Economics Technical Memorandum
S. Holgate Street to S. King Street
Viaduct Replacement Project
Environmental Assessment
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ACRONYMS

B&O  business and occupation
CBD  Central Business District
City  City of Seattle
FAZ  forecast analysis zone
MIC  manufacturing and industrial center
Project SR 99: S. Holgate Street to S. King Street Viaduct Replacement Project
PSRC Puget Sound Regional Council
SMC  Seattle Municipal Code
SR  State Route
WAC  Washington Administrative Code
Chapter 1 SUMMARY

The SR 99: S. Holgate Street to S. King Street Viaduct Replacement Project (the Project) involves demolishing and replacing the State Route (SR) 99 mainline from S. Walker Street (just south of S. Holgate Street) to the vicinity of S. King Street. The Project would also provide grade-separated access for freight and general purpose traffic traveling between the BNSF railyards, SR 519, and the Port of Seattle. These east-west movements would be provided via a U-shaped undercrossing extending from the intersection of S. Atlantic Street/Colorado Avenue S. to the intersection of S. Atlantic Street and E. Marginal Way S. This new connection would improve vehicle access by providing a route for east-west traffic when railroad cars on the tail track block the at-grade roadway. At-grade access connecting these two areas would continue to be provided via S. Atlantic Street.

This Economics Technical Memorandum, prepared in support of the Environmental Assessment (EA), provides detailed information about the economic context of the Project and potential effects that could directly or indirectly result from the Project. The following sections summarize the affected economic environment, effects, and benefits to the local and regional economies, as well as recommended mitigation for adverse effects.

1.1 Affected Environment

1.1.1 General Role of the Local Economy

The greater Seattle area and King County host a large and diverse economy. King County is the largest business center in both the State of Washington and the Pacific Northwest, and the county is a leading global center for several emerging industries: aerospace, biotechnology, clean technology, information technology, and international trade and logistics (Washington State Department of Community, Trade & Economic Development 2006).

International commerce also plays a substantial role in the local economy. The value of all exports from Seattle/Washington State ports was approximately $46 billion in 2004 (City of Seattle 2006a). This equates to one out of three jobs in the local economy (City of Seattle 2006a). Freight arrives at seaport cargo and vessel handling terminals (Terminals 5, 18, and 46), the Seattle-Tacoma International Airport, and Fishermen’s Terminal.

To support this economic activity, transportation infrastructure in this area includes two transcontinental railroads, extensive nationwide trucking
capacity, three interstate highways, dozens of state highways, a ferry system, a world-class port, and an international airport (EDC 2003).

1.1.2 Established Business Districts

The Project is located within and near several retail/commercial centers, manufacturing/industrial centers, and urban centers. These districts and centers include the Duwamish Manufacturing and Industrial Center and the Pioneer Square Historic District.

1.1.3 Employment

In 2000, Seattle South\(^1\) had approximately 50 percent of its jobs distributed across three sectors: manufacturing, retail trade, and government/education. The remaining approximately 50 percent of jobs were distributed across the services and trade/transport/utilities sectors. The number of services and trade/transport/utilities sector jobs in Seattle South is projected to increase slightly, whereas the number of jobs in manufacturing is projected to decrease over time.

Unemployment rates within the region have historically been lower than the statewide average. In 2006, the average civilian labor force in King County numbered 1,044,300. Approximately 43,700 (4.2 percent) were unemployed (LMEA 2007). That compares with the average statewide civilian labor force of 3,326,600 with 166,200 (5.0 percent) unemployed for 2006 (LMEA 2007).

1.1.4 Parking Inventory

Parking is categorized by on-street (short-term and long-term) and off-street parking. The available inventory of short-term on-street parking is quantified by the number of spaces with parking meters. Approximately 157 short-term on-street parking spaces are located within the project footprint. The total number of meters in service at any one time fluctuates depending upon construction, hoarding (long-term use by permit, typically for construction vehicles), and other temporary measures that remove parking meters from use. The available inventory of on-street long-term (unmetered) parking is quantified as the number of spaces without parking meters. Approximately 423 long-term on-street parking spaces are located within the project footprint. The available inventory of off-street parking is provided by private

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\(^1\) Seattle South lies directly south of the Seattle Central Business District and is bounded by Lake Washington to the east; generally Seola Beach Drive, S.W. Roxbury Street, S. 96th Street, and S. Bangor Street to the south; and Elliott Bay to the west.
property owners and operators of private lots. Approximately 1,114 off-street parking spaces are located within the study area.

1.1.5 Local Government Revenues

The City of Seattle relies on a variety of taxes to fund state and local government programs. These taxes include a combined state and local sales and use tax; business and occupation (B&O) tax; public utility tax; property tax; and several other excise, real estate, and estate taxes.

The combined state and local sales tax rate for the study area is 8.9 percent, which also includes a Regional Transit Authority tax. For the City of Seattle's adopted 2008 budget, retail sales tax revenues account for $172.8 million, which is almost 21 percent of the General Subfund Revenue (City of Seattle 2008).

Most businesses operating in the state are subject to the B&O tax. B&O taxes account for $161.5 million (19 percent) of the General Subfund Revenue (City of Seattle 2008).

Real and personal property is subject to property tax. Within King County, property taxes account for 31 percent of the total taxes collected as revenue. According to the 2008 adopted budget, King County estimated to collect $354 million in property taxes for the 2008 fiscal year (King County Budget Office 2008). Property tax revenues in the City of Seattle's endorsed 2008 budget account for $234.5 million, which is about 28 percent of the General Subfund Revenue (City of Seattle 2008).

1.1.6 Revenues from Parking Meters and Public Garages

Beginning in April 2004, the City of Seattle began replacing single-space parking meters with pay stations. One pay station is intended to replace about six single-space parking meters. The pay stations allow users to pay with currency, credit card, or debit card. In addition, as part of the City’s 2004 budget, the City Council approved a meter rate increase from $1.00 to $1.50 per hour for pay stations and electronic meters. Parking spaces controlled by pay stations typically average about $8.00 per space day, while meters average about $1.50 per space day. Parking spaces generate revenue 6 days a week (312 days per year). Each parking space controlled by a pay station generates approximately $2,500 per year in revenue for the City’s General Fund. The City expects to have converted most single-space parking meters throughout the city to pay stations by the end of 2008.

The City of Seattle collects an annual license fee from operators of public garages. The annual license fee, in addition to the business license fee, is $6 per 1,000 square feet of floor or ground space contained in a parking garage or
lot and used for parking or storage purposes. The City of Seattle also collects a commercial parking tax that is paid by the parking customer at the time the payment for parking is made. The tax rate is currently 5 percent and eventually will rise to 10 percent by July 1, 2009.

1.1.7 Inventory of Existing Businesses

The project team performed a physical inventory of businesses within the area of direct effects. The area of direct effects for the inventory includes businesses within one block of proposed changes to existing facilities or proposed new facilities. For this technical memorandum, the total number of businesses that would be directly affected by the Project is approximately 308.

1.2 Operational Effects and Mitigation

General economic effects and benefits associated with the Project are analyzed in this technical memorandum and are summarized in the following sections.

1.2.1 Transportation, Access, and Visibility

The highway-related measures of effectiveness that have a bearing upon the economic performance of the project area include the following:

- Connectivity between streets and highways.
- Freight traffic travel time between existing industrial areas.
- Freight train movements.

The Project would provide improved access as a result of the new Alaskan Way Viaduct ramps. The Project would provide substantial access improvements to Terminal 46 for freight and would substantially diminish truck and rail conflicts.

1.2.2 Parking

The Project would result in the permanent removal of approximately 1,267 parking spaces, of which 447 would be on-street parking and 820 would be off-street parking. The removal of 447 on-street parking spaces includes the loss of 418 long-term parking spaces and a loss of 29 short-term, metered parking spaces (Exhibit 1-1). Loss of government revenue from the decrease in short-term on-street parking is presented in Section 1.2.4.

Customers and business operators who routinely use on-street parking or parking under the viaduct would need to find alternative parking. These parking effects could result in indirect economic effects to businesses along the corridor by decreasing the number of customers willing to patronize those businesses.
**Exhibit 1-1. Parking Effects**

<table>
<thead>
<tr>
<th>Property and Business Elements</th>
<th>Project Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in number of on-street short-term parking spaces</td>
<td>-29</td>
</tr>
<tr>
<td>Change in number of on-street long-term parking spaces</td>
<td>-418</td>
</tr>
<tr>
<td>Change in number of off-street parking spaces</td>
<td>-820</td>
</tr>
<tr>
<td>Net change in number of parking spaces</td>
<td>-1,267</td>
</tr>
</tbody>
</table>

### 1.2.3 Acquired Property

Construction of the Project would result in three parcels being partially acquired for right-of-way or construction staging. No full acquisitions are needed. The partial acquisitions would primarily consist of narrow strips of Pier 36 and Terminal 46 land that is parallel to the west side of SR 99, and a portion of the Pyramid Alehouse parking lot. These acquisitions would result in the removal of parking spaces and/or a slight modification of vehicle circulation patterns. No buildings are expected to be demolished on the acquired properties. Parcels subject to partial acquisition would retain any existing buildings, maintain their current function, and continue to pay property taxes.

### 1.2.4 Local Government Revenues

The Project would result in a permanent decrease in the annual local government revenues of approximately $72,500 due to the net loss in metered parking spaces.

### 1.2.5 Operational Mitigation

The operational effects would be very minor. The Project design has sought to minimize the extent and number of businesses, jobs, and access that would be permanently affected. Compensation for the partial acquisitions and easements would be provided at fair market value and would comply with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

### 1.3 Construction Effects and Mitigation

Increased employment and economic stimulus to the local economy from construction activities would be the primary economic benefit from implementing the Project. The Project would generate $15 million in sales tax revenue through the purchase of goods and materials related to construction. However, the Project requires a relatively long construction period that would disrupt normal business activities in the study area.
1.3.1 Increased Employment and Economic Activity

Approximately 18 percent of the total project costs and 22 percent of the capital project costs are in the form of “new money” (funds that are uniquely available for expenditure on the Project that would otherwise not enter the regional or state economies). Employment and economic activity associated with construction of the Project would result in additional (gross) employment and activity throughout all economic sectors within the Puget Sound region and Washington State. This gross employment and economic activity is derived from the multiplication effects of the capital expenditures for the Project.

Examples of capital expenditures include the direct employment of temporary construction workers, the purchase of construction materials and equipment, and the expenditure of capital funds to acquire new right-of-way.

About 1,600 new jobs would be directly associated with the Project as a result of new money entering the Puget Sound regional economy. The amount of new earnings (wages) entering the Puget Sound regional economy would be about $59 million.

1.3.2 Disruption to Local Businesses

Any major construction project, public or private, inconveniences or disturbs residents, businesses, and business customers adjacent to that construction project. These temporary effects include the following:

- Presence of construction workers, heavy construction equipment, and materials.
- Temporary road closures, traffic diversions, and alterations to property access.
- Airborne dust.
- Noise and vibrations from construction equipment and vehicles.
- Decreased visibility and sporadic difficulty in access to businesses by customers.

Up to 19 active commercial and industrial buildings are within 50 feet of the project alignment and will not be acquired. Some businesses in these buildings may suffer little or no adverse effects, while others may experience a noticeable decline in sales or decrease in efficiency.

Some commercial activity within the project area would be affected by the duration and physical extent of construction activities, and the accumulation of direct construction effects, such as traffic restrictions, traffic congestion, and noise. Although these effects would not be permanent, they would be present
through the duration of major construction (approximately 3 years 2 months for Traffic Stages 1 through 4).

Based on an inventory of all existing parking spaces within the project footprint, it was determined that approximately 1,633 spaces would be removed during the first stage of construction, which is expected to last 17 months. These include a mix of short-term on-street (metered) (146), long-term on-street (423), and off-street (1,064) spaces.

One of the Project’s construction assumptions is that a minimum of two lanes of SR 99 traffic in each direction must be maintained during peak traffic hours, or a comparable detour will be provided, except for nights and weekends when full closures may occur. However, construction is likely to increase traffic and congestion within and somewhat beyond the project area, and would result in minor indirect economic effects on project area businesses. Some on-street parking would be restricted or removed, and this may also have an indirect effect on truck loading zones, which may increase the difficulty of deliveries and customer access to businesses in the project area.

1.3.3 Construction Mitigation

Construction activities would likely interfere with access to businesses and properties adjacent to the Project on each side of the right-of-way. A primary goal of construction planning is to maintain adequate access to all businesses so they can continue to operate.
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Chapter 2  METHODOLOGY

The study area for this technical memorandum extends one block from each side of the proposed improvements and includes associated construction staging areas and connecting roadways. This area is generally bounded by S. Walker Street (just south of S. Holgate Street) to the vicinity of S. King Street. Indirect and cumulative effects are described for a broader area, such as the city of Seattle, King County, and the King-Pierce-Snohomish-Kitsap Counties region.

Existing information and data were collected from a variety of federal, state, and local sources, as follows:

- U.S. Bureau of the Census
- U.S. Bureau of Economic Analysis
- Washington State Offices of Financial Management and Trade and Economic Development
- Washington State Department of Revenue
- Washington State Employment Security Department, Labor Market and Economic Analysis Branch
- Puget Sound Regional Council (PSRC)
- King County Assessor’s Office
- City of Seattle Office of Economic Development, Department of Licensing, Strategic Planning Office, and Department of Planning and Development
- Port of Seattle
- Washington State Ferries

Existing data sources were supplemented by conducting an inventory of existing businesses. The physical inventory only included information that could be observed or inferred from observational activities. The area of direct effects for the inventory included businesses within one block of proposed changes to existing facilities or proposed new facilities. Facilities included surface streets and aerial structures.

General descriptions of the economies of the city of Seattle and the Puget Sound region are provided and evaluated for economic effects. Effects are differentiated as construction-related, operation-related, indirect, or cumulative. Mitigation measures are presented for construction-related and operation-related effects.
Chapter 3 AFFECTED ENVIRONMENT

This chapter characterizes existing conditions for the project area. Some aspects of the affected environment are reported for the broader geographical area, which includes King County and the King-Kitsap-Pierce-Snohomish Counties region.

3.1 General Role of the Local Economy

The greater Seattle area and King County host a large and diverse economy. King County is the largest business center in both the State of Washington and the Pacific Northwest and is a leading global center for several emerging industries: aerospace, biotechnology, clean technology, information technology, and international trade and logistics (Washington State Department of Community, Trade & Economic Development 2006).

When comparing King County to other counties in the state, it is evident that King County represents a disproportionate share of the state population (29 percent) (Washington State Office of Financial Management 2006) and state jobs (40 percent) (LMEA 2006a).

The county supports an average annual wage of $50,139 (2005) compared to the state average of $40,704 (LMEA 2006b) and the national average of $37,870 (BLS 2006). The county also has a higher proportion of jobs in services, finance/insurance/real estate, wholesale trade, and transportation/public utilities than the state (LMEA 2003).

To support this economy, transportation infrastructure in this area includes two transcontinental railroads, an extensive nationwide trucking capacity, three interstate highways, dozens of state highways, a ferry system, a world-class port, and an international airport. Local transit and transportation systems enable the shipment of goods and services within the region, state, the Pacific Northwest, and Canada.

International commerce also plays a large role in the local economy. The value of all exports from Seattle/Washington State ports was approximately $46 billion in 2004 (City of Seattle 2006a). This equates to one out of three jobs in the local economy (City of Seattle 2006a). Freight arrives at seaport cargo and vessel handling terminals (Terminals 5, 18, and 46), Seattle-Tacoma International Airport, and Fishermen’s Terminal.

3.2 Established Business Districts and Retail/Commercial Centers

The Project is located within or near several retail/commercial centers, manufacturing/industrial centers, and urban centers. These districts and
centers include the Duwamish Manufacturing and Industrial Center and the Pioneer Square Historic District.

### 3.2.1 Duwamish Manufacturing and Industrial Center

The Duwamish Manufacturing and Industrial Center (MIC) comprises almost 5,000 acres of marine and industrial lands south of the Seattle Central Business District (CBD) (PSRC 2006a). In 1999, the Duwamish MIC represented 84 percent of the industrial lands within the city (Greater Duwamish Planning Committee 1999). Key assets of the Duwamish MIC include access to water for the transportation and seafood processing/storage industry, access to multimodal transportation (freeways, highways, rail, harbor facilities, and airports), proximity to Boeing facilities, and access to a large pool of highly skilled industrial workers (Greater Duwamish Planning Committee 1999). The Duwamish MIC includes two major-league sports stadiums on its northern boundary.

### 3.2.2 Pioneer Square Historic District

The Pioneer Square Historic District is Seattle’s oldest neighborhood and is located at the south end of the CBD (City of Seattle 2006c). The approximately 88-acre area is characterized by red brick buildings and is situated among art galleries, antique shops, and the Seattle Underground. This district also provides extensive nighttime entertainment, ranging from sports bars, taverns, various music venues, and restaurants. The district also benefits from its proximity to the nearby sports stadiums. However, the Pioneer Square Historic District has experienced economic challenges over the first half of this decade from damage from the Nisqually earthquake.

### 3.3 Employment

#### 3.3.1 Employment by Industry

To characterize employment in the project area, several levels of analysis were compared. These economic elements are discussed in general terms for the region (King-Kitsap-Pierce-Snohomish Counties), King County, and the city of Seattle. Two geographic areas were analyzed in more detail: the Pioneer Square Historic District and Seattle South. These geographic areas were selected based on forecast analysis zone (FAZ) groups that the project area crosses. A FAZ is composed of one or more census tracts, and a FAZ group is

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2 Seattle South lies directly south of the Seattle CBD and is bounded by Lake Washington to the east; generally Seola Beach Drive, S.W. Roxbury Street, S. 96th Street, and S. Bangor Street to the south; and Elliott Bay to the west.
an aggregation of FAZs. A FAZ is the basic geographic unit for demographic data and forecasts. Local agencies, such as PSRC, use these FAZ and census tract areas to characterize historic, existing, and projected population, housing, and employment trends and land use.

The regional economy is diverse with an emphasis on service industries. Employment derived from retail trade and the government/education sectors also plays a major role in the regional economy.

The number of jobs has more than doubled in the region over the last three decades, with an increasing percentage of jobs gained in service industries (PSRC 2004). In 2000, the region had 39.7 percent of its jobs in service industries. After service industries, employment sectors ranked as follows for the region: retail trade (18.3 percent), government/education (15.7 percent), manufacturing (13.7 percent), and trade/transport/utilities (12.7 percent). The city of Seattle had a higher proportion of jobs (47.8 percent) in the service industries than the region as a whole.

Employment within and near the project area varies in several ways from that of the region and citywide distribution of jobs across industry sectors. In 2000, Seattle South had approximately 50 percent of jobs distributed across three sectors: manufacturing, retail trade, and government/education, as shown in Exhibit 3-1. The remaining approximately 50 percent of jobs were distributed across the services and trade/transport/utilities sectors. The number of services and trade/transport/utilities sector jobs in Seattle South is projected to increase slightly, whereas the number of jobs in manufacturing is projected to decrease over time.

Exhibit 3-1. Employment (Number/Percent of Jobs)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Seattle South</td>
<td>79,388</td>
<td>88,796</td>
<td>97,737</td>
<td>110,553</td>
<td>115,246</td>
<td>122,519</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>29.9%</td>
<td>30.2%</td>
<td>25.9%</td>
<td>18.6%</td>
<td>14.9%</td>
<td>13.2%</td>
</tr>
<tr>
<td>Trade/Transport/Utilities*</td>
<td>24.6%</td>
<td>23.6%</td>
<td>29.0%</td>
<td>26.7%</td>
<td>27.2%</td>
<td>27.7%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>13.1%</td>
<td>13.5%</td>
<td>11.3%</td>
<td>15.6%</td>
<td>15.2%</td>
<td>15.0%</td>
</tr>
<tr>
<td>Services</td>
<td>13.4%</td>
<td>14.1%</td>
<td>18.7%</td>
<td>25.3%</td>
<td>27.3%</td>
<td>29.1%</td>
</tr>
<tr>
<td>Government/Education</td>
<td>19.0%</td>
<td>18.8%</td>
<td>15.1%</td>
<td>13.8%</td>
<td>15.3%</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

*Trade/Transport/Utilities = Wholesale trade, transportation, communication, and utilities.
Total employment does not include workers in resources (agriculture, forestry, fishing, and mining) or construction.
3.3.2 Unemployment Rates

Unemployment rates within the region have historically been lower than the statewide average rate, as shown in Exhibit 3-2. In 2006, the average civilian labor force in King County numbered 1,044,300. Approximately 43,700 (4.2 percent) were unemployed (LMEA 2007). That compares with the average statewide civilian labor force of 3,326,600 with 166,200 (5.0 percent) unemployed for 2006 (LMEA 2007).

Over the next decade, nonagricultural employment in the state is forecast to continually increase, although at a slower rate (1.3 percent) compared to growth in the previous decade (1.8 percent) (LMEA 2002). An increasing proportion of jobs are expected in the services sector, and jobs in government/education are expected to continue as the second highest sector; however, the percentage of jobs overall in this sector will be flat across the state (LMEA 2002).

Exhibit 3-2. Unemployment Rates (Average Annual Percent)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington State</td>
<td>5.9</td>
<td>4.9</td>
<td>4.8</td>
<td>4.8</td>
<td>5.0</td>
<td>6.2</td>
<td>7.3</td>
<td>6.3</td>
<td>5.5</td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>King County</td>
<td>4.9</td>
<td>4.1</td>
<td>4.0</td>
<td>3.8</td>
<td>4.1</td>
<td>5.1</td>
<td>6.1</td>
<td>6.2</td>
<td>5.2</td>
<td>4.8</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Note: Unemployment rates are annual average (not seasonally adjusted).

3.4 Parking Inventory

Parking is categorized by on-street (metered and long-term) and off-street parking. Available on-street parking was inventoried by project staff. The total number of spaces in service at any time fluctuates depending on construction and other temporary activities that remove parking spaces from use.

In 2004, the City began a 3-year process of converting a majority of the single-space parking meters to 1,600 parking pay stations (City of Seattle 2006e).

The available inventory of off-street parking was compiled from City of Seattle parking data, data from Project team field studies, and private property owners and operators of private lots. Over 6,450 off-street parking stalls are located within a quarter mile of the project area, with even more stalls available in the greater stadium area. The average daily occupancy rate for off-street parking in the study area is 37 percent (PSRC 2006b).

3.5 Local Government Revenues

Washington State and the City of Seattle rely on a variety of taxes to fund state and local government programs. These taxes include a combined state
and local sales and use tax; a B&O tax and public utility tax; property tax; and several other excise, real estate, and estate taxes.

3.5.1 Sales and Use Tax

A combined state and local retail sales tax is collected on the selling price of tangible personal property. A use tax is assessed on the market value of using tangible personal property and services for which the sales tax has not been paid. The retail sales and use tax applies to most items purchased by consumers, but does not apply to food items or prescription drugs.

The rate of retail sales and use tax varies by locality. The state tax base is 6.5 percent, but each locality can assess additional tax. The combined state and local tax rate for the study area is 8.9 percent, which also includes a Regional Transit Authority tax.

For the City of Seattle’s adopted 2008 budget, retail sales tax revenues account for $172.8 million, which is almost 21 percent of the General Subfund Revenue (City of Seattle 2008). Utility services and most personal services (e.g., medical, dental, legal, barber) and real estate are not subject to these taxes. However, construction services and building materials are subject to the retail sales tax.

Within King County, sales taxes account for 28 percent of the total taxes collected as revenue. According to the 2008 adopted King County Budget, King County estimated to collect $108.9 million in sales taxes for the 2008 fiscal year (King County Budget Office 2008).

The King County food and beverage tax is collected in addition to the state and local retail sales tax for restaurants, taverns, and bars. This adds 0.5 percent to the 8.9 percent sales tax levied at these types of establishments. Proceeds from this tax are dedicated to funding debt service on county bonds sold to finance the construction costs of Safeco Field.

3.5.2 Business and Occupation Tax and Public Utility Tax Revenues

Most businesses operating in the state are subject to the B&O tax. The B&O tax is typically assessed on the gross income, proceeds of sales, or value of doing business. Construction contractors for federal agencies are classified as government contractors for B&O tax purposes and are subject to B&O taxes. Typically, the measure of tax is the gross contract price (WAC 458-20-17001).

In 2008 the City of Seattle raised the threshold for collecting B&O taxes from small businesses from $50,000 annual taxable gross revenue to $80,000. Small businesses generating less than $80,000 annual taxable gross revenue are exempt from paying B&O taxes to the City of Seattle.
According to the City of Seattle’s adopted 2008 budget, B&O taxes account for $161.5 million (19 percent) of the General Subfund Revenue (City of Seattle 2008). In addition, the City levies a tax on the gross income derived from sales of utility services by privately owned utilities within Seattle, including telephone, steam, cable communications, natural gas, and refuse collection. These business tax revenues on utilities account for $135.7 million (16 percent) of the General Subfund Revenue (City of Seattle 2008).

3.5.3 Property Tax Revenues

Real and personal property is subject to property tax. Real property includes land and any improvements, such as buildings, attached to the land. The primary characteristic of personal property is mobility. Examples of personal property are machinery, equipment, supplies, and furniture. Personal property tax typically applies to personal property used when conducting business.

Property tax is a combined state and local tax. The 2008 property taxes in the project area are levied at $8.69 per thousand dollars of assessed value (King County Department of Assessments 2008). The state portion of these property taxes is $2.15 per thousand dollars of assessed value, with the remainder apportioned to many taxing districts (Washington State Department of Revenue 2007). Within King County, property taxes are projected to account for 31 percent of the total taxes collected as revenue in 2008 (King County Budget Office 2008). According to the 2008 adopted budget, King County had a proposed levy of $353.6 million in property taxes for the 2008 fiscal year (King County Budget Office 2008). Property tax revenues in the City of Seattle’s adopted 2008 budget accounted for $234.5 million, which about 28 percent of the General Subfund Revenue (City of Seattle 2008). This includes general property tax and an Emergency Management System (Medic One) levy.

3.5.4 Other Taxes and User Fees

Various other taxes are assessed at the state and local levels, including an excise tax on hotels and motels, admission to entertainment and recreation events, food and beverages, fuels, cigarettes, tobacco products, liquor, timber, and rental cars. In Seattle, a Convention and Trade Center tax (7.0 percent) is levied on all lodging establishments with 60 or more rooms/spaces. This tax is also levied in Bellevue and elsewhere in King County with various tax rates.

Other local excise taxes include municipal business taxes and licenses. The sale of most real property is subject to a real estate tax that is paid by the seller. Other taxes levied by the state or local municipalities include an estate
and transfer tax, vehicle licensing fee, and watercraft excise tax. No personal income tax is levied in the state of Washington.

### 3.5.5 Revenues from Parking Meters and Public Garages

Revenues from parking meters are deposited into the City’s General Fund. These revenues are designated as “fees to cover the cost of installation, inspection, supervision, regulation, and maintenance involved in the control of traffic and parking upon the streets” (SMC 11.16.480).

Beginning in April 2004, the City of Seattle began replacing single-space parking meters with pay stations. One pay station is intended to replace about six single-space parking meters. The pay stations allow users to pay with currency, credit card, or debit card. In addition, as part of the City’s 2004 budget, the City Council approved a meter rate increase from $1.00 to $1.50 per hour for pay stations and electronic meters. Parking spaces controlled by pay stations typically average about $8.00 per space day, while meters average about $1.50 per space day. Parking spaces generate revenue 6 days a week (312 days per year). Each parking space controlled by a pay station generates approximately $2,500 per year in revenue for the City’s General Fund. The City expects to have converted most single-space parking meters throughout the city to pay stations by the end of 2008.

The City collects an annual license fee from private operators of public garages. Public garages include both buildings and uncovered lots (SMC 6.48). The annual license fee is $6 per 1,000 square feet of floor or ground space contained in a parking garage or lot and used for parking or storage purposes.

In August 2006, the City passed an ordinance that amended its Municipal Code (SMC 5.35.030) to impose “a tax for the act or privilege of parking a motor vehicle in a commercial lot within the City that is operated by a commercial parking business” (City of Seattle 2006d). The purpose of this tax is to “provide an equitable means of generating revenue to support the City’s transportation system, and to reduce the existing Public Garage and Parking Lot License Fee (see above) that is currently imposed by SMC Chapter 6.48” (City of Seattle 2006d). Effective July 1, 2007 through June 30, 2008, the tax rate will be 5 percent. Effective July 1, 2008 through June 30, 2009, the tax rate will be 7.5 percent. Effective July 1, 2009, the tax rate will be 10 percent (SMC 5.35.030). These taxes will be collected by commercial parking businesses from the parking customer at the time payment is made.

The City of Seattle also receives sales and B&O tax revenue from short-term and long-term off-street parking (less than 30 days). The sales tax rate is 8.9 percent, and the B&O rate for parking is 0.215 percent.
3.6 Inventory of Existing Businesses

In October 2006, the project team conducted an inventory of businesses within the area of direct effects. For this inventory, the area of direct effects during construction of the Project includes businesses within one block of proposed changes to existing facilities or proposed new facilities. Facilities include surface streets and aerial structures.

The physical inventory only includes information that was observed or inferred from publicly accessible portions of buildings to inventory tenants from building directories.

The following parameters were collected so that direct effects to individual businesses (or groupings of individual businesses) could be assessed:

- Location and number of businesses within the area of direct effects.
- Types of businesses.
- Access and primary parking requirements for these businesses.
- Estimate of size – small (up to 20 employees), medium (21 to 99 employees), or large (100 or more employees).

The inventory area was divided into the following geographic areas (numbers of businesses are in parentheses):

- Pioneer Square – S. King Street to Yesler Way (205).
- South Section – S. Andover Street to S. King Street (103).

Pioneer Square

Immediately north of the Project is Pioneer Square. Within Pioneer Square, 205 existing businesses were identified along the east side of the Alaskan Way Viaduct. Existing businesses along the west side of the viaduct were not included in the Pioneer Square grouping. This historic area is considered by the City of Seattle to be an area of special economic concern because of its heavy reliance upon on-street parking. The mix of business types is dominated by commercial office (61 percent), followed by “other service” (primarily non-retail food service) at 19 percent and commercial retail at 12 percent. No industrial (marine-dependent or non-marine-dependent) businesses were surveyed within this section. There were 11 multi-family residential buildings in the survey area and three government service and three other business types (Exhibit 3-3).

Almost all businesses were characterized as small (89 percent), and less than 5 percent were characterized as medium. No businesses appeared to be large, and vacant businesses accounted for more than 6 percent of businesses inventoried. The businesses in Pioneer Square are reliant upon on-street
parking, with only 11 businesses (5 percent) identified as having either on-site or off-street parking.

South Section
Within the area from S. Andover Street to S. King Street, 103 existing businesses were identified along the east and west sides of the Alaskan Way Viaduct. This section has a unique mix of business types as compared to other sections because of the presence of industrial (marine-dependent and non-marine-dependent) businesses within this section. Commercial office accounted for slightly less than half of existing business types (46 percent), followed by industrial at 26 percent, “other” at 17 percent, and “other service” at 10 percent. Only one commercial retail business was identified in the area surveyed. There were no observed instances of government service or residential multi-family in the south section (Exhibit 3-4).

More than half of the businesses were characterized as small (57 percent), and 37 percent were characterized as medium. Only three businesses appear to be large, and three businesses were vacant. Parking is dominated by on-site parking, followed by on-street and off-street parking.

Exhibit 3-3. Business Types for Pioneer Square

[Diagram showing business types and their number]
Exhibit 3-4. Business Types for S. Andover Street to S. King Street

<table>
<thead>
<tr>
<th>Type of Business</th>
<th>Number of Businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Office</td>
<td>47</td>
</tr>
<tr>
<td>Commercial Retail</td>
<td>1</td>
</tr>
<tr>
<td>Industrial Marine</td>
<td>8</td>
</tr>
<tr>
<td>Industrial Non-Marine</td>
<td>10</td>
</tr>
<tr>
<td>Government Service</td>
<td>0</td>
</tr>
<tr>
<td>Other Service</td>
<td>0</td>
</tr>
<tr>
<td>Residential Multi-Family</td>
<td>18</td>
</tr>
<tr>
<td>Other</td>
<td>19</td>
</tr>
</tbody>
</table>

SR 99: Alaskan Way Viaduct & Seawall Replacement Program
June 2008
S. Holgate Street to S. King Street Viaduct Replacement EA
Economics Technical Memorandum
Chapter 4 OPERATIONAL EFFECTS, MITIGATION, AND BENEFITS

Potential effects and benefits associated with the long-term operation and maintenance of the Project are identified and discussed below. The following issues were evaluated for long-term economic effects: transportation, access (freight, commuter, and tourist), and visibility; parking; acquired property; and loss of government revenue.

4.1 Operational Effects

4.1.1 Traffic and Access

The Project would include new roadways and connections near S. Atlantic Street. These connections include the following:

- Grade-separated access would be provided for freight and general purpose traffic traveling between the BNSF railyards, SR 519, and the Port of Seattle container terminal facilities. Access would be provided via a U-shaped undercrossing extending from the intersection of S. Atlantic Street/Colorado Avenue S. to the intersection of S. Atlantic Street and E. Marginal Way S. This new connection would improve vehicle access by providing a route for east-west traffic when railroad cars on the tail track block the at-grade roadway.

- A new northbound off-ramp and southbound on-ramp would be provided south of S. King Street.

- S. Royal Brougham Way would no longer provide an at-grade, east-west connection between First Avenue S. and E. Marginal Way S. as it does today. Instead, a northbound and a southbound frontage road would connect S. Atlantic Street and S. Royal Brougham Way to Alaskan Way S. These frontage roads would also provide access to a new remote holding area for Seattle Ferry Terminal traffic.

- Colorado Avenue S. would be improved to enhance access to the Seattle International Gateway (SIG) Railyard.

In addition, the existing northbound on-ramp and southbound off-ramp to SR 99 at S. King Street would be retained.

The highway-related measures of effectiveness that have a bearing upon the economic performance of the project area include the following:

- Connectivity between streets and highways.
- Improved access to the Central Business District.
• Freight traffic travel time between existing industrial areas.
• Freight train movements.

The Project would provide improved access as a result of the new Alaskan Way Viaduct ramps. The Project also would substantially improve access to Terminal 46 for freight and would substantially diminish truck and rail conflicts.

4.1.2 Parking
The Project would result in the permanent removal of approximately 1,267 parking spaces, of which 447 would be on-street parking and 820 would be off-street parking. The removal of 447 on-street parking spaces includes the loss of 418 long-term parking spaces and a loss of 29 short-term, metered parking spaces. Exhibit 4-1 presents the locations of the parking being removed. The loss of metered spaces would result in an annual decrease in City of Seattle parking revenues of approximately $72,500.

There is free parking with 1- and 2-hour limits along First Avenue S. In addition, several blocks of free parking with no time limits are currently located near the project south of S. Massachusetts Street on Utah Avenue S. and Occidental Avenue S.

Many pay lots in the area are underutilized. According to the Puget Sound Regional Council, about 37 percent of the off-street parking spaces in the stadium area are used on an average non-event weekday. This means that on an average weekday, about 4,100 off-street parking spaces are available within a quarter-mile of the project. For a detailed discussion of existing conditions and Project effects on parking, please refer to Appendix F, Transportation Discipline Report.

4.1.3 Acquired Property
Construction of the Project would result in three parcels being partially acquired for right-of-way and construction staging; no parcels would be fully acquired. The partial acquisitions would primarily consist of narrow strips of Pier 36 and Terminal 46 land that is parallel to the west side of SR 99, and a portion of the Pyramid Alehouse parking lot. These acquisitions would result in the removal of parking spaces and/or a slight modification of vehicle circulation patterns. No buildings are expected to be demolished on the

3 PSRC 2006
Exhibit 4-1. Parking Removed
acquired properties, and no businesses would be relocated. Parcels subject to partial acquisition would retain any existing buildings, maintain their current function, and continue to pay property taxes. See the Relocations Technical Memorandum for additional information on property acquisitions.

The amount of property taxes paid may change for properties subject to partial acquisition if they are reassessed by the King County Department of Assessments. Because these reassessments would be on a case-by-case basis and would occur sometime after completion of the right-of-way acquisition, an estimate cannot be made at this time regarding what changes in property tax would occur.

4.2 Operational Benefits of the Project

Improved freight mobility and connection to surface streets would be the major economic benefits of implementing the Project, as described in Section 4.1.1. Improved freight mobility and connectivity increase business efficiency and decrease the costs due to congestion.

4.3 Operational Mitigation

The operational effects would be very minor. The Project design has sought to minimize the extent and number of businesses, jobs, and access that would be permanently affected. Compensation for partial acquisitions and easements would be provided at fair market value and would comply with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.
Chapter 5 Construction Effects, Mitigation, and Benefits

The intent of this chapter is to assess the likely overall economic effects and benefits that would be attributed to construction, as measured by increases in regional and state activity, employment, and associated job earnings.

5.1 Construction Effects

5.1.1 Regional Economic Activity

Construction expenditures associated with the Project would occur over a period of about 4 years, directly creating new demand for construction materials and labor. These direct effects would lead to indirect effects, as the production of output by firms in other industries increases to supply the demand for inputs to the construction industry. Both the direct and indirect effects of construction expenditures cause firms in all industries to employ more workers to meet increases in demand; this leads to induced effects as the additional wages and salaries paid to workers lead to higher consumer spending.

Project Total Costs

Project cost estimates were prepared in November 2007 and are shown in Exhibit 5-1. Project costs include the following components: implementation (including design and construction management), right-of-way acquisition, sales tax, and construction costs.

Exhibit 5-1. Total Project Costs

<table>
<thead>
<tr>
<th>Total Project Cost Estimate ($ millions)</th>
<th>Project Cost Component (in $ millions and % share)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Implementation</td>
</tr>
<tr>
<td>540</td>
<td>85 (16%)</td>
</tr>
</tbody>
</table>

¹ Capital cost component.

Project Capital Costs

For purposes of assessing the economic effects on output, earnings, and employment, the focus is placed on the project capital costs (construction and right-of-way acquisition) as an accurate measure of the capital investment that would likely occur for the Project.
Exhibit 5-2 shows the Project’s capital cost estimate and the distribution of funding sources, which was developed by the project team. Percentage shares of the capital cost estimates are also provided. Funding is sufficient to cover all project costs, including capital costs, implementation costs, and sales taxes. Only federal and state sources of funding are committed to this Project; there are no local funding sources committed to this Project.

**Exhibit 5-2. Capital Costs and Funding Sources for the Project**

<table>
<thead>
<tr>
<th>Capital Cost Estimate ($ millions)</th>
<th>Funding Source (in $ millions and % share)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Federal Committed</td>
</tr>
<tr>
<td>440</td>
<td>96 (22%)</td>
</tr>
</tbody>
</table>

For purposes of examining regional economic effects, all federal funding is assumed to be new funds that would otherwise not be spent either regionally or within the state in the absence of the Project. All state funding is assumed to be expended with or without this Project, as these funds are specifically earmarked for transportation projects within the region or state.

**Summary of Gross Economic Effects**

For every dollar spent on construction capital costs, two dollars of additional economic activity would be generated in the Seattle-Tacoma region, and slightly more than two dollars statewide. This additional economic activity would occur across all economic and labor sectors. For the Project, every dollar spent on capital costs translates directly into $0.58 in new wages and salary earnings for the jobs generated outside the construction field.

New demand for construction would generate gross direct effects equal to the capital cost of $440 million of construction dollars. The gross multiplied effect on output would total approximately $889 million for all industries not directly involved with reconstruction of the viaduct. Of this amount, $254 million would be paid to workers as wage and salary earnings for the jobs generated beyond those directly involved with reconstruction of the viaduct. The estimated average number of jobs related to construction of the Project would be 350 jobs per year, representing about $36 million in wages and benefits per year.

**Summary of Net Economic Effects**

For the portion of the Project’s funding that comes from the federal government (outside of the region or state), the net effect on the regional economy from this new money would be less than the gross effect associated with the expenditure of all of the construction capital cost.
For the Project, the same new demand for construction expenditures would generate net direct effects equal to $96 million (21.8 percent of $440 million for the Project) of construction dollars after accounting for local funds that would otherwise still be spent in the regional economy with similar multiplied effects. The net multiplied effect on output would total $194 million for all industries not directly involved with reconstruction of the viaduct. Of this amount, $55 million would be paid to workers as wage and salary earnings for the net new jobs created beyond those directly involved with reconstruction of the viaduct.

Summary of Benefits for Regional Economic Activity
The cost associated with construction of the Project would result in additional (gross) activity throughout all economic sectors within the Puget Sound region and the state. This gross economic activity is derived from the multiplication effects of the capital expenditures for the Project. Examples of capital expenditures include the direct hiring of temporary construction workers, the purchase of construction materials and equipment, and the expenditure of capital funds to acquire new right-of-way.

5.1.2 Temporary Economic Effects to Businesses

Disruption to Businesses and Neighborhoods
Any major construction project, public or private, inconveniences or disturbs the residents, businesses, and business customers adjacent to that construction project. Construction-related effects can and will vary considerably over time and location.

From the inventory of existing businesses within one block of the existing alignment (see Section 3.6), the project team has identified approximately 308 businesses (including multi-family residential buildings) adjacent to the Project that would experience disruption as a result of construction. The businesses or commercial properties in the more immediate project area, between S. Atlantic Street and S. Royal Brougham Way, and south of S. Royal Brougham Way along First Avenue S. on the east, and west of the viaduct along Alaskan Way S., are primarily larger commercial or industrial properties, such as the Port of Seattle’s cruise terminal at Terminal 30, and one of the largest of the Port’s container terminals at Terminal 46. Other businesses are parking lots and older industrial warehouse uses. There are few retail businesses in this area.

Up to 19 active commercial and industrial buildings are located within 50 feet of the project alignment, and no acquisitions for these are planned. Some of these buildings have multiple business occupants. Some businesses in these buildings may suffer little or no adverse effects, while others may experience
a noticeable decline in sales or decrease in efficiency. Those businesses that rely on customers using on-street parking may see a decline in sales as customers seek businesses with readily accessible parking.

Some commercial activity within the project area may be adversely affected by the duration of construction activities and other direct construction effects, such as traffic restrictions, traffic congestion, and noise. Although these effects would not be permanent, they would last throughout project construction.

Temporary effects would include the following:

- The presence of construction workers, heavy construction equipment, and materials, both within the construction area and along haul routes.
- Temporary road closures, traffic diversions, and alterations to property access (see Appendix F, Transportation Discipline Report).
- Loss of parking, especially on-street short-term parking (see Section 5.1.4).
- Airborne dust (see Appendix G, Air Quality Discipline Report).
- Noise and vibrations from construction equipment and vehicles.
- Decreased visibility of and alterations of access to businesses for customers.

Without proper planning and implementation of mitigation, these construction-related effects have the potential to adversely affect the comfort and daily life of residents and inconvenience or disrupt the flow of customers, employees, and materials and supplies to and from businesses. Project coordination through open houses and community briefings has taken place and will continue to occur. In addition, adjacent property and business owners will receive notification prior to the start of construction. Maintaining awareness of the Project’s construction timing and proximity should help to mitigate some of these potential temporary effects.

5.1.3 Temporary Change in Vehicular Through Traffic on SR 99

A detailed analysis of effects to the existing roadway system during construction is presented in Appendix F, Transportation Discipline Report. In general, the Project would cause some traffic effects during construction along a portion of the SR 99 corridor. Generally, the most severe travel effects would occur during Traffic Stage 3, when SR 99 capacity would be reduced to the greatest extent and construction activities would continue to affect nearby roadways.

One of the Project’s construction assumptions is that a minimum of two lanes of SR 99 traffic in each direction must be maintained during peak traffic
hours, or a comparable detour will be provided, except for nights and weekends when full closures may occur. However, construction is likely to increase traffic and congestion within and somewhat beyond the project area, and would result in minor indirect economic effects on project area businesses. Some on-street parking would be restricted or removed, and this may also have an indirect effect on truck loading zones, which may increase the difficulty of deliveries, and customer access to businesses in the project area. Traffic congestion on First Avenue S. and Fourth Avenue S. and any associated effects on businesses would be greatest during peak traffic hours.

5.1.4 Economic Effects of the Potential Loss of Available Parking

A detailed analysis of effects to the existing parking during construction is presented in Appendix F, Transportation Discipline Report. Based on an inventory of all existing parking spaces within the project footprint, it was determined that 1,633 spaces would be removed during the first stage of construction, which is expected to last 17 months. These spaces include a mix of short-term on-street (metered), long-term on-street, and off-street spaces. The 1,633 existing spaces are broken down as follows:

- On-street short-term spaces (146)
- On-street long-term spaces (423)
- Off-street spaces (1,064)

The loss of 146 on-street short-term parking spaces would result in an annual loss of approximately $365,000 in parking meter revenue for the City. This loss would occur each year for the duration of construction of the Project. The City would also lose revenue associated with the license fees for off-street parking lots, as described in Section 3.5.5.

Although 146 short-term parking spaces would be lost, there is free or metered on-street parking on the streets surrounding the project area. In addition, several blocks of free parking with no time limits are currently located near the project south of S. Massachusetts Street on Utah Avenue S. and Occidental Avenue S. The 2006 Parking Inventory for the Central Puget Sound Region, published by PSRC in January 2007, found that the parking occupancy rate for off-street parking in the study area was 37 percent. This means that on an average weekday, about 4,100 off-street parking spaces are available within a quarter-mile of the project.

Customers and business operators who routinely use on-street parking or parking under the viaduct would need to find alternative parking. These parking effects could result in direct economic effects to businesses along the corridor if customers perceive traffic or parking difficulties. The ease with
which customers and business operators can find nearby on-street or private lot parking would be one factor in determining the degree of economic effect to businesses in the project area.

Up to 250 parking spaces would be required for construction worker parking during the most intense periods of construction. One alternative would be for Washington State Department of Transportation (WSDOT) to arrange for off-street parking near construction areas. These costs would likely be included in construction capital costs.

5.2 Construction Benefits

The primary economic benefit from implementing the Project is increased employment and economic stimulation for the local economy from construction activities, materials, and equipment. This includes the collection of sales tax revenue by local municipalities.

5.2.1 Construction Expenditures on Sales Tax Revenue

Sales taxes would be generated through the purchase of goods and materials related to construction. The estimated amount of sales tax ($15 million) generated for the Project is based on construction costs only. Sales tax estimates were not generated for non-construction costs such as right-of-way acquisition and engineering.

The sales tax estimate is based on the construction cost estimate presented in Section 5.1.1. This sales tax estimate is only related to direct construction expenditures. This analysis does not include an evaluation of the change in sales tax revenue collected by businesses in the project area that could be affected by construction activities.

5.2.2 Temporary Jobs Created during Construction

Temporary jobs would be created to construct the Project. The duration of these temporary jobs is expected to be between 3 and 4 years.

Estimates of the direct labor force needed to construct the Project were prepared. These estimates were calculated based on the approximate cost for construction contracts, assuming that 40 percent of the total construction cost would be absorbed by labor and that the average labor rate in 2005 would be $49.55 per hour (with an escalation for inflation in later years).

For the Project, the average number of jobs directly related to construction would be about 350 per year. As a result, the Project would generate approximately $36 million in direct wages per year. Assuming that the
construction duration is approximately 3 to 4 years, the total construction labor for the Project would be 1,300 person-year jobs.

New demand for construction would generate gross direct effects equal to the capital cost of $440 million of construction dollars. The gross multiplied effect on output would total approximately $889 million for all industries in the Puget Sound region not directly involved with reconstruction of the viaduct. Of this amount, $254 million would be paid to the 7,500 workers as wage and salary earnings for the jobs generated beyond those directly involved with the replacement of the viaduct.

The amount of new indirect and induced earnings (wages) as a result of new money entering the Puget Sound economy would be $55 million.

**Summary of Benefits for Employment**

Compared with the existing conditions, construction of the Project would result in additional (gross) employment throughout all economic sectors within the Puget Sound region and the state. This gross employment is derived from the multiplication effects of the capital expenditures for the Project. Examples of capital expenditures include the direct hiring of temporary construction workers, the purchase of construction materials and equipment, and the expenditure of capital funds to acquire new right-of-way.

The number of new jobs directly associated with the Project that are the result of new money entering the Puget Sound regional economy is 1,600 jobs. All other fund sources would come from the state or the Puget Sound region and would likely be spent in the local and state economy even without this Project.

Sales taxes would be generated through the purchase of goods and materials related to construction. The Project would generate sales tax of approximately $15 million.

**5.3 Construction Mitigation**

Maintaining awareness of the Project’s construction timing and proximity should help to mitigate some of the potential temporary effects. A package of public information and business assistance measures will be developed; these measures would include conducting public information campaigns to encourage patronage of businesses during construction.

Construction activities could interfere with access to some businesses and properties adjacent to the Project on each side of the right-of-way. A primary goal of construction planning is to maintain adequate access to all businesses so they can continue to operate.
Chapter 6 INDIRECT AND CUMULATIVE EFFECTS

6.1 Indirect Effects

Indirect effects are effects that are caused by the proposed action but are indirectly related. They generally occur at a later point in time or may be farther removed in location, but are still reasonably foreseeable effects of the project.

The Project’s potential overall influence on growth in the project area is difficult to predict. As an indirect effect, changes in land uses, and by extension, economic activity may be stimulated by the overall improvement in connectivity associated with the new roadway compared to the No Build Alternative.

However, large-scale redevelopment as a direct or indirect result of the Project is not likely. The Project represents only one of numerous ongoing transportation improvements occurring in the city. Because the Project would replace an existing facility to meet safety and projected capacity needs, the potential to induce economic growth would be minor, if any.

Many other factors, however, influence land use decisions, including economic conditions, zoning, and land supply. The Project is not likely to influence these factors and therefore is not expected to be a major catalyst to future growth.

6.2 Cumulative Effects

Cumulative effects are the total effects of the proposed action combined with other past, present, and reasonably foreseeable future actions. They can include both construction and operational effects.

As compared to the No Build Alternative, cumulative effects of the project may include increased likelihood of redevelopment in the area south of Seattle’s downtown core, particularly in areas that would have improved vehicle access or circulation. The Project could contribute to cumulative economic benefits to the area in combination with other recent or reasonably foreseeable future projects. These projects include transportation projects such as the SR 519 Intermodal Access Project Phase 2, and private development projects such as the planned redevelopment of a portion of Qwest Field’s north parking lot with residential and commercial development and the planned Home Plate mixed-use office building and parking.
Chapter 7 REFERENCES


EDC (Economic Development Council of Seattle and King County). 2003. Research and data: Economic base, international trade, the City of Seattle, office market, transportation. Available at: http://www.edc-sea.org/research_data.


