tickets, but clearly identified. Because the surcharge is determined by future fuel prices, it would vary from year to year and is not cumulative. The surcharge would be calculated to offset increases in fuel prices only to the extent they exceed historical average prices by a significant percentage. The WSF Long-Range Plan analysis estimates that typical fuel surcharges in the first 16 years of the Long-Range Plan scenarios would result in an increase in base ferry fares of 1 to 5 percent².

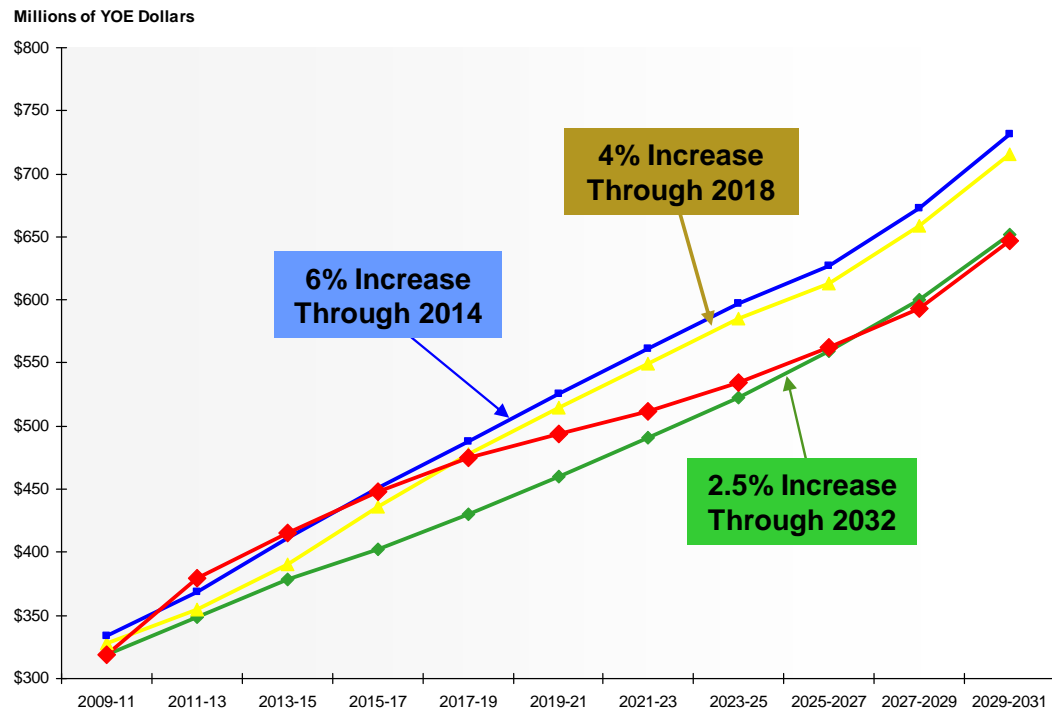
To raise additional operating revenue, the Commission recommends adoption of a “super summer surcharge” that would increase one-way car driver fares during the approximate period July 1 through Labor Day weekend. There is already a summer surcharge that extends from June 1 through mid-October, and which adds about 25 percent to the price of a typical one-way car driver fare (purchasers of multiuse fare cards do not pay the current surcharge). Adding another 15 percentage points to the base fare (i.e., a total surcharge of about 40 percent over off-season base fares) during this period would raise approximately \$2 million in additional revenue per year. A positive feature of this additional surcharge is that it disproportionately impacts out-of-state users who do not otherwise subsidize the ferry system through gas taxes or vehicle registration fees.

Figure ES.2 illustrates the types of fare increases that could fill the Long-Range Plan operating gap. Fare increases of approximately 4 percent over 9 years or 6 percent over 5 years, plus the super summer surcharge and fuel surcharge, would be necessary. These are estimates to illustrate the effectiveness of different fare increase scenarios in meeting operating needs. More precise fare rates would need to be calculated with WSF’s fare revenue model to determine the optimal rate of increase and duration over which to apply a level of increase.

Ancillary revenues, such as advertising income and on-board concessions, are unlikely to constitute a significant percentage of operating expenses. Nonetheless, the Commission recommends that WSF pursue additional revenue from these sources, and implement new programs to augment operating income, including sale of vessel and/or terminal naming rights.

² Refer to the WSF Revised Draft Long Range Plan, Section 14.2, for additional discussion of the fuel surcharge.

Figure ES.2 Fare Revenue Per Biennium Under Different Fare Increase Scenarios
Millions of YOE Dollars



“Revenue target” (red) is fare revenue required to cover WSF Scenario A operating needs in each biennium, such that no additional state subsidies are needed beyond dedicated revenues and \$88 million in administrative transfers expected by WSF.

“2.5% Increase” – (green) Revenue estimate in WSF Long Range Plan Scenario A (January 30th, 2009.) Assumes 2.5% per year fare increase plus variable fuel surcharge.

“4% Increase” – (yellow) Fares increased at up to 4 percent per year, plus fuel surcharge and super summer surcharge until no additional increases are needed to meet biennium revenue target. Fares increased thereafter at 2.5% per year.

“6% Increase” – (blue) Same as 4% increase but capped at 6% per year until revenue target met, thereafter at 2.5% per year.

Finding: Challenges to Local Funding Districts Are Substantial

The Commission believes local participation in funding the WSF system is vital to its continued viability. To this end, the Commission studied numerous potential sources of revenue that could be generated locally (i.e., at the city, county, or multicounty level). In addition, the authority to implement local funding mechanisms and the related governance issues were explored. The Commission found that the revenue generation potential of any district comprised mainly of ferry-dependent populations was very small relative to system capital funding needs. That is, local taxes or fees would have to be set very high relative to existing taxes in order to meet funding needs. The smallest such district examined includes Island, Jefferson, San Juan, and Kitsap Counties, plus Vashon

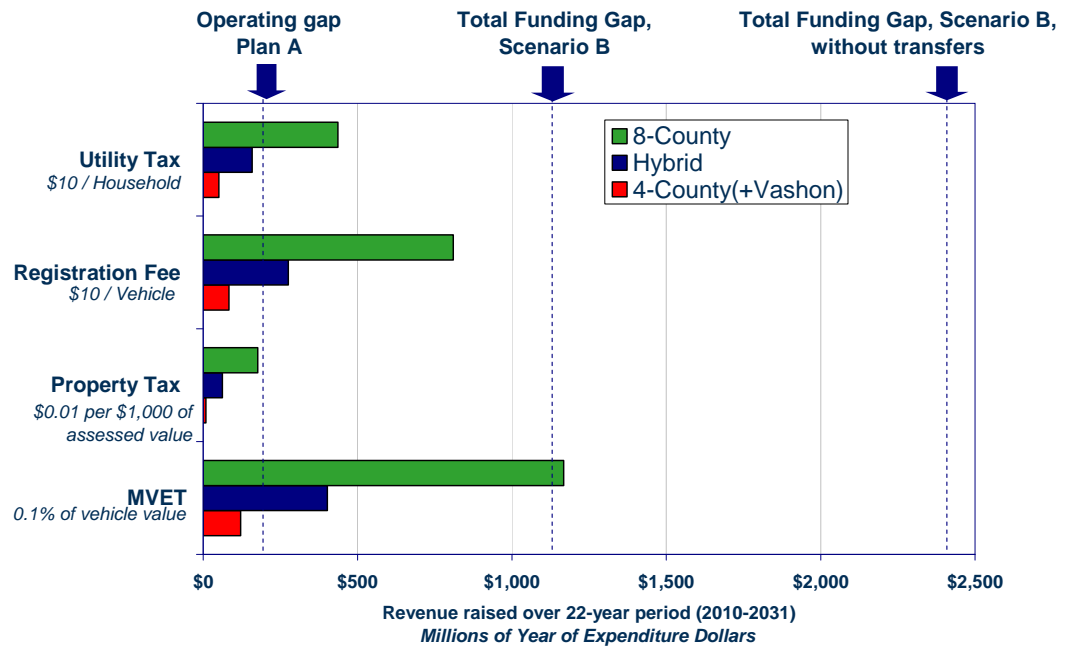
Island, a part of King County. While these counties generate a significant percentage of total ferry trips, their resident populations (or number of households, registered vehicles, or property tax base, any of which is an indicator of the tax revenue generation potential) are small as a percentage of statewide totals and even of the Puget Sound Region.

Alternately, the local funding district would have to be expanded to include a much larger percentage of the Puget Sound population to generate sufficient revenue. A significantly larger eight-county district, encompassing the smaller four-county district plus the remainder of King County and Skagit, Pierce, and Snohomish Counties was also evaluated. This eight-county district contains about 9.5 times as many housing units as the smaller four-county plus Vashon district, indicative of its much larger revenue generation potential. It may be more difficult to obtain participation from those who are infrequent users of the system and not dependent upon it to some degree for transportation or economic activity, and thus the larger district's higher revenue-generation potential is offset by the likely greater political challenge to securing broad support for a local funding measure. A third "hybrid" funding district was evaluated encompassing the four-county-plus Vashon district and the portions of just King and Snohomish Counties west of Interstate 5.³

Figure ES.3 illustrates the revenue generating potential of the four local tax sources found to be most appropriate for the purpose of funding ferry operating and/or capital needs, for three different ferry funding districts. As the figure underscores, either fairly high tax rates or substantially larger districts are required to generate revenue in the range of even the WSF Scenario B needs, which are substantially lower than those of Scenario A. Only the operating needs of Scenario A are included in this figure, as the capital needs of Scenario A exceed the reasonable funding capacity of local revenue sources.

³ The hybrid district was defined and evaluated to estimate the revenue potential of those communities most directly served by the ferry system. The I-5 boundary was selected simply as an approximate dividing line to facilitate revenue analysis. If pursued, a more precise and more rational dividing line would be developed for detailed analysis.

Figure ES.3 Local Tax Revenue Generation Potential Compared With Ferry Funding Gaps



Note: This chart compares only the operating needs of WSF Scenario A, as the capital needs of Scenario A (\$3.1 billion to \$4.2 billion over 22 years) are believed to be beyond the reasonable funding capacity of local district revenue sources. Combined capital and operating needs are indicated for Scenario B.

The Commission believes it is very likely that a multicounty district would require establishment of a multijurisdictional administrative body to ensure local constituents that the funds collected were spent appropriately on services that benefit those paying the tax or fee. Similarly, if a single-county funding apparatus were established, it would be difficult to prevent fragmentation of the funding program. The Commission notes that local funding authority already extended to the counties is not well utilized, and there has been little support from public officials of locally generated tax revenue to support the centralized WSF auto ferry system. Thus, there is legitimate concern and doubt whether support will materialize in the future for a local tax or fee proposal of sufficient size to make a significant contribution to ferry system capital needs.

Recommendation: Use Fare Increases in Lieu of Local Tax Funding, While Leaving the Option Open for the Future

The Commission concludes that local participation in the form of direct user fees (i.e., ferry fares) is the most plausible near-term solution to meet the operating needs of the system. Local funding sources are unlikely to be sufficiently large to fund the capital needs, and the implementation challenges are too complex to justify setting up a local funding district to fund only the relatively small operating gap.

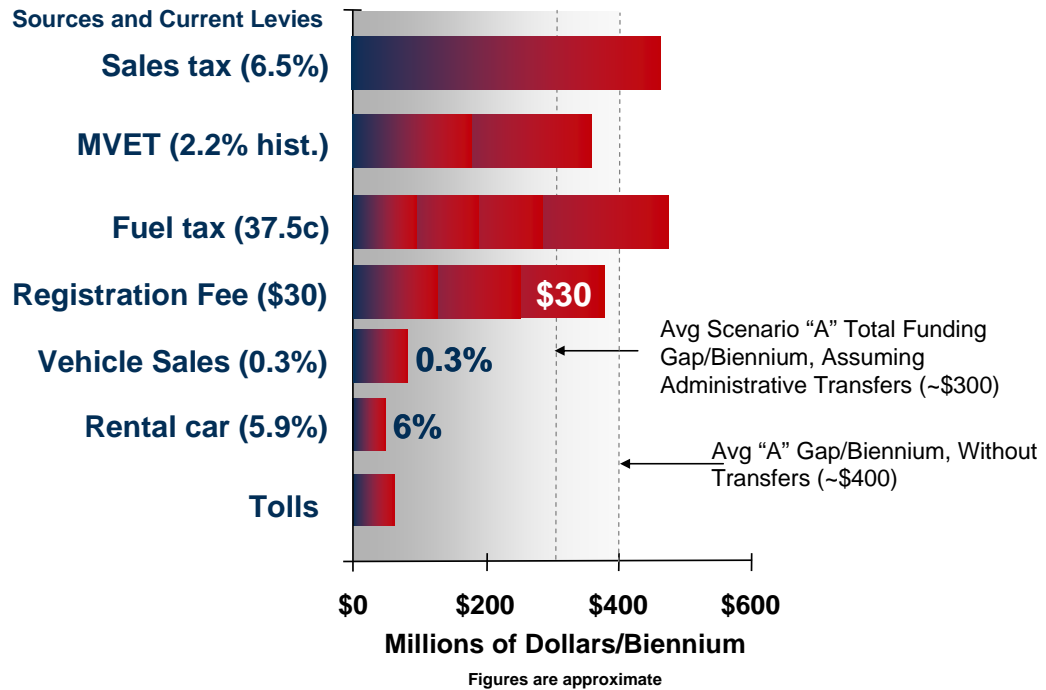
Counties and cities are not dissuaded from pursuing a local funding option to help fund either operations or capital needs, but the numerous challenges identified by this study, such as fragmentation of funds; complicated multijurisdictional governance; and competition with other local funding priorities (e.g., public education), should be addressed by any such proposal. Fares are a logistically simpler method of raising a local contribution, and the collection mechanism already exists. There is a direct connection or “nexus” between the payment of fares and benefits received.

Finding: A Statewide Source Is the Most Feasible Means of Meeting Long-Term Capital Needs of the WSF System

The Commission studied numerous sources of major funding before settling on a small number of potential sources that met the tests of revenue generation potential (yield, reliability, administrative efficiency, and other criteria). Due to the size of the funding base, statewide taxes have the potential to support significant long-term capital needs of the system, even at relatively low tax rates. State sources, such as the motor fuel tax and vehicle registration fees, are already used to subsidize both capital and operating expenses; there is little in the way of administrative barriers to implement expansion of these funding programs.

The most promising source of statewide funds include the sales tax, fuel tax, vehicle registration and weight fees, and a vehicle excise tax. Figure ES.4 illustrates the revenue generation potential of these sources compared to the estimated biennial funding gap of WSF’s Scenario A. As this figure indicates, relatively small increments over existing tax rates for the sales or fuel taxes could fund a substantial portion of system needs. An excise tax on motor vehicles (MVET or similar mechanism) would also generate sufficient revenue at tax rates substantially lower than the historical level of the MVET before it was eliminated in 2000.

Figure ES.4 Potential Yield of State Funding Sources Relative to 22-Year Average Funding Gap
2008 Dollars



Note: The figures are approximate. Assumptions used in calculations are documented in the Part II Technical Memorandum – Initial Screening of Ferry Funding Sources report, available on the Commission web site and on the CD accompanying this report.

Recommendation: Fund Long-Term Capital Needs with Vehicle Excise or Similar Tax

The Commission’s study of multiple characteristics of numerous potential revenue sources led to the conclusion that an excise tax based on the value of motor vehicles in the State is perhaps the most viable mechanism for funding the substantial long-term capital needs of WSF’s Scenario A. As already noted, an MVET-like tax has the necessary yield even at relatively low tax rates. And unlike the motor fuel tax, an MVET is likely to be substantially more reliable and stable over time than even the gas tax, which has been the historical source of transportation funding for most states for many years. Improving fleet fuel economy and rising fuel prices in the long run will almost certainly decrease fuel tax revenues, unless they are indexed to inflation and otherwise increased over time to maintain yield. In contrast, yield of the MVET, being based on vehicle value, is more likely to increase over time than decrease. Past concerns with the seemingly unfair treatment of vehicle depreciation can be addressed through adoption of alternative depreciation schedules already studied by the State.

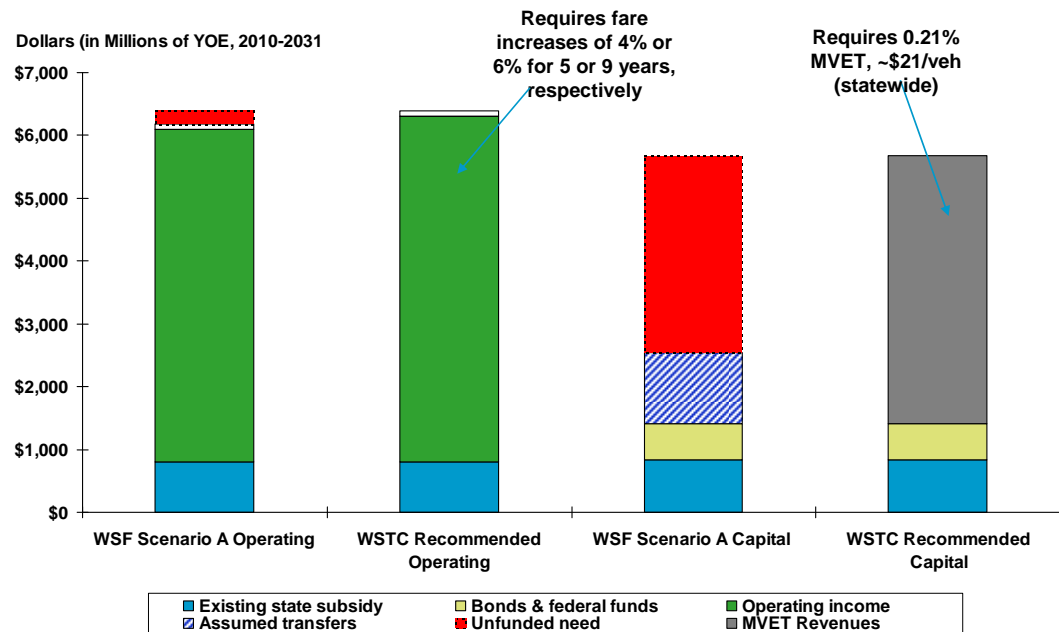
To broaden political and popular support for a funding measure backed by a statewide source, the Commission recommends that a multimodal funding

package be developed with a portion of tax revenues allocated to various programs, including ferries, streets and highways, local transit, etc. This could help to address questions of geographic equity, nexus between those who pay and those who benefit, and other concerns.

Recommendation: Set State Tax Rate to Allow Elimination of Administrative Transfers

As mentioned above, Washington State Ferries has assumed it will receive \$1.1 billion in ad hoc administrative transfers to its capital program. The Commission prefers a funding scenario where state taxes are raised so that these transfers are no longer necessary. Transfers take money out of accounts intended for other transportation purposes, and are a less reliable and predictable form of revenue since their amounts are decided annually by the legislature. An MVET of about 0.21 percent would be required to cover all of the Scenario A unfunded need and allow removal of administrative transfers to the capital program. A slightly higher MVET rate is needed to cover the additional cost of debt financing necessary to manage the irregular stream of capital expenditures of WSF Scenario A (refer to Section 4.0 for more detail.) The Commission’s preferred funding alternative is shown in Figure ES.5 and compared to the funding assumptions contained in the WSF Revised Draft Long-Range Plan.

Figure ES.5 Commission Preferred Funding Alternative



Other recommendations relating to other less significant components of an overall approach to funding long-term needs are presented in the main text of this report, in particular in Section 4.0.

Summary of Findings

In summary, the Commission finds that capital needs of the system as planned by WSF are too great to be funded through fares or a local funding district alone, and that a stable, significant source of capital revenue is best generated through a statewide tax or fee. This tax or fee should be set sufficiently high to permit discontinuation of administrative transfers to the ferry capital account, and to provide necessary debt coverage to permit bond or other debt financing of major capital expenditures. Fares are a logistically more simple way of closing the project operating funding gap than establishing a local ferry funding district. The Commission believes also that fares are an acceptable proxy for local funding support of the state ferry system. If there is incentive at the local level for direct county or city contribution to funding of the system, the Commission remains supportive of that approach, as long as governance and administrative concerns are adequately resolved.

1.0 Introduction

1.1 IMPETUS FOR THE STUDY – BRIEF HISTORY OF THE FERRY FUNDING CRISIS

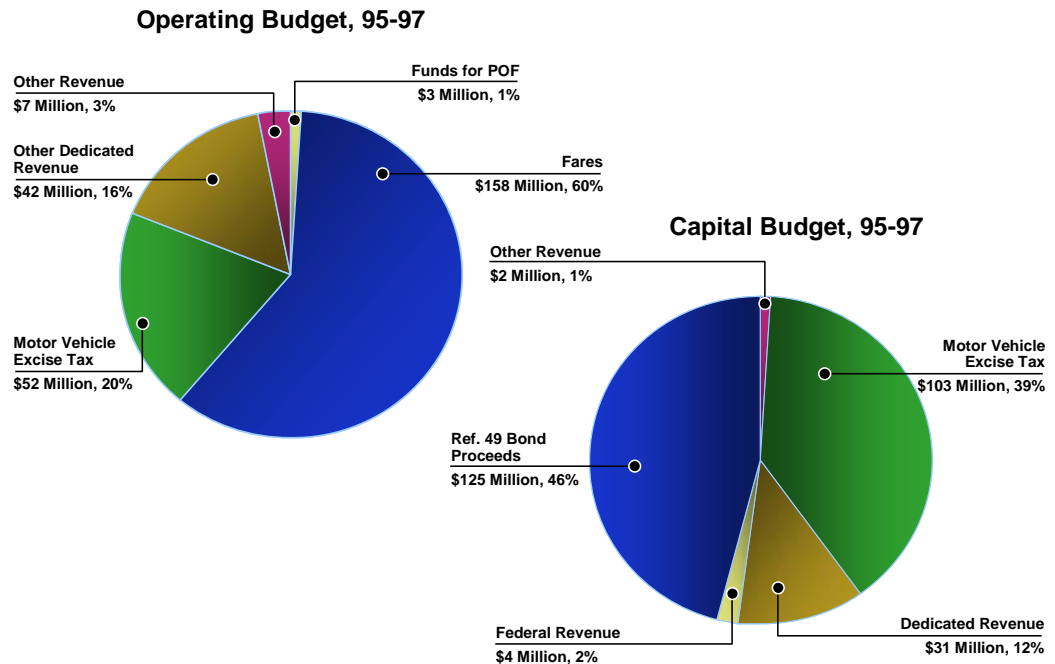
Washington State Ferries is facing a funding crisis that extends beyond the current dilemma of how to close the gap between operating income and rapidly rising operating costs. More dramatic and more threatening to the system's existence is the large unmet capital funding needed to perform necessary preservation work and to replace aging vessels. Simply put, unless a source of substantial new revenue is tapped, the ferry system will face certain cuts in service and, over time, declining condition of both the fleet and terminal facilities.

Prior to 2000, Washington State Ferries obtained a large share of its operating and capital revenue from the Motor Vehicle Excise Tax (MVET). Figure 1.1 shows WSF's operating and capital budgets in the 1995 to 1997 biennium, when the MVET provided 20 percent of WSF's operating revenues and 40 percent of its capital revenues.

The Washington State Legislature eliminated the MVET in 2000 in response to a voter initiative. Since then, the ferry system has managed to continue operations in large part by delaying heavy maintenance and replacement of ferry vessels and terminals. Money intended for capital preservation and reinvestment has been redirected through ad-hoc administrative transfers from the capital account to cover rising fuel and labor costs that could not be met despite substantial fare increases since 2000.

As a result of deferred preservation and maintenance, some existing vessels are badly in need of repair or replacement. Over the past 18 months, there have been several unanticipated service interruptions resulting from deferred maintenance. In time, declining vessel condition will increase the incidence of unscheduled emergency repairs and maintenance, causing more frequent service interruptions and cancellations. If spare vessels in good operating condition are not available, even relatively minor problems will cause service interruptions. Those vessels declining to the worst condition will need to be taken out of service for safety reasons. Without dedicated, sustained funding for vessels maintenance and preservation, there will not be enough capacity to maintain the current schedule of operations, or to provide the level of reliability that customers expect and count on.

Figure 1.1 Washington State Ferries Operating and Capital Budgets, 1995 to 1997
Prior to Removal of the Motor Vehicle Excise Tax

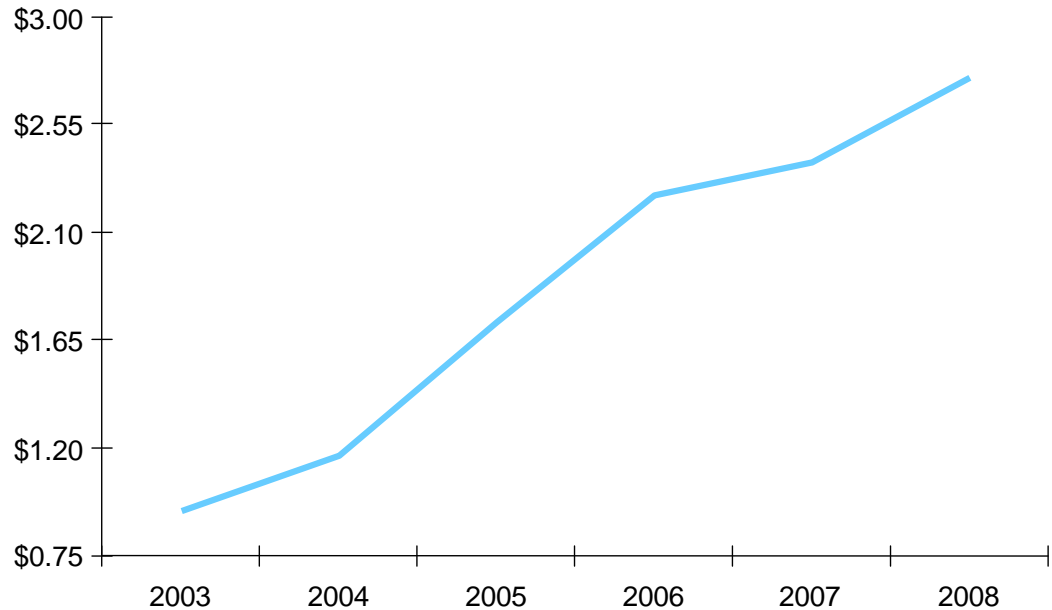


Source: Adapted from “From “WSF Ferries Budget: An Overview,” presented by legislative staff at the July 8th, 2008 meeting of the JTC Ferries Policy Work Group.

In addition to the lack of major funding for capital preservation and replacement, there are long-term challenges to funding ferry operations as well. Rising motor fuel prices have impacted ferry operations by raising the cost of operations, and simultaneously depressing ferry ridership and fare revenue.⁴ Figure 1.2 shows WSF’s average fuel costs between FY03 and FY08. Although fuel costs have moderated in recent months, they remain a major point of uncertainty.

⁴ Aside from any direct impact that fuel costs have on ferry operations, it has also been documented that as the general cost of transportation rises due to fuel cost increases, ferry ridership and thus revenue decline, simply because there is less passenger transportation activity in total. If ferry fares are increased to make up some of the cost of higher fuel, there is further reduction in ridership.

Figure 1.2 Washington State Ferries Average Fuel Costs, FY 2003 to 2008
Average Cost Per Gallon



Source: Washington State Department of Transportation Budget Office.

If fares are raised to help pay for increased operating costs, some reduction in ridership can be expected, though based on current evaluations of fare elasticity, fare revenue may be expected to increase. If fares are raised too high, however, there can be a more dramatic drop in ridership resulting in actual decline of total fare revenue. And of course if service cuts are necessary in order to bring capital and operating expenses in line with revenues, further loss of ridership and revenue can be expected. Reduced ridership, reduced revenues, and increasing costs could create a downward spiral seriously disrupting business, commuter, recreational, and tourist travel alternatives in Puget Sound.

1.2 THIS STUDY

Legislative Mandate to Address Long-Term Needs

The state legislature initiated this study in response to Washington State Ferries' funding crisis. Legislative budget proviso ESHB 1094 Section 206 required the Washington State Transportation Commission to evaluate ways of meeting WSF's long-term funding needs as described in its Long-Range Plan, and to the proviso also asked the Commission to evaluate "state, regional, or local" funding options.

The focus on long-term needs is important. WSF's short-term funding needs have recently been met through ad-hoc administrative transfers from its capital to its operating program, and through deferral of capital preservation and

maintenance. The Long-Term Funding Study is mandated to look for solutions beyond these short-term strategies.

Relationship to Other Studies

This study is one of several that emerged from a 2006 evaluation of WSF's financial situation (Ferry System Review Phase I) and EHSB 2358, the "ferry bill" (see box at right). The studies have been conducted concurrently to support development of a revised version of WSF's Long-Range Plan.

The studies include the following:⁵

- **Ferry System Review Phase II** (Joint Transportation Committee). In 2006, the Joint Transportation Committee began Phase I of a comprehensive study of the ferry system. The study was continued into a second phase that has included review and improvement of Washington State Ferries' ridership demand forecasting and life-cycle cost modeling tools; consideration of operational strategies and pricing policy changes (e.g., peak period fare pricing, use of a reservation system); consideration of potential terminal co-developments with private sector partners; and evaluation of the cost-effectiveness of one-way toll collection.
- **Ferry Customer Survey (Transportation Commission)**. ESHB 2358 required the WSTC to conduct a study of ferry customers that includes information on recreational, walk-on, vehicle, and freight customers and their reactions to possible operational strategies and pricing policies.
- **Vessel Study**. The 2007 Transportation Budget requires the JTC to make recommendations regarding the most efficient timing and sizing of future vessel acquisitions beyond those currently authorized by the Legislature.

As noted in the box above, the intent of these studies is to improve the quality information on the ferry system, allowing more precise estimation of Washington State Ferries' future funding needs.

Figure 1.3 provides an overview of the studies relating to ESHB 2358.

EHSB 2358 – "The Ferry Bill"

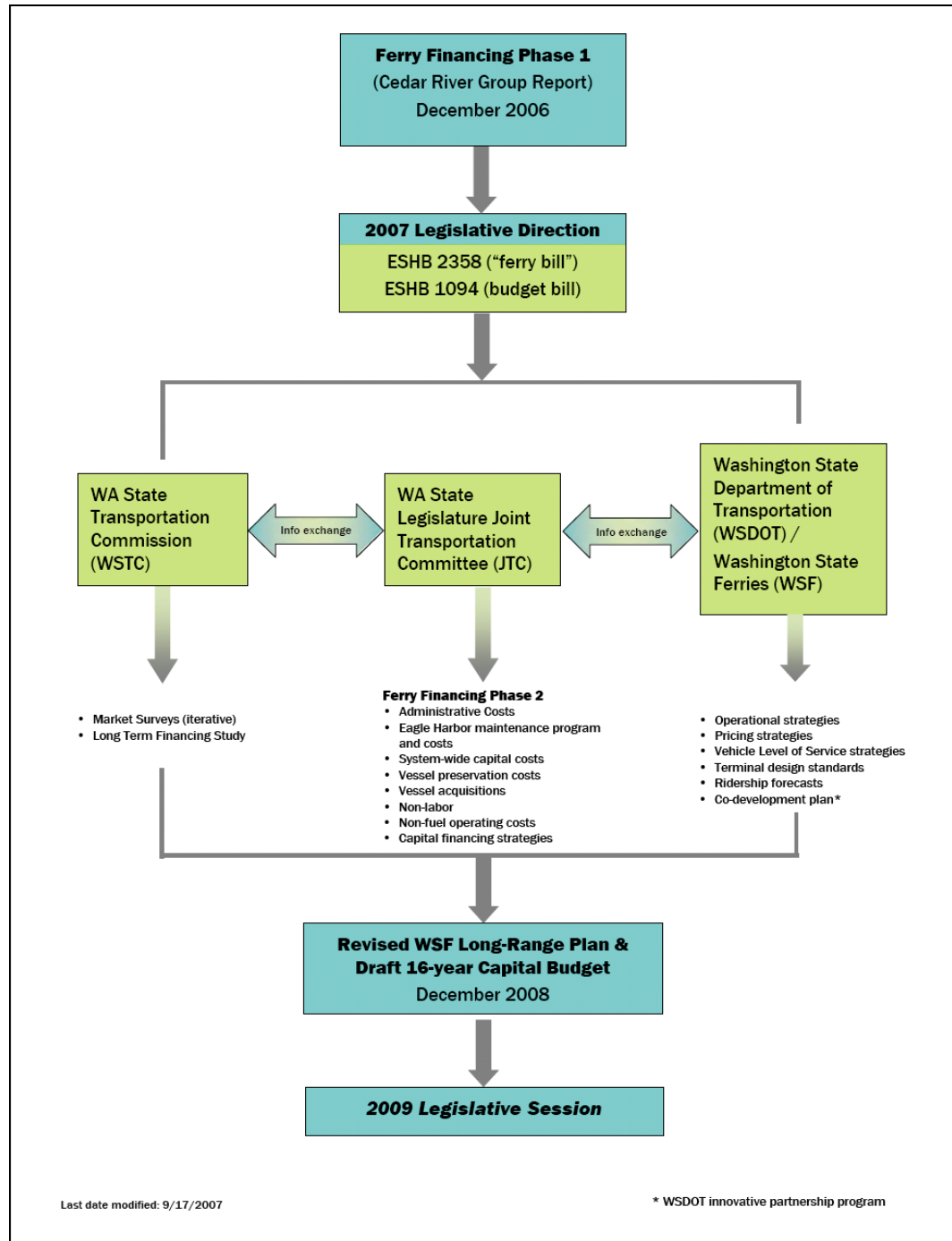
[Note: Text adapted from Washington State Ferries Draft Long-Range Plan]

Passed by the 2007 Legislature, Engrossed Substitute House Bill (ESHB) 2358, the "Ferry Bill," fundamentally changes the policy direction guiding long-range planning efforts for the ferry system. The Legislature found that the State did not have adequate information about ferry customers and the ferry system.

ESHB 2358 and associated budget provisions spelled out a list of tasks and a timeline that were designed to begin to address the questions raised in the 2006 Ferry Financing Study, and to develop an information base that could support the ultimate question of how to address the long-term funding needs of the ferry system.

⁵ The text summarizing the content of related studies is adapted from text contained in Washington State Ferries Draft Long-Range Plan Document Section 2.2, "ESHB 2358 The Ferry Bill".

Figure 1.3 Ferry Financing Legislation Overall Work Program, 2006 to 2009



Study Process and Schedule

The Long-Term Ferry Funding Study was initiated in the fall of 2007. This report is the fourth and final in a series of reports published since the study's inception:

- **Financial Background and Summary of Previous Studies** (February 2008). The first report (February 2008) was a background paper on Washington State Ferries' financial situation. It compared WSF to peer ferry systems, summarized WSF's finances, and reviewed previous studies on the ferry system.
- **Initial Screening of Ferry Funding Sources** (July 2008) presented the evaluation results of a thorough screening of possible funding sources to support the ferry systems' needs.
- **Draft Funding Plan Recommendations** (November 2008) documented the process used to identify a short list of funding sources, and showed how they could be used to meet the baseline future funding needs presented by Washington State Ferries.
- **Final Funding Plan Recommendations** (this document, February 2009) is an expanded and revised version of the Draft Recommendations. This report includes additional analysis and presents the Commission's final recommendations for funding WSF's Revised Draft Long-Range Plan.

Report Outline

This final report contains the following sections:

- Section 2.0 provides an overview of Washington State's Funding needs, as illustrated in the Revised Draft Long-Range Plan (January 31st, 2009 version);
- Section 3.0 provides background information and analysis on state, local, ferry system, and Federal sources of revenue considered by the Commission throughout the funding study;
- Section 4.0 provides alternative methods of meeting WSF's funding needs, presents the Commission's recommendation for a preferred funding strategy, and provides basic discussion of capital finance strategies for the Long-Range Plan.

2.0 WSF's Funding Need

Washington State Ferries has worked over the last year to estimate its funding needs over the 22-year long-range planning period (FY 2010 to FY 2031). WSF has continually refined its estimates, and several versions of the funding needs exist. The funding needs referred to in this report are drawn from the January 31st, 2009 version of WSF's Draft Revised Long-Range Plan. WSF is expected to produce a final version of its Long-Range Plan in March of 2009.

WSF illustrates two possible service scenarios (A and B) in its Long-Range Plan.

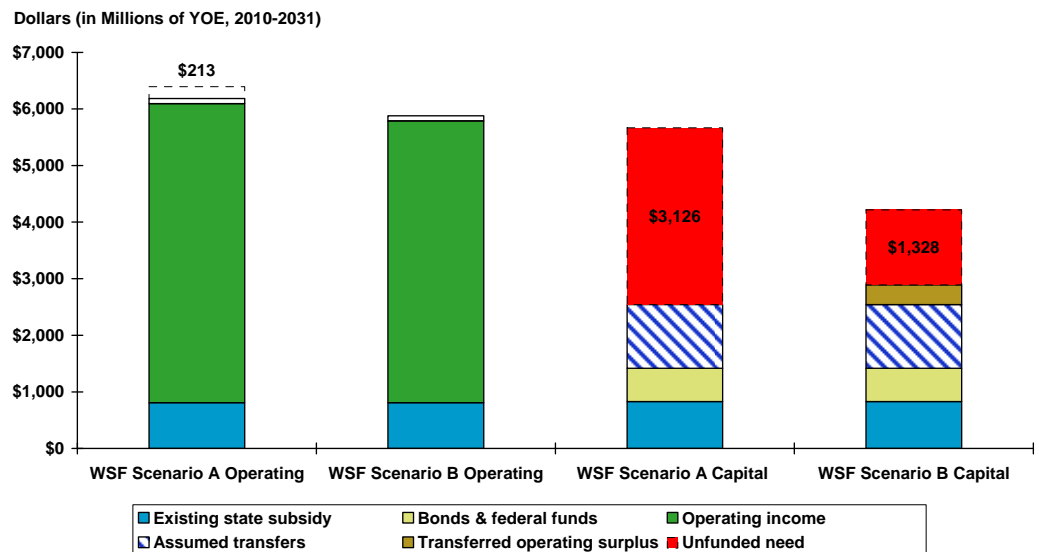
- **Scenario A** assumes the ferry system's current levels of service remain constant with minor improvements, operational strategies are implemented over time, and several replacement vessels come online. It assumes the state will continue in its current role as owner, operator, and principal funder of ferry services in the Puget Sound region⁶. The Scenario A budget shortfall is estimated to be at least \$3.3 billion over the 22-year life of the plan.⁷ (See below for discussion of cost uncertainties.)
- **Scenario B** is a pared-down version of Scenario A. It assumes elimination of the Anacortes-Sidney route and reduced service on several intrastate routes. Service reductions start in the 2011 to 2013, allowing time (in the words of the LRP) for "the State to engage local governments in a dialogue about how, working together, we may be able to mitigate the negative impacts." In other words, Scenario B leaves open the possibility that local governments could provide funds necessary to reduce the level of proposed service cuts. However, funding even the pared-down level of service outlined in Plan B would require significant new funding. The Scenario B budget shortfall is estimated to be at least \$1.3 billion over the life of the plan. (See below for discussion of cost uncertainties.)

Figure 2.1 provides an overview and comparison of Scenarios A and B operating and capital revenues and unfunded needs over the 22-year long-range planning period.

⁶ Previous two sentences excerpted from the WSF Revised Draft Long-Range Plan.

⁷ These figures are expressed in "year of expenditure" dollars, which take into account that an expense incurred 10 years from now will cost more than it would today due to inflation. Using inflated dollars for future capital and operating expenses provides a more accurate estimate of the amount of revenue needed to meet projected future expenses.

Figure 2.1 Scenarios A and B Operating and Capital Needs



Source: Washington State Ferries Draft Revised Long-Range Plan, January 31st, 2009.

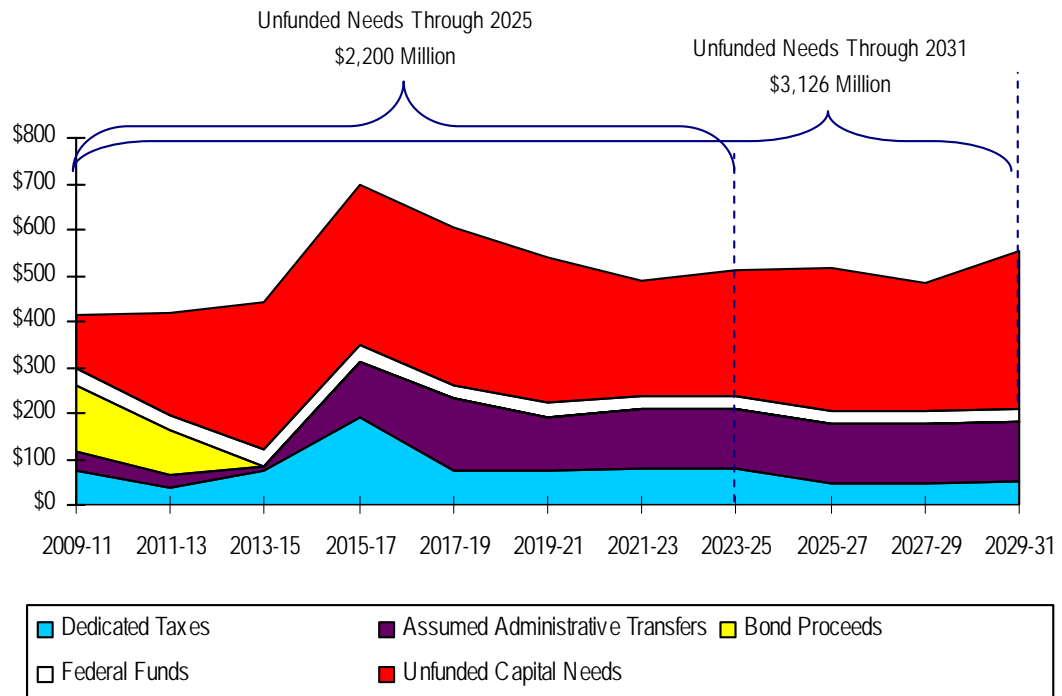
Sources of Funds for Capital

The main sources of funds available to cover WSF’s capital needs over the Long-Range Plan period are dedicated revenues from state taxes and fees (e.g., fuel taxes and licenses, permits, and fees), amounting to \$829 million (\$YOE). WSF also expects to receive some revenue from Federal grants and bond sales.

In addition, WSF assumes it will receive \$1.1 billion over the life of the plan in administrative transfers from other transportation funding accounts to its capital account.

These sources are not sufficient to cover WSF’s project capital needs, leaving a capital funding shortfall of \$3.1 billion (\$YOE) in Scenario A. Figure 2.2 shows sources of capital revenue and the Scenario A capital revenue gap for each bien-nium. The capital shortfall in Scenario B (not shown) is significantly smaller – \$1.3 billion.

Figure 2.2 Scenario A Capital Revenue and Unfunded Capital Need
Millions of Year of Expenditure Dollars

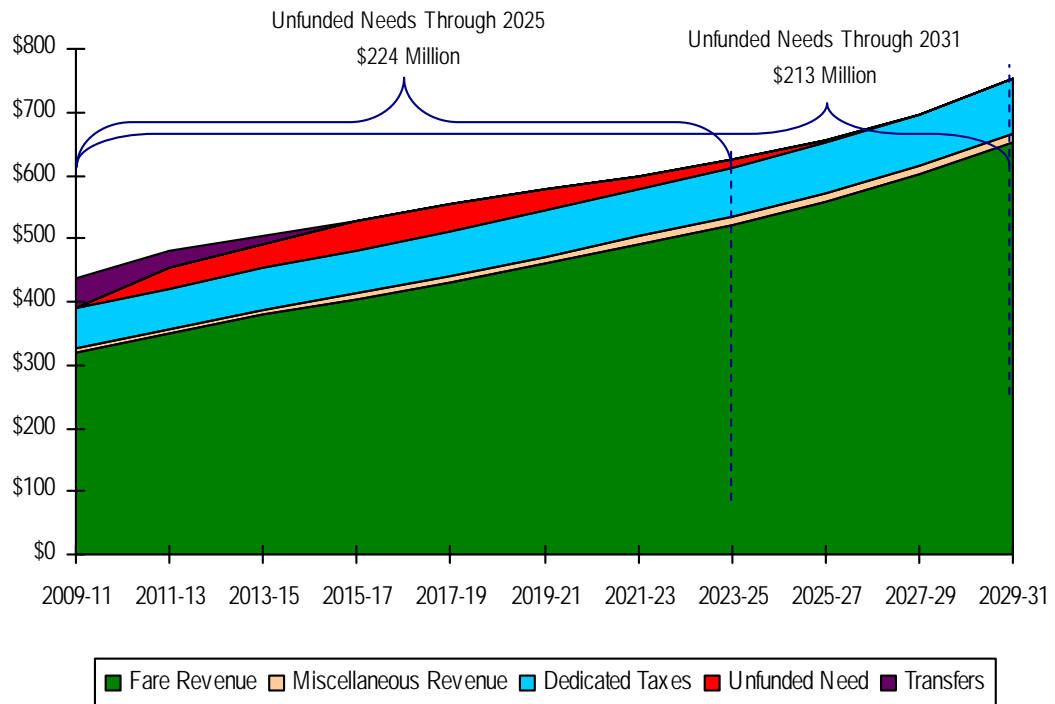


Sources of Funds for Operations

The great majority of WSF’s operating revenue needs are expected to be met through operating income (of which 98 percent come from fare revenues and 2 percent come from ancillary revenues, such as advertising and food and beverage sales). WSF’s fare revenue projections assume ridership grows between 1 and 2 percent per year, and fares increase at 2.5 percent per year. The projections also assume WSF implements a fuel surcharge that varies per year, depending on the cost of fuel.

Other sources of revenue include state tax and fee revenues dedicated to the operating program (e.g., fuel tax and licenses, permits, and fees), as well as \$88 million in administrative transfers from other transportation programs, which WSF assumes it will receive from the legislature. These sources of revenue are not enough to cover operating expenses in Scenario A, which shows a \$213 million (\$YOE) operating gap. Figure 2.3 shows year-by-year estimates of operating revenue and the unfunded operating gap for Scenario A. Because of the reduced service levels in Scenario B, it shows no operating gap, and in fact shows a small operating surplus being transferred to the capital program.

Figure 2.3 Scenario A Operating Revenue and Unfunded Operating Need
Millions of Year of Expenditure Dollars



Source: Washington State Ferries Revised Draft Long-Range Plan, January 31st, 2009. Note that small surpluses in outer biennia reduce the cumulative funding need over the 2010 to 2031 horizon.

Risks and Uncertainties in the Needs Estimate

WSF’s needs estimates are based on projections over a 22-year period. By definition, there is significant uncertainty in long-term projections. It is important to be aware of these uncertainties, as they could affect the magnitude of WSF’s funding needs.

- **Amount of dedicated tax revenues.** WSF’s receives state subsidies from fuel tax revenues and licenses, permits, and fees. The revenue projections for these sources are based on population and vehicle usage assumptions. Fuel tax revenues, in particular, may not be as reliable as they once were assumed to be due to increasing vehicle fuel efficiency and (recently) declining vehicle miles traveled, both of which reduce fuel tax revenues.
- **Administrative transfers.** WSF assumes it will receive over \$1.1 billion in administrative transfers to its capital program over the 22-year long-range planning period. The amount of the transfers is based on legislative estimates of funds that could be made available to WSF, but do not constitute a firm commitment by the legislature. There is a risk that the legislature may decide not to provide the transfers when the time comes. Because of this risk, the Commission team estimated what it would take to fund WSF’s needs, both with and without these transfers.

- **Vessel timing and sizing.** Vessels are one of WSF’s largest single expenses, costing hundreds of millions of dollars each. Decisions about vessel size and the timing of purchase greatly impact WSF’s needs estimates. For more detail, see the “Vessel Timing and Sizing” report by the Washington State Joint Transportation Committee⁸.
- **Fuel prices.** Fuel prices are a major point of uncertainty. They have been volatile over the past year, but have trended consistently upward over the past decade. To mitigate this uncertainty, WSF has proposed instituting a fuel surcharge (to be included in fares) that would cover unforeseen fuel price increases. However, high fuel prices would still affect the system by dampening ridership (historically, ridership declines when fuel prices rise).
- **Ridership.** In periods of economic decline, many individuals forgo discretionary trips (e.g., for shopping, travel, social engagements) on the ferry system. In FY 2008, for example, a period of economic decline and rapid fuel price increases, WSF’s ridership decreased. Because of the current economic downturn, WSF’s ridership growth assumptions (one to two percent per year) may not bear out in the short term.
- **Long-term population trends.** WSF’s ridership forecasts are based on assumptions about long-term population growth in Washington State. If population does not grow as assumed, WSF could see a reduction in its projected operating income.

⁸ Available on: http://www.leg.wa.gov/documents/LTC/jtc/Ferries/VesselSizingandTimeDraft%20_111408.pdf.

3.0 Background on Funding Sources Considered

This section presents background information on the three major categories of funding available to the ferry system: 1) state sources, 2) local sources, and 3) ferry operating income.

Each section describes the characteristics of the funding sources considered within each category (state, local, and ferry system), and their suitability for the ferry system. Each section has a slightly different focus to highlight the questions of greatest importance for each:

- The **state sources** section discusses the pros and cons of a variety of state funding sources, and presents the Commission's process for selecting a few sources for further consideration. It also presents revenue estimates for selected sources compared to the ferry system's funding needs.
- The **local sources** section focuses on the administrative and implementation issues associated with using local funds to support the ferry system, since historically they have not been used for that purpose. It also presents revenue estimates for selected sources compared to the ferry system's funding needs.
- The **ferry operating income** section describes the types of operating income available to the ferry system, such as fares and revenue from food and beverage sales, and discusses their relative yield.
- The **Federal sources** section describes WSF's current Federal revenue projections and barriers to receipt of additional grant monies.

3.1 STATE SOURCES

In analyzing state sources, the Commission focused on the question of which source(s) would be most appropriate to consider as part of a long-term funding package for Washington State Ferries. To answer this question, it followed a three-step process:

1. Develop a long list of possible state sources;
2. Evaluate the long list according to an agreed-upon set of criteria (yield, reliability, administrative effectiveness, equity, economic efficiency, and political acceptability); and
3. Select a short list of sources based on the evaluation results.

The first two steps were completed in July 2008 with the publication of the *Part II Technical Memorandum – Initial Screening of Ferry Funding Sources*. The report is

available on the Commission web site,⁹ and in Appendix C of this report. For reference, the evaluation results are presented in Table 3.1.

Table 3.1 Evaluation Results From Initial Screening Process

	Yield	Reliability	Administrative Effectiveness
State Sources			
Vehicle Excise Tax	●●●	●●●	●●
Fuel Tax Increase	●●●	●●●	●●●
Sales Tax Surcharge or Increment	●●●	●	●●
Tolls	●●	●●	●
Licenses, Permits, and Fees	●●	●●●	●●●
Rental Car Tax Surcharge	●	●●	●●●

Note: Yield: High (●●●) – \$70 million or more; Medium (●●) – \$10 million to \$70 million; and Low (●) – less than \$10 million. Amounts reflect estimated gross receipts per biennium. Reliability: High (●●●); Medium (●●); and Low (●). Administrative Effectiveness: High (●●●); Medium (●●); and Low (●).

Based on the evaluation results, the Commission subsequently selected a short list of state sources it judged to be most viable, including the following:

- MVET; and
- Passenger vehicle registration and weight fees.

Considerations in Selecting the Short List

Yield was the most important consideration in narrowing the list of sources. Yield is the amount of money the source can produce, and is a function of the tax/fee level and the size of the tax base.

The ferry system’s funding needs are very large (\$3.3 billion and \$1.3 billion for Long-Range Plan Scenarios A and B, respectively, over the next 22 years)¹⁰. For a funding source to be viable, it must be able to cover a large portion of this need. In effect, this means that only sources with a large tax base or a historically high tax rate are good candidates.

Figure 3.1 shows the approximate yield of all state sources considered compared with the approximate average ferry funding gap for Scenario A over the life of the plan (22 years). The current or historical tax and fee levels are shown in

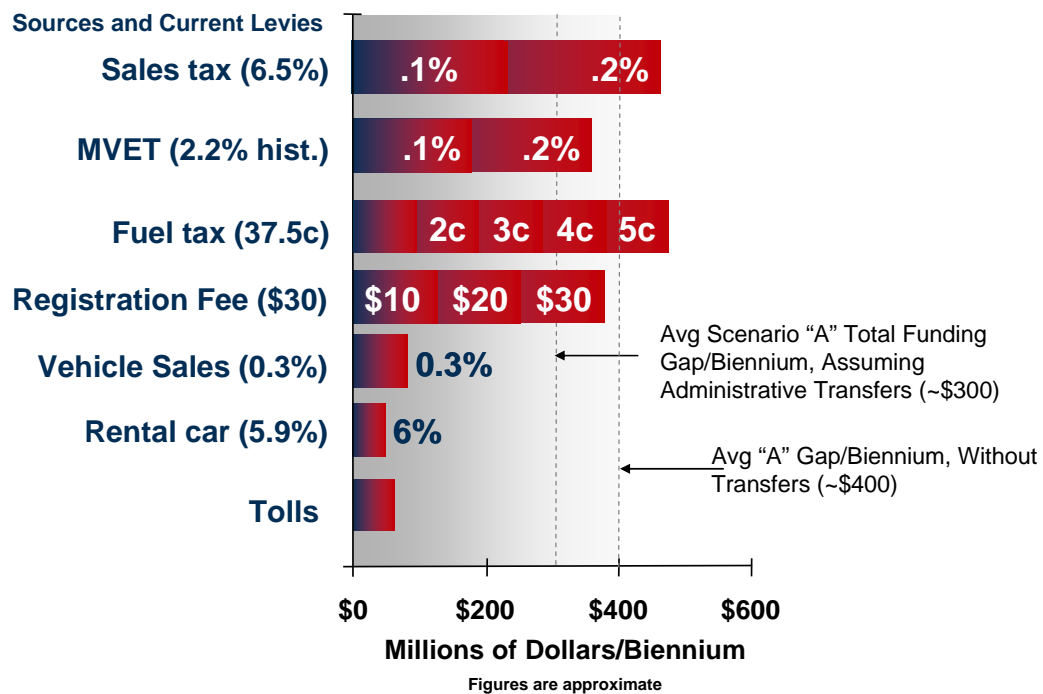
⁹ <http://wstc.wa.gov/LongTermFerryFinance/default.htm>.

¹⁰These figures include \$1.12 billion in funding needs that WSF projects will be met through ad-hoc administrative transfers to the ferry capital program.

parentheses. They provide context for whether the increase can be considered large or small relative to the current tax rate. For example, a 0.1 MVET is small relative to the historical tax rate of 2.2 percent; a 0.1-percent increase in the vehicle sales tax is very large relative to the current tax level of 0.3 percent.

Note that the figures assume that all tax and fee revenues would go towards WSF. In practice, it is unlikely that WSF would receive all of the revenue from a tax or fee increase.

Figure 3.1 Potential Yield of State Funding Sources Relative to 22-Year Average Funding Gap, 2008 Dollars



Note: The figures are approximate. Assumptions used in calculations are documented in the Part II Technical Memorandum – Initial Screening of Ferry Funding Sources report; available on the Commission web site. More refined estimates for selected sources are presented below.

The numbers demonstrate that the yield from a vehicle sales tax, rental car tax, and tolls all fall well short of the ferry system’s funding need. For example, even if the current rental car tax rate were doubled (from 5.9 percent to 12 percent), the additional revenue earned would only amount to about \$50 million a biennium; well short of the \$300 million to \$400 million needed to cover the Scenario A funding gap in an average biennium (with or without assumed transfers to the capital program).

The yield is much greater from small increments of the MVET, sales tax, fuel tax, and to a lesser extent from the passenger vehicle registration and weight fee.

Although the sales tax and fuel tax are high-yielding, they were removed from consideration. The sales tax was removed because it is not related to the ferry system or transportation, and is less reliable than other sources due to its

tendency to fluctuate with the economy. Moreover, it is currently dedicated to other important state priorities, such as education and health care.

The fuel tax was not subjected to detailed analysis based on the Commission's judgment that it is not likely to be politically acceptable at the current time, given recent volatility in motor fuel prices.

Characteristics of Remaining Funding Sources

Removal of the sales tax and fuel tax from consideration left the MVET and a registration/weight fee increase on the "short list" of sources to be considered for the ferry funding plan. The registration and weight fee are paired because they are currently paid together by vehicle owners. See the "Tab Renewal Fees" box at right. The legislature could consider raising one or both fees simultaneously. Raising weight fees, along with registration fees, could have the policy benefit of encouraging the use of smaller, more fuel-efficient vehicles.

Advantages of Remaining Funding Sources

Both the registration/weight fee and MVET are advantageous because of their potential for high yield. Figure 3.2 compares the relative yield of the MVET, registration, and weight fees with the ferry funding needs represented in Scenarios A and B of WSF's Long-Range Plan.

Tab Renewal Fees

Vehicle owners in Washington State pay an annual fee to obtain updated stickers for their vehicle. The fee includes a registration fee component, a weight fee component, and other fees such as the Vehicle Excises Taxes in place in parts of King, Pierce, and Snohomish Counties. If the MVET were reinstated statewide, it would likely be paid as part of these annual combined sticker fees. The MVET, registration, and weight fees would all be paid as part of the same bill.

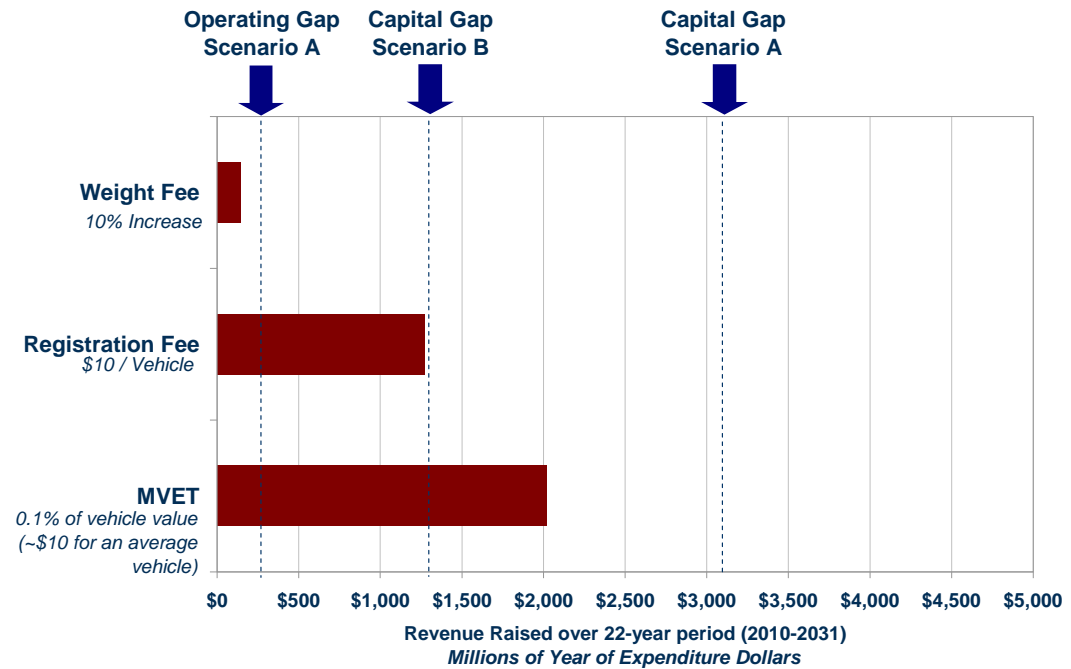
Would Reinstating the MVET or Increasing Registration Fees Be "Politically Acceptable?"

The Commission considered political acceptability as a criterion in judging the viability of funding sources. Some sources, such as the Motor Vehicle Excise Tax (MVET) and the Registration Fee were judged to be somewhat more acceptable than others.

However, it is important to acknowledge that no taxes or fees are politically popular. The MVET was rescinded in the past due to voter opposition. Vehicle registration and weight fees are not popular either; the Department of Licensing reports frequent complaints about them. Substantial increases in those fees will encounter political opposition.

The legislature must weigh whether the benefits of any proposed tax or fee increase outweigh the burden placed on the public.

Figure 3.2 Yield of Selected State Sources
Year of Expenditure Dollars, Millions



Assumptions: Please see Appendix B for the assumptions used in the revenue forecasts. Note that the MVET calculations assume an average MVET revenue growth rate of five percent per year (slightly less than the historical growth rates during the period that the MVET was enacted). MVET revenues could grow at a lower rate than predicted if Washington’s population growth slows or residents purchase fewer cars, leading to a lower fleet size; the fleet value could diminish if residents purchase less expensive vehicles or wait longer to replace older, lower-value vehicles.

Table 3.2 shows the tax and fee levels necessary to close funding gaps represented in Scenarios A and B of WSF’s Long-Range Plan. It is presented for reference purposes.

Note that the figures assume that all tax and fee revenues would go towards WSF. As stated above, it is unlikely in practice that WSF would receive all of the revenue from a tax or fee increase.

Table 3.2 State Tax and Fee Levels Necessary to Close the Funding Gap

	Tax/Fee Level Necessary to Generate \$3.1 Billion (Scenario A Capital Gap)	Tax/Fee Level Necessary to Generate \$1.3 Billion (Scenario B Capital Gap)
MVET	0.15% or about \$15 on an average vehicle	0.07% or about \$7 on an average vehicle
Registration fee Increase (alone)	\$25 per vehicle (on top of the current \$30 fee)	\$10 per vehicle (on top of the current \$30 fee)
Combined registration and weight fee increase	About \$20 per vehicle (on top of the current \$30 fee), plus a 50% increase in the weight fee (currently ranges from \$10-\$30)	\$5 per vehicle plus a 50% increase in the weight fee (currently ranges from \$10-\$30)

Note: Values assume all revenue goes to WSF. Average MVET vehicle value for passenger cars and light trucks in Washington State is about \$10,000, according to the Washington State Joint Transportation Committee Motor Vehicle Excise Tax Study, 2006.

In addition to having high yield, both the motor vehicle fees and the MVET have high administrative effectiveness in that the system for collecting the revenues exists or existed in the recent past (as was the case with the MVET).

The MVET is particularly attractive in that revenues increase along with inflation and appreciation in the vehicle fleet value over time. There also is historical precedent for using MVET revenues to support the ferry system. Until it was rescinded in 2000, it was the main state source of funds for WSF. The funds were never replaced, leading to years of deferred maintenance and today’s funding crisis. Reinstating the MVET would be a logical remedy to the situation.

A final attractive quality of the MVET is that the fee is deductible for those who itemize their Federal tax returns. This reduces the effective tax burden on Washington State residents.

Disadvantages of Remaining Funding Sources

Both the vehicle fees and the MVET have drawbacks. The MVET was unpopular in the past and may be so in the future. However, some of its unpopularity was related to the method used to assess vehicle value, which was considered unfair. An alternative valuation method that may be considered fairer is discussed in the box below. The MVET also was disliked due to the high overall tax burden. The historical rate of 2.2 percent of the vehicle value amounts to about \$220 on an average vehicle. The MVET may be more acceptable to voters in the future if the tax rate is not as high as it was in the past.

Unlike the MVET, which is calculated as a percentage of vehicle value, registration and weight fees are flat fees (a set number of dollars per year). Flat fees are undermined by inflationary pressure over time unless they are increased on a regular basis. Another drawback is that flat fees are regressive. They disproportionately burden poorer individuals, who must pay the same amount as

wealthier individuals, although they have a smaller income. The MVET is less regressive in that owners of more expensive vehicles pay a higher fee.

Calculating the Value of a Vehicle

The Motor Vehicle Excise Tax, an annual fee equivalent to 2.2% of a vehicle's value, supported WSF up until the year 2000 when it was rescinded by the legislature due to voter objections.

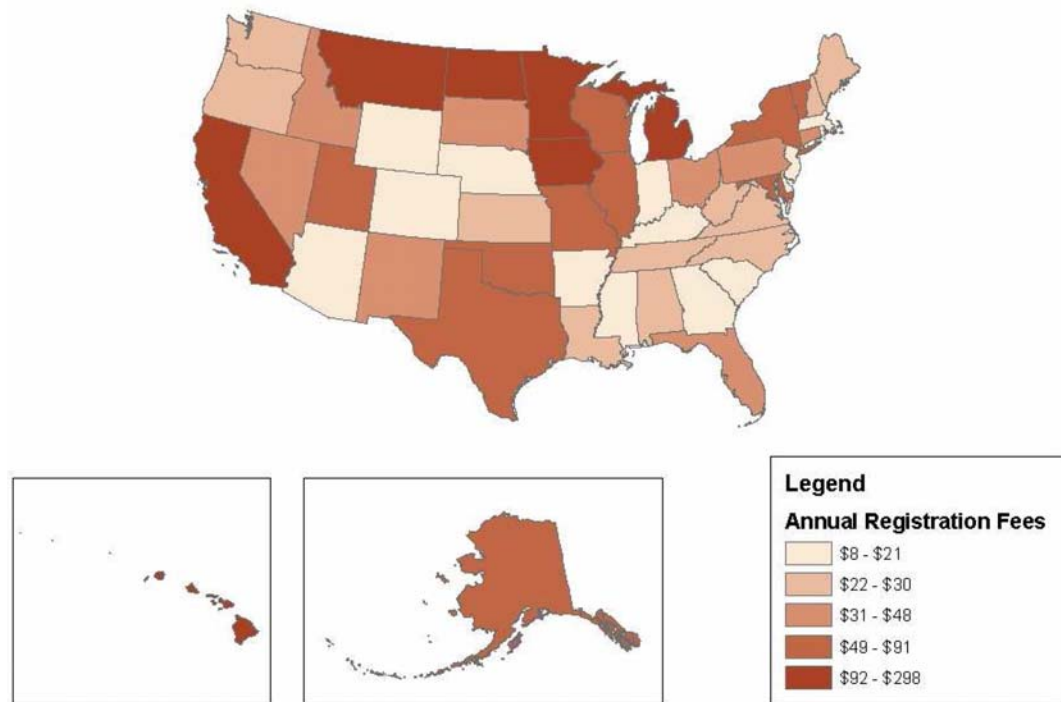
One common complaint about the MVET was that it was based on overly high estimates of vehicle value. Vehicle value was calculated as a percentage of the manufacturer's suggested retail price (MSRP) and depreciated by 10% per year over 13 years.

In 2006, the Washington State Joint Transportation Committee studied alternative ways of calculating vehicle value over time. Of seven alternatives studied, it was concluded that Alternative 5 would most accurately reflect vehicle value while having the lowest administrative costs. Under Alternative 5, vehicle values would be calculated based on 85% of the MSRP (to reflect that once purchased, the vehicle value is immediately less 100% of the purchase price), and depreciated each year according to a market-based schedule for each vehicle use class. The schedule would be developed by analyzing databases of vehicle sales, and would be updated annually to reflect market conditions. The study authors suggest that this approach could be perceived as fairer than the previous method of depreciating all vehicles at 10% per year.

All of the MVET revenue estimates in this report are based on estimated vehicle fleet values for Alternative 5 included in the MVET revenue study. For more detail on Alternative 5, see <http://www.leg.wa.gov/documents/LTC/jtc/Studies/MVETStudy.pdf>.

When considering whether to increase vehicle registration and weight fees, it is helpful to consider how current fee levels compare to those in other states. Washington's combined registration and weight fee are somewhat below the norm. Figure 3.2 shows registration fee amounts for automobiles of standard weight (3,500 lbs) by state. The average fee for all states is \$56; Washington's fee is somewhat below that amount, at \$30 for the registration plus a component for the vehicle weight (varies between \$10 and \$30). If the registration and weight fees were both doubled, the combined amount due would be \$70 to \$90; a high amount but still lower than several other states.

Figure 3.3 Passenger Vehicle Registration Amounts by State



Source: Cambridge Systematics, Inc., using information from state web sites and telephone interviews. Information collected for the *Vehicle Title and Registration Fee Study*, Texas Department of Transportation, 2008. Values reflect only vehicle registration fee amounts; they do not reflect other types of vehicle fees.

Table 3.3 presents more detailed information regarding why each state funding source was either removed from consideration, selected for the short list, or “set aside.” Sources which were “set aside”, were those that are attractive for certain reasons, but due to their low yield or other barriers were not submitted for detailed analysis. These sources may be considered as part of a ferry funding package, but are not explicitly recommended by the Commission.

Table 3.3 Rationale for Discarding, Setting Aside, or Retaining State Sources of Funds

Source	Summary Reasons for Discarding/Retaining/Setting Aside	Explanation
Discarded		
Tolls	<ul style="list-style-type: none"> Politically unacceptable Legal barriers Insufficient yield Lack of connection o the ferry system 	This source is in high demand for highway and bridge projects, so is not likely to be accepted as a source of funds for the ferry system. Even if it were politically acceptable, use of tolls for the ferry system may require a law change, since historically toll revenues may not be used outside the tolled facility. Finally, analysis of potential toll revenues on highways in the Puget Sound region indicates that tolls would not be able to generate sufficient revenue to cover the ferry funding shortfall, unless the tolls are applied extensively and the toll rates set very high.
Set Aside		
Fuel Tax Increase	<ul style="list-style-type: none"> Politically unacceptable at the current time due to volatile fuel prices 	While the high yield and administrative effectiveness of the fuel tax make it one of the more attractive sources, the Commission discussion indicates that the fuel tax is not likely to be politically acceptable at the current time, given recent fuel price volatility.
Sales Tax Surcharge or Increment	<ul style="list-style-type: none"> Not a transportation related tax Used for important state priorities (health care, education) Less reliable 	Although the state sales tax is capable of generating sufficient revenues to cover the ferry system’s needs, it was set aside from consideration due to its disconnection from the transportation system, its unreliability relative to other sources, and the fact that revenues are typically dedicated to the state general fund to serve important state priorities such as health care and education.
Rental Car Tax Surcharge	<ul style="list-style-type: none"> Insufficient yield 	This source is attractive due to the fact that it maximizes revenue gained from out-of-state tourists and visitors, and limits the burden on Washington State residents. However, unless the tax rate is raised dramatically (i.e., more than doubled from its current rate), it would generate funds insufficient to meaningfully offset the ferry funding shortfall.
Vehicle Sales Tax	<ul style="list-style-type: none"> Insufficient yield Less reliable 	This source does not have the potential to generate sufficient funds to support the ferry system unless the tax rate is raised dramatically (i.e., more than doubled). Moreover, it is not as reliable as other sources, since it is linked to vehicle sales, which can be expected to fluctuate rapidly with the economy.
Combined Licensing Fee	<ul style="list-style-type: none"> Insufficient yield Disproportionate burden on freight industry 	If the fee rate were increased substantially, the combined licensing fee could generate funds sufficient to meaningfully offset the ferry funding gap. However, increasing this fee to support the ferry system would disproportionately burden the freight industry.
Retained		
Vehicle Excise Tax	<ul style="list-style-type: none"> Very high yield Transportation related Automatically adjusts to inflationary pressure Historic precedent Progressive tax 	The MVET is one of the highest yielding sources. In addition, because MVET revenues are based on vehicle values, which tend to appreciate over time, revenues are less subject to being undermined by inflationary pressure. The MVET also rates high in administrative effectiveness since the mechanism for collecting it existed in the past and could be reinstated. It is a relatively progressive tax, meaning that wealthier individuals would tend to pay more. The main disadvantage of the MVET is that it may be politically unpopular due to its history.
Passenger License and Weight Fees	<ul style="list-style-type: none"> Reasonably high yield (if both fees are increased substantially) Already used to support the ferry system 	If raised simultaneously and by a substantial percentage, passenger vehicle registration and weight fees would be sufficient to cover the ferry funding shortfall. Aside from their yield, the main advantage of these fees is that they are already in existence and used to support the ferry system. Their main disadvantages are that they are vulnerable to inflationary pressure; their yield is low relative to the MVET; and they are relatively regressive, in that individuals pay the same amount per vehicle regardless of their income.

Raising State Taxes – Implementation Issues

State taxes are already used to support WSF. Raising state taxes to increase the level of support is administratively relatively simple. However, there are a number of implementation issues that would need to be considered in the process:

- **Unlikely that state taxes would be raised for WSF alone.** State taxes for transportation are rarely raised for a single purpose. To increase its chances of success, a tax increase for WSF would need to be bundled with increases to fund other transportation priorities, such as highways, transit, freight, local roads, and so forth. Previous transportation tax increases (the Nickel and Partnership funding packages) included funding for ferries and many other transportation improvements.
- **State tax increases now require a two-thirds legislative approval.** Initiative 960, passed in 2007, requires that new state tax increases obtain approval from two-thirds of the state legislature. If the tax increase results in state government expenditures exceeding a preset limit, the increase must be put to a public vote before going into effect.
- **State budget is under pressure.** The State of Washington is currently facing a significant budget shortfall that goes beyond the ferry system. Assuming the necessary decisions are made to authorize a new revenue source, it would take time to work out and implement the details of a funding package.

Table 3.4 provides assumptions used in the estimation of revenues from state taxes.

Table 3.4 Assumptions Used in State Tax and Fee Revenue Forecasts

Year	Key Assumptions Used in Revenue Forecast
MVET	<ul style="list-style-type: none"> • Used vehicle fleet values for passenger and truck vehicles from Washington State Joint Transportation Committee MVET study (2006) as a base. Base values were drawn from “Alternative 5,” where the tax base for cars and light trucks equals 85% of the manufacturer’s price, and the tax base for medium and heavy trucks equals 100% of the purchase price. • Increased vehicle fleet value by 5 percent per year, a value suggested by the Washington State Transportation Revenue Technical Forecasting Group; it is slightly lower than historical trends in vehicle fleet value increases. • Reduced revenues by 0.66% based on average fee administration costs reported by the Washington State Department of Revenue.
Motor Vehicle Registration Fee	<ul style="list-style-type: none"> • Used 2005 vehicle registrations as a base (divided 2005 fee revenues by \$30, the fee amount). • Increased registrations every year by 1.3%, the average annual rate of driver population growth between 2008 & 2023 (projected by Washington State Department of Transportation (WSDOT) Financial and Economic Analysis Office). • Reduced revenues by administrative costs of 0.66%, based on average fee administration costs reported by the Washington State Department of Revenue.
Motor Vehicle Weight Fee	<ul style="list-style-type: none"> • Used 2007 weight fee revenue as a base. Revenues provided by WSDOT Office of Financial Planning and Economic Analysis. • Increased revenue every year by 1.3%, the average annual rate of driver population growth between 2008 & 2023 (projected by WSDOT Financial and Economic Analysis Office). • Reduced first year revenues by administrative costs of 0.66%, based on average fee administration costs reported by the Washington State Department of Revenue.

3.2 LOCAL SOURCES

Local sources have not contributed to the ferry system in the past, and there is no existing mechanism for collecting or distributing the funds. Consideration of local sources must address the following questions:

- What is the rationale for local funding?
- What are the most viable sources from which to generate revenue?
- What are reasonable geographic boundaries of a local ferry-funding district? How much revenue could be raised from different sized districts?
- How would the district be implemented and governed?

Each of these questions is considered in turn below.

Before proceeding, the reader should understand that neither the Washington State Transportation Commission nor the state legislature can create a local ferry funding district. The Commission can recommend its creation, and the

legislature can enact enabling legislation. However, the State cannot force localities to collect taxes and fees¹¹. The localities themselves must do so. This discussion is simply a starting place for thinking about how a local ferry funding district could be structured, and how much money could be raised.

Another important note is that, throughout this section, the term “local ferry funding district” is used to refer to a funding district (e.g., county, city, or multi-county/city) that would be used to support WSF System. It does not refer to locally-run ferry districts, such as County Ferry Districts or local passenger-only ferries. Localities always have the option to initiate their own ferry service in order to supplement or replace service provided by WSF. The possibility of locally-run ferry systems is not explicitly considered here because the purpose of this study is to investigate long-term funding alternatives for WSF.

Rationale for Local Funding of WSF

The ferry system is facing an unprecedented funding shortfall. With such a large amount of money to be raised, if the ferry system is to be kept intact, funding sources that have been overlooked in the past are now being scrutinized. This includes not only local funds, but also nonfare operating revenue, private investment, etc.

The primary argument for local funding is the “nexus” principle, which says that the amount paid for a good or service should be proportional to benefits received. Ferry-served localities receive a disproportionate share of benefits from the ferry system, but do not pay a disproportionate cost. Some of these benefits might include the following:

- **Local economic benefits.** Everyone in Washington State benefits from commerce and tourism related to the presence of the ferry system. However, local residents may benefit disproportionately from local sales tax revenues and jobs created by tourism.
- **Property values.** Owners of residential and commercial properties may benefit from increased property values due to improved accessibility.
- **Unique access to residential locations.** The ferry system allows some individuals to live in unique natural locations that would otherwise be difficult to access.

Note that none of these benefits have been studied in detail or quantified, so their magnitude is uncertain.

¹¹Article XI, Section 12 of the State Constitution says: “The legislature shall have no power to impose taxes upon counties, cities, towns, or other municipal corporations, or upon the inhabitants or property thereof, for county, city, town, or other municipal purposes, but may, by general laws, vest in the corporate authorities thereof, the power to assess and collect taxes for such purposes.”

There appears to be some support among residents of ferry-served communities for local funding of the ferry system. The Transportation Commission's General Market Area Survey of Puget Sound residents¹² showed that, overall, respondents felt that 28 percent of the costs of funding the ferry system should be paid through local taxes and fees in ferry-served communities, 22 percent should be paid through state taxes and fees, and the remaining 50 percent should be paid by ferry riders.

Responses to this question varied by residential location, with West Sound residents assigning the lowest percentage to local funding (16 percent) and East Sound Residents assigning the highest percentage (23 percent). Figure 3.4 shows responses by place of residence (West Sound County, East Sound County, and the Islands).

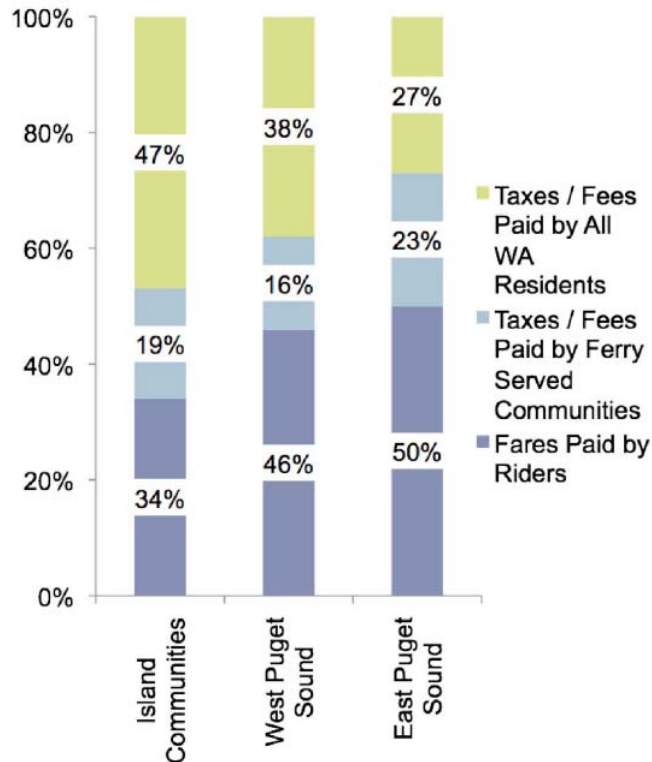
These responses suggest that in the minds of the general public, locally-collected revenues should provide in the range of 15 to 20 percent or more of ferry system costs.

Figure 3.4 shows responses to the question regarding responsibility for the ferry system. For simplicity, respondents were told that about one-half the ferry system's revenues comes from ferry users and the other one-half comes state taxes, as was true in the 2005 to 2007 biennium. The precise split varies from one biennium to another, depending on the extent of capital funding provided by the State.

¹²The General Market Area Survey included 1,240 telephone surveys completed with a random sample of residents living in counties surrounding Puget Sound that are most likely to use the ferries. The sample included ferry riders and nonriders.

Figure 3.4 Responses to Question Regarding How Ferry System Costs Should Be Distributed

Question: Currently, 50 percent of the ferry system’s revenues come from ferry users and 50 percent come from general taxes paid by Washington State residents, and 0 percent comes from local taxes in communities served by the ferries. What percent of the cost to maintain the ferry system should come from state taxes and fees, taxes and fees paid by ferry-served communities, and fares paid by riders?



Selecting a Short List of Local Funding Sources

The Commission reviewed a range of local funding sources to determine which would be most attractive. As with state sources, a long list of potential sources was developed and then evaluated primarily according to the amount of revenue the source can generate (yield), the reliability of the revenue stream, and the ease of administering the tax or fee (administrative effectiveness). The evaluation results were published in the July 2008 report entitled, *Part II Technical Memorandum – Initial Screening of Ferry Funding Sources*.

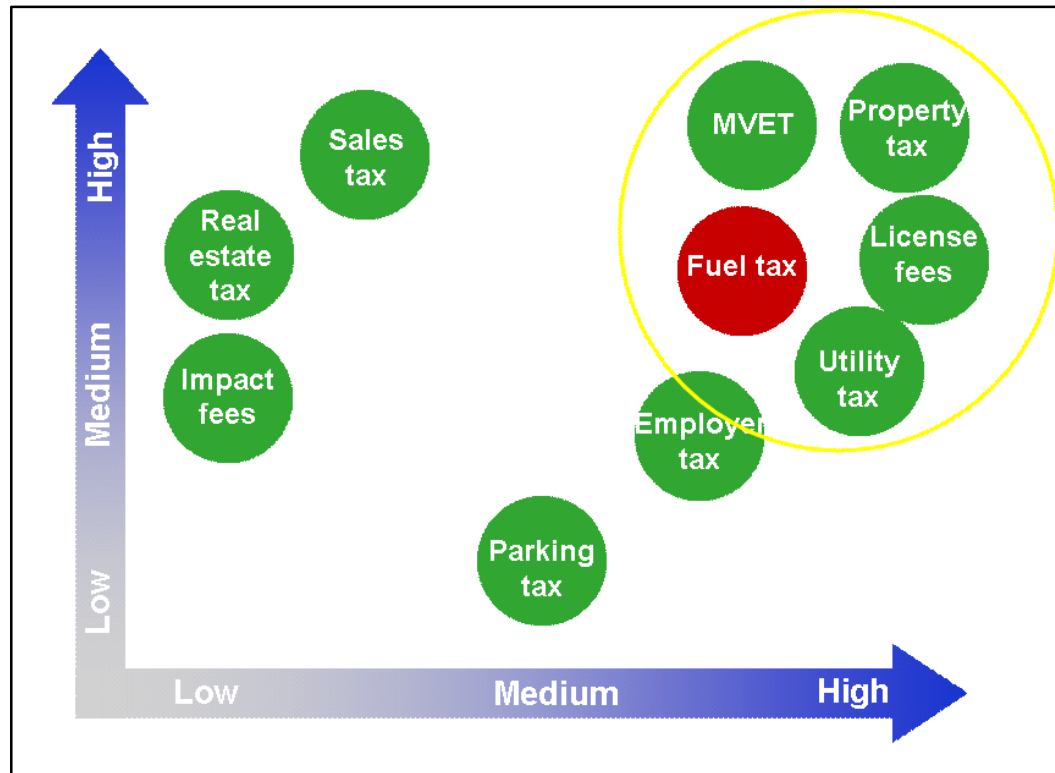
Using the evaluation results, the Commission selected a smaller set of funding sources for more detailed financial analysis. These sources included the following:

- Local motor vehicle excise tax,
- Local registration fee surcharge,

- Property tax, and
- Local utility tax.

These sources were selected primarily because of their superior yield and reliability. Figure 3.4 graphically depicts how the sources performed in the initial review in terms of their yield and reliability. The fuel tax is shown in red because it was judged to be politically infeasible at the current time, even though it has high yield and reliability.

Figure 3.5 Yield and Reliability of Local Funding Sources



Note: The fuel tax is shown in red because it was judged to be less politically feasible than the other sources due to recent volatility in fuel prices, though it performed well on yield and reliability. Property taxes are shown as being highly reliable, but this may not always be the case (see box below on property tax rate caps).

The selection of a small number of local sources for detailed analysis was necessary to allow estimation of the revenue-generation capacity of a ferry funding district. In practice, localities would have a say in the selection of the tax or fee source. There are many local benefit districts currently authorized in law (e.g., Regional Transportation Investment Districts and County Ferry Districts), and all provide a list of eligible funding sources from among which localities can choose. One type of district, the Transportation Benefit Districts (TBD), maybe particularly well-suited as a means for implementing a local ferry funding district. TBDs are discussed in greater detail below.

Transportation Benefit Districts

The Washington State Legislature has passed legislation allowing local governments to form special taxing districts for a variety of transportation related purposes, such as funding local transit systems, passenger-only ferries, and High-Occupancy Vehicle (HOV) lanes.

Of all the types of districts, TBDs seem best suited as a means to allow local governments to raise funds to support the ferry system. TBDs have very broad eligibility. According to the law (RCW 36.73), funds raised by TBDs may be used “to finance construction of, and operate, improvements to roadways, high capacity transportation systems, public transit systems, and other transportation management programs.” The “legislative intent” portion of the authorizing legislation states that: “It is the intent of the legislature to encourage joint efforts by the state, local governments, and the private sector to respond to the need for transportation improvements on state highways, county roads, and city streets”. This general language and intent may be interpreted to include improvements to the ferry system as an eligible use of funds by TBDs. The ferry system is considered to be both a public transportation system and part of the state highway system.

TBDs may be enacted by combinations of cities or counties anywhere in Washington State. They may be supported by sales taxes, vehicle registration fees, excess property tax levies, tolls, late-comer fees, and developer fees; TBDs also have the authority to issue bonds backed by these revenue sources.

Imposition of taxes or fees imposed under TBDs requires voter approval except for vehicle licensing fees under \$20. Fees of up to \$20 may be imposed by a majority of the decision making body of the city or county without voter approval (see RCW 36.73.065).

In choosing the funding source that best meets their needs, localities may wish to consider whether the source is currently authorized for use under TBDs, since TBDs appear to be appropriate as a means to raise funds for the ferry system.

In addition, localities may consider the current use of the tax and fee source, since the entities which depend on the revenue may object to it being used for another purpose. For reference, the sources recommended for detailed analysis by the Commission are currently used for the following purposes in the following places:

- **MVET.** There is a 0.3 percent MVET in place in King, Pierce, and Snohomish Counties to support Sound Transit.
- **Motor Vehicle License/Registration Fee.** To the consultant’s knowledge, there is no local motor vehicle license fee in place in the Puget Sound region. However, all residents pay the state fee of \$30 per vehicle.
- **Property tax.** Property taxes are used for a wide variety of purposes throughout the Puget Sound region. Property taxes levels vary greatly by location, depending on how many districts rely on the revenues. For example, in San Juan County, total property taxes range from \$3.97 to \$6.64 per \$1,000 of assessed value. The taxes are used to support schools, roads, fire protection, cemeteries, libraries, parks and recreation, hospitals, and

Emergency Medical Services¹³. Any new use of the property tax (e.g., for ferries) would effectively have to compete with all of the existing uses. See the box below on property tax limitations.

- **Utility Tax.** To the consultant’s knowledge, there are no utility taxes in place in the Puget Sound region. There is a utility tax in place in the City of Pullman in eastern Washington (Whitman County), used to support Pullman Transit.

Property Tax Rate Limitations

In Washington State, total property taxes may not exceed 1 percent of the market value of the property, and, for most districts, taxes may not increase by more than 1 percent per year without voter approval. A wide variety of taxing districts (e.g., cities, counties, fire districts) competes for a portion of this authority. Traditionally, there has been a preestablished priority order for apportioning the authority among districts. However, the traditional order has not been followed as closely in recent years. Property values have risen rapidly, opening up more space under the property tax cap. Some junior taxing districts have been able to secure a portion of this new taxing authority by agreeing to be the first to give it up should property values decline.

If localities were to form a new taxing authority to support WSF, it would have to compete with other taxing districts. In all likelihood, it would have to make the same arrangement other junior taxing districts are making, which is to agree to cede the authority if property values decline. In this case, property taxes may not be as reliable a revenue source as they would otherwise seem.

Limitations on property taxes are codified in RCW 84.52.050, RCW 84.52.043, and Chapter 84.55 RCW.

Table 3.5 presents some of the pros and cons of the four sources selected for detailed analysis.

¹³Source: San Juan County Assessor’s web site.

Table 3.5 Pros, Cons, and Legal Restrictions of Funding Sources Selected for Detailed Analysis

Local Tax/Fee	Pros	Cons
MVET	<ul style="list-style-type: none"> • High yield. • Not as vulnerable to inflationary pressures as a flat tax. • Less regressive (higher income individuals have more and higher value vehicles). 	<ul style="list-style-type: none"> • Already in place in three counties to support Sound Transit. • Use at the local level to fund the ferry system would likely require enabling legislation.
Property Tax	<ul style="list-style-type: none"> • High yield. • Not as vulnerable to inflationary pressures as a flat tax. • Potential for more direct connection to ferry system benefits (existence of ferry system may influence property values, especially for Island residents and those living near ferry terminals). • Less regressive. • Enabling legislation may not be required due to the fact that property taxes are listed as an eligible funding source under TBDs. 	<ul style="list-style-type: none"> • Property taxes are used for many purposes; the ferry system would have to compete. • Imposing property taxes can be complex due to caps on property tax rates and increases. (See box above.) • Imposition of excess property tax levies under TBDs requires voter approval.
Motor Vehicle Licensing Fee	<ul style="list-style-type: none"> • Not currently used on the local level; may be less likely to be seen as competing with other local priorities. • Enabling legislation may not be required due to the fact that registration fees are listed as an eligible funding source under TBDs. • Voter approval may not be required. Fees of up to \$20 may be implemented without voter approval under a TBD. 	<ul style="list-style-type: none"> • Lower yield than the MVET and the property tax. • More regressive than other taxes (everyone pays the same amount for vehicles of similar weight, regardless of income). • Vulnerable to inflationary pressure.
Utility Tax	<ul style="list-style-type: none"> • Not currently used on the local level; may be less likely to be seen as competing with other local priorities. 	<ul style="list-style-type: none"> • Lower yield than MVET, license fee, and property tax. More regressive than other taxes (everyone pays the same regardless of income). • Vulnerable to inflationary pressure. • Use at the local level to fund the ferry system would likely require enabling legislation.

Ferry District Boundaries, Political Feasibility, and Revenue Generation Potential

The Commission investigated a number of hypothetical ferry district boundaries. However, the boundary of any funding district ultimately depends on which local governments are interested in forming it. The level of interest may be influenced by: 1) the degree to which residents depend on the ferry system; 2) the degree to which entering into a local ferry district will preserve or enhance vital ferry service; and 3) the relative costs and benefits of entering into a partnership with other localities versus initiating locally-controlled ferry service.

In other words, each locality will have to evaluate its interest in forming a multicounty or multicity district versus starting its own district (e.g., a county ferry district similar to that in place in King County) versus accepting a reduced level of ferry service. Localities that do not depend as heavily on ferry service may be more willing to accept service cuts than enter into a local ferry district partnership arrangement.

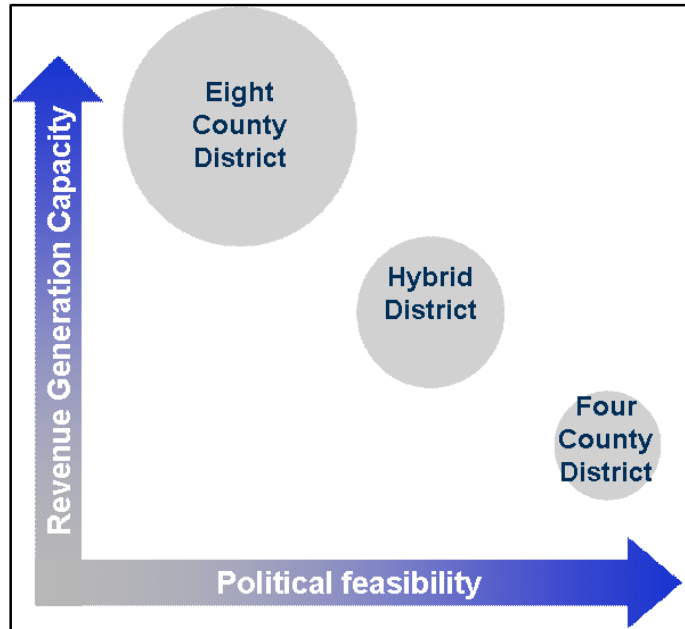
Some possible ferry district boundaries investigated by the Commission include the following:

- **Eight-County District.** An eight-county ferry funding district, encompassing all eight ferry-served counties (King, Pierce, Snohomish, Skagit, Island, San Juan, Kitsap, and Jefferson) would have the greatest revenue-generation potential, but would likely be the most politically challenging to implement, since voters in the counties on the eastern part of Puget Sound (King, Pierce, Snohomish, and Skagit) are less dependent on the ferry system, and so may be less likely to support a ferry funding district.
- **Four-County District.** It may be less challenging to gain political support for a four-county ferry district comprising only the more ferry-dependent West Sound counties (Island, San Juan, Jefferson, and Kitsap, plus Vashon Island, which is part of King County). However, those areas have small populations, making revenue generation potential much lower than an eight-county district.
- **Hybrid District.** A hybrid of the first two options would include the four-county district plus those areas in the East Sound, which, due to their proximity to the ferry system, may be more likely to support a local ferry district. Additional research would be needed to identify such areas. For the purposes of this report, it was assumed that the hybrid district would include the four-county district (e.g., four West Sound counties plus Vashon Island), and the portions of King and Snohomish Counties lying west of Interstate 5. These areas encompass about 33 and 42 percent of the county populations, respectively¹⁴. In practice, it is unlikely that I-5 would be used to define the boundaries of a ferry district, but it is useful approximation for the purposes of this report.

There is a clear tradeoff between the size (and revenue generation potential) of the ferry funding district and its political feasibility. The eight-county district would generate about nine times more revenue than the four-county district, but would be less politically viable, since it would include populations that do not depend on the ferry system (e.g., those who both live and work in King County). Figure 3.6 illustrates this tradeoff.

¹⁴Percentages estimated through Geographic Information Systems analysis of Census blockgroup populations.

Figure 3.6 Tradeoff Between Ferry District Size and Political Feasibility



Note: An eight-county district includes all eight ferry-served counties (King, Pierce, Snohomish, Skagit, Island, San Juan, Kitsap, and Jefferson). A four-county district includes the four West Sound counties (Island, Kitsap, San Juan, and Jefferson) plus Vashon Island, which is part of King County. The hybrid district is an intermediate option.

Ferry District Implementation and Governance

By law, the State may not force localities to collect funds; formation of the funding district would be voluntary and would be subject to a vote of either the affected public or county/city councils.

Gaining local approval would require that local voters or elected officials have some incentive to adopt the arrangement, and some assurance that the amount paid would be linked to system benefits received. The potential for fragmentation of what is now a state system would increase, with the undesirable specter of multiple bodies for the planning and funding of the ferry system.

Depending on the role of the district, there may need to be a change in the governance structure of WSF in order to better represent local government in oversight and decision-making. While these are not insurmountable obstacles, they clearly represent challenges or impediments that need to be resolved. Start-up time for a local funding option could be several years.

In considering how the governance of a ferry district might work, it is useful to consider relevant examples of mass transit systems funded and governed by multiple localities and state agencies. The two boxes below explain the unique local funding arrangements devised to support the Washington Metropolitan

Area Transit Authority (WMATA) and Caltrain, a commuter rail service in the San Francisco Bay Area. Sound Transit, not discussed here, is another example of a transportation district that draws funds from multiple localities.

Caltrain: Transition from State to Shared State-Local Responsibility

Caltrain is a commuter rail service that serves San Mateo, San Jose, and San Francisco Counties in California. The service was initiated in 1980 and run by the State Department of Transportation (Caltrans) through a partnership with a private rail operator. Caltrain's annual budget is about \$150 million.

In 1987, representatives of the localities served by the commuter rail formed a Joint Powers Board (JPB) to transfer responsibility for the rail service from the State to the local level. The localities signed a Joint Powers Agreement that stipulated the JPB membership and powers, specified financial commitments for each member, established the San Mateo County Transit District as the managing agency and detailed other administrative procedures.

Under the Joint Powers Agreement, member localities are responsible for funding the operating subsidy. The localities' share of the operating subsidy is apportioned based on A.M. boardings.

Capital funding needs have been met through a combination of state grants, Federal grants, and fixed match amounts paid by member localities. Member localities also occasionally pay extra for special projects that particularly benefit their area.

WMATA: Funding from Eight Localities and MDOT

WMATA provides bus, rail, and paratransit service to the District of Columbia and portions of Maryland and Virginia. WMATA's annual budget is nearly \$2 billion.

About 40 percent of WMATA's annual budget come from contributions from the localities it serves, which include three counties, four cities, and the District of Columbia¹. The remainder comes from fares and Federal funds.

Each localities' funding contribution is determined by a formula that approximates system benefits received. The rail funding formula, for example, takes into account factors, such as the population of the locality, ridership attributed to the locality, and the number of rail stations in the locality.

In addition, the localities and the Maryland DOT have historically paid hundreds of millions of dollars each year on top of the formula-based contributions for special improvements in their areas, such as station improvements, parking lots, and additional rail stations and buses.

The localities that contribute to WMATA are directly involved in its governance. Each member of WMATA's board represents one of its member jurisdictions (including a member representing the State of Maryland).

Not all localities in the metro area have opted to subsidize WMATA. Fairfax County elected to operate its own local bus service (the Fairfax County Connector) rather than pay WMATA.

The examples illustrate that there is precedent for joint funding and management of transit systems by a group of localities and state agencies. They show that the following steps will likely be needed to make such a funding arrangement work:

1. Determine which local governments are willing to participate in the arrangement.

2. Determine how funding responsibility will be split among participants (most likely as a function of system usage and access variables, such as ridership, population, number of access points).
3. Negotiate what each locality would receive in return for providing its share of the funds (e.g., a certain level of service, specific capital improvements).
4. Determine how the district would be administered and who would be involved in governing it (e.g., representatives from each locality). Determine whether the governance body would be integrated into WSF's current governance structure, or whether it would be separate. If it would be separate, determine how its roles and responsibilities would interface those of WSF.
5. Determine whether action is needed by the state legislature to allow creation of the district. Action may not be needed if an existing type of transportation funding district can be adapted for ferry system purposes. Current law authorizing TBDs (RCW 36.73) may be adequate.
6. Draft an agreement that specifies funding contributions and management responsibilities of each locality.
7. Localities determine how to raise the necessary funds. Voter approval will be necessary for most tax and fee types. One exception is the vehicle licensing fees; if the fee is under \$20, it may be implemented by a vote of the city or county council (e.g., "councilmatic" decision-making).

Appropriate Level of Local Contribution

The Commission explored what would be an appropriate level of local contribution towards total ferry funding needs. The level of contribution would ultimately need to be negotiated with the local governments, and would need to be linked to certain levels of service.

Some possible roles for local funding considered in this study include the following:

- **Locals pay the portion of operating subsidy not covered by dedicated state tax revenues in Scenario A.** Dedicated state taxes and fares are projected to cover most of the future operating subsidy needed by the ferry system. Local revenues could be used to close the remaining operating revenue gap, which is currently projected to be \$213 million (YOE dollars) for WSF Ferries Scenario A.

Capron Funds – A Form of Local Participation

Until recently, fuel tax revenues collected in the San Juan and Islands Counties were put into a special fund (the Capron Fund) and returned to those counties for use for local roads. With the passage of the 2005/2007 biennial budget, a portion of the Capron fund revenues related to the increased gas tax were diverted to Washington State Ferries' operating fund; the rationale being that WSF serves as a state highway for those counties. In this sense, the two counties are already contributing local funds to support Washington State Ferries.

- **Locals pay the entire operating subsidy.** Local revenues could close the operating gap after all current dedicated state sources of operating funding are transferred to the capital budget. This would free up existing state revenues for the capital program where the greatest funding needs lie.
- **Locals pay the unfunded capital needs associated with Plan B.** Ferries' Scenario B presents a situation in which no major sources of state revenue are forthcoming. In this situation, local governments could pay all of the unfunded capital needs associated with the scenario (\$1.3 billion).
- **Locals pay unfunded capital needs associated with Scenario B, and also cover assumed administrative transfers from the State.** Both Scenarios A and B assume that WSF will receive \$1.1 billion in ad-hoc administrative transfers of state revenue to the capital program. These transfers are not a dedicated revenue source, so are less reliable than other sources. To reduce this uncertainty, local governments could increase their level of subsidy, allowing elimination of the ad-hoc transfers.

Figure 3.7 provides an indication of how the various revenue sources compare to the total operating subsidy needs, and the needs associated with Scenario B.

Note that the figures assume that all tax and fee revenues would go towards WSF. In practice, it is unlikely that WSF would receive all of the revenue from a tax or fee increase.

The figure makes clear that the revenue generation potential in a four-county district is relatively small. Most population and revenue generation potential is in the large counties on the east of Puget Sound, not in the western counties included in the district. Fee levels in a four-county district would have to be set very high to meaningfully offset the ferry system's funding needs. For example, an MVET level of about 1 percent (or about \$100 on a \$10,000 vehicle, the approximate average vehicle value in Washington State¹⁵) would be necessary to address the Scenario B funding gap. Double that amount (a 2-percent MVET) would be necessary to address the Scenario B funding gap, and remove the need for ad-hoc administrative transfers to the ferry capital program. Much smaller fee levels (for example, a 0.17-percent MVET, or about \$17 per vehicle) would be necessary if the goal was only to address the unmet operating needs of Scenario A.

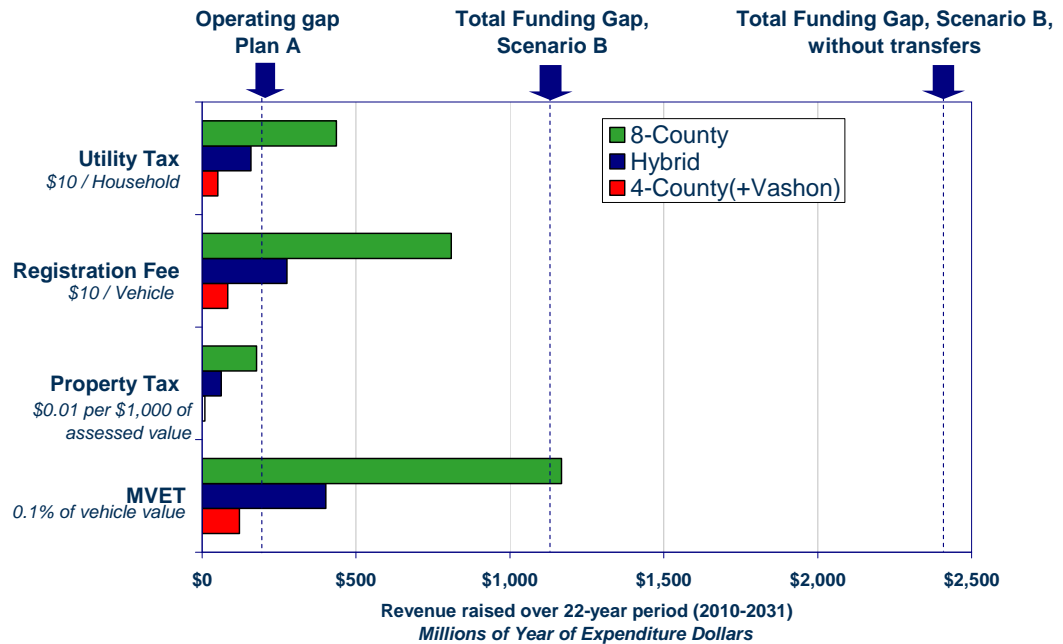
The "hybrid" district could offset a greater share of the need. If fee levels were set sufficiently high (e.g., an MVET level of 0.3 percent), the district could raise enough revenue to cover the Scenario B funding gap.

The eight-county district raises a significant amount of revenue with modest tax and fee levels. For example, an MVET of 0.2 percent would raise enough

¹⁵According to the Joint Transportation Committee Motor Vehicle Excise Tax Study, the average MVET value for passenger cars was \$10,453, and light trucks is \$8,329.

revenue to cover the Scenario B funding gap, and remove the need for ad-hoc administrative transfers.

Figure 3.7 Local Tax and Fee Revenue Generation Potential Compared With Ferry Funding Gaps



Assumptions: Please see Appendix B for the assumptions used in the revenue forecasts. The assumptions are based on historical trends and projections. If the number of households, number of vehicles, value of property, or value of the vehicle fleet do not grow as expected, revenues may be less than what is shown. For example, the MVET calculations assume an average MVET revenue growth rate of 5 percent per year (slightly less than the historical growth rates during the period that the MVET was enacted). MVET revenues could grow at a lower rate than predicted if Washington’s population growth slows or residents purchase fewer cars, leading to a lower fleet size; the fleet value could diminish if residents purchase less expensive vehicles or wait longer to replace older, lower-value vehicles.

District definitions: The “eight-county” district includes King, Pierce, Snohomish, Skagit, Island, San Juan, Kitsap, and Jefferson Counties. The “four-county” district includes Island, San Juan, Kitsap, and Jefferson Counties and Vashon Island, which is part of King County. The “hybrid district” includes everything in the four-county district plus portions of King and Snohomish Counties that border the Puget Sound.

In summary, only an eight-county ferry district could address the unmet needs associated with WSF’s Scenario B while keeping fee levels within the range of current practice. Smaller ferry funding districts would raise insufficient revenue, unless fee levels were set relatively high.

Figure 3.8 compares the local MVET levels necessary to close the Scenario A operating gap, the Scenario B total gap, and the Scenario B total gap, assuming WSF does not receive administrative transfers to its capital program.

Table 3.6 through Table 3.9 show the tax and fee levels necessary under each scenario to generate enough funds to close the WSF Scenario A operating gap of \$213 million and the Scenario B capital gap of \$1.3 billion.

Note that the figures assume that all tax and fee revenues would go towards WSF. As stated above, it is unlikely in practice that WSF would receive all of the revenue from a tax or fee increase.

Figure 3.8 Local MVET Levels Necessary to Raise Equivalent of Ferry Funding Gap

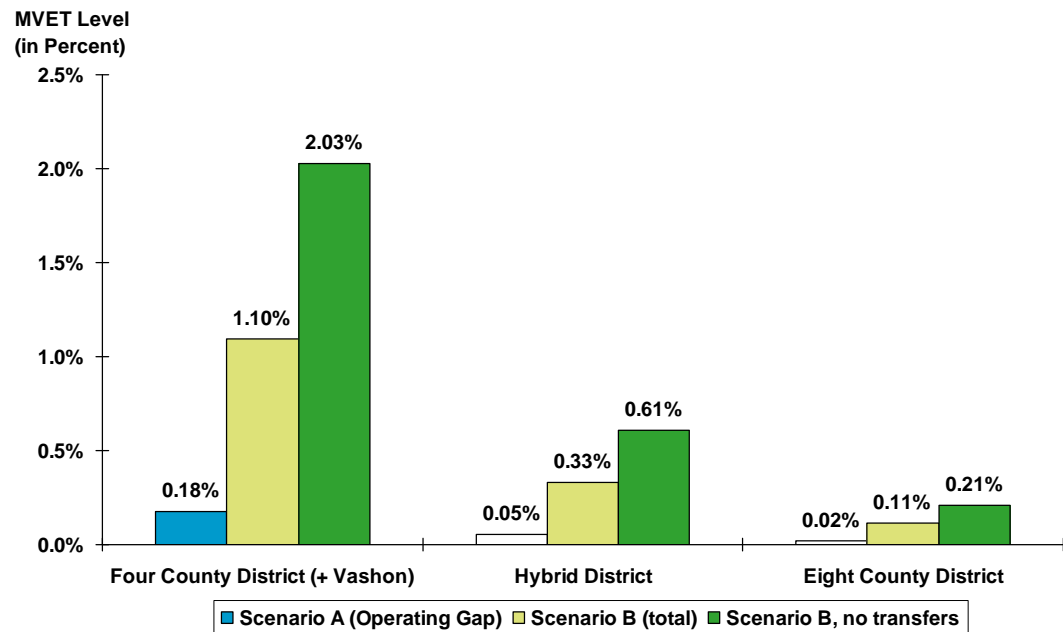


Table 3.6 Illustrative Tax and Fee Levels Necessary to Close Scenario A Operating Gap and Scenario B Total Gap, Motor Vehicle Excise Tax

District Size	Tax/Fee Level Necessary to Address Scenario A Operating Gap (\$213 Million)	Tax/Fee Level Necessary to Close Entire Scenario B Funding Gap (\$1,300 Million)
Eight-County District	0.02% of vehicle value or \$2 on a typical vehicle	0.11% of vehicle value or \$11 on a typical vehicle
Hybrid District	0.05% of vehicle value or \$5 on a typical vehicle	0.33% of vehicle value or \$33 on a typical vehicle
Four-County District	0.18% of vehicle value or \$18 on a typical vehicle	1% of vehicle value or \$100 on a typical vehicle

Note: Average MVET vehicle value for passenger cars and light trucks in Washington State is about \$10,000, according to the Joint Transportation Committee Motor Vehicle Excise Tax Study (2006).

Table 3.7 Illustrative Tax and Fee Levels Necessary to Close Scenario A Operating Gap and Scenario B Total Gap, Local Registration Fee

District Size	Tax/Fee Level Necessary to Address Scenario A Operating Gap (\$213 Million)	Tax/Fee Level Necessary to Close Entire Scenario B Funding Gap (\$1,300 Million)
Eight-County District	\$3 per vehicle	\$16 per vehicle
Hybrid District	\$8 per vehicle	\$48 per vehicle
Four-County District	\$25 per vehicle	\$160 per vehicle

Note: Values rounded to nearest dollar.

Table 3.8 Illustrative Tax and Fee Levels Necessary to Close Scenario A Operating Gap and Scenario B Total Gap, Local Property Tax

District Size	Tax/Fee Level Necessary to Address Scenario A Operating Gap (\$213 Million)	Tax/Fee Level Necessary to Close Entire Scenario B Funding Gap (\$1,300 Million)
Eight-County District	\$0.01 per \$1,000 of assessed value, or \$4 on a \$400,000 home	\$0.07 per \$1,000 of assessed value, or \$28 on a \$400,000 home
Hybrid District	\$0.03 per \$1,000 of assessed value, or \$12 on a \$400,000 home	\$0.21 per \$1,000 of assessed value, or \$84 on a \$400,000 home
Four-County District	\$0.12 per \$1,000 of assessed value, or \$48 on a \$400,000 home	\$0.74 per \$1,000 of assessed value, or \$296 on a \$400,000 home

Note: Values rounded to the nearest cent. Note that these levels, especially the higher values, may not be possible in all jurisdictions due to property tax rate caps.

Table 3.9 Illustrative Tax and Fee Levels Necessary to Close Scenario A Operating Gap and Scenario B Total Gap, Utility Tax

District Size	Tax/Fee Level Necessary to Address Scenario A Operating Gap (\$213 Million)	Tax/Fee Level Necessary to Close Entire Scenario B Funding Gap (\$1,300 Million)
Eight-County District	\$5 per household	\$30 per household
Hybrid District	\$13 per household	\$84 per household
Four-County District	\$42 per household	\$262 per household

Note: Values rounded to nearest dollar.

Table 3.10 presents assumptions used in the estimation of local tax revenue.

Table 3.10 Assumptions Used in Local Tax and Fee Revenue Forecasts

Year	Key Assumptions Used in Revenue Forecast
MVET	<ul style="list-style-type: none"> • Same as state; county-level fleet values calculated by multiplying county-level registrations by average vehicle value (drawn from Washington State Joint Transportation Committee MVET study).
Motor Vehicle Registration Fee	<ul style="list-style-type: none"> • Same as state; used 2006 vehicle registrations by county as a base (data drawn from the Office of Financial Management Counties Profile).
Utility Tax	<ul style="list-style-type: none"> • Used housing units by county as a base (2006 Census). • Increased units each year by the projected average annual increase in housing units by county between 2005-2010 (Washington State Office of Financial Management). • Reduced revenues by administrative costs of 0.66%, based on average fee administration costs reported by the Washington State Department of Revenue.
Property Tax	<ul style="list-style-type: none"> • Used 2006 total assessed property values by County, reported by the Washington State Office of Financial Management. • Applied an average annual rate of revenue increase suggested by consultation with Washington Economic and Revenue Forecast Council (3.2%) based on past experiences, for 2010 and onward. Used a more conservative growth estimate (1%) for 2008 and 2009. • Reduced first year revenues by administrative costs of 0.66%, based on average fee administration costs reported by the Washington State Department of Revenue.

3.3 FERRY SYSTEM OPERATING INCOME

Throughout the ferry funding study, the Commission considered mechanisms for increasing ferry operating income so as to reduce the amount of subsidy required to support the ferry system. Sources considered have included the following:

- Fare increases.
- New sources of ancillary revenue, such as naming rights, more aggressive advertising, and concessions sales on-board and in terminals.
- Public-private partnership arrangements. These are not sources of revenue, but if structured properly, have the potential to produce money-saving efficiencies or reduce financial uncertainty.

Each type of source is considered in more detail below.

Fare Increases

The Commission considered a number of different types of fare increases, including the following:

- General fare increase;
- Fuel surcharge;

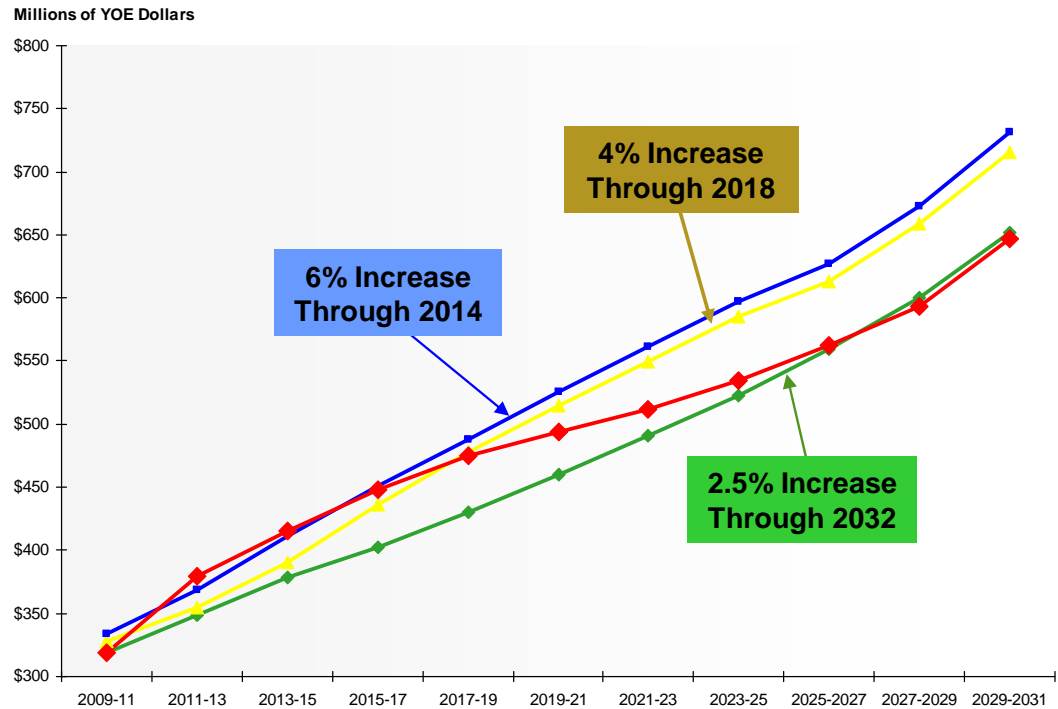
- Index fares to inflation;
- Increase in the seasonal fare surcharge;
- Peak-period fare surcharge;
- Reduction in frequent user discounts;
- Surcharge on oversize vehicles; and
- Simplification of the fare structure.

The pros and cons of each type of increase are discussed briefly below.

General Fare Increase

Fares could be increased at a higher rate than inflation to reduce WSF's operating gap and increase farebox recovery ratios. As an example, raising general fare levels at 4 percent over 9 years or 6 percent over five years, plus a fuel surcharge and super summer surcharge (described below), would be sufficient to close the Scenario A operating gap. Figure 3.9 illustrates these different fare increase rates and compares them to the Long-Range Plan fare increase scenario of 2.5 percent per year.

Figure 3.9 Fare Revenue Per Biennium Under Different Fare Increase Scenarios
Millions of YOE Dollars



“Revenue target” (red) is fare revenue required to cover WSF Scenario A operating needs in each biennium, such that no additional state subsidies are needed beyond dedicated revenues and \$88 million in administrative transfers expected by WSF.

“2.5% Increase” – (green) Revenue estimate in WSF Long Range Plan Scenario A (January 30th, 2009.) Assumes 2.5% per year fare increase plus variable fuel surcharge.

“4% Increase” – (yellow) Fares increased at up to 4 percent per year, plus fuel surcharge and super summer surcharge until no additional increases are needed to meet biennium revenue target. Fares increased thereafter at 2.5% per year.

“6% Increase” – (blue) Same as 4% increase but capped at 6% per year until revenue target met, thereafter at 2.5% per year.

Fuel Surcharge

Any fare increase could take the form of a fuel surcharge, which would be listed as a separate line item on the fare media. The fuel surcharge could be readjusted on a periodic basis to account for increases or decreases in the cost of fuel. This would be intended primarily to: 1) make the fare increase more palatable and understandable to ferry riders, and 2) to offset a part of the impact of unpredictable fuel increase. Many commercial airlines, taxi companies, and other fuel-

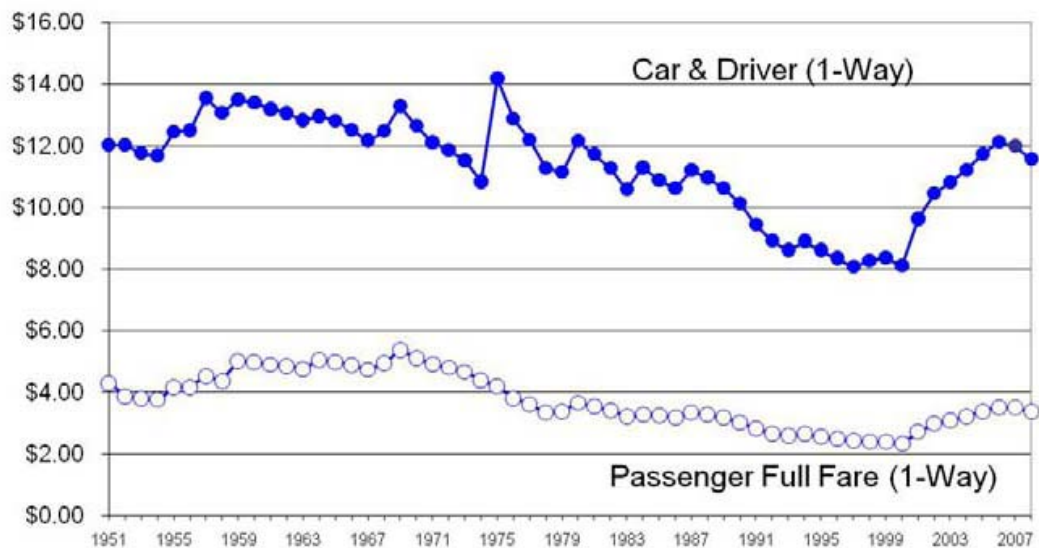
dependent businesses are implementing fuel surcharges. BC Ferries has recently done the same.¹⁶

WSF has proposed a fuel surcharge in its Draft Revised Long-Range Plan Scenarios A and B. The surcharge would be set to cover the increased costs of fuel associated with variances in fuel costs beyond the long-term average cost of fuel (\$2.15 per gallon).

Indexing to Inflation

In the past, fare increases have been highly erratic, resulting in an unpredictable situation for both riders and for WSDOT’s financial planners. Real fares have declined over time, and in spite of recent increases, remain below 1960s’ levels.

Figure 3.10 Historical Ferry Fares Indexed to Inflation



Source: Washington State Ferries Revised Draft Long-Range Plan, January 2009.

The WSF financial plan assumes fares will increase every year by 2.5 percent. This rate of increase is not consistent with past increases, which have been highly erratic and have not kept pace with inflation. This lack of predictability makes it difficult for WSF to accurately forecast its subsidy needs.

Increasing fares to actual inflation could improve the predictability of fare revenues. The Bay Area Rapid Transit (BART) system may be a good model for how automatic fare indexing can be achieved. In 2003, the BART board passed a

¹⁶See BC Ferries July 24th press release: <http://www.bcferrries.com/bcferrries/faces/attachments?id=34392>; and a related article, BC Ferries to Hit Riders with New Fuel Charge: http://www.ctvbc.ctv.ca/servlet/an/local/CTVNews/20080611/BC_new_seabus_080611?hub=BritishColumbiaHome.

directive allowing an automatic fare increase every other year to adjust to inflation, without any input from outside entities¹⁷. BART has not suffered a ridership decline because of the increases; in fact, ridership since 2003 has grown by more than 20 percent¹⁸.

Increase in the Seasonal Fare Surcharge (“Super Summer Surcharge”)

WSF applies a seasonal fare surcharge of about 25 percent¹⁹ between May 1st and mid-October of each calendar year. The surcharge does not apply to passengers (walk-ons or vehicle passengers), or to vehicles paying with a multiride card (*Wave2Go*).

WSF could raise additional revenues by increasing the surcharge to beyond 25 percent for some or all of the peak season. As an example, if the average seasonal fare surcharge was increased to about 40 percent (from 25 percent)²⁰ during July and August, about an additional \$2 million could be raised²¹.

The advantage of increasing the seasonal surcharge is that it affects summer riders who are less sensitive to price increases than winter riders. Results of the 2008 WSF Customer Survey showed that fares may be increased up to 16 percent on summer riders and still be considered “not expensive,” while fares on winter riders would have to be discounted by 6 percent to be considered “not expensive.”

Peak-Period Surcharge

WSF explored the possibility of a peak-period surcharge or off-peak discount throughout its Long-Range Planning processes. A surcharge could both generate additional revenue and reduce demand during peak periods, allowing better utilization of existing vessel space and consequently reduce long-term capital costs.

WSF undertook detailed study of a peak surcharge/off peak discount; the results of which are presented in Appendix H of the Draft Revised Long-Range Plan.

¹⁷Relevant article: http://findarticles.com/p/articles/mi_qn4176/is_20030523/ai_n14550765.

¹⁸Source: BART average weekday exits by fiscal year, http://www.bart.gov/docs/station_exits_FY.pdf.

¹⁹The seasonal surcharge for certain types of fares is slightly higher. For example, the surcharge on elderly/disabled passengers on the Bainbridge route is 29 percent for elderly/disabled and drivers, and 38 percent for elderly/disabled motorcycle riders.

²⁰This represents an effective increase of about 6 percent for the vehicle full fare category, and about 12 percent for the vehicle “other” category (primarily oversize vehicles).

²¹Berk and Associates for Washington State Ferries estimate of additional super summer surcharge revenue in 2011.

Surcharge on Oversized Vehicles

WSF has a special fare category for oversized vehicles. Increasing fares for vehicles in this group would generate additional revenues, and may also help encourage the use of smaller vehicles, thereby saving space on the ferry and potentially reducing capital costs in the long term. A fare increase of 10 percent on oversize vehicles would generate about \$1 million to \$2 million per year in additional revenues²².

Reduction in Frequent User Discounts

Frequent riders receive substantial discounts. The amount of the discount varies by season and route. For example, those who purchase a multiride card on the Seattle-Bainbridge route receive a 25-percent discount during the off-season, and a 57-percent discount during the peak season²³ (due to the fact that they are not subject to the current peak-season surcharge).

Given the steep discounts received by frequent users, it is not surprising that their elasticity of demand is lower than for other riders, indicating that fares could be raised on these groups without losing as many riders. For instance, a 15-percent increase on both passengers and vehicles purchasing the multiride card could yield about \$4 million in additional revenue per year²⁴. Even with this increase, the average fare paid by multiride card users would about 20 percent lower on average for multiride passengers, and 37 percent lower on average for multiride drivers.

Simplification of the Fare Structure

WSF's fare collection process is dominantly manual. This contributes to longer vehicle boarding times and traffic backing up to travel lanes. It has been suggested that automatic fare collection could reduce wait times. This would require installation of toll gantries at all boarding locations, allowing fares to be collected automatically through transponders.

The complexity of WSF's fare structure is an obstacle in implementation of an automated fare collection system. In particular, the existence of a special fare

²²Cambridge Systematics using data from PB Consult (FY 2009 projections from the WSF revenue model received August 2008). Estimate is an illustrative "ball park" park figure.

²³A multiride card on the Seattle-Bainbridge route costs \$184.40 and is good for 20 rides, or an average of \$9.24 per ride. This is a 25-percent discount off the regular vehicle fare of \$11.55 and a 57-percent discount off the peak-season fare of \$14.55.

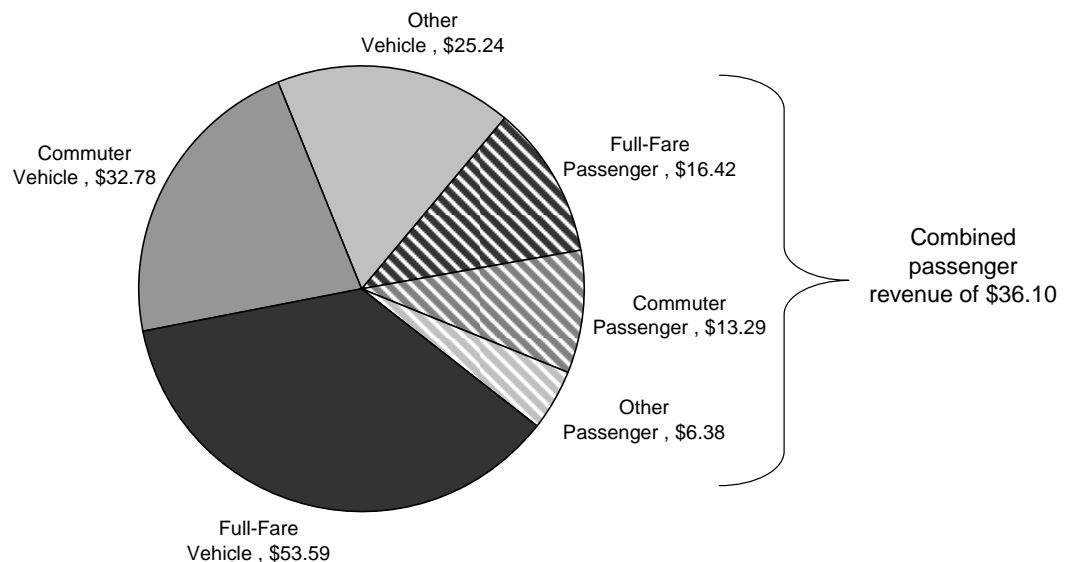
²⁴Cambridge Systematics, using data from PB Consult (FY 2009 projections from the WSF revenue model received August 2008). Estimate is an illustrative "ball park" park figure.

category for vehicle passengers, who cannot be counted automatically, makes electronic fare collection difficult. Other potentially problematic types of fares are the special fares for oversize vehicles, motorcycles, motorcycle sidecars, overweight vehicles, seniors, and youth.

Members of the Washington Senate requested that Cambridge Systematics investigate the revenue implications of going to a drastically simplified fare structure that would allow automatic collection.

One simple means of considering the revenue implication of a fare structure change is to consider current sources of revenue by fare category. Figure 3.11 shows projected revenue by six aggregated fare categories for FY 2009. It shows that revenue from all categories of passengers will total about \$36 million in FY 2009. About one-half that revenue, or \$18 million, can be attributed to vehicle passengers²⁵. Assuming that the vehicle passenger category were eliminated, about \$18 million per year would have to be raised per year from other types of fare categories. Using the elasticities currently in the revenue model, fare increases of more than 30 percent on all vehicle fares would be necessary to generate that much revenue.

Figure 3.11 FY 2009 Projected Fare Revenues by Category
In Millions



Source: PB Consult, FY 2009 Fare Revenue Projections.

²⁵According to a 2007 Rider Segment Report issued by Washington State Ferries, vehicle passengers comprised one-half of all passengers, and walk-on passengers comprised the remaining one-half.

However, that figure may not be accurate due to the fact that elasticities are not reliable for very large fare increases. Further study would be needed to determine how riders might react to such large vehicle fare increases, while taking into account the added convenience of an automatic fare collection system.

There are a number of other questions that would need to be explored to determine the feasibility of a transition to automatic fare collection, such as the following:

- Which types of fare categories (besides the vehicle passenger category) would need to be altered or eliminated to allow automatic fare collection? Would it be possible, for example, to continue discounts for seniors and the disabled through a special registration system? How would such discounts be administered and enforced?
- To what extent would the new system encourage fare evasion, for instance from walk-ons getting into vehicles in order to avoid paying a fare?
- How would riders respond to the changes in the fare structure? Would the convenience of an automated system offset some of the burden of certain types of fare increases? Would riders split the cost of the increased fare with their passengers?
- How much would the toll infrastructure cost? Toll gantries typically cost in the range of \$300,000 per lane²⁶; for example, \$900,000 for a three-lane gantry. That figure only covers roadside equipment; it does not include the cost of back office support, communication systems, or transponders.
- Where would toll gantries be installed? Is there sufficient space for them in all locations?
- Could the automated system be interoperable with existing toll systems, such as WSDOT's "Good 2 Go!"?
- How would unionized workers be transitioned into the new system? Could they be used for enforcement or for back office toll processing activities?
- Are there any alternatives to a tolling system that would achieve a similar result? What about on-board toll collection?

Such questions are outside the scope of the ferry funding study. A separate study would be necessary to pursue them in detail.

Table 3.11 summarizes the types of increases discussed above.

²⁶Federal Highway Administration, http://ops.fhwa.dot.gov/tolling_pricing/value_pricing/tools/index.htm.

Table 3.11 Summary of Types of Fare Increases

Type of Increase	Approximate Additional Yield in a Year (in Millions)	Policy Purpose	Comments
General fare increase	About \$9 million year from a 10% increase	Revenue generation only	Raises the greatest amount of money, but serves no policy purpose other than revenue generation
Fuel surcharge	Varies depending on how surcharge is implemented	Reduce uncertainty associated with fuel price escalation	May be more palatable to riders than a regular fare increase, but adds another level of complexity to an already complex fare structure
Indexing fares to inflation	No “real” increase – keeps fare revenues matched to inflation	Improve stability and predictability in fare revenues	Necessary for the predictability and stability of fare revenues over time
Seasonal surcharge	About \$2 million a year if vehicle surcharge is increased to about 40% of regular fare (from 25%)	Revenue generation only	Summer riders are less sensitive to fare increases than winter riders
Peak-period surcharge	About \$2 million a year for a 10% surcharge on peak travel (vehicle only)	Reduce peak congestion; possibly reduce capital needs	Peak weekday riders are slightly less sensitive to fare increases than off-peak riders
Oversized vehicle surcharge	About \$1.6 million a year for a 10% surcharge on oversized vehicles	Potentially encourage the use of smaller vehicles	Would focus the burden of the fare increase on freight
Reduction in frequent user discounts	About \$4 million a year if vehicle and passenger commuter fares increased by 15%	Revenue generation only	Frequent users may demonstrate opposition to fare increases
Simplification of fare structure	This would not be intended to raise revenue	Reduce wait times and queuing	Requires detailed study

Source: Cambridge Systematics, using data from PB Consult (FY 2009 projections from WSF revenue model received August 2008).

Note: These estimates are illustrative “ball park” figures. They take into account the elasticities of demand in the revenue model, but represent aggregates of fare categories, and thus are subject to error. The estimates are based on FY 2009 ridership projections from the revenue model. The projections assume fares will be 2.5 percent higher in that year. The increases illustrated here would be on top of the 2.5 percent assumed increase.

Ancillary Revenues and Public-Private Partnerships

Through the course of the Ferry Funding Study, the Commission has considered a number of possible sources of new nonfare ferry system revenues, or “ancillary revenues.” Those analyzed have included the following:

- More aggressive advertising;
- More aggressive food and beverage sales;

- Public-private partnerships, such as terminal joint development, lease of the ferry system, or a long-term lease of the entire ferry system to a private operator;
- Ferry system naming rights; and
- Ferry reservation system.

The July 2008 report entitled, *Part II Technical Memorandum – Initial Screening of Ferry Funding Sources*, explored each of these areas, except ferry system naming rights.

The report showed that ancillary revenues and public-private partnerships should be pursued aggressively, as they might help defray the amount of subsidy required. However, they cannot be expected to generate a large amount of new capital of the magnitude needed to close WSF's operating gap, or replace ferry boats and terminals.

For context, the sum total earned from ancillary revenues is currently around \$3 million per year, or less than two percent of the total operating budget. WSF's current forecasts assume that more aggressive strategies will allow revenues to grow at a rate higher than what would be expected from ridership growth and inflation (e.g., over five percent annual growth in ancillary revenues until 2014). Even with these growth assumptions built into the forecasts, ancillary revenues cover an average of two percent of WSF's operating costs over the planning period.

Nevertheless, ancillary revenues are worth considering as a means to supplement WSF's operating income. This section provides additional detail on potential revenues from naming rights, which were not explored in the initial report.

Naming/Branding Rights

Ferry system naming rights were among the additional sources of operating income considered by the consultant team. Selling of naming rights would include applying commercial names or logos (e.g., Starbucks, Gap) to components of the ferry system, such as ferry vessels, routes, terminals, web sites, etc.

This source was considered in detail because the Transportation Commission has the authority to name transportation facilities owned and operated by the State. However, it is unclear whether the authorizing legislation allows naming for commercial purposes, since the Commission has not tried commercial naming in the past. In fact, there is little precedent in the United States for naming transportation facilities for commercial purposes. Naming is more typically undertaken to honor an individual or group.

Although naming components of the ferry system for commercial purposes is uncharted territory, the Commission felt that it is appropriate to explore it, given the magnitude of WSF's financial crisis and the need to identify new sources of revenue.

Some Examples

As stated above, there are few examples of transportation facilities named for commercial purposes. The most relevant examples include the following:

- **Oklahoma River Ferries.** A locally-based energy company contributed \$2 million to the construction cost of new vessels on the Oklahoma River ferry transportation system. In exchange, these vessels will bear the name of the company for 15 years as part of the naming rights deal.
- **San Diego Port District Terminal.** The San Diego Port District is considering granting naming rights for its new proposed terminal, scheduled to open in 2011. The district will request bids in the near future, and expects to generate at least \$5 million for a naming deal that could last up to 10 years.
- **Florida and Pennsylvania Turnpike Safety Vehicles.** In Florida, the largest toll road agency has a contract with State Farm that grants the company the right to put its colors, logos, and name on service trucks at an annual fee of approximately \$1 million. The Pennsylvania Turnpike has a similar arrangement with the same insurance company. The service truck fleet is known as “State Farm Safety Patrol.” For both turnpikes, the deal with State Farm allows the agencies to provide a service free of charge to their customers, as the sponsorship revenue enables the agencies to cover the operating expenses of the service trucks in full or part thereof.²⁷

Potential Value

It is not possible to estimate the potential value of a naming rights program without detailed analysis that is outside the scope of this study. However, it is possible to identify the variables that affect commercial value. In general, commercial value potential is a function of customer traffic, the available mechanisms for exposing customers to the name/logo, and the availability and types of ancillary consumer centric programs that can be implemented (e.g., related promotional marketing and advertising opportunities).

Potential sponsors would likely be interested in the following statistics:

- **Exposure.** Potential sponsors would need to assess how the naming rights arrangement would affect their “visibility” to potential customers. They would want to know how ferry riders would be exposed to their corporate name or logo (e.g., displayed inside the ferry vessel or terminal, noted on web sites, spoken aloud to those calling for information about the ferry system, etc.). They would also want to know how many people would be exposed to the name/logo and for how long? Prominently displayed corporate names and logos on ferry vessels should be attractive to potential

²⁷Source: Branding Rights, LLC.

sponsors, as they would be within view throughout the journey, not just for a few seconds, as is common with billboards.

- **Household income.** A key element to the willingness of businesses to sell advertisement or provide sponsorship is the household income of the target market. This should be favorable to ferries, as its customer base is relatively affluent.
- **Economy.** The overall economy plays a key role because in downturns companies typically reduce expenses, including marketing. Hence, potential revenue analysis should consider how this may affect the agency's ancillary revenues. For instance, if the naming agreement specifies annual payments rather than an upfront payment for the naming deal, businesses under an adverse economic environment may not be able to fulfill their contract agreements.

A detailed analysis would review the above factors, as well as other ones relevant to the analysis of potential revenues from a branding/naming program. In addition to experts knowledgeable with ferry operations, it is advisable to involve subject matter experts in naming/branding to support the development of a reliable analysis.

To further investigate the potential revenue from a naming rights arrangement, it would be necessary to take the following steps:

- Review applicable statutes and regulations to determine whether commercial naming arrangements would be allowed.
- Review asset inventory (e.g., vessels, terminals, routes, Internet sites, etc.) for their viability for a naming rights arrangement. This would involve reviewing traffic statistics and rider demographics, as well as physical inspections.
- Prepare estimates of initial value of naming rights, solicit prospective sponsors/partners.
- Determine how revenue from naming rights arrangements would compare to revenue from other forms of advertising, such as temporary but intensive advertising on board ferry vessels. For example, in the San Francisco and the Bay Area in California, commercial businesses buy the rights to temporarily "wrap" the Bay Area Rapid Transit (BART) stations with publicity to promote their products and services for a specified period of time. The same type of arrangement could be pursued for WSF.

It is important to note that the development of a naming rights program should be coordinated with existing efforts to expand advertising throughout the ferry system. Washington State Ferries is currently engaged in a commercial arrangement with an advertising agency, to use its vessel fleet as an advertising platform.

3.4 FEDERAL SOURCES

Washington State Ferries expects to receive \$347 million in Federal funds over the life of Scenario A. These funds will be used primarily for terminal improvements. WSF is prohibited from using Federal funds on vessel improvements due to the “Build it in Washington” law. The law requires WSF’s ferry vessels to be constructed in the state.

The “Build it in Washington” law is beneficial because it ensures that ferry manufacturing jobs remain within the state. If the law were removed, those jobs might be lost. The law has drawbacks as well. By reducing competition for ferry vessel construction, it may contribute to increased vessel prices. The Cedar River Group Vessel Timing and Sizing Report compared recent bids for two similar 50-auto ferries, one in Washington State and one North Carolina – found out-of-state bid to be about 20 percent lower²⁸.

The “Build it in Washington” requirement also reduces the amount of Federal funding WSF is eligible to receive. Vessel procurements must be bid nationally to be eligible for Federal funding. Reducing or eliminating the requirement would allow WSF a greater opportunity to access Federal funding²⁹. To the consultant’s knowledge, no comprehensive analysis of the costs and benefits of the provision has been conducted.

²⁸Source: Cedar River Group Vessel Timing and Sizing Report, available on: http://www.leg.wa.gov/documents/LTC/jtc/Ferries/VesselSizingandTimeDraft%20_111408.pdf.

²⁹Note that a bill has recently been introduced in the House during this session (House Bill 1652) that would open ferry procurements to national bidding, allowing Washington to receive Federal funds and perhaps more competitive bids.

4.0 Alternative Funding Scenarios

The previous background sections described the Commission’s investigation of three main sources of funding for Washington State Ferries: local taxes, state taxes, and ferry operating income sources (fares and nonfare revenue).

While the Commission investigated the pros and cons of the three main sources separately, in practice the sources can be put together in various combinations.

The “Scenario A” **operating** shortfall could be funded by:

- State taxes;
- Local taxes;
- Fares and other operating income (advertising, etc.); and
- Any combination thereof.

Note that Scenario B shows no cumulative operating shortfall, except in the first 16 years of the plan. Over the 22-year period, there is a small operating surplus.

The “Scenario A” or “Scenario B” **capital** shortfall could be funded by:

- State taxes,
- Local taxes, and
- Any combination thereof.

Fares are not listed because the large capital shortfalls in both Scenarios A and B cannot be met through fare revenues alone. To raise that much revenue, fares would have to be increased so much that riders would be driven away, and net revenue would no longer increase; moreover, there is historical precedent for using fare revenues only for operations, not for capital. However, fare increases could be used to offset the amount that needs to be raised from state or local taxes, so long as the portion for capital is separately identified in the fare.³⁰

The Commission considered many different ways of combining sources of funds to meet WSF’s capital and operating needs for Scenarios A and B. Tables 4.1 and 4.2 show several alternative combinations and the required state tax, local tax, and fare levels necessary under each, for Scenarios A and B, respectively.

The Motor Vehicle Excise Tax is used as an example in both tables for simplicity, but the Commission prepared estimates for multiple tax and fee sources. Estimates with alternative taxes and fees are contained in the background section of this report.

³⁰ESHB 2358 precludes fares from being used for capital unless the support is separately identified in the fare.

Table 4.1 Funding Alternatives to Address Scenario A Operating and Capital Needs

	Close Capital and Operating Shortfall With State Taxes (A1)	Close Capital Shortfall With State Taxes and Operating Shortfall With Higher Fares (A2)	Close Capital Shortfall With State Taxes and Operating Shortfall With Local Taxes (A3)	Close Capital Shortfall With Local Taxes and Operating Shortfall With Higher Fares (A4)
Dedicated state taxes	<p>New state tax (MVET, reg fee or similar) to close both operating and capital shortfall</p> <ul style="list-style-type: none"> State MVET level would need to be about 0.17% to close both capital and operating shortfall (assumes all revenues go to WSF). To also replace administrative transfers to the capital program, state MVET level would need to be about 0.22% (assumes all revenues go to WSF). 	<p>New state tax (MVET, reg fee or similar) to close capital shortfall</p> <ul style="list-style-type: none"> State MVET level would need to be about 0.15% to close only capital shortfall (assumes all revenues go to WSF). To also replace administrative transfers to the capital program, state MVET level would need to be about 0.21% (assumes all revenues go to WSF). 	<p>New state tax (MVET, reg fee or similar) to close capital shortfall</p> <ul style="list-style-type: none"> State MVET level would need to be about 0.15% to close only capital shortfall (assumes all revenues go to WSF). To also replace administrative transfers to the capital program, state MVET level would need to be about 0.21% (assumes all revenues go to WSF). 	<p>No additional state taxes beyond currently dedicated sources and assumed administrative transfers to the capital program.</p>
Local Contribution	No local funding.	No local funding.	<p>Close operating gap with local taxes and fees. Local MVET levels would need to be about</p> <ul style="list-style-type: none"> 4-County district: 0.18%; Hybrid District: 0.05%; and 8-County district: 0.02%. 	<p>Close capital gap with local contribution. Local MVET levels would need to be about:</p> <ul style="list-style-type: none"> 4-County district: 2.5%; Hybrid District: 0.80%; and 8-County district: 0.27%.
Operating Revenue	No additional fare revenue beyond WSF Long-Range Plan assumptions (i.e., 2.5% annual fare increase, plus fuel surcharge).	Close operating gap with additional fare increases beyond those in the LRP – about 4% annual increase for 9 years or 6% annual increase for 5 years, plus super summer surcharge of 15% above existing surcharge, and fuel surcharge to vary with fuel costs.	Fare revenue assumptions per WSF Long-Range Plan (i.e., 2.5% annual fare increase, plus fuel surcharge).	Close operating gap with fare increases – about 4% annual increase for 9 years or 6% annual increase for 5 years, plus super summer surcharge of 15% above existing surcharge, and fuel surcharge to vary with fuel costs.

Note: All calculations assume that all revenues go to Washington State Ferries. For forecast assumptions, see background section on local sources. Figures do not include cost of debt service (discussed below). Fare revenue figures account for fare elasticity.

Table 4.2 Funding Alternatives to Address Scenario B Operating and Capital Needs

	Close Capital Shortfall With Local Taxes (B1)	Close Capital Shortfall With State Taxes (B2)
Dedicated state taxes	No additional state taxes beyond currently dedicated sources and assumed administrative transfers to the capital program.	New state tax (MVET, reg fee or similar) to close capital shortfall: <ul style="list-style-type: none"> • State MVET level would need to be about 0.07% (assumes all revenues go to WSF); and • To also replace administrative transfers to the capital program, state MVET level would need to be about 0.12% (assumes all revenues go to WSF).
Local Contribution	Close capital gap with local contribution. Local MVET levels would need to be about: <ul style="list-style-type: none"> • 4-County district: 1.0%; • Hybrid District: 0.3%; and • 8-County district: 0.11%. 	No local funding.
Operating Revenue	Additional fare increases as required to close small operating gap through 2016.	Additional fare increases as required to close small operating gap through 2016.

Notes: All calculations assume that all revenues go to Washington State Ferries. For definitions of 4-, 8-, and hybrid county districts and forecast assumptions, see background section on local sources. Figures do not include cost of debt service (discussed below).

4.1 PREFERRED FUNDING ALTERNATIVE

Of the alternatives listed in Tables 4.1 and 4.2 above, the Commission recommends the funding alternative labeled “A2” in the chart – a situation where the operating gap is addressed through fare increases and the capital gap through state taxes. The rationale for that choice is as follows.

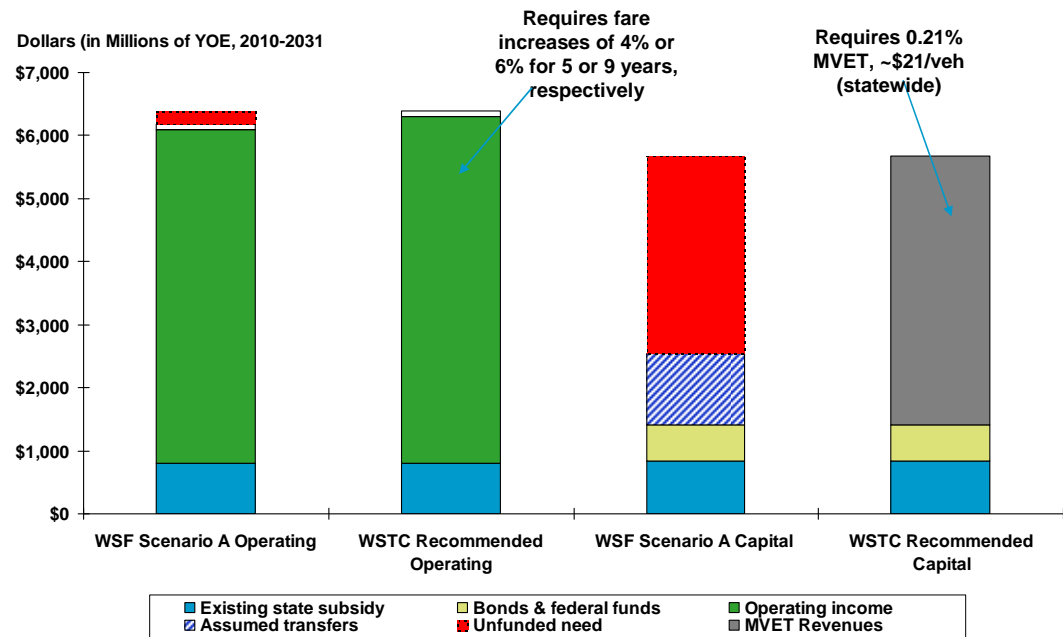
- **Fares are a logistically simpler means of closing the operating gap than a local taxing district.** The background sections of this report explain some of the logistical and political difficulties inherent in creating a local taxing authority to raise funds for the ferry system. To meet the relatively small Scenario A operating shortfall, it would be logistically simpler and more expedient to raise the necessary funds through a series of fare increases. Fare increases of approximately six percent over a period of five years, or four percent over a period of nine years, plus a fuel surcharge and a super-summer surcharge would be required. However, the Commission is open to the possibility that, in the future, a local funding district could be used to

offset the impact of fare increases and be used to subsidize ferry operations or even local terminal improvements.

- **Capital needs are too great to be funded through fares or a local funding district.** As explained above, fares cannot raise sufficient revenue to fund WSF’s large capital needs. A large (eight-county) local funding district could raise sufficient revenue to fund the Scenario A or B capital needs, but anything smaller than an eight-county district would require very high tax and fee levels – so high as to likely be unpalatable to local residents.
- **State taxes should be raised to allow elimination of ad-hoc administrative transfers to the capital program.** The Commission prefers a scenario where state taxes are raised so that ad-hoc administrative transfers to the capital program are no longer necessary. Transfers take money out of accounts intended for other transportation purposes, and are not a reliable or predictable form of revenue. An MVET of about 0.21 percent would be required to cover all of the Scenario A unfunded need, and allow removal of administrative transfers to the capital program.

Figure 4.1 shows the Commission’s preferred alternative in contrast with the funding assumptions made by WSF in its Revised Draft Long-Range Plan.

Figure 4.1 Commission Preferred Funding Alternative



4.2 FINANCING THE LONG-RANGE PLAN

The tax and fee rates presented in Tables 4.1 and 4.2 above are those required to close the cumulative ferry funding gap. They do not include the cost of debt service. It will be necessary for WSF to take on debt in years when its cumulative costs exceed its cumulative revenues.

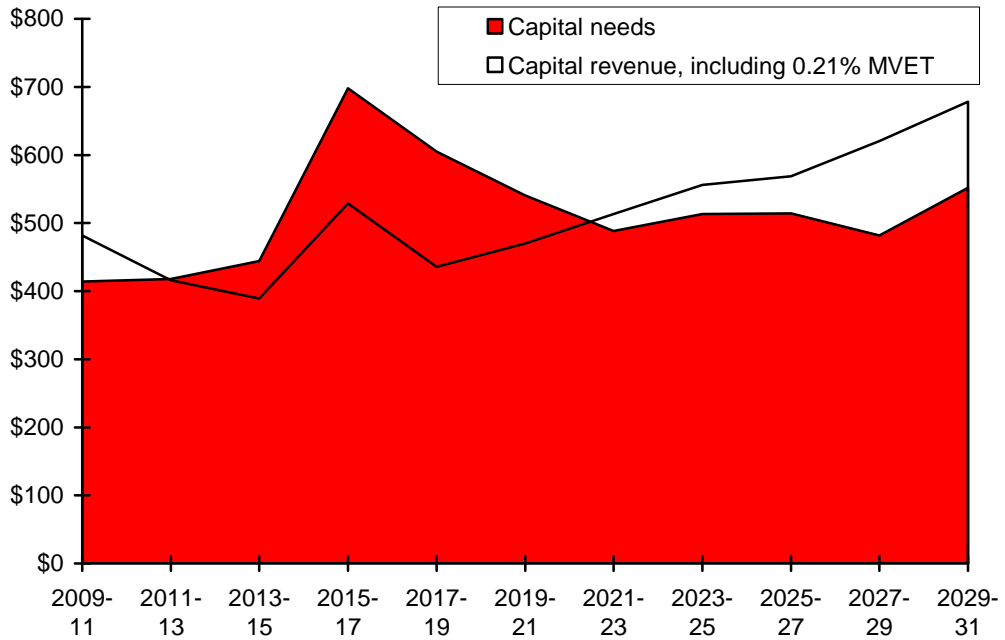
The cost of debt service is influenced by the timing of major capital expenditures (e.g., vessel purchases and major terminal improvements). The timing and amounts of these expenditures have been the subject of considerable study by the Joint Transportation Committee³¹. It is premature to develop a precise capital purchase financing plan (e.g., exact specification of the year of bond purchase, specification of debt coverage ratio, specification of bond duration, and yearly interest rates and costs), since the timing of purchases is still in flux.

However, it is worthwhile to estimate the approximate additional cost of financing the WSF Long-Range Plan Scenario A in its current form. Figure 4.2 compares WSF's capital outlays in each biennium with its revenue for capital by biennium, which includes all the revenues that would be received from a 0.21 percent MVET³². It shows that revenues in a single biennium are less than the expenses in that biennium between 2012 and 2021.

³¹See the recently published *Vessel Timing and Sizing Report*, Cedar River Group, December 2008.

³²The 0.21 percent MVET value is the tax rate required to close WSF's cumulative capital funding gap over a 22-year period, and replace the \$1.1 billion in ad hoc administrative transfers assumed by the WSF Revised Draft Long Range Plan.

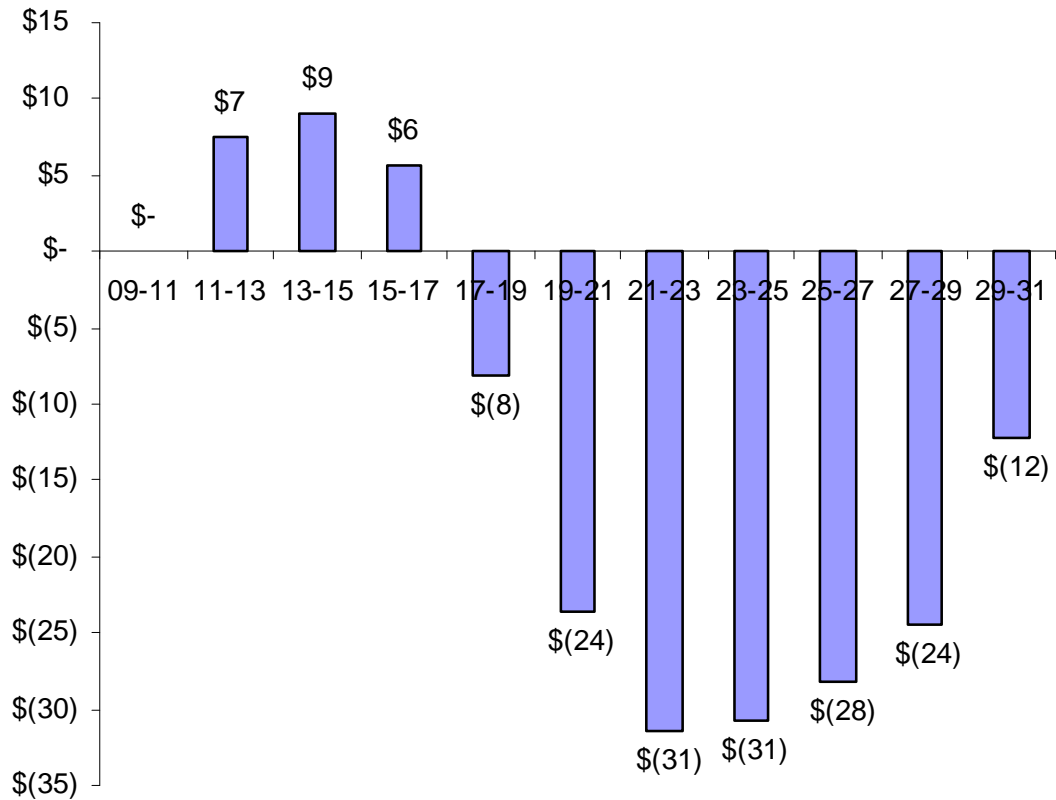
Figure 4.2 Capital Outlays and Revenue by Biennium
In Millions of Year of Expenditure Dollars



A simple method of approximating the additional cost of taking on debt is to calculate the interest on the cumulative capital fund balance each year. In years when the cumulative balance is positive, WSF earns interest on the funds and can apply those earnings against its costs. In years when the cumulative capital balance is negative, WSF must pay interest on the negative balance. Figure 4.3 shows the interest amounts accrued or interest paid each biennium, assuming an interest rate of 4.6 percent per year³³. Interest payments over the Long-Range Plan period total approximately \$140 million (YOE dollars). Covering that additional interest and compound interest through MVET revenue would require a slightly higher MVET tax rate – about 0.22 percent.

³³This was a typical interest payment on an AA rated 20-year municipal bond in the fall of 2008. After the fall of 2008, bond interest rates became highly volatile.

Figure 4.3 Interest Payments by Biennium
In Millions of Year of Expenditure Dollars



The additional cost of interest payments discussed above assumes that all revenues can be bonded against. In practice, some revenues must be retained to provide debt coverage. If a 10-percent coverage factor is assumed, then the MVET rate must be raised to about 0.25 percent to ensure sufficient funds for debt coverage and interest payments.