

**Report to the State of Washington
Legislative Transportation Committee**

**STUDY OF ALTERNATIVE
TRANSPORTATION PROJECT FUNDING
OPTIONS**

for

**State Route 99 - Alaskan Way Viaduct and Seawall
State Route 520 Floating Bridge Replacement and HOV Lanes
Improvements to Interstate 405**

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STUDY OF ALTERNATIVE FUNDING OPTIONS

Executive Summary

This study was undertaken at the behest of the Legislative Transportation Committee of the State of Washington to identify non-traditional transportation project funding sources and the degree to which three large projects could be funded with such revenues. The projects that are the subjects of this study include:

- State Route 99 - Alaskan Way Viaduct and Seawall
- State Route 520 Floating Bridge replacement and High Occupancy Vehicle Lanes
- Improvements to Interstate 405

Other than “traditional” sources such as motor fuel taxes, motor vehicle excise taxes, and motor vehicle license fees, many potential revenue sources available for transportation projects were evaluated as part of this report. Non-traditional sources, including several that have not been used before in Washington, that may be available to fund the three Projects include:

- Special Assessments/Taxes as part of Community Facilities District
- Development Impact Fees
- Tax Increment Revenues
- Private Sector Contributions
- Tolls from the Projects
- Tolls from other roadways in the Project areas
- State and federal sources

Each of these non-traditional funding sources is reviewed in the report, along with a discussion of its benefits and any barriers to use or implementation in Washington State.

Summary of Revenue Sources

For these non-traditional revenue sources, there is a general consideration that property related charges (special taxes, assessments, etc.) need to be applied in a manner that keeps them separate and apart from *ad valorem* property taxes. The special taxes are normally displayed as a separate line item on the property tax bill.).

Community Facilities Districts (CFDs)

CFDs are considered to be very flexible and creative funding mechanisms used to fund infrastructure projects, especially in states where they are frequently used, namely California, Arizona, Illinois, New Mexico and Hawaii. Potential revenue for 2007 – 2045 is **\$7.7 billion**, assuming that the areas of benefit in the report are used. The assumed special tax rates and resulting estimated revenues used in this study are based on trip-end data that reflects relative use of projects, although this is not required under CFD law. Estimated revenue assumes Residential, Commercial and Industrial properties are charged an *annual* special tax in each area.

\$50 per home for residential
\$114 - \$132 per 1,000 sq. ft for commercial
\$24 - \$30 per 1,000 sq. ft for industrial

CFDs are well suited to regional transportation projects, as there is no specific benefit nexus requirement between the properties paying the special tax and the specific facilities being funded.

CFD financing can provide adequate security for bond financing, or can be used for “pay-as-you-go” funding. CFDs are welcomed by public agencies as they are secured by the properties within the CFD, and therefore are non-recourse to the public agencies themselves.

From a property owner perspective, the special taxes do not need to be *ad valorem* based, so they can be limited to a certain maximum level that can never be exceeded. Furthermore, if the CFD formation documents allow the maximum taxes to escalate by 2% per year, the public agency can garner 20% more in bond proceeds as compared with a tax that can not escalate. Other specific advantages are listed in the report. In California and Hawaii, CFDs require a 2/3 vote to implement, due to the flexibility they provide (by comparison, assessment districts often require only a 50% + 1 majority). California’s Mello-Roos statutes (named after the bill’s sponsors) are a good model for the legislation for CFDs.

Development Impact Fees

Potential revenue for 2007 – 2045 is **\$2.3 billion**. Implementing impact fees requires a public hearing, but not an election. This is a mechanism to have new development pay its fair share for regional infrastructure that is not directly conditioned on the new development itself. Existing property owners are protected, since the fee applies to new development only. The fee is *paid once*, often when the building permit is issued. The assumed impact fees and resulting estimated revenues are generally based on benefit nexus criteria, which for transportation improvements means trip-end data that reflects relative use of improvements. Assumed fees in the study are:

- \$1,000 per home for residential
- \$2,286 - \$2,648 per 1,000 sq. ft for commercial
- \$476 - \$594 per 1,000 sq. ft for industrial

In Washington, there is a concern that legal cases like *City of Olympia vs. Drebeck* may cause administrative difficulties in implementing development-related charges for regional infrastructure if “individualized determinations” of benefit are required. The benefit must be applied regionally or by benefit area for some of these non-traditional revenues to be realized – benefit determinations on a parcel-by-parcel basis are effectively unworkable over even a modestly sized area.

Tax Increment (TI)

Potential revenue for 2007 – 2045 is **\$1.7 billion**. The increment comes from (a portion of) the growth in assessed value for existing properties and new development (and the future increase in assessed value of such new development). Other states use TI to fund regional improvements (for example, Infrastructure Financing Districts in California). A portion of the future tax increment is required, the amount to be determined by the taxing jurisdictions. The study assumes 1.0% of total tax increment generated is allocated to project.

There will be political concerns about the willingness of all government levels to contribute to project funding. Larger geographic areas would require Legislative approval of an Infrastructure Financing District. Some of the incremental tax revenue would be diverted from the uses for which it would otherwise be used – this may create some concern, as alternative funding sources for such future uses must be found.

Tax Increment revenues are initially modest, but grow with assessed value and new development in the Increment Area.

Private Sector Contribution

While private sector participation does not generate “revenue” per se, it can expedite delivery and reduce costs. The consultant estimates potential for **\$648 million** in related savings due to private sector participation due to an assumed 5% “savings” factor based on other public-private partnership projects in transportation nationally. Advertising was another potential private sector revenue source, but revenue potential was not included in the report due to restrictions in Washington’s “Scenic Vistas Act” and related statutes.

Tolls

Tolls on the three Projects have potential revenue for 2007 – 2045 of **\$2.9 billion**. Tolls on regional roadways (including SR 99/Alaskan Way, SR 520, I-405, SR 509, I-90, I-5, and SR 167) can generate potential revenue of **\$6.3 billion** over the same time period. There is precedent for establishing tolls on the federal interstate system. HOT lanes and FAIR lanes are also an option.

Federal Programs

These programs are often revenue neutral, but can assist in *accelerating* the funding of projects or can add credit enhancement to potential project financings. Such acceleration requires a plan for how to fund other future projects, if any, that may have otherwise received some of the accelerated federal funds.

The development and implementation schedules of Community Facilities Districts, tax increment or infrastructure financing districts, impact areas, regional tolls and private sector participation require that stakeholders begin the process of evaluating these nontraditional revenue sources soon and take the steps necessary to enact any necessary changes in legislation and regulations.

A summary of the revenue potential from non-traditional sources follows.

NON-TRADITIONAL REVENUE PROJECTIONS BY TYPE (\$ millions)						
	First 4 Years	10 Years	10 Years	10 Years	5 Years	TOTAL
	2007-2010	2011-2020	2021-2030	2031-2040	2041-2045	(2007-2045)
Special Assessments/Taxes	\$628.1	\$1,704.6	\$1,948.1	\$2,233.0	\$1,179.5	\$7,693.3
Development Impact Fees	\$186.7	\$765.0	\$617.8	\$504.8	\$252.4	\$2,326.7
Tax Increment Revenue	\$11.8	\$172.3	\$411.3	\$688.0	\$454.9	\$1,738.4
Private Sector Contributions*	\$83.6	\$428.0	\$136.0	\$0.0	\$0.0	\$647.7
Tolls - Project Facilities	\$0.0	\$154.0	\$949.9	\$1,188.2	\$640.0	\$2,932.1
Tolls - Non-Projects	\$255.8	\$1,326.1	\$1,753.2	\$1,936.6	\$1,043.0	\$6,314.8
Total	\$1,166.1	\$4,550.0	\$5,816.3	\$6,550.7	\$3,569.8	\$21,652.9
Cumulative Total	\$1,166.1	\$5,716.1	\$11,532.4	\$18,083.1	\$21,652.9	

* Analyzed as cost & time savings rather than incremental revenue.

Case studies are included that illustrate how the traditional and non-traditional or alternative funding sources can be combined to fund the three Projects.

REVIEW OF SCOPE OF WORK - WORK PLAN TASKS AND DESCRIPTIONS

Through a competitive proposal and interview process, the Legislative Transportation Committee of the State of Washington selected Public Financial Management, Inc. (“PFM”) to prepare this report of Alternative Financing Options for the funding of three major transportation projects: replacement of the Alaskan Way Viaduct and Seawall, State Route 520 Floating Bridge replacement and High Occupancy Vehicle Lanes, and improvements to Interstate 405 (each a “Project” and, collectively, the “Projects”). PFM was charged with evaluating those funding sources which have not typically been used as a major source of funding for transportation projects in the State. The requirement to evaluate only non-traditional sources excluded such common transportation funding mechanisms as motor fuel taxes, motor vehicle excise taxes, and motor vehicle license fees.

The scope of work called for a review of non-traditional transportation revenue sources and a quantification of potential funding capacity from these sources for 25 years. The costs and useful lives of the Projects will result in the use of debt financing with repayment terms of 30 years or more. The staggered implementation of the construction timetables for the Projects and the debt repayment term necessitated the extension of the report’s projection horizon to 2045. Projects will all be complete and much of the debt will be repaid by 2045 – the longer projection period was chosen to determine whether non-traditional revenues could service the debt after Project completion.

After presenting several alternate funding sources and describing and quantifying the revenue projections for each, a series of case studies are provided which analyze how much of each Project may be funded with non-traditional revenue sources with and without the use of bond financing.

LEGISLATION, REFERENCE DOCUMENTS, AND REPORTS

In preparing this report, PFM assembled and reviewed numerous pieces of information, including relevant legislation, reference documents, and reports prepared by consultants and governmental entities. The primary information sources reviewed for this study are included in Appendix.

POTENTIAL NON-TRADITIONAL REVENUES AND FUNDING SOURCES

Recognizing that (1) there are competing demands for traditional transportation funding sources in Washington State and that (2) the magnitude of the costs for the three Projects requiring funding are potentially draining on these traditional funding sources, the Legislative Transportation Committee directed that only those funding sources not normally used to fund transportation projects in the State be evaluated. Common transportation funding mechanisms such as motor fuel taxes, motor vehicle excise taxes, and motor vehicle license fees were not considered and all other funding sources were evaluated and deemed “non traditional” transportation funding sources for projects in the State. The types of non-traditional funding sources that were evaluated and quantified are described below.

Certain of the non-traditional transportation funding sources are familiar to the State while others are either not currently permitted or are little-used. Tolls, federal and state funding options and public-private partnerships are all funding mechanisms that have been analyzed to varying degrees by WSDOT and other transportation agencies. While this report describes such sources, the main quantitative focus is on the following potential sources of revenues:

- Special taxes as part of a Community Facilities District
- Development Impact Fees
- Tax Increment Revenues

Revenue Derivation for Community Facility Districts, Impact Fees and Tax Increment

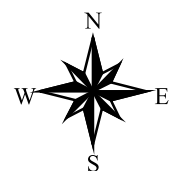
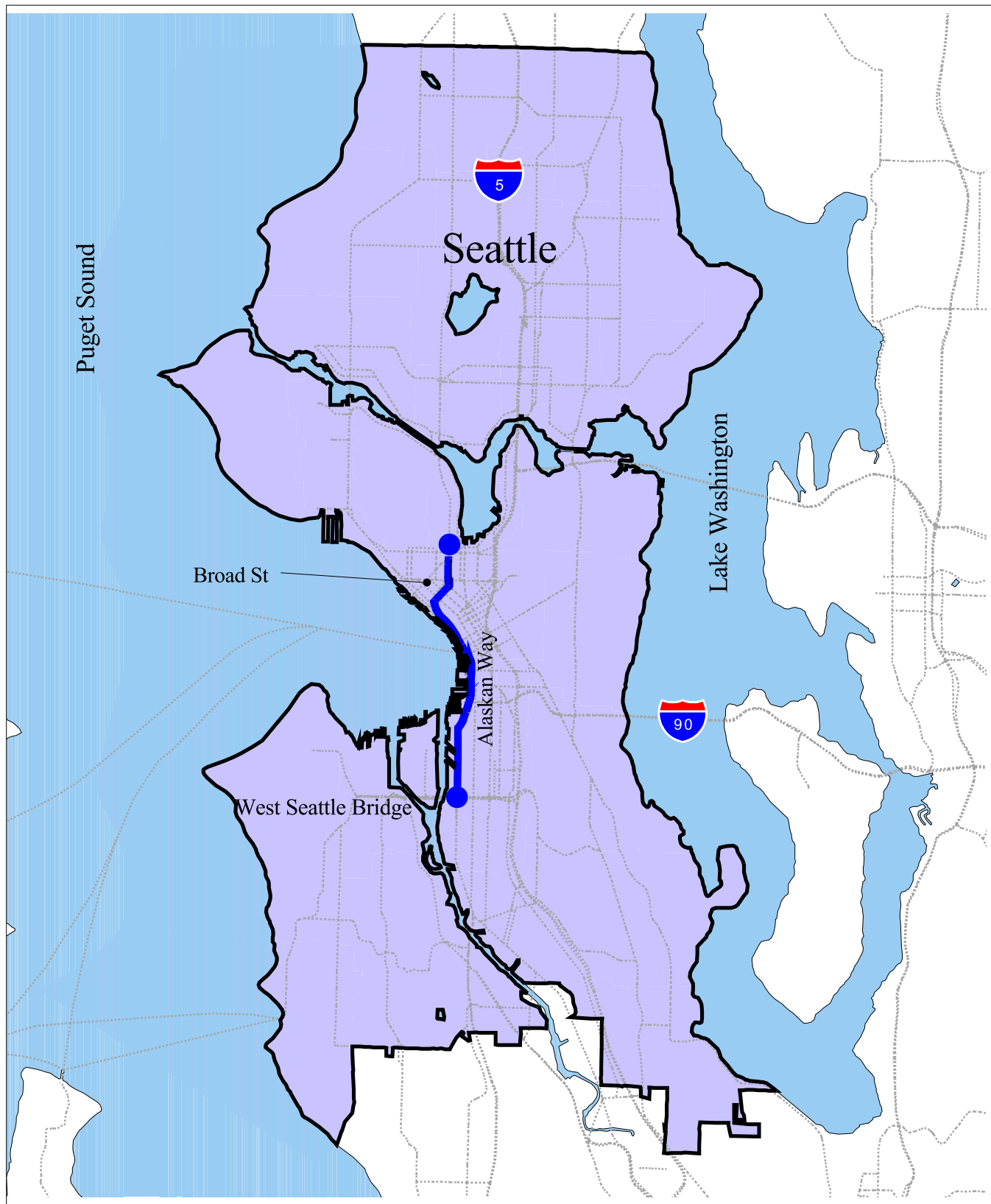
All of the Community Facility District special tax, Impact Fee and Tax Increment revenue projections were based on residential and commercial/industrial development projections derived from data published in the Puget Sound Regional Council's 2003 Sub-County (Small Area) Forecasts of Population and Employment.¹ Since each of these three revenue sources is based on either the Project's benefit to properties or the value of development, the amount and value of both current and future development for different types of land use (residential, commercial and industrial) is a prime determinant of revenue potential from these sources. The geographic area that encompasses the land parcels which will primarily benefit from a particular Project is referred to as the "Benefit Area" for that Project. A summary of these development projections, by Benefit Area, are listed in Table 1, below. Maps for each Benefit Area can be found on the following pages.

TABLE 1
Projections of Future Land Development by Facility Benefit Area (Cumulative)

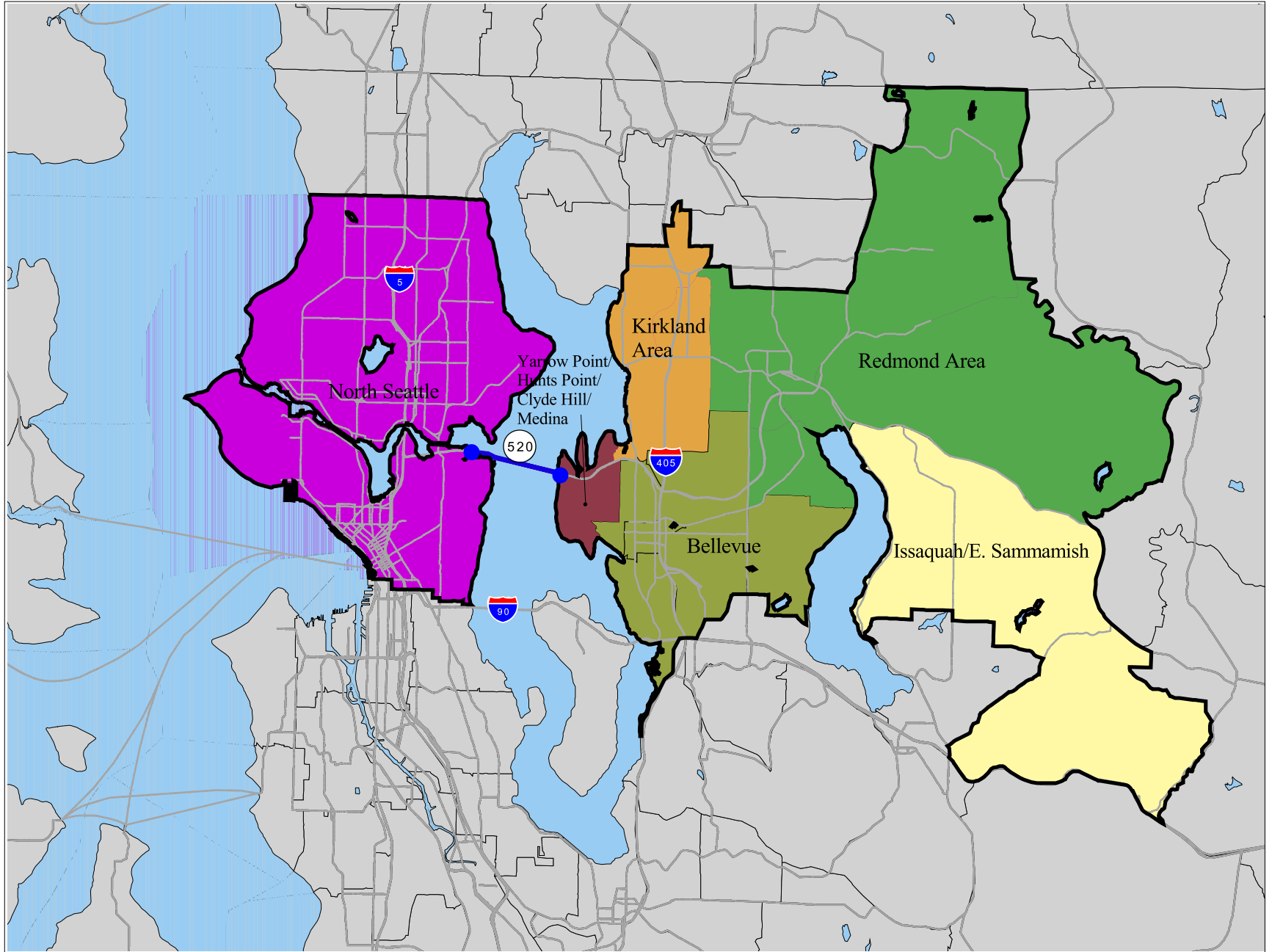
Alaskan Way Viaduct Benefit Area				
Facility Benefit Area	2010	2020	2030	2040
Residential (Dwelling Units)	281,440	313,291	353,719	399,364
Commercial (Building Sq. Ft.)	247,861,552	273,529,600	294,418,464	316,902,565
Industrial (Building Sq. Ft.)	84,811,876	92,634,410	97,296,192	94,965,301
SR-520 Benefit Area				
Facility Benefit Area	2010	2020	2030	2040
Residential (Dwelling Units)	312,475	354,056	403,319	459,436
Commercial (Building Sq. Ft.)	265,758,528	308,565,784	342,973,128	381,217,143
Industrial (Building Sq. Ft.)	76,614,698	87,870,378	94,476,546	91,173,462
I-405 Corridor Benefit Area				
Facility Benefit Area	2010	2020	2030	2040
Residential (Dwelling Units)	536,809	613,915	674,215	740,438
Commercial (Building Sq. Ft.)	317,289,912	379,652,512	432,227,960	492,084,218
Industrial (Building Sq. Ft.)	205,632,112	212,421,512	229,965,976	221,193,744

¹ Puget Sound Regional Council, 2003 *Sub-County (Small Area) Forecasts of Population and Employment*, Central Puget Sound Region, 2004.

Washington State Alaskan Way Viaduct Project Funding Area



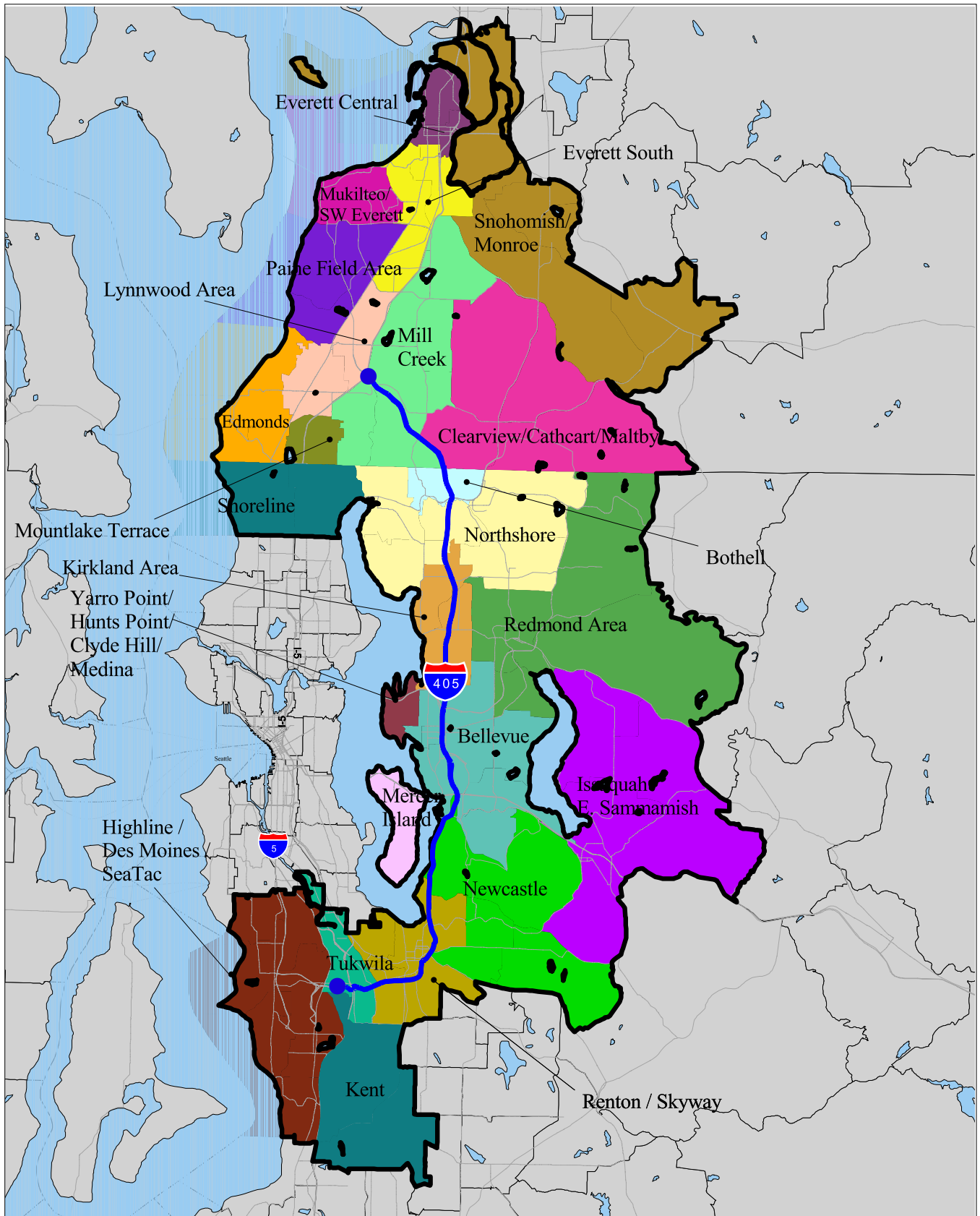
Washington State SR-520 Bridge Project Funding Areas



5 0 5 10 Miles



Washington State I-405 Corridor Project Funding Areas



5 0 5 10 Miles



In preparing these revenue projections used as part of this study, it was recognized that political acceptance by the electorate and its representatives will be crucial to the successful adoption and implementation of any of these alternative funding programs. In particular, the magnitude of additional taxes or impact fees will be subject to considerable scrutiny by those who will be responsible for paying them. Therefore, for purposes of this initial report, professional judgment limited Community Facilities District (“CFD”) special tax rates, Development Impact Fees and Tax Increment apportionment percentages to conservative levels.

As a result, all of the CFD special tax analyses limited the annual special tax to \$50 for each existing and future dwelling unit in each of the three Benefit Areas, with annual special taxes for commercial and industrial development varying based on automobile trip-end data that reflected the relative use of the Projects by commercial and industrial development, as compared with use of the Projects by residential development. Similarly, development impact fees were limited to \$1,000 for each new dwelling unit, with commercial and industrial development being charged higher impact fees based on the same benefit factors utilized in the CFD special tax analyses. Finally, for the tax increment projections, it was assumed that only 0.5% of the total tax increment generated within each Benefit Area after 2005 would be allocated to the specific Project being funded through that Benefit Area. All of the revenue projections discussed below are stated in 2005 dollars, with the expectation that the taxes and fees collected under these programs could be escalated each year based on the increase in construction costs required to construct the Projects. If it becomes necessary to eliminate these escalations, any inflated construction costs must be funded through other revenue sources.

COMMUNITY FACILITY DISTRICTS AND CFD SPECIAL TAXES

One of the potential sources of funding transportation projects is to use a property-based tax or charge to support annual costs and debt service expenses. Assessments are permissible in Washington when levied as part of a Local Improvement District. This section describes an analogous but distinctly different funding structure called a Community Facilities District.

Introduction

As a result of Initiative 747, which was authorized by the State’s voters in 2001, local governments in Washington are prohibited from raising property taxes by more than 1% per year, after adjustments for new development. To exceed this property tax level requires approval through a referendum from a jurisdiction’s voters. One of the effects of Initiative 747 is to limit a city or county’s ability to contribute to the construction or renovation of necessary public infrastructure, especially through the sale of bonds that require a secure revenue stream as a source of repayment. Other states faced with these same types of limitations have created new types of financing districts that function more effectively in this type of environment. For example, California, Arizona and Hawaii have passed legislation allowing a new type of district called a Community Facilities District (“CFD”). CFDs are perhaps the most creative and flexible public financing mechanisms in common use today within these three states.

Under a CFD ordinance, local governments can establish financing districts on any one or more parcels located within their boundaries. The parcels included within a CFD are subject to a special tax that can be used to pay directly for the acquisition and/or construction of public facilities, or to pay debt service for the sale of bonds by the CFD to fund public facilities. Similar to bonds currently sold in Washington under the State’s LID statutes, the ultimate security behind special tax bonds is the property located within the CFD, not the public agency issuer’s (the “Issuer”) General Fund or its ability to tax property throughout its jurisdiction. Therefore, interest rates on these

bonds, like those on LID bonds, tend to be higher than those of more conventional general obligation bonds. However, the flexibility inherent in the use of CFD bonds allows their use on a scale and for a variety of infrastructure and services that far exceeds those of LID bonds, and would be totally appropriate for financing regional transportation improvements such as the three improvement programs being discussed within this report.

Forming Community Facilities Districts

The formation of a CFD can be initiated by a written request submitted by two members of the Issuer's legislative body, by a motion of that legislative body, or by a petition signed by 10% of the prospective district's voters or landowners. After the adoption of a Resolution of Intention by the legislative body and a public hearing, the levy of the special tax must be put before the registered voters residing in the CFD, or the property owners within that CFD, either at the next general election or in a special election.

Special Taxes

Special taxes are generally assigned to individual parcels based on land use, and may differ depending on the land use type, density or level of development of a specific parcel. These special taxes do not have to be based on *ad valorem* criteria, which can be helpful if it is decided that the special taxes are to be identical for a variety of parcels with different values (e.g., all single family detached homes are to have identical special taxes), or if the special taxes are to remain unchanged each year (similar to an assessment lien), or if they are to appreciate at a slower rate than property values. A special tax formula is established when the CFD is first formed to determine the maximum levels of special taxes that can be levied on the parcels within the CFD during its lifetime, and all buyers of property within the CFD are provided with special disclosures by property sellers informing them of the maximum special taxes that can be levied on their parcels by the CFD.

Community Facility District Bonds

CFD bonds are senior to all other liens on the properties within the CFD, except for other property taxes, against which they are considered to be on parity. The only revenue source generally available to amortize CFD bonds are the special taxes collected from property owners. Prior to the sale of these bonds, an independent consultant must determine that the maximum special tax levels that were established at the formation of the CFD are sufficient to provide at least 110% of the debt service on these bonds, plus the cost to the Issuer of administering the CFD. As the CFD bonds are solely collateralized by the properties within the CFD boundaries, and are non-recourse to the Issuer and property owners, they require that the value of the land collateralizing the bonds is equal to at least three times all public debt on the property, including the lien amount of the CFD bonds themselves. CFD bonds generally require some sort of reserve fund to assure timely payment of principal and interest should the CFD experience high levels of delinquencies on the part of property owners.

Community Facility District Advantages

1. CFDs may fund any public facility with a useful life of five years or longer, not just projects of local special benefit, as is the case with LIDs. Therefore, CFDs are ideal for regional improvements.
2. Improvements financed through a CFD may benefit property owners and residents outside of the CFD, and in fact, can be located outside of the CFD.

3. CFD boundaries can be set up to cover specific geographical areas that are politically or financially appropriate within a given jurisdiction. For example, a County can set up a CFD that crosses city boundaries, and includes portions of the unincorporated County as well, if that is who will benefit from specific financed facilities and/or will more likely support a special tax to pay for these facilities.
4. A CFD can only levy special taxes on property owners within the CFD itself, and therefore cannot levy these special taxes on property owners outside of the CFD.
5. CFDs can consist of properties that are not contiguous.
6. In areas that are undeveloped, property owners interested in developing their properties are often quite willing to allow the levy of a special tax on their parcels to support bond financing for new infrastructure required by their development. With a CFD, a local property owner election can be conducted without resorting to a community-wide election.
7. All CFD bonds are non-recourse to the public agency issuer of the bonds (the “Issuer”), so the Issuer’s General Fund and taxing capacity are not at risk.
8. All CFD bonds are also non-recourse to the property owners paying the special taxes, as the only collateral for the bonds are the specific parcels subject to the special tax. This generally encourages developers to agree to this type of financing.
9. Allocation of the special tax to properties within the CFD must be based on reasonable criteria, but does not specifically have to relate to the level of benefit received from the financed public facilities by each of the properties.
10. Allocations of special taxes in a CFD generally relate to type of land use, and can adapt to changes in future development plans and reflect to the ultimate land use developed.
11. CFDs provide an Issuer with the option of paying for public improvements through the sale of bonds, through the use of special tax revenues to pay directly for construction, or through a combination of the two.
12. CFD liens on parcels can be paid off at any time by individual property owners if they do not want to pay annual special taxes over a period of years.

CFD Revenue Summary

CFD special taxes would be collected from all existing and future development throughout the Benefit Areas. The amount of CFD special taxes generated within each Project's Benefit Area are based on the special tax per unit (residential) or per 1,000 square feet (commercial and industrial). The following table shows the amount of the special tax for each land use category within each Benefit Area. These special tax rates are held constant throughout the report period but could be adjusted if need be.

COMMUNITY FACILITY DISTRICT SPECIAL TAX RATES					
by LAND USE CATEGORY AND BENEFIT AREA					
	First 4 Years	10 Years	10 Years	10 Years	5 Years
	<u>2007-2010</u>	<u>2011-2020</u>	<u>2021-2030</u>	<u>2031-2040</u>	<u>2041-2045</u>
<u>Residential:</u> ^(a)					
SR 99-Alaskan Way	\$50	\$50	\$50	\$50	\$50
SR 520	\$50	\$50	\$50	\$50	\$50
I-405	\$50	\$50	\$50	\$50	\$50
<u>Commercial:</u> ^(b)					
SR 99-Alaskan Way	\$114	\$114	\$114	\$114	\$114
SR 520	\$115	\$115	\$115	\$115	\$115
I-405	\$132	\$132	\$132	\$132	\$132
<u>Industrial:</u> ^(b)					
SR 99-Alaskan Way	\$30	\$30	\$30	\$30	\$30
SR 520	\$29	\$29	\$29	\$29	\$29
I-405	\$24	\$24	\$24	\$24	\$24
^(a) Based on Trip Generation Rates and Economic Benefit Units per Unit					
^(b) Based on Trip Generation Rates and Economic Benefit Units per 1,000 sq. ft.					

The CFD special tax projections for each Benefit Area and regional totals are provided below.

COMMUNITY FACILITY DISTRICT REVENUE PROJECTIONS (\$ millions)						
ALASKAN WAY VIADUCT/SEAWALL BENEFIT AREA						
	First 4 Years	10 Years	10 Years	10 Years	5 Years	TOTAL
	<u>2007-2010</u>	<u>2011-2020</u>	<u>2021-2030</u>	<u>2031-2040</u>	<u>2041-2045</u>	<u>(2007-2045)</u>
Type of Unit:						
Residential	\$55.1	\$147.9	\$165.7	\$187.1	\$99.8	\$655.7
Commercial	\$105.4	\$283.3	\$312.6	\$348.0	\$181.1	\$1,230.3
Industrial	\$10.3	\$25.2	\$27.5	\$28.6	\$14.1	\$105.7
Total	\$170.8	\$456.3	\$505.9	\$563.8	\$295.0	\$1,991.8

COMMUNITY FACILITY DISTRICT REVENUE PROJECTIONS (\$ millions)						
SR-520 BENEFIT AREA						
	First 4 Years	10 Years	10 Years	10 Years	5 Years	TOTAL
	<u>2007-2010</u>	<u>2011-2020</u>	<u>2021-2030</u>	<u>2031-2040</u>	<u>2041-2045</u>	<u>(2007-2045)</u>
Type of Unit:						
Residential	\$60.9	\$165.6	\$188.1	\$214.3	\$114.9	\$743.8
Commercial	\$112.1	\$305.9	\$355.1	\$414.5	\$219.4	\$1,407.0
Industrial	\$8.8	\$22.0	\$25.2	\$26.6	\$13.1	\$95.6
Total	\$181.8	\$493.4	\$568.4	\$655.5	\$347.3	\$2,246.4

COMMUNITY FACILITY DISTRICT REVENUE PROJECTIONS (\$ millions)						
I-405 CORRIDOR BENEFIT AREA						
	First 4 Years	10 Years	10 Years	10 Years	5 Years	TOTAL
	<u>2007-2010</u>	<u>2011-2020</u>	<u>2021-2030</u>	<u>2031-2040</u>	<u>2041-2045</u>	<u>(2007-2045)</u>
Type of Unit:						
Residential	\$103.8	\$285.8	\$320.5	\$352.0	\$185.1	\$1,247.2
Commercial	\$152.4	\$420.1	\$502.7	\$607.9	\$325.8	\$2,008.8
Industrial	\$19.3	\$49.0	\$50.6	\$53.8	\$26.3	\$199.1
Total	\$275.5	\$754.8	\$873.8	\$1,013.8	\$537.2	\$3,455.1

COMMUNITY FACILITY DISTRICT REVENUE PROJECTIONS (\$ millions)						
ALL PROJECTS						
	First 4 Years	10 Years	10 Years	10 Years	5 Years	TOTAL
	<u>2007-2010</u>	<u>2011-2020</u>	<u>2021-2030</u>	<u>2031-2040</u>	<u>2041-2045</u>	<u>(2007-2045)</u>
Type of Unit:						
Residential	\$219.9	\$599.2	\$674.4	\$753.4	\$399.8	\$2,646.7
Commercial	\$369.8	\$1,009.2	\$1,170.4	\$1,370.5	\$726.2	\$4,646.1
Industrial	\$38.4	\$96.1	\$103.3	\$109.1	\$53.5	\$400.5
Total	\$628.1	\$1,704.6	\$1,948.1	\$2,233.0	\$1,179.5	\$7,693.3

REGIONAL TRANSPORTATION IMPACT FEES

Introduction

The levy of impact fees is one authorized method of financing the public facilities necessary to mitigate the impacts of new development, as the levy of such fees provides funding to maintain an agency's facilities standards for an increased service population. According to Section 3 of RCW 82.02.090:

Impact fee means a payment of money imposed upon development as a condition of development approval to pay for public facilities needed to serve new growth and development, and that is reasonably related to the new development that creates additional demand and need for public facilities, that is a proportionate share of the cost of the public facilities, and that is used for facilities that reasonably benefit the new development.

Local jurisdictions in other states often establish regional transportation fee programs in which individual jurisdictions impose impact fees on new development, and then contribute all or a portion of these fees to a regional body that is responsible for funding transportation improvements that provide regional benefit.

Revenues

Separate impact fees are generally levied for each type of capital improvement required by new development, with the payment of the fee occurring prior to the beginning of construction of a dwelling unit or non-residential building (or prior to the expansion of existing buildings of these types). Fees are often levied at final map recordation, issuance of a certificate of occupancy, or more commonly, at building permit issuance.

Washington has adopted its own Transportation Impact Fee legislation, which allows the levy of fees for off-site transportation improvements. Under this program, transportation fees must be apportioned to new development based on the cost of the portion of the transportation facilities necessitated by new development. Developers must be given the option of paying the transportation impact fee in a lump sum, or over a five year period or more as specified by the local agency imposing the fee.

There are many methods or ways of calculating impact fees, but they are all based on determining the cost of needed improvements and assigning those costs equitably to various types of development. Most impact fees are apportioned according to land use type, based on the concept of an Equivalent Dwelling Unit ("EDU") or Equivalent Benefit Unit ("EBU") to allocate benefit among different land use classes. EDUs/EBUs are a means of quantifying different land uses in terms of their equivalence to a single family detached dwelling unit or some other defined unit, where equivalence is measured in terms of potential infrastructure use or benefit for each type of public facility. In the case of apportioning the cost of transportation facilities, EDUs/EBUs are based on the average daily automobile trips or similar criteria that reflect the level of benefit received from a transportation facility by a single family home, multi-family home, commercial building square footage, industrial building square footage, and other types of land uses within one or more proposed development projects.

One troubling issue that may hinder the implementation of regional impact fees in Washington is the *City of Olympia v. Drebeck* decision handed down by the Washington Court of Appeals (the “Court”) in early 2004. While a thorough review of this case is beyond the scope of work of this report, and we are not familiar with the specific documentation utilized by the City of Olympia to support its position, it appears that the Court of Appeals established a burden of proof for public agencies that goes well beyond that required in other states. According to the Court, public agencies must analyze the specific impacts of each new development before determining a fee level for that specific development, as opposed to setting uniform fees for all new development based upon land use categories and the total impacts of all proposed new development on the need for facilities. A requirement to make “individualized determinations,” as called for by the Court, would be an administrative nightmare, unless the Court accepted the use of a region-wide traffic model that could generate impact levels of individual parcels throughout the region.

Transportation Benefit District Formation

Washington allows the establishment of Transportation Benefit Districts (“TBD”) by a city or county that can cross jurisdictional boundaries if agreed upon by the impacted jurisdictions. TBDs are authorized to levy development impact fees for regional transportation facilities, and therefore are the ideal vehicle for implementing this type of program. The establishment of a TBD requires a public hearing, with the proceedings being terminated if a declaration requesting such termination is executed by property owners representing at least 60% of the assessed valuation in the proposed district. A TBD can only include those properties that can reasonably be expected to benefit from improvements to be funded by the district.

Impact Fee Revenue Bonds

Since there is no certainty that impact fees will accrue at a projected rate, or for that matter whether projected development will occur at all, bonds based on impact fee revenues can not be marketed without some form of credit support or a public agency’s General Fund as a backup. As a result of these credit enhancement requirements, most impact fee programs are only used to provide a stream of revenues to pay directly for facilities, not as backing for Revenue Bonds.

Impact Fee Program Advantages

1. New development can be conditioned upon approval of entitlements to contribute its fair share towards the cost of the three sets of transportation improvements, without triggering a registered voter or property owner election.
2. Impact fee programs can assure existing developed property owners that they are not being required to pay for the portion of new improvements that are necessary as a result of new development. This can encourage existing developed property owners to support other financing programs such as a Community Facilities District, knowing that new development would be paying for itself.
3. Impact fee revenues would be generated in proportion to the new development that has occurred, so these revenues would become available as the need for expanded facilities manifested itself.

Development Impact Fee Revenue Summary

Development Impact Fees would be collected once per newly developed unit at the time of building permit issuance or certificate of occupancy for all future development within the Benefit Areas.

Due to the unpredictable nature of impact fees, which results from the difficulty in projecting the timing of the development that will generate these fees, it is unlikely that revenue bonds could be secured solely by this revenue source. However, impact fees are an excellent source of pay-as-you-go financing, or can support bonded indebtedness by enhancing other revenue sources or through the use of a letter of credit or some other type of credit enhancement.

DEVELOPMENT IMPACT FEES (Collected Once per Unit)					
by LAND USE CATEGORY AND BENEFIT AREA					
	First 4 Years	10 Years	10 Years	10 Years	5 Years
	<u>2007-2010</u>	<u>2011-2020</u>	<u>2021-2030</u>	<u>2031-2040</u>	<u>2041-2045</u>
Residential: ^(a)					
SR 99-Alaskan Way	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
SR 520	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
I-405	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Commercial: ^(b)					
SR 99-Alaskan Way	\$2,286	\$2,286	\$2,286	\$2,286	\$2,286
SR 520	\$2,302	\$2,302	\$2,302	\$2,302	\$2,302
I-405	\$2,648	\$2,648	\$2,648	\$2,648	\$2,648
Industrial: ^(b)					
SR 99-Alaskan Way	\$594	\$594	\$594	\$594	\$594
SR 520	\$573	\$573	\$573	\$573	\$573
I-405	\$476	\$476	\$476	\$476	\$476
^(a) Based on Trip Generation Rates and Economic Benefit Units per Unit					
^(b) Based on Trip Generation Rates and Economic Benefit Units per 1,000 sq. ft.					

The Development Impact Fee projections for each Benefit Area and the region are provided below.

IMPACT FEE REVENUE PROJECTIONS (\$ millions)						
ALASKAN WAY VIADUCT/SEAWALL BENEFIT AREA						
	First 4 Years	10 Years	10 Years	10 Years	5 Years	TOTAL
	<u>2007-2010</u>	<u>2011-2020</u>	<u>2021-2030</u>	<u>2031-2040</u>	<u>2041-2045</u>	<u>(2007-2045)</u>
Type of Unit:						
Residential	\$9.2	\$45.6	\$49.6	\$53.9	\$27.0	\$185.3
Commercial	\$31.7	\$106.2	\$79.5	\$59.4	\$29.7	\$306.6
Industrial	\$0.0	\$2.6	\$2.8	\$2.7	\$1.3	\$9.3
Total	\$40.9	\$154.4	\$131.8	\$116.0	\$58.0	\$501.2

IMPACT FEE REVENUE PROJECTIONS (\$ millions)						
SR-520 BENEFIT AREA						
	First 4 Years	10 Years	10 Years	10 Years	5 Years	TOTAL
	<u>2007-2010</u>	<u>2011-2020</u>	<u>2021-2030</u>	<u>2031-2040</u>	<u>2041-2045</u>	<u>(2007-2045)</u>
Type of Unit:						
Residential	\$12.7	\$60.6	\$62.0	\$63.3	\$31.7	\$230.3
Commercial	\$41.0	\$160.0	\$120.2	\$90.3	\$45.1	\$456.7
Industrial	\$0.0	\$6.2	\$3.8	\$5.0	\$2.5	\$17.5
Total	\$53.7	\$226.9	\$186.0	\$158.6	\$79.3	\$704.4

IMPACT FEE REVENUE PROJECTIONS (\$ millions)						
I-405 CORRIDOR BENEFIT AREA						
	First 4 Years	10 Years	10 Years	10 Years	5 Years	TOTAL
	<u>2007-2010</u>	<u>2011-2020</u>	<u>2021-2030</u>	<u>2031-2040</u>	<u>2041-2045</u>	<u>(2007-2045)</u>
Type of Unit:						
Residential	\$28.4	\$119.7	\$88.7	\$65.7	\$32.9	\$335.3
Commercial	\$62.7	\$259.2	\$201.9	\$157.3	\$78.7	\$759.8
Industrial	\$1.0	\$4.8	\$9.4	\$7.1	\$3.6	\$25.9
Total	\$92.1	\$383.7	\$300.0	\$230.1	\$115.1	\$1,121.1

IMPACT FEE REVENUE PROJECTIONS (\$ millions)						
ALL PROJECTS						
	First 4 Years	10 Years	10 Years	10 Years	5 Years	TOTAL
	<u>2007-2010</u>	<u>2011-2020</u>	<u>2021-2030</u>	<u>2031-2040</u>	<u>2041-2045</u>	<u>(2007-2045)</u>
Type of Unit:						
Residential	\$50.3	\$226.0	\$200.3	\$183.0	\$91.5	\$751.0
Commercial	\$135.4	\$525.5	\$401.6	\$307.0	\$153.5	\$1,523.0
Industrial	\$1.0	\$13.6	\$16.0	\$14.8	\$7.4	\$52.7
Total	\$186.7	\$765.0	\$617.8	\$504.8	\$252.4	\$2,326.7

TAX INCREMENT REVENUES

Introduction

Tax increment financing (“TIF”) is utilized by local agencies in most states throughout the United States, but has seen very limited use in Washington, despite the approval of the Community Redevelopment Financing Act by the State Legislature in 1982. In most states, TIF is the main source of revenues utilized by local redevelopment agencies to rebuild blighted areas. Some states have also adopted special statutes that allow the use of TIF over a larger area to fund regional improvements (e.g., Infrastructure Financing Districts in California), which would be necessary in Washington if the three transportation facilities improvement programs are to be financed from this type of revenue source.

Revenues

TIF consists of the flow of increased *ad valorem* property taxes generated by the incremental increase in the assessed value of properties within a designated area. When collecting TIF, a “base year” is identified; the *ad valorem* tax revenues paid on the assessed property value in the base year continue to be passed through to the agencies that normally receive *ad valorem* tax revenues. However, the revenues that result from an increase in assessed value above the base year assessed value are called TIF revenues, and a portion of these revenues are retained by an “Increment Area” (“IA”) or financing district to fund public improvements and certain limited types of private improvements.

In Washington, the property taxes normally accruing to school districts and other voter-approved property taxes are not available for tax increment purposes. Therefore, it would be the portion of the increase in property taxes allocable to the local city and county or the State that would be available for diversion to fund local public improvements. While the current level of property tax revenues accruing to the three levels of municipal government that receive these revenues would not change, a portion of the future increment that these governmental agencies normally receive would no longer be available to them.

As is the case in many other states, political concerns will often arise due to the loss of property taxes by municipalities that rely on these revenues to provide services to their constituents. According to Jay Reich, an attorney with Preston, Gates and Ellis, the portion of tax increment that would normally accrue to the city, county or State could not be utilized for redevelopment purposes without the permission of each of the municipal entities that would be losing income. Therefore, there would have to be a willingness among all three levels of government to contribute to the public good by assisting in the funding of the three major transportation improvements by sacrificing a small portion of their share of the tax increment.

Increment Area or Infrastructure Financing District Formation

In Washington, an Increment Area “IA” can be created with the approval of the public agencies that levy at least 75% of the property taxes within the proposed IA. A public hearing must be held by the lead public agency in the formation of the IA, at which meeting are defined: the geographic area to be included, the public improvements to be acquired and/or constructed, and the period of time during which TIF revenues are to be allocated to the improvements.

In order to fund major regional improvements over a larger geographical area, the State Legislature would need to authorize the use of TIF by a new type of district, hereinafter called an Infrastructure

Financing District (“IFD”). An IFD would finance the purchase, construction, expansion or improvement of any real or tangible property with an estimated useful life of 15 years or longer. Authorized facilities should be of community-wide significance and provide significant benefits to an area larger than the area of the proposed IFD.

Proceedings to establish an IFD would be initiated by a local legislative body through the adoption of a Resolution of Intention. The resolution would identify the boundaries of the IFD, the type of facilities to be financed and a time and place for a public hearing. Following adoption of the Resolution of Intention, the legislative body would direct the appropriate official to prepare an Infrastructure Financing Plan (the “Plan”) to include a map of the proposed boundaries of the IFD, the location, timing and costs of all public facilities (whether or not to be provided by the IFD) required to serve the proposed development, and a financing section. The financing section would include all of the following:

1. The maximum portion of Tax Increment revenue from each affected taxing entity proposed to be committed to the IFD for each year
2. The Tax Increment revenues projected to be received by the IFD in each year of the Plan
3. The amount of debt intended to be incurred by the IFD
4. The maximum amount of Tax Increment revenue the IFD may receive
5. An analysis, for each affected taxing entity, of the costs and the taxes, fees, and other revenues to be received
6. A fiscal impact analysis of the IFD, and the development within the IFD, on each of the affected taxing entities
7. A date on which the IFD will cease to exist (maximum term of 30 years)

A copy of the Plan would be sent to each of the affected taxing entities and to the property owners within the proposed IFD. A public hearing on the Plan would be held no sooner than 60 days after the Plan is sent to all affected taxing entities. The local legislative body could not adopt a resolution proposing formation of the IFD unless a resolution approving the Plan was adopted by 75% of the affected taxing entities prior to the hearing. The Plan could be amended to exclude any affected agency that does not approve the Plan, or to amend the percentage of increment from an agency that would be passed through to the IFD.

Subsequent to the public hearing, if the Board adopts a resolution proposing adoption of the Plan and formation of the IFD, an election would be called to submit the proposal to the qualified electors. The election could be a registered voter election or a property owner election, depending upon the local agency’s preference.

Tax Allocation Bonds

TIF revenues may be pledged to repay bonds issued by an IA or an IFD. These bonds are often called Tax Allocation Bonds, although they sometimes are based on a leasing arrangement and are called Certificates of Participation. To avoid credit enhancement requirements, bonds are sized for 125% debt service coverage based on the current assessed valuation within IA or IFD. There is generally a 10% reserve fund included in most Tax Allocation Bond issues.

Tax Increment Financing Advantages

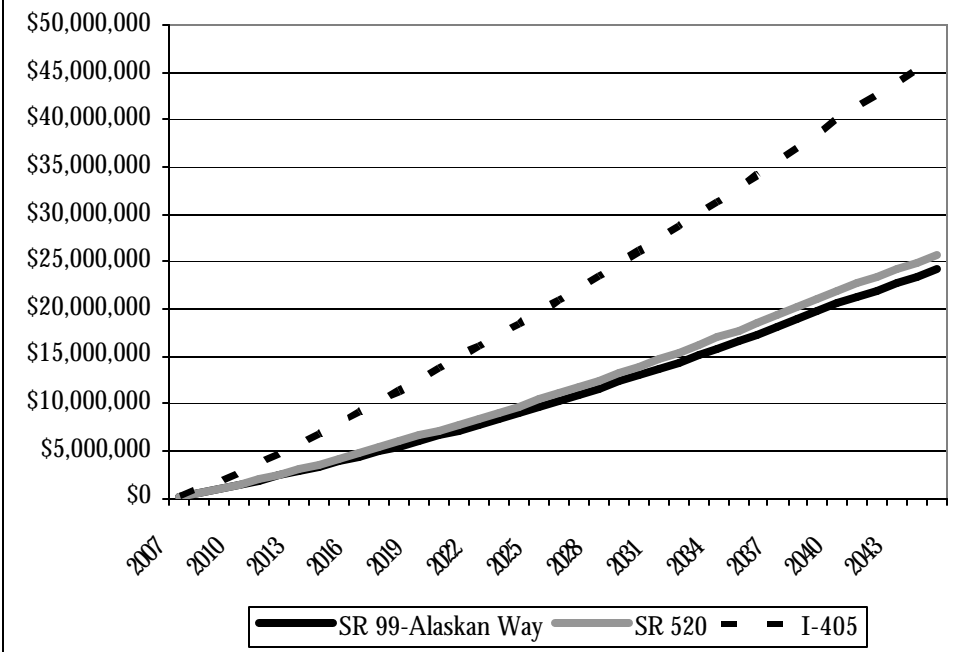
1. IAs and IFDs provide construction funds for needed public infrastructure without increasing the burden on homeowners and other property owners in the IA or IFD, or anywhere else within the jurisdiction.
2. Bonds issued by an IFD are considered to be a debt of the IFD, not of the public agency that has established the IFD.
3. In an IFD, if one agency does not want to contribute Tax Increment revenues, that agency can be removed from the Plan and the public agency can proceed with formation of the IFD.
4. In an IFD, an agency can choose to contribute a portion of their Tax Increment revenues by simply identifying the percentage the agency is willing to contribute to the Plan.
5. Revenues generated from an IA or IFD can be identified and allocated to finance specific public improvements desired by residents or property owners within. This may reduce political problems that can occur if current residents and property owners don't know where their property tax dollars are going.

Tax Increment Revenue Summary

Tax Increment revenues would be based on any increase in assessed valuations within the Benefit Areas throughout the report period to 2045. This increase would result from escalations in the assessed valuation of existing development (assumed to escalate in value by 2% per year), or from additional assessed valuation associated with future development (which is also assumed to escalate by 2% per year after completion of construction). Because the pace of new development for different land use categories (i.e., residential, commercial and industrial) varies within each Benefit Area, information from the Puget Sound Regional Council and other sources was used to forecast population, employment and the resulting development by land use category. The following table and chart summarize the projected Tax Increment revenues.

TAX INCREMENT REVENUE PROJECTIONS (\$ millions)						
ALL PROJECTS						
	First 4 Years	10 Years	10 Years	10 Years	5 Years	TOTAL
	<u>2007-2010</u>	<u>2011-2020</u>	<u>2021-2030</u>	<u>2031-2040</u>	<u>2041-2045</u>	<u>(2007-2045)</u>
SR 99-Alaskan Way	\$3.1	\$41.8	\$100.0	\$170.3	\$113.8	\$428.9
SR 520	\$3.0	\$44.9	\$107.9	\$181.8	\$120.8	\$458.4
I-405	\$5.8	\$85.6	\$203.4	\$335.9	\$220.3	\$851.0
Total	\$11.8	\$172.3	\$411.3	\$688.0	\$454.9	\$1,738.4

Projected Annual Tax Increment Value



PRIVATE SECTOR PARTICIPATION

Many options exist for the private sector to participate in the delivery of large-scale transportation projects. Increasingly, the private sector may play a role in project conceptualization and origination; design; financial planning and finance; construction; operation; maintenance; toll collection; and program management.² In practice, these various activities are combined in some manner, depending on the nature of the project. The spectrum of private involvement in project delivery ranges from Design-Build to Build-Own-Operate and many contractual variations in between.

In general terms, private sector investment in a transportation project can take the form of right-of-way donations, capital contributions in exchange for some form of an ownership share or a right to a revenue stream (a concession or franchise), or advertising. The use of innovative contracting methods to involve private sector firms includes design-build, warranties, and cost-plus-time bidding.

Sections of RCW (47.46.010-47.46.900), which was passed in 1995; authorizes WSDOT to solicit proposals for public-private initiatives for the development of up to six “demonstration” projects. To date, the new Tacoma Narrows Bridge span project has been the only transportation project of any significance that involved a substantial private component.

According to the December 2004 United States Department of Transportation report to Congress on public-private partnerships, 15 major transportation projects with capital funding requirements ranging from \$26 million to \$2.4 billion have been completed in recent years using various combinations of public and private resources. The December report was requested as part of House of Representatives Report 108-243 (2003), which accompanied the FY 2004 U.S. DOT Appropriations Act. That Act requested that the U.S. DOT prepare a report identifying the impediments to the formation of large, capital-intensive highway and transit projects involving public-private partnerships.³ U.S. DOT was also asked to work with states and local entities to identify and eliminate existing impediments.

As many of the restrictions associated with private sector involvement in public works projects are revised or eliminated, the federal government is expanding the ways in which funding for such public-private projects can be enhanced. With estimated time savings on the 15 projects mentioned above ranging from 3 months to 24 years and estimated cost savings ranging from \$1.5 million to approximately \$300 million, there are a growing number of examples that appropriate private sector participation can expedite the delivery and reduce the cost of certain projects.⁴

To facilitate the creation of public-private partnerships, the U.S. DOT’s legislative proposals for the Safe, Accountable, Flexible, and Efficient Transportation Equity Act of 2003 (SAFETEA) include:

1. Tolling: Establishing a variable toll pricing program that would permit tolling on any highway, bridge, or tunnel, including the Interstate System, to manage congestion or reduce emissions; easing the eligibility requirements for the Interstate Rehabilitation and

² U.S. Department of Transportation, Federal Highway Administration, *Public-Private Partnerships Defined*, 2004-05. <http://www.fhwa.dot.gov/ppp/defined.htm>

³ H. REP. NO. 108-243, at 9 (2003).

⁴ Battelle, *Performance-Based Contracting for the Highway Construction Industry: An Evaluation of the Use of Innovative Contracting and Performance Specifications in Highway Construction, Final Report*, prepared at the request of Koch Industries, Inc., February 2003, 25-28. <http://www.ncppp.org/resources/papers/battellereport.pdf>.

Reconstruction Program; and allowing States to permit single occupancy vehicles on high occupancy vehicle lanes provided that time-of-day variable charges are assessed (HOT lanes);

2. Private Activity Bonds: Allowing State and local governments to use up to an aggregate total of \$15 billion in private activity, tax-exempt bonds to pay for projects eligible under titles 23 and 49 of the United State Code that serve the general public;
3. Environmental Streamlining: Streamlining the environmental process without substantively changing environmental protection;
4. TIFIA: Lowering the project cost threshold for TIFIA projects to \$50 million;
5. Design-Build: Eliminating the \$50 million threshold for design-build projects;
6. Commercialization of Rest Areas: Establishing a pilot program to allow States to permit commercial operations at existing or new rest areas on Interstate System highways; and
7. Debt Service Reserve: Allowing public transportation agencies to obligate capital grant funds for a debt service reserve, to lower the cost of locally-issued bonds.⁵

Advertising

The intense and regular use of certain roadways by commuters creates an incentive for advertisers to secure space along such routes. Since the number of commuters traveling on a particular roadway is not subject to much fluctuation and most commuters are habitual in the routes they travel, corporate advertisers are attracted to the potential for a regular and reliably measurable potential customer base. According the Outdoor Advertising Association of America, more than \$5.5 billion was spent on outdoor advertising in 2003, with 62% of the total (\$3.4 billion) being spent on billboards.⁶ For the first time in 30 years, no billboard amendments were contained in the most recent federal transportation legislation, TEA-21.

In ascertaining the degree to which significant advertising revenue could be assumed for the Projects, the relevant statute in Washington is Chapter 47.42 RCW; Highway Advertising Control Act – Scenic Vistas Act from 1971. The primary rules and regulations are contained in Chapter 468-66 WAC; Highway Advertising Control Act. In general, no advertising signs are permitted within two miles of Interstate off-ramps and only limited signage is permitted on the State Highway System. Moreover, no signs are permitted within Project Rights of Way – this effectively limits any advertising on the SR-520 Bridge or in any tunnel that may be part of the Alaskan Way/SR-99 Project. As such, barring any change in State laws and regulations, little or no revenue can be expected from this source with respect to any Project.

FEDERAL PROGRAMS

Importantly, one must distinguish between those initiatives which increase the total amount of funding through incremental appropriations, federal matches or programmatic changes and those which accelerate funding but do not increase the total available. **Grant Anticipation Revenue Vehicle** bonds (“**GARVEEs**”) are a good example. GARVEEs, which are not currently authorized in Washington, would allow the State, a political subdivision of the State, or a public authority to pledge future federal-aid highway funds to support the costs related to an eligible debt financing instrument, such as a bond, note, certificate, mortgage, or lease. The use of GARVEEs means that the issuer is borrowing against the anticipated receipt of federal funds – a financing mechanism that

⁵ United States Department of Transportation, *Report to Congress on Public-Private Partnerships*, December 2004.

⁶ Outdoor Advertising Association of America, Inc., *Facts and Figures*, 2003. <http://www.oaaa.org/outdoor/facts>

may make current projects more feasible but that raises questions about how future projects will be funded if future federal funds are pledged to the repayment of the GARVEEs.

Section 129 Loans are loans of federal-aid highway funds received by the State and made directly to public or private entities with toll and non-toll dedicated revenue projects. Section 129 Loans have the positive characteristics of being available for any phase of a project, not requiring initial repayment until five years after construction is complete and the project is open to traffic, and the ability of being placed in a subordinate lien position to bonds that may be issued for the same project. Among the primary disadvantages of Section 129 Loans are the inability to fund costs that were incurred prior to loan authorization, a maximum repayment term of 30 years (from the time of loan authorization), and the need to dedicate specific revenues for loan repayment.

Under the National Highway System Designation Act of 1995, the State of Washington was allowed to create a **State Infrastructure Bank (SIB)** to support the funding of surface transportation projects. However, Washington is not one of the states in the pilot program established by the Transportation Equity Act for the 21st Century (TEA-21) which allowed federal funds to be leveraged. A SIB is funded with federal funds and a required state match and assistance in the form of loans (at or below market rates), loan guarantees, standby lines of credit, letters of credit, certificates of participation, debt service reserve funds, bond insurance, and other forms of non-grant assistance can be extended to projects. As loans are repaid, a SIB's capital is replenished and can be used to support a new cycle of projects. With few exceptions, because the federal funds used to capitalize the SIB are available to fund any project eligible under Title 23, United States Code.⁷ Nearly \$5.0 billion of projects have been funded by SIB's across the country, with the state of South Carolina having the most active programs. The State could make loans or provide guarantees with a SIB to lower project risk or reduce the cost of project capital to make private sector participation more palatable.

Toll Credits are an interesting element at the State's disposal, since they allow the State (or an authority or a private entity) to take credit for the toll revenues it uses to fund non-federal highway projects when calculating the non-federal share on a federal-aid project. Essentially, toll credits allow the federal funding component for certain projects to increase to 100%. If the State does not have the means (or desire) to match federal funds for a particular project, toll credits could allow that project to move forward with 100% federal funding. Moreover, toll credits permit available funds that would otherwise be used to provide a match to federal funds can be redirected to other projects. States currently use toll credits in a variety of ways, from sharing the credits with local governments to reserving against future federal fund matching needs to providing the matching funds required in GARVEE financings. Similar to the GARVEE funding dynamic, toll credits do not increase the amount of total funding available for transportation projects, but they do allow a reallocation or redirection of funds that may help accelerate certain projects.

The **Transportation Infrastructure Finance and Innovation Act (TIFIA)** program was created to allow the U.S. DOT to provide direct credit assistance to sponsors of major transportation projects.⁸ Under TIFIA credit assistance in the form of standby lines of credit or loan guarantees can be made up to 1/3 of the total eligible project costs. Direct loans are also permitted. In addition to most types of public agencies, private entities may also receive TIFIA assistance. With the aforementioned proposal to reduce the minimum project size for TIFIA-eligible projects to \$50 million, many more projects in the State may become eligible for such assistance. All types of

⁷ 21 Congressional Budget Office, *Innovative Financing of Highways: An Analysis of Proposals*, January 1998, xi. <http://www.cbo.gov/showdoc.cfm?index=320&sequence=0>.

⁸ 23 U.S.C. §§181-189 (2004).

surface transportation projects that can otherwise receive some form of federal assistance are potential candidates for either a TIFIA or credit assistance, but any senior lien obligations issued to fund the project must have at least an investment grade credit rating (BBB-, Baa3 or the equivalent). New toll facilities have received TIFIA assistance, which can include flexible repayment terms that allow expected toll revenues and repayment requirements to be more closely aligned.

TOLLS

According to the Federal Highway Administration, there are currently over 5,000 miles of toll roads, bridges and tunnels in the United States – this represents an increase in tolled miles of approximately 20% since 1993. Across the nation, there are 39 distinct toll road projects on the Interstate System and at least 79 distinct toll road projects that are not on the Interstate System with another 24 projects in various stages of development. In addition to roadways, 34 bridges and tunnels on the Interstate System have some form of toll, as do more than 120 bridges and tunnels that are not on the Interstate System with 12 other projects in various stages of development. These toll facility figures do not include ferry routes systems such as the extensive system in Washington State. The number of toll facilities reported with electronic technology has increased from 49 in 1995 to about 161 in 2003.⁹

The Washington State Department of Transportation (WSDOT) has commissioned studies in recent years to investigate the potential revenues from tolling the major highways and interstates in the area of King County and south Snohomish County. The Puget Sound Regional Council's regional travel demand model serves as the basis for the traffic assumptions used in the recent studies, which evaluated a system of "optimal" toll setting based on a number of factors including:

- The value each commuter or traveler places on his or her time, based on average hourly wages over time;
- Traffic flow rates during peak and off-peak periods for each roadway under consideration;
- Meaningful transportation route alternatives and assumed rates of diversion; and
- Construction timetables for the Projects.

The regional toll revenue analyses included a network of roadways subject to tolling. These roadways included: SR-99/Alaskan Way, SR-520, I-405, SR-509, I-90, I-5, and SR-167. The analyses also assumed that some additional components of this regional road network would be completed within ten years. For example, a limited access connection between Alaskan Way and SR-509 would be constructed to facilitate the regionalization of the tolling network.

Generally conservative assumptions were used to estimate the amount of toll revenue available from this regional road network. No weekend tolls were assumed for the low-end revenue estimates and trucks were tolled at only twice the rate of automobiles. Importantly, the basic method used to derive optimal toll levels for each roadway was based on the objective of maximizing efficient roadway use (i.e., minimizing travel time), not maximizing toll revenues nor the amount of vehicles using each roadway. Approximately ten years from now (2014) when the regional toll system is assumed to be in place, toll rates per mile may range from \$0.04 per mile for off-peak and certain roadway segments to \$0.42 per mile for some peak period directions. Calculated peak period tolls

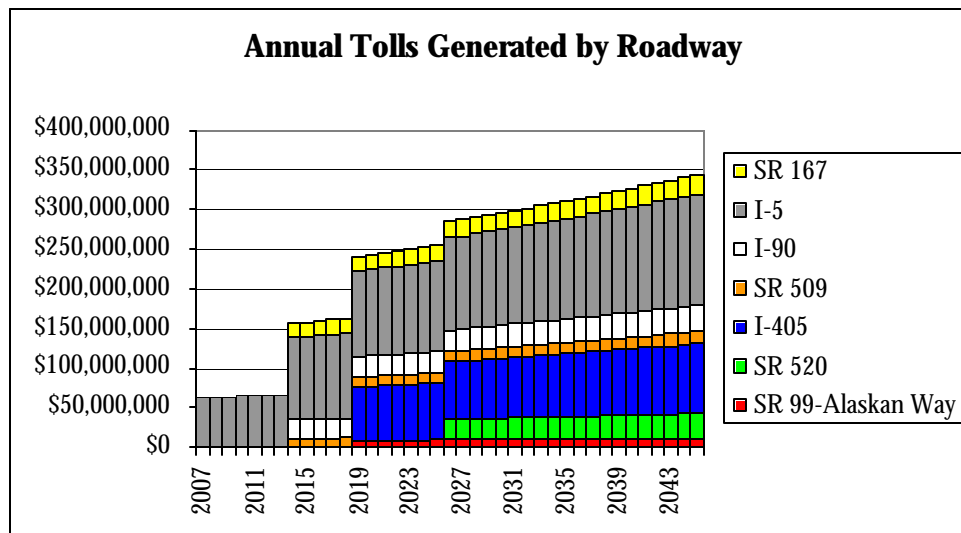
⁹ Toll Facilities in the United States, Bridges-Roads-Tunnels-Ferries, Federal Highway Administration, Publication No: FHWA-PL-03-017, June 2003.

were estimated to be \$0.11 per mile with off-peak tolls averaging \$0.04 per mile.¹⁰ Increasing traffic volumes and the impacts of inflation would cause the need for toll adjustments over time to maintain an optimal toll level.

Several factors may influence the ability to charge and collect tolls from the regional roadway network, including:

- The ability to toll portions of the federal interstate highway system;
- The ability to pool toll revenues from a regional network when not every roadway in the network may have improvements funded from the tolls;
- Technology requirements of an electronic tolling network; and
- Policy issues related to the jurisdictions involved.

Moreover, many considerations will influence the amount of toll revenue available to support either capital funding or financing (debt service) requirements. These include the potential need to divert toll revenues to fund operations and maintenance expenses, the reliability of the revenue source (traffic demand elasticity), technology demands of a system-wide electronic toll collection system, and toll system implementation schedules.



Tolling less than the regional network would create different potential traffic flow dynamics and the potential for increased diversions to non-tolled roadways. Stand-alone toll routes would be subject to a different range of estimated tolls and toll revenue than the same roadways would experience as part of a regionally tolled system. For the purposes of this report, tolls from a regional roadway network were assumed. As described above in the Private Sector Participation section, a regional approach tolling may also permit the introduction of toll credits into the State’s transportation funding mix.

Alternative Tolling Mechanisms

The regional tolling system described above generally assumes that all lanes of a particular roadway are tolled in a similar manner. Value pricing tolling alternatives exist and have been implemented

¹⁰ Parsons Brinckerhoff Quade & Douglas, Inc., *Regional Toll Revenue Feasibility Study – Working Draft*, July 18, 2002.

with varying degrees of success as part of other toll facilities across the nation. High Occupancy/Toll (HOT) lanes are increasingly common. HOT lanes are those in which low occupancy vehicles are charged a toll and high occupancy vehicles are charged either a reduced toll or are not required to pay any toll. By converting HOV lanes to HOT lanes or constructing new HOT lanes, traffic flows are increased as low occupancy vehicles are granted access to high occupancy lanes in exchange for paying for such access.

Fast and Intertwined Regular (FAIR) lanes may also be of particular interest to those setting the tolls related to the Projects, since the concept was designed to introduce a measure of fairness on roadways that were not previously tolled but will be converted to variable toll facilities. FAIR lanes involve the separation of the roadway into Fast and Regular lanes. Fast lanes are tolled and users with electronic toll devices using the Regular lanes would receive credits for not using the Fast lanes. These credits could be applied to future Fast lane use or toward other eligible transportation services.

ALTERNATIVE FINANCING MECHANISMS

Many of the non-traditional transportation revenue sources identified in this report are suitable as security for bond issues and similar forms of financing (borrowing). Since *ad valorem* taxes are not among the revenue sources identified in this report, no general obligation bonds are used as available debt financing vehicles. In addition to a number of federal program-specific financing arrangements, feasible financing mechanisms include federal loans, State Infrastructure Bank loans, Certificates of Participation, and Revenue Bonds. Revenue bonds are an accepted financing mechanism and can be supported by many of the non-traditional revenue sources identified herein. Special tax bonds or tax increment structures may also be required due to the unique nature of certain revenue sources, but all financing mechanisms modeled as part of this report have gained widespread acceptance in the capital marketplace either as the sole security for a bond issue or in combination with other revenue sources.

PROJECT FUNDING CAPACITY ANALYSIS

General

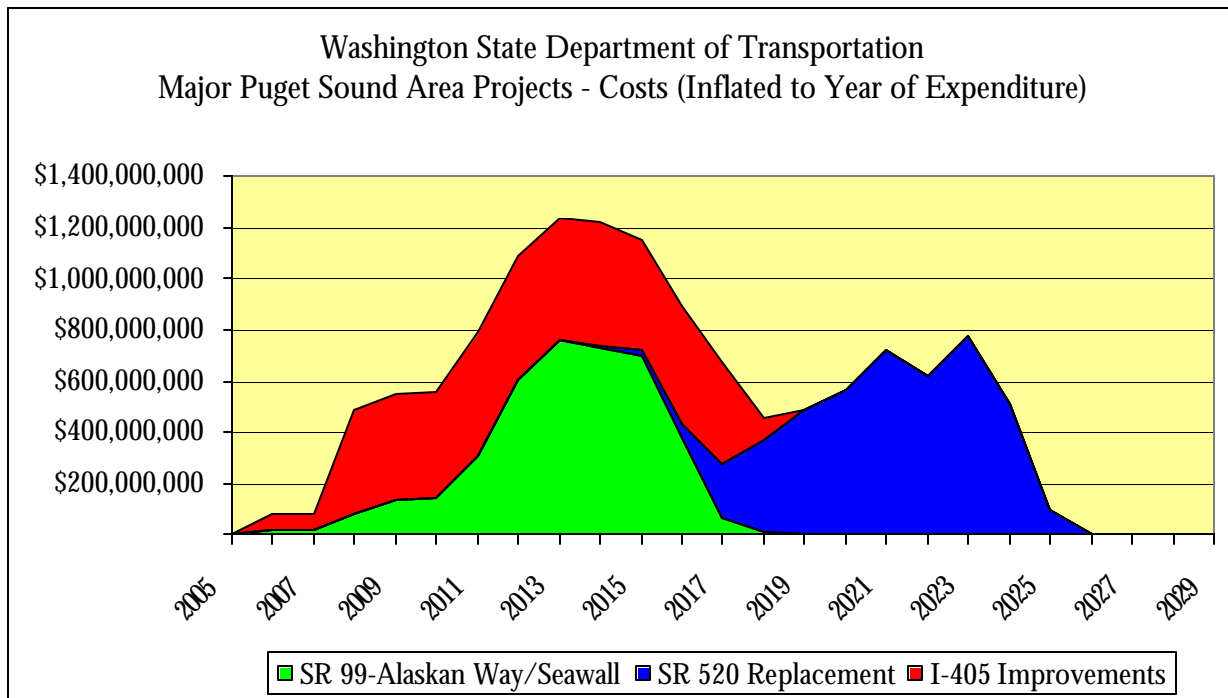
In reviewing the nature of the capital cost requirements with various parties, it became clear that no consensus exists concerning the timing and magnitude of the costs for each Project. There are indeed “preferred alternatives” for each Project, but several considerations arose when evaluating Project funding needs.

Inflationary impacts – current Project cost estimates have generally been expressed in dollars with a base year of 2004. As a result, the actual funding requirement in the year of projected expenditure has been inflated by a consistently applied assumption from the base year.

Operations and Maintenance expenses – while there will certainly be significant, ongoing costs associated with the operations and maintenance of the Projects, only capital cost information was readily available for this report. The funding models developed for this report can easily accommodate non-capital expenses and further study of the magnitude of operations and maintenance expense requirements is undoubtedly warranted.

Project Phasing Considerations – with three Projects of such magnitude and proximity requiring both funding and construction resources over similar timeframes, consideration was given to the likelihood that all three Projects would not occur simultaneously. Discussions with legislative staff indicated that traffic demands, construction resources and funding sources could all limit the ability to undertake more than two Projects at the same time. Therefore, the working assumption of this report is that the SR 99-Alaskan Way/Seawall Project would occur first, followed by the SR-520 Replacement Project. Improvements to I-405 are assumed to begin during the SR 99-Alaskan Way/Seawall Project and continue through the initial years of the SR-520 Replacement Project – **the costs of the SR-520 project are inflated over the base estimates as a result of this Project staging assumption.**

Addressing these considerations resulted in the following assumed schedule of capital costs for the three Projects:



As these charts show, *annual* funding requirements often exceed \$1 billion. On an inflated cost basis, assuming an annual factor of 2.5%, the total capital cost requirements by Project are:

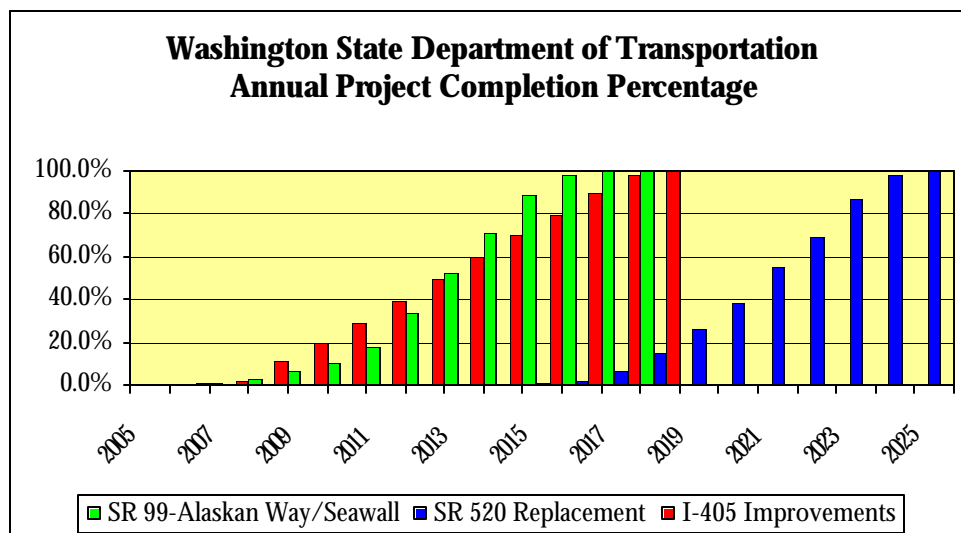
SR 99-Alaskan Way/Seawall	\$3,955,780,000
SR 520 Replacement	4,429,381,754
<u>I-405 Improvements</u>	<u>4,647,796,000</u>
Total	\$13,032,957,754

The multi-year nature of each Project creates a persistent funding need for at least the next two decades. The character of the annual funding needs by Project is presented below.

	Annual Funding Requirement (inflated costs)		
	<u>Minimum</u>	<u>Maximum</u>	<u>Average</u>
SR 99-Alaskan Way/Seawall	\$13,530,000	\$757,000,000	\$304,290,769
SR 520 Replacement	\$10,771,443	\$776,416,826	\$369,115,146
I-405 Improvements	\$57,400,000	\$480,000,000	\$357,522,769
Overall *	\$78,400,000	\$1,237,000,000	\$651,647,888

* Minimum and maximum funding requirements do not necessarily occur in the same year for each Project; the Overall levels refer to aggregate requirements.

The following chart shows the percentage of each Project’s total planned capital costs that are expended in each year. It is unclear whether the SR-520 Replacement Project can be accelerated in light of regional funding and construction resource constraints. The I-405 Improvement Project appears to have the most flexible implementation program; however, this chart reflects the assumed expenditure timing used throughout this report.



As shown in the preceding non-traditional revenue analyses, substantial additional funding may be available for the Projects. In fact, total revenues may exceed Project costs. However, much of the funding starts out at modest levels and increases over time, especially the funding related at least in part to new development (e.g., Tax Increment and Development Impact Fees), so funding is not sufficient during the construction periods. Similarly, toll revenues from the Projects, by definition, do not materialize until after the Projects are completed. Given the construction schedules for the Projects, the revenue and expenditure imbalance is most severe in the near-term – this dynamic is presented in the following table. Through 2030, cumulative Project costs are estimated to exceed revenues from non-traditional sources without the use of debt financing; the difference or “gap” must be funded from either traditional transportation revenue sources or other State or federal contributions. The following table does include potential private sector funds in an amount equal to 5% of project costs inflated to the date of expenditure.

NON-TRADITIONAL REVENUE/EXPENSE PROJECTIONS (\$ millions)

	First 4 Years 2007-2010	10 Years 2011-2020	10 Years 2021-2030	10 Years 2031-2040	5 Years 2041-2045	TOTALS
Non-Traditional Revenues	\$1,166.1	\$4,550.0	\$5,816.3	\$6,550.7	\$3,569.8	\$21,652.9
Project Costs*	\$1,671.7	\$8,560.8	\$2,720.9	\$0.0	\$0.0	\$12,953.3
Difference	(\$505.6)	(\$4,010.8)	\$3,095.5	\$6,550.7	\$3,569.8	\$8,699.6
Cumulative Difference	(\$505.6)	(\$4,516.3)	(\$1,420.9)	\$5,129.8	\$8,699.6	

* Does not include \$79.65 million of costs in 2006.

The case study section that follows analyzes the use of debt financing to partially address this imbalance by addressing some cases in which expenditures are extended over a longer period of time through the use of debt financing, during which period projected revenues are expected to increase.

FUNDING CASE STUDIES

In formulating the funding case studies for the Projects, alternatives to both expenses and revenues were addressed. Capital costs were funded either using annual revenues (“pay-as-you-go”) or debt financing. Revenues were either limited to incremental funding sources (“base case” revenues) or set to include private sector participation. For the sake of understanding, private sector participation was assumed to result in 5% cost savings for the Projects but no meaningful acceleration of the Projects’ construction schedules and, therefore, no reduction in the inflationary impact on Project costs was estimated.

Funding Case Study Overview

	Funding of Capital Costs		Available Funding Sources	
	Pay-as-you-go	Debt Financing	Incremental Revenues	Private Sector Participation
Base Case 1	X		X	
Base Case 2		X	X	
Alternative 1	X		X	X

Note that for Base Case 1 and Base Case 2, two alternative design options for the SR-99 Alaskan Way Viaduct and Seawall project were evaluated – the preferred Tunnel option and the replacement alternative.

The following pages present the results of each of the funding alternatives for the Projects.

BASE CASE 1: No debt financing; use only incremental revenues

Base Case 1 assumes that no debt financing is used to fund the Projects. Only increment revenue sources or mechanisms are used, rather than techniques or programs which may accelerate funding. This case provides a baseline assessment of the revenue and expense imbalance for each Project through its construction period.

The following table summarizes the costs and revenues from non-traditional sources before and during the construction period for each Project as part of the Base Case 1 funding approach.

	Capital Costs (\$ millions)	Non-Traditional Revenue Before/During Construction	Funding "Gap" through Construction Period
SR 99-Alaskan Way/Seawall:			
- Preferred Tunnel Option ¹¹	\$3,955.8	\$1,171.4	\$2,784.40
- Replacement Alternative ¹²	\$2,966.9	\$1,107.7	\$1,859.20
SR 520 Replacement	\$4,429.4	\$2,800.0	\$1,629.40
I-405 Improvements	\$4,647.8	\$1,960.3	\$2,687.50

¹¹ Includes \$22.25 million of costs in 2006 that are not reflected in the case study time period of 2007-2045.

¹² Includes \$16.7 million of costs in 2006 that are not reflected in the case study time period of 2007-2045. Available revenues through the construction period are marginally lower than the Tunnel Option due to a cost-based allocation of regional tolls among the Projects.

Base Case 1: No Debt Financing

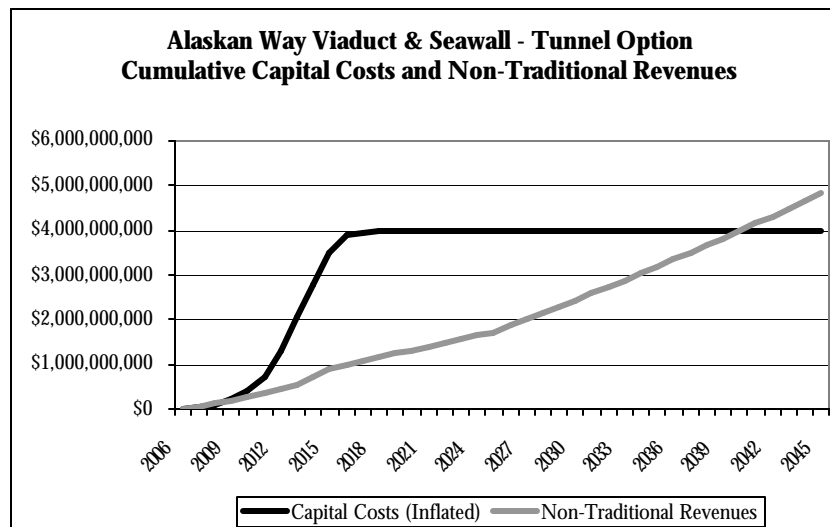
SR 99-Alaskan Way/Seawall – Preferred Alternative – Tunnel Option

The Preferred Alternative – Tunnel Option for SR 99-Alaskan Way/Seawall Project has an estimated total construction cost of \$3.95 billion in year-of-expenditure dollars. The estimated amount of non-traditional revenues allocable to this Project before and during the Project construction period (2006-2016/2018) is \$1.17 billion. The resulting unmet funding need or “gap” during construction is \$2.78 billion. The following table presents the revenues from non-traditional sources, the required “pay-as-you-go” inflated construction costs and the cumulative funding “gap” for each summary time period.

COMPARISON OF COSTS AND NON-TRADITIONAL REVENUES (\$ millions)						
SR 99-Alaskan Way/Seawall - Tunnel Alternative						
Non-Traditional Revenues:	First 4 Years 2007-2010	10 Years 2011-2020	10 Years 2021-2030	10 Years 2031-2040	5 Years 2041-2045	TOTAL (2007-2045)
Special Assessments/Taxes	\$170.8	\$456.3	\$505.9	\$563.8	\$295.0	\$1,991.8
Development Impact Fees	\$40.9	\$154.4	\$131.8	\$116.0	\$58.0	\$501.2
Tax Increment Revenue	\$3.1	\$41.8	\$100.0	\$170.3	\$113.8	\$428.9
Private Sector Contributions*	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Tolls - Project Facilities	\$0.0	\$18.0	\$95.3	\$105.3	\$56.7	\$275.3
Tolls - Non-Projects	\$59.9	\$380.2	\$272.7	\$587.8	\$316.6	\$1,617.2
Total	\$274.7	\$1,050.7	\$1,105.7	\$1,543.2	\$840.2	\$4,814.5
Cumulative Total Revenues	\$274.7	\$1,325.4	\$2,431.1	\$3,974.3	\$4,814.5	
Costs:						
Capital Costs (Net of Bonds) **	\$380.3	\$3,553.3	\$0.0	\$0.0	\$0.0	\$3,933.5
Projected Debt Service	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total	\$380.3	\$3,553.3	\$0.0	\$0.0	\$0.0	\$3,933.5
Cumulative Total Costs	\$380.3	\$3,933.5	\$3,933.5	\$3,933.5	\$3,933.5	
Difference in Cumulative Amounts (Funding "Gap" - negative amounts indicate additional funding needs)	(\$105.6)	(\$2,608.2)	(\$1,502.4)	\$40.8	\$880.9	

* Analyzed as cost savings rather than incremental revenue.

** Does not include \$22.25 million of costs in 2006.



Base Case 1: No Debt Financing

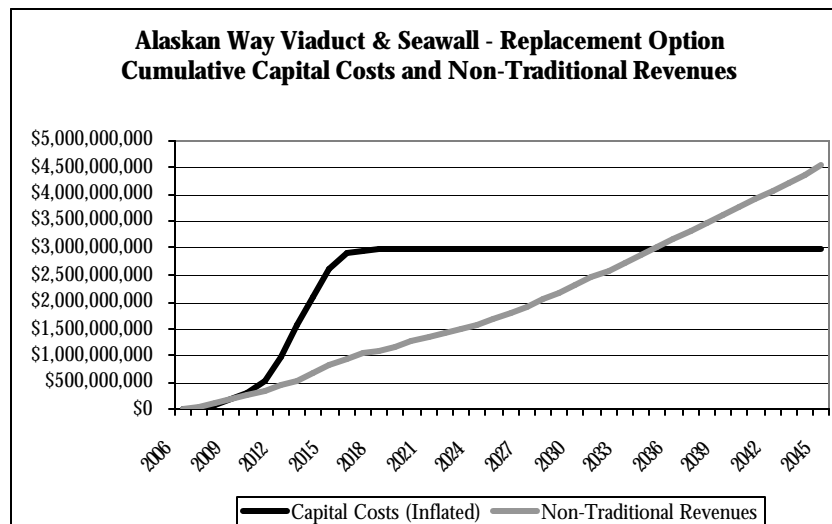
SR 99-Alaskan Way/Seawall – Replacement Alternative

If the replacement design were chosen for SR 99-Alaskan Way/Seawall Project, total construction costs are estimated to total \$2.97 billion in year-of-expenditure dollars. The estimated amount of non-traditional revenues allocable to this Project before and during the Project construction period (2006-2016/2018) is \$1.11 billion (slightly lower than the Tunnel Option due to a cost-based allocation of regional tolls among the Projects). The resulting unmet funding need or “gap” during construction is \$1.86 billion. The following table presents the revenues from non-traditional sources, the required “pay-as-you-go” inflated construction costs and the cumulative funding “gap” for each summary time period.

COMPARISON OF COSTS AND NON-TRADITIONAL REVENUES (\$ millions)						
SR 99-Alaskan Way/Seawall - Replacement Alternative						
Non-Traditional Revenues:	First 4 Years 2007-2010	10 Years 2011-2020	10 Years 2021-2030	10 Years 2031-2040	5 Years 2041-2045	TOTAL (2007-2045)
Special Assessments/Taxes	\$170.8	\$456.3	\$505.9	\$563.8	\$295.0	\$1,991.8
Development Impact Fees	\$40.9	\$154.4	\$131.8	\$116.0	\$58.0	\$501.2
Tax Increment Revenue	\$3.1	\$41.8	\$100.0	\$170.3	\$113.8	\$428.9
Private Sector Contributions*	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Tolls - Project Facilities	\$0.0	\$18.0	\$95.3	\$105.3	\$56.7	\$275.3
Tolls - Non-Projects	\$47.8	\$328.7	\$221.3	\$477.1	\$256.9	\$1,331.8
Total	\$262.6	\$999.2	\$1,054.3	\$1,432.5	\$780.5	\$4,529.1
Cumulative Total Revenues	\$262.6	\$1,261.7	\$2,316.1	\$3,748.6	\$4,529.1	
Costs:						
Capital Costs (Net of Bonds) **	\$285.2	\$2,665.0	\$0.0	\$0.0	\$0.0	\$2,950.1
Projected Debt Service	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total	\$285.2	\$2,665.0	\$0.0	\$0.0	\$0.0	\$2,950.1
Cumulative Total Costs	\$285.2	\$2,950.1	\$2,950.1	\$2,950.1	\$2,950.1	
Difference in Cumulative Amounts (Funding "Gap" - negative amounts indicate additional funding needs)	(\$22.6)	(\$1,688.4)	(\$634.1)	\$798.4	\$1,578.9	

* Analyzed as cost savings rather than incremental revenue.

** Does not include \$16.688 million of costs in 2006.

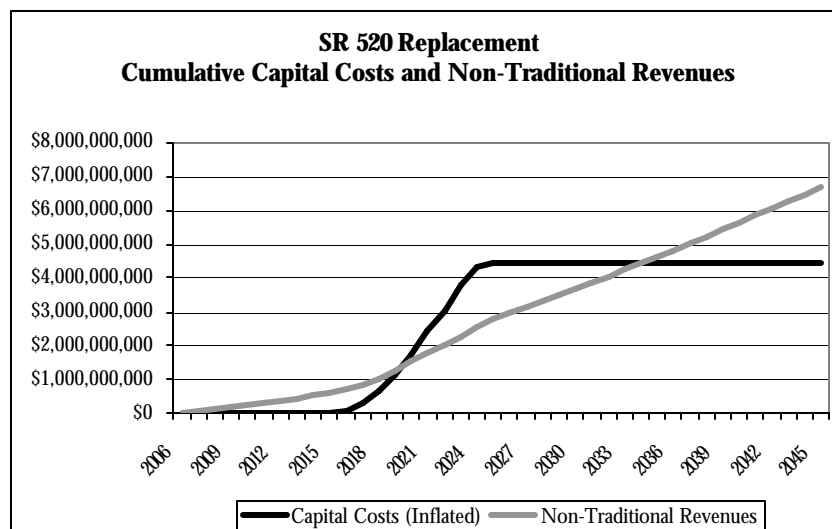


Base Case 1: No Debt Financing
SR-520 Bridge Replacement

The SR-520 Bridge Replacement Project has an estimated total construction cost of \$4.43 billion in year-of-expenditure dollars. Inflationary impacts are dramatic on the cost of this Project because the construction period is assumed to cover 2014-2025. The estimated amount of non-traditional revenues allocable to this Project *before and during construction* period is \$2.80 billion, including the lengthy pre-construction period of 2007-2013. The resulting unmet funding need or “gap” is \$1.63 billion. The following table presents the revenues from non-traditional sources, the required “pay-as-you-go” inflated construction costs and the cumulative funding “gap” for each summary time period.

COMPARISON OF COSTS AND NON-TRADITIONAL REVENUES (\$ millions)						
SR 520 Replacement						
	First 4 Years	10 Years	10 Years	10 Years	5 Years	TOTAL
Non-Traditional Revenues:	2007-2010	2011-2020	2021-2030	2031-2040	2041-2045	(2007-2045)
Special Assessments/Taxes	\$181.8	\$493.4	\$568.4	\$655.5	\$347.3	\$2,246.4
Development Impact Fees	\$53.7	\$226.9	\$186.0	\$158.6	\$79.3	\$704.4
Tax Increment Revenue	\$3.0	\$44.9	\$107.9	\$181.8	\$120.8	\$458.4
Private Sector Contributions*	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Tolls - Project Facilities	\$0.0	\$0.0	\$132.2	\$285.0	\$153.5	\$570.7
Tolls - Non-Projects	\$0.0	\$521.9	\$1,160.1	\$658.2	\$354.5	\$2,694.7
Total	\$238.5	\$1,287.1	\$2,154.6	\$1,939.1	\$1,055.4	\$6,674.6
Cumulative Total Revenues	\$238.5	\$1,525.7	\$3,680.2	\$5,619.3	\$6,674.6	
Costs:						
Capital Costs (Net of Bonds)	\$0.0	\$1,708.5	\$2,720.9	\$0.0	\$0.0	\$4,429.4
Projected Debt Service	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total	\$0.0	\$1,708.5	\$2,720.9	\$0.0	\$0.0	\$4,429.4
Cumulative Total Costs	\$0.0	\$1,708.5	\$4,429.4	\$4,429.4	\$4,429.4	
Difference in Cumulative Amounts (Funding "Gap" - negative amounts indicate additional funding needs)	\$238.5	(\$182.9)	(\$749.2)	\$1,189.9	\$2,245.3	

* Analyzed as cost & time savings rather than incremental revenue.



Base Case 1: No Debt Financing

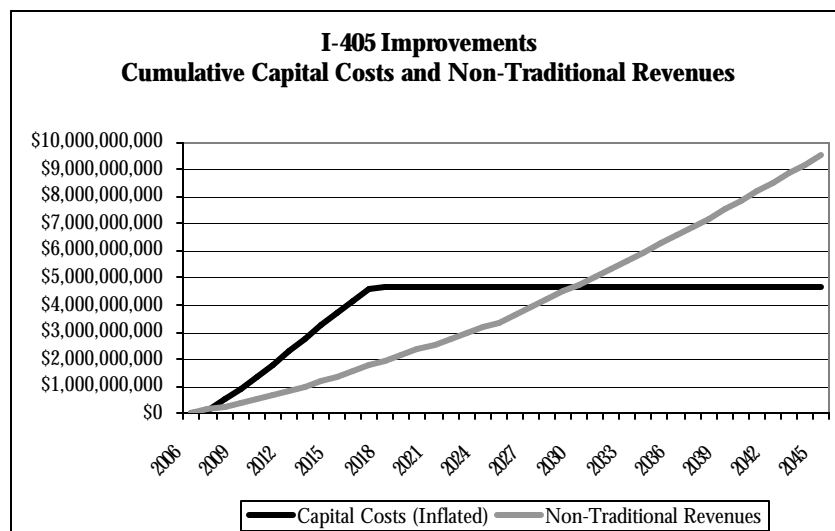
I-405 Improvements

The I-405 Improvements Project has an estimated total construction cost of \$4.65 billion in year-of-expenditure dollars. The estimated amount of non-traditional revenues allocable to this Project *during construction* period is \$1.96 billion. The resulting unmet funding need or “gap” during construction is \$2.69 billion. The following table presents the revenues from non-traditional sources, the required “pay-as-you-go” inflated construction costs and the cumulative funding “gap” for each summary time period.

COMPARISON OF COSTS AND NON-TRADITIONAL REVENUES (\$ millions)						
I-405 Improvements						
Non-Traditional Revenues:	First 4 Years 2007-2010	10 Years 2011-2020	10 Years 2021-2030	10 Years 2031-2040	5 Years 2041-2045	TOTAL (2007-2045)
Special Assessments/Taxes	\$275.5	\$754.8	\$873.8	\$1,013.8	\$537.2	\$3,455.1
Development Impact Fees	\$92.1	\$383.7	\$300.0	\$230.1	\$115.1	\$1,121.1
Tax Increment Revenue	\$5.8	\$85.6	\$203.4	\$335.9	\$220.3	\$851.0
Private Sector Contributions*	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Tolls - Project Facilities	\$0.0	\$136.0	\$722.4	\$797.9	\$429.8	\$2,086.1
Tolls - Non-Projects	\$195.9	\$424.0	\$320.4	\$690.6	\$372.0	\$2,002.9
Total	\$569.3	\$1,784.1	\$2,420.0	\$3,068.4	\$1,674.3	\$9,516.2
Cumulative Total Revenues	\$569.3	\$2,353.5	\$4,773.5	\$7,841.8	\$9,516.2	
Costs:						
Capital Costs (Net of Bonds)	\$1,291.4	\$3,299.0	\$0.0	\$0.0	\$0.0	\$4,590.4
Projected Debt Service	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total	\$1,291.4	\$3,299.0	\$0.0	\$0.0	\$0.0	\$4,590.4
Cumulative Total Costs	\$1,291.4	\$4,590.4	\$4,590.4	\$4,590.4	\$4,590.4	
Difference in Cumulative Amounts (Funding "Gap" - negative amounts indicate additional funding needs)	(\$722.1)	(\$2,236.9)	\$183.1	\$3,251.4	\$4,925.8	

* Analyzed as cost & time savings rather than incremental revenue.

** Does not include \$57.4 million of costs in 2006.



BASE CASE 2: Use of Revenue Bond Financing

Base Case 2 assumes that revenue bonds are issued to finance 100% of Project costs – this funding approach differentiates Base Case 2 from Base Case 1. Again, only incremental revenue sources are projected.

The following table summarizes the debt service (principal and interest) costs, principal amount of issued bonds, and revenues from non-traditional sources through 2045 for each Project as part of the Base Case 2 funding approach. *Note that the principal amount of bonds issued and the resulting debt service costs reflect at debt service reserve fund equal to 10% of the each issue size. If the financing mechanism were general obligation bonds, such a reserve fund would not be needed. In most cases, the debt service reserve fund is invested at the rate of borrowing so debt service net of reserve earnings approximates the debt service one would expect for bond issues that do not have a debt service reserve fund.*

	Debt Service through 2045	Par Amount of Bonds	Non-Traditional Revenue (through 2045)
SR 99-Alaskan Way/Seawall:			
- Preferred Tunnel Option ¹³	\$9,650.4	\$4,431.4	\$5,636.7
- Replacement Alternative ¹⁴	\$7,239.9	\$3,324.5	\$5,115.2
SR 520 Replacement	\$8,090.4	\$4,461.8	\$7,196.2
I-405 Improvements	\$10,162.8	\$5,648.5	\$8,003.8

¹³ Includes \$22.25 million of costs in 2006 that are not reflected in the case study time period of 2007-2045.

¹⁴ Includes \$16.7 million of costs in 2006 that are not reflected in the case study time period of 2007-2045. Available revenues through the construction period are marginally lower than the Tunnel Option due to a cost-based allocation of regional tolls among the Projects.

Base Case 2: Bond Financing

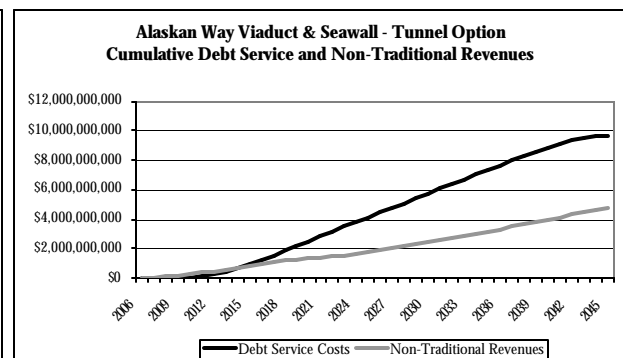
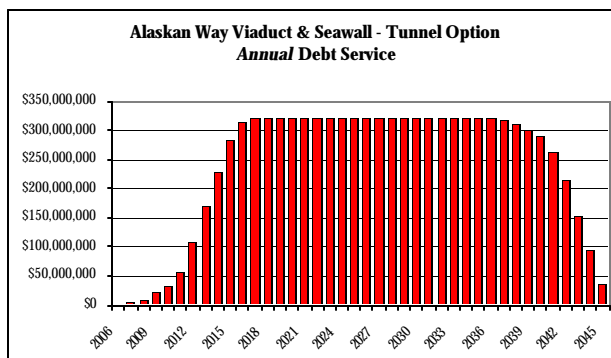
SR 99-Alaskan Way/Seawall – Preferred Alternative – Tunnel Option

The Preferred Alternative – Tunnel Option for SR 99-Alaskan Way/Seawall Project has an estimated total construction cost of \$3.96 billion in year-of-expenditure dollars. Assuming that bonds are issued to finance all Project costs, the total debt service (principal and interest) expense during the report period is \$9.65 billion. The average interest on the bonds is estimated at 6.0% and the repayment term of each financing is 30 years. The estimated amount of non-traditional revenues allocable to this Project through 2045 is \$4.81 billion. The resulting unmet funding need or “gap” from 2007 to 2045 is \$4.83 billion. The following table presents the revenues from non-traditional sources, the debt service costs and the cumulative funding “gap” for each summary time period.

COMPARISON OF COSTS AND NON-TRADITIONAL REVENUES (\$ millions)						
SR 99-Alaskan Way/Seawall - Tunnel Alternative						
Non-Traditional Revenues:	First 4 Years 2007-2010	10 Years 2011-2020	10 Years 2021-2030	10 Years 2031-2040	5 Years 2041-2045	TOTAL (2007-2045)
Special Assessments/Taxes	\$170.8	\$456.3	\$505.9	\$563.8	\$295.0	\$1,991.8
Development Impact Fees	\$40.9	\$154.4	\$131.8	\$116.0	\$58.0	\$501.2
Tax Increment Revenue	\$3.1	\$41.8	\$100.0	\$170.3	\$113.8	\$428.9
Private Sector Contributions*	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Tolls - Project Facilities	\$0.0	\$18.0	\$95.3	\$105.3	\$56.7	\$275.3
Tolls - Non-Projects	\$59.9	\$380.2	\$272.7	\$587.8	\$316.6	\$1,617.2
Total	\$274.7	\$1,050.7	\$1,105.7	\$1,543.2	\$840.2	\$4,814.5
Cumulative Total Revenues	\$274.7	\$1,325.4	\$2,431.1	\$3,974.3	\$4,814.5	
Costs:						
Capital Costs (Net of Bonds)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Projected Debt Service	\$67.4	\$2,448.7	\$3,219.3	\$3,150.2	\$763.1	\$9,648.6
Total	\$67.4	\$2,448.7	\$3,219.3	\$3,150.2	\$763.1	\$9,648.6
Cumulative Total Costs	\$67.4	\$2,516.0	\$5,735.3	\$8,885.5	\$9,648.6	
Difference in Cumulative Amounts (Funding "Gap" - negative amounts indicate additional funding needs)	\$207.3	(\$1,190.6)	(\$3,304.3)	(\$4,911.2)	(\$4,834.1)	

* Analyzed as cost savings rather than incremental revenue.

** Does not include \$22.25 million of costs in 2006.



Base Case 2: Bond Financing

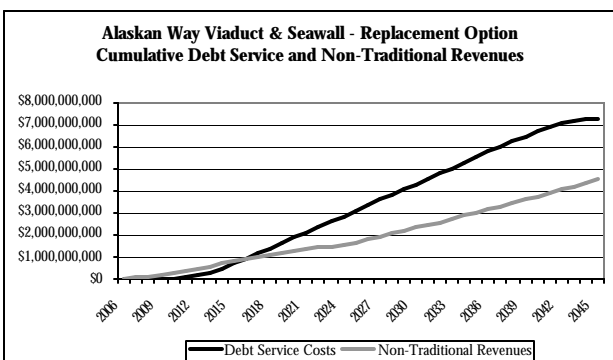
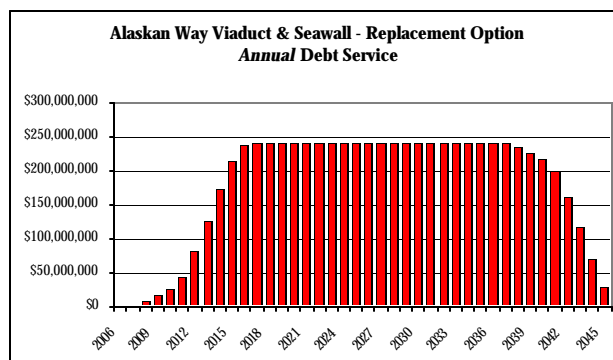
SR 99-Alaskan Way/Seawall – Replacement Alternative

The replacement alternative for SR 99-Alaskan Way/Seawall Project, has an estimated total construction cost of \$2.97 billion in year-of-expenditure dollars. If bonds are issued to finance all Project costs, the total debt service (principal and interest) expense during the report period is \$7.24 billion. The average interest on the bonds is estimated at 6.0% and the repayment term of each financing is 30 years. The estimated amount of non-traditional revenues allocable to this Project through 2045 is \$4.53 billion (slightly lower than the Tunnel Option due to a cost-based allocation of regional tolls among the Projects). The resulting unmet funding need or “gap” from 2007 to 2045 is \$2.71 billion. The following table presents the revenues from non-traditional sources, the debt service costs and the cumulative funding “gap” for each summary time period.

COMPARISON OF COSTS AND NON-TRADITIONAL REVENUES (\$ millions)						
SR 99-Alaskan Way/Seawall - Replacement Alternative						
	First 4 Years 2007-2010	10 Years 2011-2020	10 Years 2021-2030	10 Years 2031-2040	5 Years 2041-2045	TOTAL (2007-2045)
Non-Traditional Revenues:						
Special Assessments/Taxes	\$170.8	\$456.3	\$505.9	\$563.8	\$295.0	\$1,991.8
Development Impact Fees	\$40.9	\$154.4	\$131.8	\$116.0	\$58.0	\$501.2
Tax Increment Revenue	\$3.1	\$41.8	\$100.0	\$170.3	\$113.8	\$428.9
Private Sector Contributions*	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Tolls - Project Facilities	\$0.0	\$18.0	\$95.3	\$105.3	\$56.7	\$275.3
Tolls - Non-Projects	\$47.8	\$328.7	\$221.3	\$477.1	\$256.9	\$1,331.8
Total	\$262.6	\$999.2	\$1,054.3	\$1,432.5	\$780.5	\$4,529.1
Cumulative Total Revenues	\$262.6	\$1,261.7	\$2,316.1	\$3,748.6	\$4,529.1	
Costs:						
Capital Costs (Net of Bonds)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Projected Debt Service	\$50.6	\$1,837.0	\$2,415.2	\$2,363.3	\$572.4	\$7,238.5
Total	\$50.6	\$1,837.0	\$2,415.2	\$2,363.3	\$572.4	\$7,238.5
Cumulative Total Costs	\$50.6	\$1,887.6	\$4,302.8	\$6,666.1	\$7,238.5	
Difference in Cumulative Amounts (Funding "Gap" - negative amounts indicate additional funding needs)	\$212.0	(\$625.9)	(\$1,986.7)	(\$2,917.5)	(\$2,709.4)	

* Analyzed as cost savings rather than incremental revenue.

** Does not include \$16.688 million of costs in 2006.

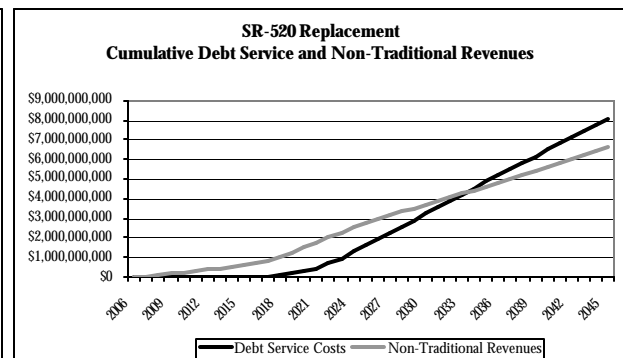
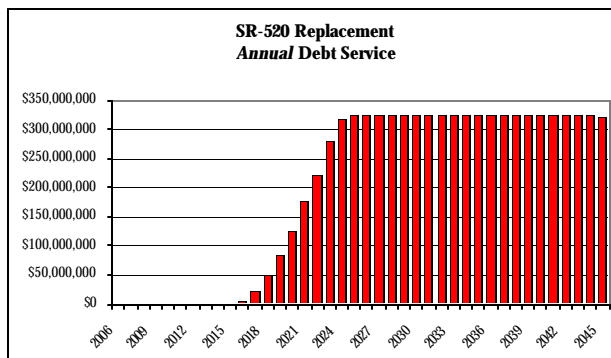


Base Case 2: Bond Financing SR-520 Bridge Replacement

The SR-520 Bridge Replacement Project has an estimated total construction cost of \$4.43 billion in year-of-expenditure dollars. Assuming that bonds are issued to finance all Project costs, the total debt service (principal and interest) expense during the report period is \$8.09 billion. The average interest on the bonds is estimated at 6.0% and the repayment term of each financing is 30 years. The estimated amount of non-traditional revenues allocable to this Project through 2045 is \$6.67 billion. The resulting unmet funding need or “gap” from 2007 to 2045 is \$1.41 billion – lower than the other Projects due to the collection of revenues for this Project before construction begins and the fact that the bonds will not be fully amortized until after the construction period. The following table presents the revenues from non-traditional sources, the debt service costs and the cumulative funding “gap” for each summary time period.

COMPARISON OF COSTS AND NON-TRADITIONAL REVENUES (\$ millions)						
SR 520 Replacement						
	First 4 Years 2007-2010	10 Years 2011-2020	10 Years 2021-2030	10 Years 2031-2040	5 Years 2041-2045	TOTAL (2007-2045)
Non-Traditional Revenues:						
Special Assessments/Taxes	\$181.8	\$493.4	\$568.4	\$655.5	\$347.3	\$2,246.4
Development Impact Fees	\$53.7	\$226.9	\$186.0	\$158.6	\$79.3	\$704.4
Tax Increment Revenue	\$3.0	\$44.9	\$107.9	\$181.8	\$120.8	\$458.4
Private Sector Contributions*	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Tolls - Project Facilities	\$0.0	\$0.0	\$132.2	\$285.0	\$153.5	\$570.7
Tolls - Non-Projects	\$0.0	\$521.9	\$1,160.1	\$658.2	\$354.5	\$2,694.7
Total	\$238.5	\$1,287.1	\$2,154.6	\$1,939.1	\$1,055.4	\$6,674.6
Cumulative Total Revenues	\$238.5	\$1,525.7	\$3,680.2	\$5,619.3	\$6,674.6	
Costs:						
Capital Costs (Net of Bonds)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Projected Debt Service	\$0.0	\$288.8	\$2,942.4	\$3,241.5	\$1,617.7	\$8,090.4
Total	\$0.0	\$288.8	\$2,942.4	\$3,241.5	\$1,617.7	\$8,090.4
Cumulative Total Costs	\$0.0	\$288.8	\$3,231.2	\$6,472.7	\$8,090.4	
Difference in Cumulative Amounts (Funding "Gap" - negative amounts indicate additional funding needs)	\$238.5	\$1,236.9	\$449.0	(\$853.4)	(\$1,415.7)	

* Analyzed as cost & time savings rather than incremental revenue.



Base Case 2: Bond Financing

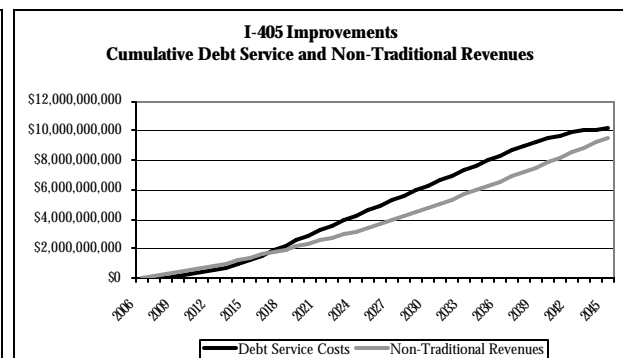
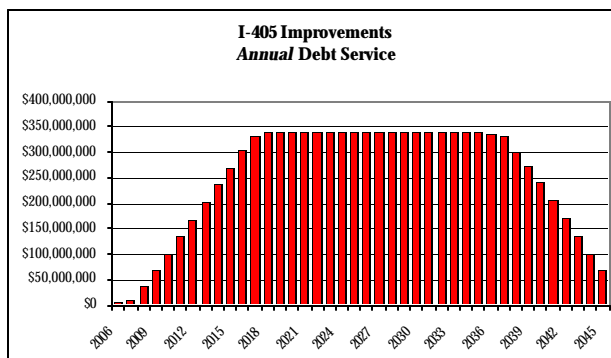
I-405 Improvements

The I-405 Improvements Project has an estimated total construction cost of \$4.65 billion in year-of-expenditure dollars. Assuming that bonds are issued to finance all Project costs, the total debt service (principal and interest) expense during the report period is \$10.16 billion. The average interest on the bonds is estimated at 6.0% and the repayment term of each financing is 30 years. The estimated amount of non-traditional revenues allocable to this Project through 2045 is \$9.52 billion. The resulting unmet funding need or “gap” from 2007 to 2045 is \$0.64 billion. The following table presents the revenues from non-traditional sources, the debt service costs and the cumulative funding “gap” for each summary time period.

COMPARISON OF COSTS AND NON-TRADITIONAL REVENUES (\$ millions)						
I-405 Improvements						
	First 4 Years 2007-2010	10 Years 2011-2020	10 Years 2021-2030	10 Years 2031-2040	5 Years 2041-2045	TOTAL (2007-2045)
Non-Traditional Revenues:						
Special Assessments/Taxes	\$275.5	\$754.8	\$873.8	\$1,013.8	\$537.2	\$3,455.1
Development Impact Fees	\$92.1	\$383.7	\$300.0	\$230.1	\$115.1	\$1,121.1
Tax Increment Revenue	\$5.8	\$85.6	\$203.4	\$335.9	\$220.3	\$851.0
Private Sector Contributions*	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Tolls - Project Facilities	\$0.0	\$136.0	\$722.4	\$797.9	\$429.8	\$2,086.1
Tolls - Non-Projects	\$195.9	\$424.0	\$320.4	\$690.6	\$372.0	\$2,002.9
Total	\$569.3	\$1,784.1	\$2,420.0	\$3,068.4	\$1,674.3	\$9,516.2
Cumulative Total Revenues	\$569.3	\$2,353.5	\$4,773.5	\$7,841.8	\$9,516.2	
Costs:						
Capital Costs (Net of Bonds)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Projected Debt Service	\$214.0	\$2,675.7	\$3,401.6	\$3,183.4	\$683.8	\$10,158.6
Total	\$214.0	\$2,675.7	\$3,401.6	\$3,183.4	\$683.8	\$10,158.6
Cumulative Total Costs	\$214.0	\$2,889.7	\$6,291.3	\$9,474.7	\$10,158.6	
Difference in Cumulative Amounts (Funding "Gap" - negative amounts indicate additional funding needs)	\$355.3	(\$536.2)	(\$1,517.9)	(\$1,632.9)	(\$642.4)	

* Analyzed as cost & time savings rather than incremental revenue.

** Does not include \$57.4 million of costs in 2006.



ALTERNATIVE FUNDING CASE 1: No debt financing; adjust for private sector savings

Alternative Case 1 assumes that no debt financing is used to fund the Projects, but that Project costs are reduced 5% due to private sector involvement – recent federal studies suggest that this is an average cost savings for transportation projects with significant private sector participation. No acceleration of projects is assumed; therefore, the inflationary impacts from the lower revised costs are similar to the other funding alternatives. Only incremental revenue sources or mechanisms are used, rather than techniques or programs which may accelerate funding.

The following table summarizes the costs and revenues from non-traditional sources before and during the construction period for each Project as part of the Alternative Case 1 funding approach.

	Capital Costs (\$ millions)	Non-Traditional Revenue Before/During Construction
SR 99-Alaskan Way/Seawall	\$3,758.0	\$1,171.4
SR 520 Replacement	\$4,207.9	\$2,800.0
I-405 Improvements	\$4,415.4	\$1,960.3

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