



MEMORANDUM

DATE: January 21, 2005

TO: Mark Griffin, Port of Seattle

FROM: Michael Hodgins and Brett Sheckler

**RE: **Preliminary Economic and Fiscal Assessment
North Bay Development EIS Alternatives****

The following memorandum summarizes the analysis of potential economic and fiscal implications of the North Bay Environmental Impact Statement (EIS) Development Alternatives. This analysis assesses the potential impact of the six EIS alternatives, including assumptions about development on the North Bay, Armory, and BNSF sites, and considers the fiscal implications of a realistic phasing schedule of development and a more specific set of potential uses. The fiscal analysis also includes an assessment of potential revenues from leasehold taxes assuming the Port leases land and other parties are responsible for vertical development in each of the Alternatives. The following are the EIS alternatives:

- **Alternative 1:** Maximum development without residential
- **Alternative 2:** Maximum development with residential
- **Alternative 3:** Medium development with residential (Armory)
- **Alternative 4:** Medium development with residential
- **Alternative 5:** Low Density – current zoning
- **Alternative 6:** No further development

Approach and Assumptions

For each land use, general factors were used to estimate the value of construction, the value of development, the number of jobs and residents, and the magnitude of economic activity that might be expected as the project is built out. Direct economic factors were then used to estimate potential fiscal benefits of the new activity for each of three jurisdictions: City of Seattle, King County, and the State of Washington. The analysis is conducted on an annual basis through 2030, is represented in constant 2004 dollars, and assumes 2004 tax rates. The analysis is intended to show the relative magnitude of the major sources of general government tax revenues that would likely accrue to these jurisdictions.

Fiscal implications are presented as a net present value of the total impact over a 25-year planning horizon, assuming a real discount rate of 3%. The discount rate is consistent with City of Seattle financial policies that call for a discount rate that approximates the inflation-adjusted marginal pre-tax rate of return on an average investment in the private sector. The 25-year term was selected because

it is five years longer than the expected absorption period, providing for a “steady state” of some period without development activity. The fiscal analysis does not extend to 50 years, as the financial analysis does, because of the number of variables that are held constant in the analysis (in particular tax rates and tax base assumptions, such as sales tax per square foot of building) that are unlikely to remain constant for a very long term. The revenues that were estimated for each alternative include:

- **City of Seattle:** Property tax, sales tax, utility tax, B&O tax and leasehold excise tax.
- **King County:** Property tax, sales tax, and leasehold excise tax.
- **State of Washington:** Property tax, sales tax, utility tax, B&O tax and leasehold excise tax.

This analysis focuses on a limited set of economic and fiscal variables and a limited number of potentially benefited jurisdictions. For example, the Seattle School District, Sound Transit and the Major League Baseball Stadium Public Facility District will also benefit from the economic activity on site but are excluded from the analysis.

The analysis, at this stage, does not consider the issues associated with the potential for North Bay and adjacent sites to attract development that might otherwise occur elsewhere in the City or the region. The question of whether the estimated impacts would really be incremental growth or simply redistributed regional growth will be an important element in the final assessment of development options.

Assessment of economic impacts includes estimates of **direct** economic effects associated with development as well as **Type II multiplier effects** associated with commercial activity on the site. Type II multiplier effects capture both the **indirect** economic effects (purchases made by the source industry from suppliers and service providers) and the **induced** effect (demand for locally produced goods and services that stems from re-spending of income earned at each stage in the process). Estimates of these economic multiplier effects are based on Washington State input-output model multipliers, which uses 1997 state-level economic data to estimate the industry relationships for the Washington State economy. For each use category, composite Type II economic multipliers were generated to reflect a representative mix of North American Industry Classification System (NAICS) industry categories that might use the space in question. For a listing of the industries assumed for each use category, see **Appendix A**.

Estimates of fiscal impacts account for only the **direct** economic activity that takes place on the North Bay, Armory, and BNSF sites.

Ultimately, the findings are driven by a range of assumptions about intensities of uses, property values, tax rates, and the degree to which commercial activity on the three sites are subject to property taxes, retail sales tax, and taxes on gross business income. Key development assumptions are summarized in **Exhibits 1 and 2**. In **Exhibit 1**, the total development assumed for each of the three sites is summarized for each EIS alternative. In **Exhibit 2**, the breakdown of land uses by type are presented and the total number of years assumed for project development and absorption of new space. In all cases, the first year of new absorption is assumed to be 2008 and some measure of new development is assumed to occur in all years until buildout. These absorption assumptions are

consistent with the preliminary financial analysis of alternatives that were presented to the Port Commission on October 19, 2004.

**Exhibit 1
Total Development Assumptions for EIS Alternatives**

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
North Bay Site	4.35M	4.35M	3.2M	3.2M	1.0M	0.0M
Armory Site	1.5M	1.5M	1.0M	0.0M	0.0M	0.0M
BNSF Site	1.1M	1.1M	0.8M	0.0M	0.0M	0.0M
Total	6.9M	6.9M	5.0M	3.2M	1.0M	0.0M

**Exhibit 2
Development Assumptions for EIS Alternatives
Including North Bay, Armory, and BNSF Site**

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Office	3,300,000	1,770,000	1,800,000	475,000	100,000	0
R&D / Lab	2,900,000	2,240,000	2,075,000	1,425,000	350,000	0
Warehouse & Dist./Manuf.	0	0	0	0	0	0
Flex/ Tech/Light Industrial	250,000	250,000	250,000	200,000	525,000	0
Retail - Goods and Service	525,000	575,000	490,000	100,000	15,000	0
Storage (land SF)	0	0	0	0	0	2,000,000
Residential	0	2,100,000	400,000	1,000,000	0	0
Total development	6,975,000	6,935,000	5,015,000	3,200,000	990,000	2,000,000
Years of absorption	20 yrs	21 yrs	15 yrs	18 yrs	12 yrs	6 yrs

The key economic analysis assumptions are presented in **Exhibit 3**, which shows how each of the major land use elements are assumed to affect the economic and tax base conditions as a result of the development. The key factors for each land use type include assessed value (AV) per SF of development, jobs and residents per SF of building and wages, business income, taxable business income and taxable retail sales per job. The employment factors are consistent with the employment factors used in the transportation analysis.

**Exhibit 3
Key Economic and Fiscal Impact Assumptions**

	AV per SF	SF per Job	SF per Resident	Wages per Job	Taxable Retail Sales per Job	Gross Business Income per Job	Taxable Business Income per Job
Warehouse & Dist./Manuf.	\$50	822		\$35,000	\$22,900	\$160,000	\$160,000
Flex/ Tech/Light Industrial	\$75	480		\$40,000	\$22,900	\$220,000	\$180,000
4-Story Office	\$150	344		\$35,000	\$10,800	\$90,000	\$90,000
6-Story Office	\$175	344		\$35,000	\$10,800	\$90,000	\$90,000
10-Story Office	\$200	344		\$35,000	\$10,800	\$90,000	\$90,000
Retail - Goods and Service	\$125	400		\$20,000	\$160,000	\$160,000	\$160,000
Residential	\$125	0	600				
R&D / Lab*	\$300	335		\$80,000	\$0	\$200,000	\$0

* Assessed value per square foot for R&D lab space under Alternative 5 is assumed to be reduced from \$300 to \$250 due to lower-than-optimal ceiling heights--which would be required in order for the development to conform to current zoning.

Source: Berk & Associates analysis

Analytic Findings

The results of the analysis are presented in **Exhibits 4, 5 and 6**. **Exhibit 4** provides an overall summary of economic and fiscal impacts for all three sites. **Exhibit 5** summarizes direct and indirect economic affect of activity on each of the sites in question, while **Exhibit 6** summarizes the fiscal implications associated with the new development by site.

Generally, the more intense the use of the property, the greater the estimate of economic and fiscal impacts resulting from development of the site. It is worth noting that while Alternatives 1 and 2 both have roughly the same total amount of development, the shift to residential in Alternative 2 results in lower overall fiscal and economic benefits.

**Exhibit 4
Potential Economic and Fiscal Impacts of
Total Development for EIS Alternatives (All Sites)**

Economic Impacts	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
SF of Development	6.94M	6.94M	5.0M	3.2M	1.0M	0.0M
Direct Impacts						
Jobs - Permanent	19,500	13,500	13,000	6,500	2,500	0
Jobs - Construction (per year)	668	641	551	352	49	0
Residents	0	3,500	670	1,670	0	0
Assessed value \$2004	\$1,550M	\$1,400M	\$1,100M	\$650M	\$150M	\$0M
Gross business income \$2004	\$2,900M	\$2,150M	\$2,000M	\$1,100M	\$500M	\$0M
Wages \$2004	\$1,100M	\$750M	\$750M	\$400M	\$150M	\$0M
Total Direct, Indirect, Induced						
Jobs - Permanent	53,000	36,500	35,000	17,000	6,500	0
Gross business income \$2004	\$5,650M	\$4,100M	\$3,850M	\$2,200M	\$950M	\$0M
Wages \$2004	\$2,350M	\$1,650M	\$1,600M	\$900M	\$300M	\$0M
Fiscal Impacts						
Recurring Tax Revenues						
City of Seattle	\$111.3M	\$97.0M	\$89.7M	\$39.0M	\$12.5M	\$1.0M
King County	\$18.1M	\$17.4M	\$14.9M	\$8.0M	\$1.5M	\$0.0M
State of Washington	\$386.0M	\$344.8M	\$322.5M	\$101.0M	\$36.5M	\$1.5M
Total recurring revenues	\$515.4M	\$459.2M	\$427.1M	\$148.0M	\$50.5M	\$2.5M
One-time Tax Revenues (construction-related)						
City of Seattle	\$3.4M	\$3.5M	\$2.3M	\$1.3M	\$0.3M	\$0.0M
King County	\$0.6M	\$0.6M	\$0.5M	\$0.3M	\$0.0M	\$0.0M
State of Washington	\$25.7M	\$26.1M	\$16.9M	\$9.0M	\$2.3M	\$0.0M
Total one-time revenues	\$29.6M	\$30.2M	\$19.6M	\$10.5M	\$2.5M	\$0.0M
Total NPV of tax revenues	\$545.0M	\$489.4M	\$446.7M	\$158.5M	\$53.0M	\$2.5M

Source: Berk & Associates analysis

The exception is in sales tax on construction activity, where it is assumed that a significant portion of the additional commercial development in Alternative 1 would be eligible for the high tech sales tax exemption and thus would not generate the same level of tax revenues as an equivalent amount of residential. It is assumed that the only economic or fiscal benefits to accrue from Alternative 4a is the

leasehold excise tax that would be paid on the value of the land leases for the purpose of general storage.

**Exhibit 5
Potential Economic Impacts of North Bay, Armory, and BNSF EIS Alternatives**

North Bay Site	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
SF of Development	4.35M	4.35M	3.2M	3.2M	1.0M	0.0M
Direct Impacts						
Jobs - Permanent	12,500	8,000	9,000	6,500	2,500	0
Jobs - Construction (per year)	354	345	343	352	49	0
Residents	0	2,500	0	1,670	0	0
Assessed value \$2004	\$1,050M	\$900M	\$750M	\$650M	\$150M	\$0M
Gross business income \$2004	\$1,950M	\$1,350M	\$1,450M	\$1,100M	\$500M	\$0M
Wages \$2004	\$750M	\$500M	\$550M	\$400M	\$150M	\$0M
Total Direct, Indirect, Induced						
Jobs - Permanent	34,500	22,500	25,000	17,000	6,500	0
Gross business income \$2004	\$3,950M	\$2,700M	\$2,900M	\$2,200M	\$950M	\$0M
Wages \$2004	\$1,650M	\$1,100M	\$1,200M	\$900M	\$300M	\$0M
Armory Site						
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
SF of Development	1.5M	1.5M	1.0M	0.0M	0.0M	0.0M
Direct Impacts						
Jobs - Permanent	4,000	2,500	1,500	0	0	0
Jobs - Construction (per year)	90	72	61	0	0	0
Residents	0	1,000	670	0	0	0
Assessed value \$2004	\$250M	\$250M	\$150M	\$0M	\$0M	\$0M
Gross business income \$2004	\$450M	\$300M	\$200M	\$0M	\$0M	\$0M
Wages \$2004	\$150M	\$50M	\$50M	\$0M	\$0M	\$0M
Total Direct, Indirect, Induced						
Jobs - Permanent	10,000	5,500	3,500	0	0	0
Gross business income \$2004	\$700M	\$400M	\$200M	\$0M	\$0M	\$0M
Wages \$2004	\$300M	\$150M	\$100M	\$0M	\$0M	\$0M
BNSF Site						
	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
SF of Development	1.09M	1.09M	0.8M	0.0M	0.0M	0.0M
Direct Impacts						
Jobs - Permanent	3,000	3,000	2,500	0	0	0
Jobs - Construction (per year)	224	224	147	0	0	0
Residents	0	0	0	0	0	0
Assessed value \$2004	\$250M	\$250M	\$200M	\$0M	\$0M	\$0M
Gross business income \$2004	\$500M	\$500M	\$350M	\$0M	\$0M	\$0M
Wages \$2004	\$200M	\$200M	\$150M	\$0M	\$0M	\$0M
Total Direct, Indirect, Induced						
Jobs - Permanent	8,500	8,500	6,500	0	0	0
Gross business income \$2004	\$1,000M	\$1,000M	\$750M	\$0M	\$0M	\$0M
Wages \$2004	\$400M	\$400M	\$300M	\$0M	\$0M	\$0M

Source: Berk & Associates analysis

This higher level of economic activity associated with the more intensely developed alternatives would translate into significantly greater general tax revenues for each of the major jurisdictions evaluated. The State of Washington would receive the greatest amount of new tax revenue, followed by the City of Seattle and King County.

**Exhibit 6
Potential Fiscal Impacts of North Bay, Armory, and BNSF EIS Alternatives**

North Bay Site	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Recurring Tax Revenues						
City of Seattle	\$59.0M	\$52.0M	\$48.0M	\$39.0M	\$12.5M	\$1.0M
King County	\$10.5M	\$10.5M	\$8.5M	\$8.0M	\$1.5M	\$0.0M
State of Washington	\$154.5M	\$138.0M	\$125.0M	\$101.0M	\$36.5M	\$1.5M
Total recurring revenues	\$224.0M	\$200.5M	\$181.5M	\$148.0M	\$50.5M	\$2.5M
One-time Tax Revenues (construction-related)						
City of Seattle	\$1.8M	\$2.0M	\$1.3M	\$1.3M	\$0.3M	\$0.0M
King County	\$0.3M	\$0.3M	\$0.3M	\$0.3M	\$0.0M	\$0.0M
State of Washington	\$13.5M	\$15.0M	\$9.0M	\$9.0M	\$2.3M	\$0.0M
Total one-time revenues	\$15.5M	\$17.3M	\$10.5M	\$10.5M	\$2.5M	\$0.0M
Total NPV of tax revenues	\$239.5M	\$217.8M	\$192.0M	\$158.5M	\$53.0M	\$2.5M
Armory Site						
Recurring Tax Revenues						
City of Seattle	\$43.5M	\$35.3M	\$32.1M	\$0.0M	\$0.0M	\$0.0M
King County	\$6.0M	\$5.5M	\$5.0M	\$0.0M	\$0.0M	\$0.0M
State of Washington	\$206.5M	\$176.1M	\$168.5M	\$0.0M	\$0.0M	\$0.0M
Total recurring revenues	\$256.0M	\$216.9M	\$205.6M	\$0.0M	\$0.0M	\$0.0M
One-time Tax Revenues (construction-related)						
City of Seattle	\$1.3M	\$1.1M	\$0.7M	\$0.0M	\$0.0M	\$0.0M
King County	\$0.2M	\$0.2M	\$0.1M	\$0.0M	\$0.0M	\$0.0M
State of Washington	\$9.6M	\$8.2M	\$5.6M	\$0.0M	\$0.0M	\$0.0M
Total one-time revenues	\$11.1M	\$9.5M	\$6.4M	\$0.0M	\$0.0M	\$0.0M
Total NPV of tax revenues	\$267.1M	\$226.4M	\$212.0M	\$0.0M	\$0.0M	\$0.0M
BNSF Site						
Recurring Tax Revenues						
City of Seattle	\$8.8M	\$9.7M	\$9.6M	\$0.0M	\$0.0M	\$0.0M
King County	\$1.6M	\$1.4M	\$1.4M	\$0.0M	\$0.0M	\$0.0M
State of Washington	\$25.0M	\$30.7M	\$29.0M	\$0.0M	\$0.0M	\$0.0M
Total recurring revenues	\$35.4M	\$41.8M	\$40.0M	\$0.0M	\$0.0M	\$0.0M
One-time Tax Revenues (construction-related)						
City of Seattle	\$0.3M	\$0.4M	\$0.3M	\$0.0M	\$0.0M	\$0.0M
King County	\$0.1M	\$0.1M	\$0.1M	\$0.0M	\$0.0M	\$0.0M
State of Washington	\$2.6M	\$2.9M	\$2.3M	\$0.0M	\$0.0M	\$0.0M
Total one-time revenues	\$3.0M	\$3.4M	\$2.7M	\$0.0M	\$0.0M	\$0.0M
Total NPV of tax revenues	\$38.4M	\$45.2M	\$42.7M	\$0.0M	\$0.0M	\$0.0M

Source: Berk & Associates analysis

These findings are based on an assumption that R&D/Lab development would be eligible for high-tech or research tax deferrals or credits, which reflects a worst-case scenario. First, the analysis assumes that *all* of the business income earned by the R&D/research firms would be exempt from City and State B&O taxes (which is only one of many possibilities). If the analysis were to be altered to reflect the City's current statutes, the City would receive even greater fiscal benefits than those shown here.

Among the assumptions listed in **Exhibit 3**, the most important are the assumptions about retail sales and business income per employee for different categories of uses. The estimates of taxable sales and income per job used in this analysis are based (1) on average gross and taxable revenues for non-aerospace manufacturing industries in Washington State (for the light industrial category); (2) on average gross and taxable revenues for Finance, Insurance, and Real Estate industries in Washington State (for traditional office uses) and on average sales per square foot data for retail uses as reported in the Urban Land Institute's Dollars and Cents of U.S. Shopping Centers (for retail uses). If the actual value of sales or income from specific businesses were to vary substantially from the values assumed in this analysis, then clearly, one would expect to see higher or lower revenues.

In light of these risks, it is worth noting that the assumption with the single greatest downside risk is that each light-industrial job will generate \$22,900 in taxable retail sales. This estimate is based on an analysis of Seattle's historical retail sales tax revenues coming from firms that are categorized as Industrial. It is important to note, however, that the Department of Revenue's Sales Tax Streamlining proposals, if fully implemented by the Legislature, are likely to substantially reduce the portion of sales tax revenues that cities receive from industrial uses.

Next Steps

A more specifically focused and detailed analysis will be developed on the preferred development alternative, which will provide a more complete picture of potential economic and fiscal implications of development, including an assessment of the indirect and induced impacts of the project. Future refinement of this analysis will include:

- **Implications of North Bay development for attracting net new growth versus redistributed regional development.** The analysis will frame the job-creation strategies for the North Bay alternatives in the context of absorption periods and capacity elsewhere in the city and region to accommodate similar economic growth.
- **Consideration of the value of tax base additions in the context of the tax limitations imposed when Initiative 747 (1% limit on property tax growth) became law.** For example, the limit on property tax growth makes the value of new construction much more valuable as it is not subject to the 1% cap.
- **Analysis of the industries well suited for the development alternatives, along with the associated stratification of jobs and wages.** The analysis will draw connections between the development envisioned as part of the Framework Plan and EIS alternatives and industries well suited for the development. Industries will include traditional and emerging industrial and other industries consistent with the Port's mission for North Bay.

Appendix A

North American Industry Classification System (NAICS) Industries Used By Land Use

Transportation/Warehousing	Flex Tech/Light Industrial	Office	R&D Lab	Retail
Transportation and Warehousing	Printing Fabricated Metals Electrical Equipment Furniture Other Manufacturing	Information Finance and Insurance Real Estate Professional Services and Management	Chemical Manufacturing Professional Services and Management	Retail Trade Food Service and Drinking Places