Executive Briefing
Magnolia Bridge Replacement Impacts on Maritime Industries
September 5, 2004

Regional Characteristics of the Maritime Cluster
Seattle became the center of the North Pacific fishing fleet as early as 1913. Today, the Washington-based, at-sea processing fleet produces over $1 billion of seafood annually, most of which is exported. Internationally, the largest markets for processed fish and seafood products are Japan and Europe. The magnitude of Washington’s seafood processing industry dwarfs that of the rest of the United States. Indeed, Washington exports more processed fish and seafood products, in both value and weight, than the rest of the United States combined.

The Seattle-based seafood industry has advantages over other regions because of its relatively easy access to Alaska’s abundant fisheries resources, proximity to product markets, and access to transportation assets that carry final products to regional, national, and international markets. As such, the Seattle-based seafood industry can harvest, process, and transport North Pacific seafood products with less sacrifice than entities operating out of other west coast ports, including those in Alaska.

Because most of the processed seafood is exported and much of the fresh seafood is consumed in regional markets such as Seattle/Tacoma and Portland, connections between ships, airplanes, trains, and trucks is crucial for the industry. The Port of Seattle is situated close to the Seattle-Tacoma Airport and has easy access to interstate highways and on-dock and near-dock rail yards that are linked to a highly developed regional and transcontinental rail system.

Seattle’s Unique Maritime Industries
Puget Sound, in general, and Seattle, in particular, hosts a diversified array of firms offering marine support services, including maritime law, customs brokerage, freight forwarding, warehouse and distribution, and financial and accounting services. Puget Sound has more than 100 maritime law and fisheries attorneys, and over 60 custom brokers and 100 freight forwarders to provide logistics services to the maritime industry.

Within the maritime cluster there are sub-clusters of marine businesses that rely on the immediate proximity with one another. One such sub-cluster is located in the Ballard Interbay Northend Manufacturing & Industrial Center (BINMIC) area and is concentrated on land owned by the Port of Seattle. It includes a number of processing and distribution companies that are interrelated and depend upon one another for logistical and business support services. City Ice lies at the heart of this sub-cluster, allowing the other businesses access to cold storage space. City Ice also brings other business to the area. Trident Seafoods is the largest of these businesses and occupies a large portion of City Ice’s storage area. Both businesses are highly specialized and tend to operate efficiently at locations that are either adjacent to or a very short distance from one another. In the Interbay area of Seattle, sales to other sectors are not significant enough to justify other locations.

In 2000, according to the US Bureau of Labor Statistics, the 4,332 covered employees in the sector earned an average annual wage of $54,213. It is important to recognize that this represents a mix of both highly skilled financial and legal professionals and a large workforce of semi-
skilled processing and support personnel, as well as many other mid-level management and sales positions.

**Magnolia Bridge Replacement Effects**

Alternatives A and D directly affect a small marine sub-cluster located on Port of Seattle property. Included in this sub-cluster are Trident Seafoods, City Ice (cold storage), Independent Packers (seafood processing), and Anthony’s Seafood Distributing. City Ice operates five buildings in the Interbay area, all of which they generally use to capacity. One building operated by City Ice would require removal under Alternative D. The building that would require removal is a newer cold storage building, and is an integral part of the City Ice operation.

This cluster differs from the citywide seafood cluster in several ways. Employment in the affected area is dominated by processing and cleaning, jobs that tend to pay a lower wage than the cluster average. Based on estimates from interviews with all of the directly affected businesses in the Interbay area, ECONorthwest estimates that the average wage for seafood processors is between $28,000 and $36,000 per year. This is substantially lower that the $54,000 estimated from the 2000 BLS statistics (see above)—even accounting for the recent downturn in overall employment in this sector as described in the Puget Sound Regional Council (PSRC) review of industry clusters.

Based on interviews with local businesses, workers in seafood processing and production have a higher representation by minorities than would be found in the region’s overall workforce. Overall, a large percentage of employees in this area are non-white. Of the total 478 employees, 351 (73.5%) were identified as non-Caucasian.

During interviews conducted by ECONorthwest, each business emphasized their mutual reliance upon each other, and the necessity for co-location with one another for the benefit of each business. Several businesses made it clear that their very existence is dependent upon being located next to the others.

The five businesses interviewed employ a total of approximately 478 employees and pay approximately $10,300,000 annually in wages, as shown in Table 8. Of the total employees, 338 are full-time workers and 140 are part-time workers. These part-time workers are either seasonal employees or temporary day workers who are called in when unexpectedly large amounts of work are presented, such as large shipments of product that must be loaded or unloaded.

**Potential Impacts**

Each alternative (A and D) is expected to have a number of short-term effects on local businesses due to construction and detours, including:

1. increases in the travel times, and costs, of transporting goods to and from the Magnolia Bridge impact area due to detours,
2. increases in the amount of time it takes workers to drive to work, and
3. construction noise and vibration, which may impact businesses that depend on low ambient noise (such as restaurants, music recording, and golf courses) and that are sensitive to vibration (audio recording facilities and food processing plants that indicated their clean air circulation systems may be affected by foundation cracks caused by construction-related vibration).
**Alternative A**

Anthony’s Seafood Distributing will be required to move under Alternative A. It is located on the second floor of a building owned by City Ice, and the entrance is connected to the existing Magnolia Bridge.

**Alternative D**

Alternative D would result in the removal of the Snider Petroleum building, the Tsubota building, and one of the five City Ice buildings, and the relocation of Anthony’s Seafood. All affected businesses prefer to relocate within the Interbay Area, preferably as close to their current location as possible.

**Important Points for Relocation/Mitigation**

The following concerns were raised by the interviewees regarding the possibility of moving:

- **Importance of the marine cluster.** The marine cluster’s interdependence was, as previously explained, of paramount importance. If any one of the four marine companies were to relocate away from the others, it would not only be a hardship for that company, but also for those who remain.

- **Reasonable rent.** Reasonable rent was a major concern. Many companies have located in this area specifically because of the reasonable lease rates, or have been in their current location long enough to have negotiated low rates. They are concerned that they may not be able to survive in another suitable area because of higher rent/lease costs.

- **Security.** Security is also an issue for many of the interviewed businesses. One company said that they were aware of one other location that might suit their needs, but that the other companies located there had problems with theft. Those companies currently located on Port property benefit from Port security.

**Relocation Issues – Alternative A**

*Anthony’s Seafood*

Anthony’s will lose their existing connection to the bridge, and with it all access to their business. Anthony’s is closely linked with City Ice, therefore it is advantageous for them to be located either directly next to, or physically connected to the business. One important aspect of Anthony’s Seafood business is that they operate seven days a week, 363 days of the year. It is unacceptable in their line of work to close. It would be crucial to their business that a new facility is built and ready to use with plenty of lead-time so that they could transition their business over to a new location without having to close.

**Relocation Issues – Alternative D**

*Snider Petroleum*

Alternative D requires the relocation of Snider Petroleum. They have a lease on their current space until 2007, at which time they may or may not renew, although they have no plans for relocating at this point. If relocation is necessary, they would prefer to be relocated near industrial and freeway access. Access to Interstate 5 is very important to their operation. They must also have a diked area for the containment of their tanks in accordance with environmental regulations.
Trident Seafoods

Trident Seafoods would not necessarily need to be relocated, but may be affected by the removal of a City Ice building and any disruption in the marine cluster. If this disruption is considerable, either from the relocation of other businesses, or from the construction of the bridge, Trident may choose to relocate. Also of great significance to Trident is the free-flow of product from the piers. They make many trips daily to bring product from the pier to their facility. If this thoroughfare is disrupted (e.g., a surface road obstructs traffic) this would create a considerable challenge for their business.

If it becomes necessary for Trident to move, it may be possible to build another building nearby, maybe to the north of their current facility. If this is not an option, they would consider connecting to another of their existing facilities in Fife, Anacortes or Bellingham, or they might consider splitting their current operations. Important aspects they would consider are the tax base of various locations, labor rates, and utility costs. They would also consider offers they might receive from other cities.

Trident is concerned about what the constructing of a new bridge will do to the buildings in the area, including theirs. Construction of the bridge near Trident’s building may cause large problems in terms of soils, settling, and liquefaction, etc., because the ground has been filled but not compacted completely. This is an important factor because all of the circulation for their production cooling system is sandwiched between concrete slabs under the flooring system and would be very susceptible to breach if minor cracks were to develop. Unconsolidated soils and vibrations caused by subsurface drilling and pile driving could cause a variety of problems related to operating and maintaining the integrity of the cooling system. Leaks would compromise the contamination prevention program required for certification of the processing facility.

The intersection options for alternatives A and D also descend and terminate in front of their building, which may be a considerable issue for trucks coming in and out of their facility. Any design that comes within 200 feet of the building would cause major issues of accessibility and could affect productivity of current operations as a significant amount of vehicle circulation (both intra-building and semi-trailer positioning) is currently required.

City Ice

Alternative D requires the removal/relocation of one of the City Ice storage buildings. If Alternative D is chosen and the operations that depend on the affected building must be relocated, City Ice would prefer that a new location remain very close to their existing facility in order to maintain their connection with existing processors.

As discussed for Trident Seafoods, it is also important to City Ice that the corridor under the bridge remain open to facilitate travel back and forth to the docks. If this is interrupted due to a surface road (either a temporary construction access-way or a future surface road), it may cause significant changes to their operations.

Independent Packers

Independent Packers would not be required to move under any of the currently considered alternatives; however the relocation of other businesses in the marine cluster may adversely
affect them. They work closely with City Ice and both businesses are interdependent. Therefore, it is important that their businesses remain in close physical proximity.

*Anthony’s Seafood Distributing*
See discussion under Alternative A.

*Tsubota Family Property*
Alternative D requires the taking of the southwest section of the Tsubota Family property as well as the southernmost building. This land is currently optioned by Opus, a development company. Opus feels that, ultimately, the developer who purchases this land, whether or not it is the current prospective buyers, will want to have input regarding the considered alternatives. The land value could also be significantly affected if Alternative D becomes the chosen alternative.

**Mitigation**

*Communication with affected businesses*: The City should work with each of the affected businesses to determine the effects of construction operations (noise and vibration) and circulation requirements (both short-term construction and long-term operations).

*Processing and logistics considerations*: The City should address specific technical requirements of each business with regard to FDA regulations for maintaining a clean food processing environment, as well as the need to maintain efficient flow of products between various buildings in the processing complex. The City should allow for sufficient planning to accommodate the needs of existing businesses.

*Liaison to affected businesses*. The City should appoint appropriate technical engineering staff who can communicate and coordinate with affected businesses throughout the design, development and initial operations of the project. These staff should ensure that design and monitoring of all technical conditions cited above – and those that may arise as the project develops – meet the federal and state governmental standards and operating needs of the affected businesses.

*Outreach to customers of affected businesses*

*Signage*. The City should post signs (such as temporary neon road signs) that indicate the Bridge closure and the alternative route.

*Detoured transportation of materials and products*

*Schedule transportation of materials and products*. The City should work closely with affected businesses to coordinate detours and possible road closures due to construction so as to minimize delay of material and product shipments.

*Utilization of the railroad*: Although current operations at the seafood processing facilities in the Interbay area are not as dependent on rail as they have been in the past, Trident’s facilities continue to make a substantial number of shipments (approximately 70 cars per year). Any temporary or permanent changes to the area related to replacement of the Magnolia Bridge should preserve rail operations. This is especially important considering that unforeseeable factors may
increase the role that rail will play in moving processed seafood from the Interbay area to regional and, especially, national markets.

**Construction noise and vibration**

*Communication*. As with many aspects of this project, communication is probably the most important mitigation tool for the City. A schedule of major construction activities will help local businesses plan for loud events, such as pile driving or blasting.

*Vibration*. As addressed previously, vibration from the construction of the bridge near the existing buildings may cause large problems in terms of soils, settling, liquefaction issues, etc., because the ground has been filled but not compacted completely. Unconsolidated soils and vibrations caused by subsurface drilling and pile driving could cause a variety of problems related to operating and maintaining the integrity of the business’ cooling and ventilation systems, in addition to the damage it may cause to the buildings overall. There are also known contamination issues with subsurface hydrocarbon plumes associated with oil storage at the tank farm located nearby (which is to be demolished, but not remediated). Even minor cracking or shifts in sealed expansion joints in the flooring may cause dust or debris to enter “clean” areas in the seafood processing plants and contaminate them. For Trident, the potential problems may be large. Hydrocarbons in the soil may also be released into the air, which could cause Trident to invest in controlling air intake for their buildings – an expense not presently incurred. Alternative D is much more of a concern than A because it is closer to the building.
Data Sources

ECONorthwest developed the economic impact assessment based on a range of data sources. As described above, information about employment in the maritime sector is fragmented and notoriously difficult to establish given the wide geographic distribution of employers and employees, the geographic range of its operations and the high concentration of self-employed and independent operators – many of which are not covered by traditional employment data sources. ECONorthwest used the following sources to identify basic information about the Maritime Cluster in Seattle, King County and the State of Washington:

- 2002 ES-202 employment data from the Puget Sound Regional Council
- 2002 Small Area Forecasts of Population and Employment, Central Puget Sound Region by the Puget Sound Regional Council
- Interviews of impacted business owners, County, and City government officials
- Real Estate Property tax from the King County Finance and Business Operations Division
- Regional Economic and Demographic Data Base, Modeling, and Forecasting: Data Base for Puget Sound Region Specification of STEP02 Long-Range Forecasts for Puget Sound Region, Puget Sound Regional Council, 2002.
- Personal Property tax (King County Assessors Office and ECONorthwest interviews)
- Sales Tax (City of Seattle and ECONorthwest interviews)
- B & O Tax (City of Seattle and ECONorthwest interviews)
- Workboat.com
- References USA Business Directory Database from the Library Division of infoUSA
- Dun & Bradstreet
- infoUSA firm data
Key Data for Magnolia Bridge Replacement

### Concentration of Citywide employment in total study area and Census Tract 58.02

<table>
<thead>
<tr>
<th>2-Digit SIC</th>
<th>2-Digit SIC Employment Services Division Definition</th>
<th>City of Seattle Emp</th>
<th>Total Study Area Emp</th>
<th>% of City of Seattle</th>
<th>Census Tract 58.02 Emp</th>
<th>% of City of Seattle</th>
<th>% of Study Area Emp</th>
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<tbody>
<tr>
<td>17</td>
<td>Special Trade Contractors</td>
<td>9,153</td>
<td>623</td>
<td>8.99%</td>
<td>518</td>
<td>5.66%</td>
<td>62.94%</td>
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<tr>
<td>20</td>
<td>Food and Kindred Products</td>
<td>6,891</td>
<td>1,379</td>
<td>20.01%</td>
<td>257</td>
<td>3.73%</td>
<td>18.64%</td>
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<tr>
<td>57</td>
<td>Furniture and Home Furnishings</td>
<td>3,100</td>
<td>120</td>
<td>3.87%</td>
<td>72</td>
<td>2.32%</td>
<td>60.00%</td>
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<tr>
<td>65</td>
<td>Real Estate</td>
<td>8,735</td>
<td>264</td>
<td>3.02%</td>
<td>151</td>
<td>1.73%</td>
<td>57.20%</td>
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<tr>
<td>73</td>
<td>Business Services</td>
<td>30,084</td>
<td>914</td>
<td>3.04%</td>
<td>372</td>
<td>1.24%</td>
<td>40.70%</td>
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<tr>
<td>50</td>
<td>Wholesale Trade - Durable Goods</td>
<td>13,794</td>
<td>674</td>
<td>4.89%</td>
<td>168</td>
<td>1.22%</td>
<td>24.93%</td>
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<tr>
<td>58</td>
<td>Eating and Drinking Places</td>
<td>30,613</td>
<td>666</td>
<td>2.24%</td>
<td>321</td>
<td>1.05%</td>
<td>46.79%</td>
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<tr>
<td>79</td>
<td>Amusement and Recreation Services</td>
<td>5,544</td>
<td>118</td>
<td>2.13%</td>
<td>57</td>
<td>1.03%</td>
<td>48.31%</td>
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<tr>
<td>75</td>
<td>Automotive Repair, Services &amp; Parking</td>
<td>3,815</td>
<td>50</td>
<td>1.31%</td>
<td>39</td>
<td>1.02%</td>
<td>78.00%</td>
</tr>
<tr>
<td>15</td>
<td>General Building Contractors</td>
<td>6,402</td>
<td>250</td>
<td>3.91%</td>
<td>65</td>
<td>1.02%</td>
<td>26.00%</td>
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<tr>
<td>55</td>
<td>Automotive Dealers and Service Stati</td>
<td>3,383</td>
<td>144</td>
<td>4.26%</td>
<td>31</td>
<td>0.92%</td>
<td>21.53%</td>
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<tr>
<td>59</td>
<td>Miscellaneous Retail</td>
<td>11,910</td>
<td>234</td>
<td>1.96%</td>
<td>96</td>
<td>0.81%</td>
<td>41.03%</td>
</tr>
<tr>
<td>51</td>
<td>Wholesale Trade - Nondurable Goods</td>
<td>9,718</td>
<td>258</td>
<td>2.65%</td>
<td>59</td>
<td>0.81%</td>
<td>22.87%</td>
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<tr>
<td>87</td>
<td>Engineering, Accounting &amp; Management</td>
<td>20,321</td>
<td>241</td>
<td>1.19%</td>
<td>93</td>
<td>0.46%</td>
<td>38.59%</td>
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<tr>
<td>88</td>
<td>Private Households</td>
<td>3,396</td>
<td>150</td>
<td>4.54%</td>
<td>14</td>
<td>0.42%</td>
<td>9.33%</td>
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<tr>
<td>44</td>
<td>Water Transportation</td>
<td>5,108</td>
<td>727</td>
<td>14.23%</td>
<td>21</td>
<td>0.41%</td>
<td>2.89%</td>
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<tr>
<td>60</td>
<td>Depository Institutions</td>
<td>12,055</td>
<td>54</td>
<td>0.45%</td>
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<td>0.00%</td>
<td>0.00%</td>
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<td>61</td>
<td>Nondepository Credit Institutions</td>
<td>1,350</td>
<td>8</td>
<td>0.59%</td>
<td>0</td>
<td>0.00%</td>
<td>0.00%</td>
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<tr>
<td>80</td>
<td>Health Services</td>
<td>39,763</td>
<td>53</td>
<td>0.13%</td>
<td>0</td>
<td>0.00%</td>
<td>0.00%</td>
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<tr>
<td>81</td>
<td>Legal Services</td>
<td>9,327</td>
<td>18</td>
<td>0.19%</td>
<td>0</td>
<td>0.00%</td>
<td>0.00%</td>
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<tr>
<td>Total Unsurpressed</td>
<td></td>
<td>234,372</td>
<td>7,165</td>
<td>3.06%</td>
<td>2,334</td>
<td>1.00%</td>
<td>32.58%</td>
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<tr>
<td>Total Unsurpressed and Surpressed</td>
<td></td>
<td>364,454</td>
<td>12,023</td>
<td>3.30%</td>
<td>3,863</td>
<td>1.06%</td>
<td>32.13%</td>
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### Annual Taxes Paid and Revenues Collected

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<tr>
<th></th>
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<tbody>
<tr>
<td>Alternative D</td>
<td>$1,275,000,000</td>
<td>$526,000,000</td>
<td>$914,000,000</td>
<td>$290,000</td>
<td>$510,000</td>
<td>$220,000</td>
<td>$510,000</td>
<td>$290,000</td>
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</tbody>
</table>

Source: ECONorthwest interviews.

### Annual Real Estate Property Taxes Paid

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Total Tax Paid 2003</th>
<th>Total Tax Paid 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative A</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Alternative D</td>
<td>$34,963.51</td>
<td>$25,788.66</td>
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</tbody>
</table>

Source: King County Assessor’s Office. Note that there are many more affected land parcels than there are affected businesses due to the fact that many of the land parcels do not contain businesses, or may contain businesses that are not directly in the path of the considered alternative, and therefore remain unaffected. Also worth noting is that the majority of affected land is owned by the Port of Seattle, which is exempt from paying Real Estate Tax.