



Bureau of Planning and Sustainability
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MEMO

DATE: March 15, 2013
TO: Planning and Sustainability Commission
FROM: Eric Engstrom, BPS
CC: Susan Anderson and Joe Zehnder, BPS; Mike Rosen, BES
SUBJECT: West Hayden Island Work Session #5 (March 26, 2013)

Background

In November the Planning and Sustainability Commission (PSC) asked staff to develop a work plan and timeline to further examine unresolved topics related to the November 21st WHI draft plan. In December the PSC approved a work plan and timeline which includes a series of work sessions and hearings through early 2013.

You asked that staff prepare written responses to the PSC questions with the assistance of technical experts and core stakeholders (Attachments A through D). At least one week prior to each work session you have received packets which contain: 1) answers to PSC questions to be discussed at the session, 2) all feedback received from technical experts and stakeholders, 3) significant outstanding issues, and 4) staff recommendations. This is the fifth such packet and covers questions related to economics, financing, IGA/legal issues and recreation.

Prior to the March 26th work session, BPS will provide a second memo that ties together many of the project and mitigation costs in order to discuss further the overall project feasibility.

Work Session Discussion Topics

The potential discussion topics for the 5th session on March 26, 2013 will include:

- 1) Economic need and benefits
- 2) Vancouver as alternative
- 3) State Goal 9 requirements
- 4) The financial plan
- 5) IGA Enforceability, miscellaneous legal questions
- 6) Recreation



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Partner and Stakeholder Input

We have initiated communication with a number of technical experts and stakeholders related to the above topics. Over the past several months we have consulted with:

Ed McMullan: Senior Consultant, ECONorthwest
Terry Moore: Principal, ECONorthwest
Janet Smith-Heimer: Bay Area Economics (BAE)
Michael Williams: Business Oregon
Carly Riter: Portland Business Alliance
Bruce Allen: Portland Development Commission
Keith Leavitt, Greg Theisen: Port of Portland
Jennifer Cooperman, Josh Harwood: Portland Office of Management and Finance
Kathryn Beaumont: City Attorney's office
Tom Armstrong, Steve Kountz: Bureau of Planning and Sustainability

A parallel discussion also took place regarding project costs and finances involving several state and regional agencies. In addition to Janet Smith-Heimer, Michael Williams, Bruce Allen, Keith Leavitt and Greg Theisen above, this discussion included Andy Cotugno from Metro, Anne Debbaut from the State, and Susie Lahsene from the Port.

Discussion and Recommendations

Economic Need and Benefit

During Phase I of the WHI planning process, BST and Associates developed a report on the potential growth in trade in the Lower Columbia River and the supply of land available to accommodate the growth. This report was used by ENTRIX in their Economic Foundation Study. During the current planning phase, BPS hired ECONorthwest to do two studies, one looking at the supply of land in the Portland Harbor and Vancouver to compare with updated forecasts, and one to look at the Cost and Benefit of a marine terminal on WHI as compared to leaving the island in its current state. Generally, all of the forecasts have shown a long-term need for additional marine terminal land in the Columbia River, especially large parcels in excess of 100 acres. The BST report has shown that the Port of Portland has lost market share as other terminal facilities have expanded in the Pacific Northwest. This could be attributed to a lack of marketable sites at the Port of Portland that meet the size requirements of modern terminals. The ECONorthwest Cost-Benefit report takes a conservative view of potential benefits but still concludes that the local benefits of a marine terminal outweigh the costs. The Harbor Lands report shows that WHI is needed in the region in all but the most conservative forecasts.

Staff does not have any recommendations to change the code or IGA at this time, but welcomes discussion from the PSC. Existing provisions in the IGA provide opportunity for local hiring and the Port's existing programs help small businesses in the region.



Vancouver as Alternative

BPS engaged ECONW in a Harbor Lands Analysis Report which reviewed the current cargo forecasts to verify the potential need for future development in the region. ECONW considered potential capacity at existing terminals and also looked at other sites along the Willamette as future public terminal sites, even those under private ownership. There are two sites, Time Oil and Atofina that could potentially have enough land assembled to accommodate a smaller terminal. Neither have enough room for a full rail loop. ECONW also reviewed the current land supply and demand that may be attributed to Vancouver. Vancouver's Port does have a reserve of land available for future development, including a parcel under negotiation with a tenant for a potash terminal, and the Gateway area west of the existing port. This area is already within the City of Vancouver and zoned for industrial uses and provides approximately 350 acres of vacant land. The land also has some similar environmental constraints to WHI, including wetlands, and a large area of shallow water habitat.

The ECONW Harbor Lands analysis indicates there is a wide range of potential acreage needed for terminals, based upon the commodities and the assumptions regarding the size and rail needs. However, the study found that both the Vancouver land and WHI would be needed to satisfy regional demand under the moderate to high growth scenarios. Staff does not have any additional recommendations at this time, but welcomes discussion from the PSC.

State Goal 9 Requirements

There have been several questions about how WHI fits into the City's Industrial Land Needs that are an element of the State Planning Goal 9. The short answer is that the City of Portland needs to meet its Goal 9 land needs within its own boundaries. It cannot transfer this responsibility onto another state. Goal 9 requires an adequate land supply to meet the city's economic forecast. The city's forecast is based on the Economic Opportunities Analysis (EOA) which is a background report for our Comprehensive Plan Update. This analysis anticipates that Portland will continue to have a strong traded sector employment base including jobs in manufacturing, warehousing and transportation. Continued growth in these sectors is also a key component of many city policies. The EOA concludes that additional industrial land, including marine terminals, is necessary to achieve the goals in industrial job growth.

In order to deviate from this strategy, the City would have to rethink its future growth goals. This includes revising the EOA to eliminate references to the need for additional marine terminal capacity, and adjusting the employment allocation to other sectors to account for the resulting decline in traded sector capacity.

There are also equity considerations that would be relevant in that discussion. An important factor in Portland's future economic prosperity, and addressing economic equity concerns, will be maintaining and growing "family-wage" jobs. This is particularly important in North Portland, where poverty and unemployment rates are chronically high. Manufacturing and distribution jobs are an important part of Portland's Goal 9 strategy because often wages in these sectors are significantly higher than average, and they are available to those with lower levels of education. The manufacturing and distribution sector has also traditionally employed people of color at a higher rate than many other sectors offering similar access to a



living wage. Average wages of the direct jobs provided at public and private marine terminals in the Portland harbor is \$50,392 (Martin Associates, 2012). For comparison, average wages in the retail, food/drink, and service sectors are in the range of \$17,000 to 27,000 annually. Staff does not have any additional recommendations at this time, but welcomes discussion from the PSC.

The Financial Plan

BPS created a timeline that addresses the next 30+ years based upon the November IGA proposal. This timeline considers the relevant costs and processes that may be needed in order to construct and operate a future terminal per the IGA. BPS asked Bay Area Economics (BAE) to review this current plan and consider financial feasibility and the potential need for a joint business plan. BAE reviewed a general cash flow analysis from the Port, as well as initial analysis of the costs and potential return on industrial land. BAE submitted two memos for review (attached as an updated combined memo) that considered whether the project was feasible based upon the Port's model, and whether other financing mechanisms or business planning processes could help bridge the gap between the up-front costs and the future revenue. Based upon the BAE analysis, and additional discussion with the technical group, BPS staff are making several recommendations that could help make the project more financially feasible.

Recommendations:

- Move the timing of two high-cost items back in the process to better align these costs with the development impacts and planning process. The housing fund implementation should be moved to coincide with the findings of the Stage 2 HIA. The construction of the parks and trails should be moved to align with initial construction of the marine terminal, so that terminal construction doesn't impact the recreation improvements.
- Consider a Memorandum of Understanding, or other agreement, to initiate a joint financial/business planning process including the Port, City of Portland, Metro and state partners such as Business Oregon.
- Amend the IGA so that the funding for mitigation and infrastructure project is re-adjusted and provided in five-year increments, rather than relying on single lump sum payments. This allows more nimble response to market conditions, rather than making up-front assumptions now about future rates of inflation and earnings.

IGA Enforceability, Miscellaneous Legal Questions

The IGA is a negotiated document that needs to be signed by both the City and the Port to be effective. As a result, the items and conditions that are within this document must be accepted by both parties. In this sense, the terms related to forest mitigation will have been voluntarily accepted by the Port and City. However, if the Port fails to perform its obligations under the IGA, the City has several mechanisms to negotiate a settlement or pursue other enforcement remedies.

There has been repeated concerns expressed by stakeholders that Senate Bill 766 (SB 766), passed last year will allow for a future bypass out of environmental requirements. Staff has consulted with the City Attorney, and does not believe that SB 766 has any relevant application to the anticipated WHI permitting process. Almost all work will require a federal



permit and will be unable to utilize the statute. A provision confirming the Port and City's intent to use standard permitting procedures, and not the "expedited" routes offered through SB 766 development protections could be included in the IGA as a symbolic gesture. Such a provision would have no meaningful impact, but it could legally be included. There is some risk that an agreement to avoid taking advantage of any aspect of SB 766 could make it more difficult to utilize any financing opportunities provided in the future, if the legislature were to target any funding in the future for the development of "regionally significant" industrial lands. A middle ground could be found on this issue.

Stakeholders have raised questions about several legal clauses in the IGA, including Non-appropriation language, waiver of default, and agreements to assess progress and consider IGA amendments in the future. Intergovernmental agreements commonly include these provisions, to protect both parties. The non-appropriation clause is a legally necessary statement, reminding the parties that adoption of the IGA does not, by itself, appropriate any funds. The City Council and Port Commission will need to take separate future actions to dedicate funds, at the appropriate times specified in the IGA. The waiver of default language, and the description of amendment procedures is included because both parties acknowledge unforeseen events in the future could require a course correction.

Recommendation:

- Add language to the IGA to clarify that SB 766 will not be used by the City or the Port to bypass local regulatory process, but also re-affirm in the IGA that designating WHI as "regionally significant industrial land" is not precluded.

Recreation Costs, Roles and Timing

The recreation costs, timing, and responsibility have been topics of discussion between BPS, Parks and the Port. The results of the discussions are being incorporated into the updated IGA. There have also been private proposals for a motorized boat ramp on East Hayden Island (see site plan in attachments). Continued discussion on this issue should be part of a future Open Space strategy. Answers to PSC questions are enclosed.

Recommendation:

- As stated above, the timing for the construction of the parks and trails will be pushed back to align with initial construction of the terminal on WHI so that terminal construction doesn't impact the recreation improvements.
- The IGA will be amended to clarify the responsible parties for the recreation improvements on both WHI and EHI.

Attachments

- A) PSC Economic/Finance Questions and Staff Responses (incl. orig. timeline)
- B) PSC IGA/Other Questions and Staff Responses
- C) PSC Recreation Questions and Staff Responses
- D) Economic/Finance Technical Comments
- E) Economic/Finance Stakeholder (PBA) Comments
- F) Traded Sector Report commissioned by PBA
- G) Bay Area Economic (BAE) Memo on Financing and Joint Business Plan
- H) Letters of support on EHI dock and Recreation responses from Inland Sea Maritime



Economics & Finance Questions**Need and Benefits**

49. Are the predictions about local jobs being created true and if so, all I need is a simple chart about what the local, regional and state benefits will be from having a new marine terminal on WHI?

Answer: The ECONorthwest (ECONW) Benefit/Cost Report took a fairly conservative view of Port benefits, pointing out that many port benefits flow to the larger region, and many impacts are local. Despite that general statement, they did conclude (and the numbers show) that the local benefits would likely exceed the public costs, potentially by a wide margin.

These public benefits could be anywhere from \$3.75 to \$90 million annually, in local benefit. The wide range reflects the range of expert opinion on the amount of benefits actually captured locally, and if that benefit might be achieved by other means. The marine terminal is also expected to generate \$18 to \$30 million annually in state and local tax revenue.

As noted in their conclusion, the break even point for the public investment is about \$5.5 million annually. The projected benefits are well above that. They summarized by saying "it is likely that the Development Scenario will generate net local economic benefits relative to the Baseline Scenario"

Studies done to date project that WHI development would lead to roughly 2,300 to 3,600 jobs, including direct, indirect, and induced. This does not include jobs associated with terminal construction. For context, there were about 18,000 jobs in the entire Central Eastside Industrial Area in 2008. The citywide job total in 2008 was 292,000. Between 2000 and 2008 Portland gained only about 3,000 jobs in total. The projected job total was interpolated by ECONW from Portland Harbor estimates reported by Martin & Associates. Martin does economic reports for many ports across the country.

50. Why Now?

Answer: In a general sense, there are three reasons the City chose to undertake this project now, rather than waiting another decade.

- First, the City Council adopted a plan for the Hayden Island Neighborhood, and there was a desire to settle the question of WHI while the neighborhood plan was still fresh, so we would have a complete plan for the future of the island.
- Second, we had completed significant transportation planning work in connection with the CRC, and there was a desire to integrate WHI planning work with CRC planning work. For example, because this is happening at the same time, we can more directly relate our transportation studies.
- Third, the City is currently working to update its Comprehensive Plan. A major question within that planning project is to determine the supply of industrial land in the City, and identify ways to provide enough supply to meet projected demands.

WHI is the largest single property potentially available for industrial development, and as such, it is helpful to resolve this question before we are done updating our Comprehensive Plan.

We have insufficient supply of land to meet adopted long-term employment growth targets, and economic development plan objectives. Within the 25-year planning horizon, studies suggest there will be a need to build additional marine terminals in Portland. The planning and permitting process for those terminals takes many years to complete. If annexation occurred in 2013, the soonest we might expect marine terminal development is the early 2020's. In short, if we don't consider annexation in the near term, it will not be possible to supply enough land to meet our long term economic needs, which we expect to become a limiting factor for our economic growth in the coming decades, before 2035. There are long lead times for marine design, permitting, and development.

51. Why so many caveats in EcoNorthwest report? A sign that this is really not worth it? , Could we get another independent economist(s) provide another opinion on the cost-benefit of the proposed development?

Answer: The caveats reflect the fact that this is complex, and there are many different opinions, and there is uncertainty in exactly when development will occur. The report also projects benefits and costs out for 100 years which widens the range of projected costs and benefits. ECONorthwest is careful with facts, and does not want to present conclusions as iron-clad if they are not. We also strived to represent the range of different professional opinions in the report. That said, EcoNorthwest summarized by saying "it is likely that the Development Scenario will generate net local economic benefits relative to the Baseline Scenario". The numbers back this up.

- The public costs are calculated to equal about \$5.5 million annually, including the cost of public infrastructure and monetized lost ecosystem benefits. The projected benefits are well above that.
- Development would reduce the value of the ecosystems services provided by WHI natural resources by \$4.5 to \$11.5 million (100-year NPV).
- Reports project \$18 to \$30 million annually in state and local tax revenue.
- Local personal and business income generated from development is in the \$100's of Millions, annually.

52. Describe the overall benefits of traded sector industries (including trans-shipment ports) on regional and state economy. What benefit does a "pass-through" port have, if we assume it is not focused on shipping local goods?

Answer: In general, traded sector industries are beneficial to local economies by bringing export income into a region. Traded sector industries export a portion of their goods and services beyond the metropolitan region which bring in outside income that can be used for further investment. Export activity can generate new jobs that wouldn't otherwise occur to serve the existing population. These export markets can also drive competition and productivity gains.

In the case of trans-shipment ports, the benefits may be distributed over a wider region, especially if the goods or services are produced elsewhere. However, international and domestic shipping is a traded sector on its own, as the ports and transportation network provide the logistics and service to move and transfer the goods, sometimes with value added to the goods. This activity feeds into the region's transportation and wholesale trade sector. Overall, traded sector activity accounted for an estimated 61% of the transportation sector and 43% of the wholesale trade sector in the Portland metropolitan regions (ECONW 2012). As indicated in the attached Traded Sector report done for the Portland Business Alliance, many traded sector jobs can be in the high tech or finance industry and attract a greater number of people with college degrees (40% compared to 31% in Portland as shown in Figure 2). However traded sector industrial jobs, such as manufacturing and distribution are often middle income jobs that provide opportunities for people without college degrees. These jobs provide a lower barrier to entry providing living wages to those who may otherwise only qualify for lower paying service jobs. These types of jobs can help reduce the equity gaps between higher paying professional occupations and lower paying service positions. Freight gateways also create key transportation cost savings and conveniences that can help producers both in the metropolitan region and throughout the west, including metals manufacturers in Portland and Eastern Oregon farmers.

Providing local opportunities for the growth of transportation sector ports and hubs can justify continuing national-system investments in river channel, rail and road infrastructure, which benefit all traded sector industries in the region. Portland's Pacific Rim location and river-grade access through the Cascade Range provides important locational advantages for freight hub infrastructure and the regional distribution sectors. Pass-through cargo in dry bulks and containers are a strategic service priority for both the Union Pacific and Burlington Northern Santa Fe railroads in the Pacific Northwest, and investment in ports servicing these commodities would lead to further railroad investments that could help other freight and passenger rail. Although Portland is located upriver from the coast, its location, from an east/west perspective is comparable to the Ports of Vancouver BC, Seattle, Tacoma and Oakland. Portland is actually located west of LA/Long Beach and its more northerly location benefits ships that cross over the Northern Pacific. This northerly location provides an advantage for trade with Asia, although navigation up the river is slower than navigation across open water.

Since the Columbia River navigation system competes with other ports in the country for Federal infrastructure dollars, the volume of goods flowing through the Columbia provides an added incentive to continue maintenance funding on the levees, navigation aids, jetties and shipping channel. The Army Corp of Engineers prioritizes projects by the national benefit they bring. Ports that handle pass-through cargo from a larger geographic area generate support from other regions and states to continue funding since the larger area depends on the port for their exports. This, in turn, benefits local companies by increasing the flow of federal dollars to maintenance that benefits all users of the river, including manufacturers such as Gunderson, Schnitzer and Zidell. Firms like that would not be able to stay in Portland over the long run without continued maintenance and re-investment in the regional rail and marine freight infrastructure.

53. Describe for each terminal the following: number of new jobs on site; global and USA value.

Answer: ECONW’s analysis was done to estimate the range of jobs generated by the utilization of WHI for marine terminal use. It consisted of a conservative estimate of the number of jobs generated on 300 acres of land, using a comparison of the number of jobs per acre within marine terminals at the Portland Harbor. The estimate was not calculated on a facility by facility basis, nor was it considered specific to any one terminal. The base figures were taken from a Martin Study on the Economic Impacts of the Portland Harbor from 2011. The figures included job and income figures from both the public and private terminals. The public terminals were used as the base since their total acreage could be provided by the Port. Since the public terminals include both larger job generators such as the container facility and smaller generators such as the potash facility, ECONW used a more conservative number of jobs per acre in developing the table that was ultimately placed in the Cost-Benefit Analysis (provided below). However, due to the uncertainty of the types of facilities that ultimately may be constructed on WHI, and the sequence, developing revenue assumptions for each stage of development is impossible.

The Martin Study included a number of current direct jobs per 1000 tons for each commodity handled in the Portland Harbor. Estimates from these existing facilities can inform the number of direct jobs per type of facility. As an example, the current potash facility handles approximately 3,500,000 tons. This would translate to 105 direct employees. The grain terminal at T-5 has an estimated capacity of 4,100,000 tons which could result in an estimate of 369 employees. Although not broken out by facility, the Martin study job numbers would correlate to a total of 812 employees at the three auto facilities. According to the Martin study, facilities that transport autos, break bulk cargo and steel slab generate the largest number of employees per 1,000 tons.

The Port has job numbers based on the various operations at their terminals which may provide insight into the overall number of jobs. These numbers are positions that actually are at the terminal, and don’t include spinoff jobs that occur off the site (regionally or globally). While the Port does not have overall job numbers by terminal, the Martin study estimates that each public port job can generate over 1.5-2 additional induced or indirect jobs. Using the numbers above for the existing terminals, the potash terminal on T-5 may generate a total of at least 260 jobs and the three auto facilities a total of at least 2,030 jobs (direct, indirect and induced) as examples.

Below is the table from ECONW:

Table 1. Summary of Results from Recent Economic Impact Analyses

	Total Portland Harbor	West Hayden Island Estimate #1	West Hayden Island Estimate #2
Jobs (Employment Years)			
Direct	7,011	1,175	937
Induced	6,668	1,591	891
Indirect	3,833	847	512
Total	17,512	3,613	2,340
Personal Income (\$1,000s)			

Direct	\$355,907	\$64,003	\$47,566
Induced	\$871,367	\$192,764	\$116,456
Indirect	\$193,015	\$39,441	\$25,796
Total	\$1,420,288	\$296,208	\$189,818
Business Revenue (\$1,000s)	\$1,481,570	\$240,324	\$198,008
State and Local Taxes (\$1,000s)			
Oregon	\$80,998	\$19,977	\$10,825
Washington	\$55,221	\$10,292	\$7,075
Total	\$136,219	\$30,269	\$17,900
<u>Source:</u> ECONorthwest staff estimates with data from Martin and Associates (2010).			

54. What is the impact to the state general fund over 50 years? Clarify the amount of tax revenue and graph with 2 terminals, and then up to 4.

Answer: The cost-benefit analysis and the previous economic impact studies do not provide the level of detail needed to break out tax benefits by individual facility, or by state versus local tax revenue. The ECONW estimates were based upon work done by Martin and Associates for the Port of Portland. This study did separate out the public and private terminal benefits. It also separately identified personal income, business revenue and taxes (state and local). The cost-benefit analysis estimated the annual range of state and local tax revenue to be \$18-30M. Oregon's share of this revenue was between \$11-20M. Tax impacts would include personal and corporate income tax, insurance tax, gift tax, state fuel tax, school taxes and the Tri-Met taxes. This was estimated based on 300 acres of marine terminal usage, which included three facilities. Reducing or increasing the number of facilities by one could result in an increase or decrease in the tax revenue, although the change in tax revenue would be largely dependent on the types of materials being shipped. However, using a rough numbers calculation, an increase or decrease in the number of facilities by 33% could result in a similar corresponding increase or decrease in tax revenue, which would translate to an increase or decrease of \$3.5-6.5M in tax revenue.

While the Port, as a public agency does not pay property tax for its land, terminal operators who lease the property from the Port will pay property taxes or in-lieu fees. These taxes are split out to various regional and local agencies, with the top three receivers being the City of Portland (34%), Portland School District (31.5%) and Multnomah County (26.0%). The dollar amount would need to be calculated based on the assessed value of improvements, and these values have not been estimated for the range of terminals proposed. In addition, state statute provides for reduced tax treatment for cargo operations.

The ECONW cost-benefit analysis and the base Martin study predict annual income rather than over a longer time period. If one were to assume a consistent flow of revenue and rates to the state and local taxing agencies over the 50 year period, Oregon could anticipate a total impact of between \$550M - \$1B in revenue for state and local agencies. This does not factor in any inflation, changes in growth or business revenue or changes in taxing rates. It also does not factor any expenses that the state may incur for the provision of transportation improvements.

Goal 9

55. Does the City of Portland need to meet industrial land needs (Goal 9) within its own boundaries? What is our Goal 9 flexibility? Is it factually correct that the city must annex WHI to meet state wide planning Goal 9?

Answer: Yes, the City of Portland needs to meet its Goal 9 land needs within its own boundaries.

Goal 9 requires an adequate land supply to meet the employment forecast, which is a mid-range projection of job growth by land type. The Goal 9 Administrative Rule calls for cities to estimate future land needs of the major categories of industrial or other employment uses that could reasonably be expected to locate or expand in the planning area. The estimate is to be based principally on growth trends and local comparative advantages and disadvantages. The forecast needs to be coordinated with Metro, which allocates the regional jobs forecast to local jurisdictions, representing the local share allocation of Metro's 7-county regional demand.

Goal 9 requires local jurisdictions to prepare an Economic Opportunities Analysis (EOA). The EOA is based on trends and policies to convert employment forecast to a land need. In this case economic policies that inform the EOA include the Portland Plan Prosperity and Affordability Strategy and the City's Economic Development Strategy, both of which emphasize city performance in traded sector and export growth, trade and freight hub expansion, employment districts growth, and broadening household prosperity. Portland Plan Action 68 calls for the new Comprehensive Plan to ensure adequate development capacity for forecast job growth, including specific consideration for industrial and harbor-access land needs. Current and working draft policies in the comprehensive plan promote the multimodal freight transportation system and industrial use of those transportation linkages.

The EOA analysis identifies 350 acres of land need for deepwater marine terminal growth in Portland to 2035, based on the marine cargo trends and forecast. Meeting this demand would provide for the continued growth of Portland Harbor as the Lower Columbia's largest seaport and multimodal freight hub. The WHI studies show that there is limited capacity in existing terminals and limited alternatives for new terminals - the Time Oil and Atofina sites. The City of Portland has limited flexibility under Goal 9 in considering options consistent with its own policy and political implications. The options include:

1. Meet the shortfall by creating additional marine terminal capacity, primarily by annexing WHI.
2. Shift the land demand and type of jobs from one employment sector to another - from industrial to commercial/institutional. This would require the City to revise the economic and employment policies that were part of the Portland Plan and other strategy documents listed above.
3. Take an exception to Goal 9 to not fill shortfall for marine terminal needs.

Based upon our current policies and background documents, annexing WHI is the major component for the City to meet the Goal 9 requirement of an adequate land supply for industrial uses. Other programs such as providing incentives for the reuse of

brownfields are an accessory component but do not provide enough capacity, especially for the marine terminal needs.

The flexibility in Goal 9 allows the City to use some discretion in determining how to meet the land need in the EOA. Annexing and zoning WHI for a marine terminal is one option for addressing the need for land that is suitable for marine terminals. The other WHI studies show that there are very limited options for large sites (100 acre minimum) that could satisfy this marine terminal need. Therefore, if WHI is not annexed then the City would have to re-evaluate the EOA and the traded sector facilities needs.

There are also equity considerations that would be relevant in that discussion. An important factor in Portland's future economic prosperity, and addressing economic equity concerns, will be maintaining and growing "family-wage" jobs. This is particularly important in North Portland, where poverty and unemployment rates are chronically high. Manufacturing and distribution jobs are an important part of Portland's Goal 9 strategy because often wages in these sectors are significantly higher than average, and they are available to those with lower levels of education. The manufacturing and distribution sector has also traditionally employed people of color at a higher rate than many other sectors offering similar access to a living wage. Average wages of the direct jobs provided at public and private marine terminals in the Portland harbor is \$50,392 (Martin Associates, 2012). For comparison, average wages in the retail, food/drink, and service sectors are in the range of \$17,000 to 27,000 annually.

56. What would happen if we do not annex WHI? How would this impact City's Goal 9 tasks? What process steps would occur next, in that scenario?

Answer: If we do not annex WHI, then the City would need to re-evaluate the EOA and consider the employment forecast and land needs without the marine terminals. Major issues with this adjustment:

1. Not consistent with current policy - Economic Development Strategy and Regional Export Growth Strategy. The City would need to re-evaluate these policies in light of the shortfall of land needs.
2. Not consistent with Portland Plan economic equity goals to provide for middle skill, family wage jobs. Not all jobs are created equal. Shifting jobs to other sectors implies a different type of job - lower skill/lower pay or high skill/higher pay.
3. Not consistent with regional and state economic development strategies, which would require coordinating changes in direction in those policy documents.

As a first step to address these issues, the City would have to revise the EOA to eliminate the opportunity to provide additional marine terminal capacity and adjust the employment sector allocation to other sectors to account for the decline in traded sector capacity. As explained above, the EOA revisions would need to be accompanied by changes to our economic development policies. Or, the City would have to take an exception to Goal 9, although it is not clear on what grounds we would take an exception and whether the Land Conservation and Development Commission would acknowledge such an exception.

Vancouver

57. Are both Vancouver and Portland marine terminal sites needed for future growth? Or is it just a competition? What is the reality of using the Port of Vancouver instead of WHI? Is that realistic or fantasy?

Answer: This was addressed in the Harbor Lands Analysis Report completed by ECONorthwest. The short answer is that Vancouver's land supply is only enough if we lower our economic growth expectations.

The study reviews the most recent Cargo Forecasts done for the Portland Harbor to determine the potential need for marine terminal land and considers the redevelopment potential of certain sites along the Portland Harbor for future Marine Terminal use. In addition, the study determines whether the Port of Vancouver may have excess capacity to absorb additional demand, and analyzes ways to measure industrial land efficiency along the harbor lands. Key takeaways include:

- There are two sites in the Portland Harbor that may include enough vacant land (Time Oil and Atofina sites). Both sites would require the acquisition of additional land, and both have infrastructure and contamination issues that could be barriers to development. Neither site meets the dimensional requirements for modern "unit train" rail access.
- The Bureau of Planning and Sustainability has completed a number of inventories of vacant land in the Portland harbor, which are summarized in the Harbor Lands report. The effective supply of land in the Portland harbor is 50 to 174 acres. The range reflects the outcomes of several different studies, with a range of assumptions about how "vacant" is defined, and how constraints may impact the effective use of land - such as contamination, and environmental resources.
- The number of new marine terminals necessary to meet these capacity shortfalls varies based on the commodity type, and assumptions we make about terminal size. The Harbor Lands report summarizes that information. They estimate that between 51 and 1,457 acres of land will be needed to meet projected demand for new marine terminals through 2040. Assuming the middle of the forecast range, the need is estimated at 570 acres.

The Port of Vancouver has about 350 acres of vacant land in reserve for future marine terminal growth, although some of this land may have environmental constraints. ECONorthwest estimates that the regional need for new marine terminals will be 570 acres through 2040 (assuming the mid-range in the cargo growth forecasts). Unless cargo volume growth is on the low end of the expected range, there is not enough land in Vancouver to meet the regional need by itself.

The Port of Vancouver's lands are currently zoned for Industrial Use, and the Columbia Gateway sites have had preliminary environmental review. The Port of Vancouver has stated that they expect a need for lands on both sides of the Columbia to be developed, although their lands will have similar issues with mitigating for shallow water habitat and wetlands removal.

- 58. Why can't the Port maximize capacity of existing terminals and Vancouver site before constructing WHI? - Is it possible for a facility similar to the one proposed to be built on the Vancouver side and to come to an agreement between the Port of Vancouver and the Port of Portland to provide economic benefits to Oregon while preserving WHI?**

Answer: The short answer is that both Ports plan to maximize their capacity, and we evaluated that capacity in the Harbor Lands Report.

The Harbor Lands Analysis Report includes a detailed analysis of remaining capacity at existing Port terminals in both Portland and Vancouver. That capacity was included in the calculation of harbor land need. For example, the remaining capacity in the existing container terminal was deemed to be sufficient to handle forecast cargo growth in that category, including both the low and high end of the forecast. A summary of how existing terminal capacity fits into meeting the forecasted need follows (data source = EcoNorthwest, 2012). The conclusion of this analysis was that WHI development is necessary if the region (including Vancouver) wishes to support cargo growth equivalent to the mid-range forecast or higher. Or, put another way, if WHI is not developed, the regional land supply is only enough to support levels of cargo growth equivalent to the lower third of the forecast. That would put a fairly significant limit on our ability to meet traded sector economic goals adopted with the Portland Plan.

Also see question 57 for more information on the Vancouver and Portland harbor lands.

Cargo Type	Existing Terminal Capacity	Forecast Demand (Low to High Range)	Unadjusted Capacity Gap**	Land Needed to Close Capacity Gap	Land Available (without considering WHI)	Remaining Land Gap (without considering WHI)
Automobiles	765,000 units	970,000 to 1,249,000 units	205,000 to 484,000 units	51 to 757 acres	474 acres (includes 350 acres in Vancouver, 124 acres in Portland Harbor per the adopted EOA)	Up to 783 acres
Containers	700,000 TEU	379,000 to 526,000 TEU	None	None		
Breakbulk	2,881,000 metric tons	1,666,000 to 1,955,000 metric tons	None	None		
Grain	12,644,000 metric tons	10,494,000 to 15,880,000 metric tons	Up to 3,226,000 metric tons*	Up to 200 acres		
Dry Bulk	29,756,000 metric tons	16,209,000 to 35,305,000 metric tons	Up to 5,549,000 metric tons	Up to 300 acres		
Liquid Bulk	9,390,000 metric tons	7,422,000 - 9,106,000 metric tons	None	None		
Total				51 to 1,257 acres (mid-range forecast = 570 acres)***	474 acres	0 to 783 Acres (estimated gap with mid-range forecast scenario is 96 acres)***

* Several of the region’s existing grain terminals are functionally obsolete, lacking adequate on-site rail maneuvering and storage space, and could become non-competitive within the planning horizon, reducing existing capacity. As a result, the shortfall could be higher than this, if that existing capacity is removed.

** Note that the final adjusted capacity gaps noted in EcoNorthwest’s report are slightly different, because in the high, medium and low forecasts they made a range of different assumptions about how much of the remaining capacity would be used new terminals might be built (typically the industry would not wait until 100% of existing capacity is used before they begin work on a new terminal). For simplicity I am reporting only raw un-adjusted shortfall numbers here.

***EcoNorthwest estimated the mid-range “most likely” forecast scenario at 570 acres.

59. Is there any analysis as to what benefits are gained in WA by this proposal vs. OR?

Answer: Current studies did not specifically consider this question. It is likely that a certain percentage of on-site workers at a Vancouver terminal would live and distribute their income within Multnomah County. The Martin & Associates Study from 2011 reviewed the inverse of this question by analyzing the distribution of direct jobs by place of residence at the public and private terminals of the Portland harbor on the Oregon side. Focusing on the public terminals, approximately 42% of the direct jobs were taken by people who lived in Portland or Multnomah County. Approximately 19% lived elsewhere in Oregon (mostly in Clackamas or Washington County). 11% of the direct workers lived in Clark County WA and a larger percentage (27%) lived elsewhere in Washington, which may have indicated that some of the workforce travel longer distances for these direct jobs. However, the majority (60%) of the people in marine terminal jobs currently live in Oregon

The Martin Study's estimates on State and Local taxes followed a similar trend with approximately 62% of total state and local taxes from the public ports benefitting Oregon, totaling over \$43M. These taxes included personal and corporate income tax, insurance tax, gift tax, state fuel tax, school taxes and the Tri-Met taxes. An assumption may be made (but can't be confirmed) that a greater proportion of these jobs, income and taxes would shift to Clark County if a terminal were to be built there first.

Finance, Business Plan and Timing

60. We need a realistic schedule of revenue and deadlines in the IGA.

Answer: Based upon former Mayor Adam's revisions to the Intergovernmental Agreement (IGA), BPS staff have developed an estimated timeline for the development, mitigation and other activities that are needed to establish a marine terminal and meet the community and mitigation requirements dictated by the IGA. *(A summary table of major events and timelines is attached to this document.)* It should be noted that not all expenditures and timelines have been mutually agreed upon.

Assuming a city approval in 2013, and the potential for appeals, a draft effective date in 2015 is selected for the IGA. Once the IGA is put into effect, there are several capital and mitigation projects that need planning and financing up front. These include the acquisition of parks lands for Hayden Island, the extension and improvements to North Hayden Island Drive, and the startup of mitigation on Government Island. During this time period (2015-2017) the Port would be actively working to find potential clients to build and operate the marine terminals. Planning and permitting for the terminals would include review and initial planning for the docks and site (2017-2022), clearing, filling, grading and site preparation for the terminal (2022-2024), and terminal construction (2024-2025). Concurrently with the terminal planning, it is expected that the community and housing funds would also be put in place.

This estimated schedule indicates that under a favorable scenario, revenue from port terminal operations would not begin until approximately 10 years after the effective date of the IGA. Expenses would be occurring during that time both for mitigation and for permitting and preparation of the facility. To aid in bridging the gap between the upfront costs and later revenue generation, Bay Area Economics (BAE), as part of a brief

economic analysis for the project, suggests that the City and Port consider a joint business planning process to help identify additional phasing approaches so that mitigation measures are required only after certain benchmarks are reached, and to better align costs with overall project viability.

61. Provide a cash flow analysis - Port expected revenue vs. expenditures for 50 years.

Answer: The Port of Portland has developed a generalized cash flow analysis and has shared some information about that analysis with Bay Area Economics (BAE). This review resulted in a memo from them dated March 12th (Attachment G). The Port's current cash flow model, using a 12% discount rate for future revenue and expenses, indicates that the project shows a negative financial return to the Port (i.e. cannot generate a yield sufficient enough to offset the discount rate). A secondary analysis using a discount rate of 6% also indicates a negative value when considering the upfront expenses and future revenue. A major hurdle (discussed below and in Question 60) is with the timing of expenses versus revenue. The method of applying a discount formula to the net difference between revenues and expenses over a long period of time is very sensitive to the timing of each revenue and expense item.

Caution: This analysis of return on investment for the Port is not the same thing as the overall cost-benefit analysis, because many of the benefits accrue to the wider public, rather than as revenue directly to the Port. In other words, it is possible for a project to have overall public benefits for the region, when considering all factors (jobs, income to business, general tax revenue, lost ecosystem services, etc.) but still not be financially feasible for the Port to implement by itself.

There are several assumptions within the Port's model that BAE states could affect the feasibility of the project as currently detailed in the Mayor's IGA revision. These include:

Project Timing and Impact on Bottom Line Cash Flows: The Port's model indicates a 20 year duration, of which the first 10 years have substantial costs. Considering the discount rates applied to both revenue and expenses, the 10 year hole is a tough hurdle to exceed. BAE felt that the structure of the IGA could potentially be altered so that the expenditures for the project better match with the timing of future revenue, and/or future development impacts. The Port, as part of their presentation on January 22, 2013 illustrated how responsibilities such as Superfund obligations and other infrastructure and natural resource projects may affect their cash flow. Additional detail on the scheduling is provided in Question 60 above.

Escalation Assumptions: The Port's model assigns a higher inflation rate to costs than to revenues, which is typical in conservative cash flow models. However, similar to above, this assumption makes it more difficult to recover upfront costs in a "discount net present value" calculation. Due to the undefined nature of the future development, the Port feels a conservative cash flow is best suited to the assessment.

Potentially Low Revenue Estimates: The Port bases their rent assumptions on the Toyota facility and their other marine terminal tenants. However, BAE felt that there is potential to receive greater revenues, considering what other ports have received for

auto marine terminals, especially when dealer-prep facilities are incorporated into the project. It should be noted that there is disagreement on this point as the Toyota terminal currently includes certain installation features. The Port states that the comparison ports are not in the Ports competitive market area, and comparison with other Lower Columbia River Ports and Grays Harbor are more appropriate. In follow-up conversations, BAE states that the geographic location has less influence on lease rates, which is what drives revenue, than the typical land value which is more reliant on real estate markets. Since the Port typically leases their sites, the lease rate is more pertinent to the analysis.

Potentially High Development Costs: The Worley Parsons Concept Plan for the City of Portland provided an overall public development cost estimate of approximately \$96M in today's dollars (this includes Port expenses to prepare the site for development, and other public costs, but not private terminal costs). The largest single line item is the clearing and fill of the site, at roughly \$34M. Other large-scale costs include the amount of environmental and social mitigation, which has been subject to ongoing discussion, but have been in the range of roughly \$30 to \$60M at different times in the negotiation. Another cost factor is the contingency factor. It's possible that additional research could tighten or bring down these costs. Also greater specificity reduces contingency, but several reviewers find that often this specificity increases the cost to the higher end of the contingency range.

Lack of Leverage Using Debt: Often the types of projects that generate public and private benefits can assume a debt financing scheme, through bonds, etc. The Port typically does not have access to public financing mechanisms to fund the project, partly as a result of lease limitations, but BAE feels that exploring this funding mechanism to leverage the costs could increase the overall feasibility.

Discount Rate: Based upon the complexity, uncertainty, and risk of this project, the Port feels that the use of a 12% discount rate is warranted in its model. BAE feels that it may be difficult for the Port to both promote the development and earn a financial return equivalent to this discount rate, and that the project's overall economic benefit may warrant a lower or different method of evaluating its feasibility to the Port (and the region).

It should be noted that there is not universal agreement regarding the opportunity to significantly revise these assumptions. As mentioned under Question 60, BAE recommends a joint business planning process between the City and the Port to address these issues.

62. In the Port's view, provide a decision tree of issues that give them a clear path to market ready development?

Answer: From their view, it will be extremely difficult for a market ready development to be viable for the Port if there are a large number of expenses that need to take place before any revenue can be generated through the operation of the terminal. In their opinion, the expenses must be better triggered through performance standards that link the expenses to measurable impacts of development and the revenue generated by operations. The Port does expect a certain amount of expenses to be triggered prior to

development, but feels that many impacts cannot be considered until there is more certainty on the type of terminal development that will take place.

63. What is the business cycle duration for potential decision makers on a site? (Looking for number of months or years.)

Answer: The development of a marine terminal is considered to be a long-term investment both from the perspective of a port authority and from the perspective of a port operator. Since permitting and construction can take upward of 10 years to complete, it is expected that operations of the terminal may be leased out for 25 to 40 years. Beyond the initial planned life cycle, many Port facilities continue to be re-used over the long term. For example, the Port has continued to use some of its existing facilities well beyond 40 years. It is assumed that the upfront costs would take many years to be recouped, with some studies reporting that the investments take at least a decade to amortize. Public port authorities exist in part because the length of time needed to recoup costs is longer than many private sector business will tolerate.

64. Clear explanation to PSC on the soundness of city estimates of cost of restoration. Are the NPV estimates accurate? Has an independent economist weighed in on these calculations?

Answer: The Net Present Value (NPV) estimates for mitigation were calculated by an independent consultant, ECONorthwest, as part of their cost-benefit analysis. For cost-benefit analyses it is important that a consistent base point be used for all of the analysis, (i.e. current value of dollars). The NPV is a calculation used in the cost-benefit analysis to discount costs or benefits that may occur in the future. The intent of this is to add an adjustment factor related to the fact that people value things that happen now to a greater extent than if they happen far in the future, regardless of inflation or interest rates. As a result, a benefit that occurs 20 years in the future may have less value in today's terms than a benefit that happens now.

As part of an update, ECONW took new mitigation costs calculated from the Bureau of Environmental Services (BES) and determined the NPV of these costs, using 2012 constant dollars. These included estimated costs for enhancement and restoration options with West Hayden Island, Government Island, and Sauvie Island. It is felt that these estimates are accurate for the purpose used (to consider under the cost-benefit scenario).

While the NPV estimates can be used to create a standard method for comparing the benefits and costs of a potential project, they are not intended to be used to determine the amount of money needed to finance the project. As stated by ECONW in an update memo from December 18, additional factors including estimates of future interest rates, inflation and administrative costs must be considered as part of a finance plan. In addition, these estimates involve an element of risk or contingency since a reduction in interest rates or an increase in inflation could result in inadequate funding for the life of the project.

- 65. Can mitigation funding be tied to selected benchmarks of economic success? For example, have extra mitigation triggered if revenue meets certain expectations, or if a second or third terminal is built on the site?**

Answer: See questions 60 and 61. The issue of timing of costs versus receipt of revenue is part of the ongoing discussion. Part of the conclusion of the BAE study is that there may need to be better coordination between the allocation of upfront expenses and future revenue. This could potentially be done through better phasing of mitigation in the IGA. In addition, alternative financing mechanisms involving a wider set of partners could also be explored.

- 33. Do we have any policy levers available to ensure that Columbia Gateway is developed first and that WHI is not developed if the economic reality does not reach the forecast levels at which a second terminal is required?**

Answer: It could be possible to place something into the IGA that requires the Port to allow the Vancouver lands to develop first. But this type of provision may not be consistent with the provisions of Goal 9 under state land use law, which requires that the City of Portland provides adequate industrial lands. It would also promote a land use policy in the IGA that cannot be supported by the Port nor by City, Regional and State policies. Current city policy developed for the Comprehensive Plan Update stress the importance of growing our exports and traded sector industries within our own city boundaries. (See the questions under Goal 9 for more information. Lastly, there may still be uncertainty in regards to the environmental impacts and mitigation required for development at Columbia Gateway, especially in relationship to the impacts on wetlands and shallow water that could impact future development. Although zoning is already in place for Columbia Gateway, environmental issues could still hold up development of this site, which is subject to a different set of regulations outside of the control of Portland or Metro.

Other

- 66. How will future mechanization affect the jobs estimates?**

Answer: As part of the Concept Planning process, the City asked Worley Parsons to consider possible operational efficiencies that could affect the size and intensity of the proposed concept plan terminals (grain, dry bulks and autos). Efficiencies identified included things such as coordinated rail delivery that could allow loading from both rail cars and storage containers and the potential use of structured parking for automobile storage. The report did not determine that further automation would have an effect on efficiency or number of employees.

As a result of this question, staff followed up with Worley Parsons to see if they anticipate increases in mechanization as having an effect on employment. They do not estimate that future operational efficiencies would have an effect on jobs estimates to any level of substantial significance, in comparison with state of the art operations in existing terminals today. Mechanization could affect some terminals such as container terminals to a greater extent than bulk terminals, which already have mechanized much of their loading and unloading. A more significant change in employment numbers could

occur depending on the labor situation. A non-unionized terminal could result in a smaller workforce than a unionized terminal.

67. As part of the IGA is (or can) the port be required to provide outreach/recruitment to the community to generate additional local benefits through port investments that attract and induce other investments in the local economy? What else can we do to maximize local benefit to Portland firms?

Answer: The IGA currently contains a clause that requires a ‘first source agreement’ to give North Portland residents priority for jobs on WHI created by the development. The community benefit grant will also provide funding to projects that benefit the surrounding community. Since the Port is an agency based in Portland, it is assumed that they will be using local vendors, contractors and service providers for work that they perform on WHI. However, the IGA does not currently contain a provision that requires the Port to work with companies that may have a more direct benefit with island residents either through their office location and/or hiring preferences. Any kind of specific agreement related to recruitment or outreach for hiring of firms for investment would also need to be consistent with the Ports policies for hiring of firms.

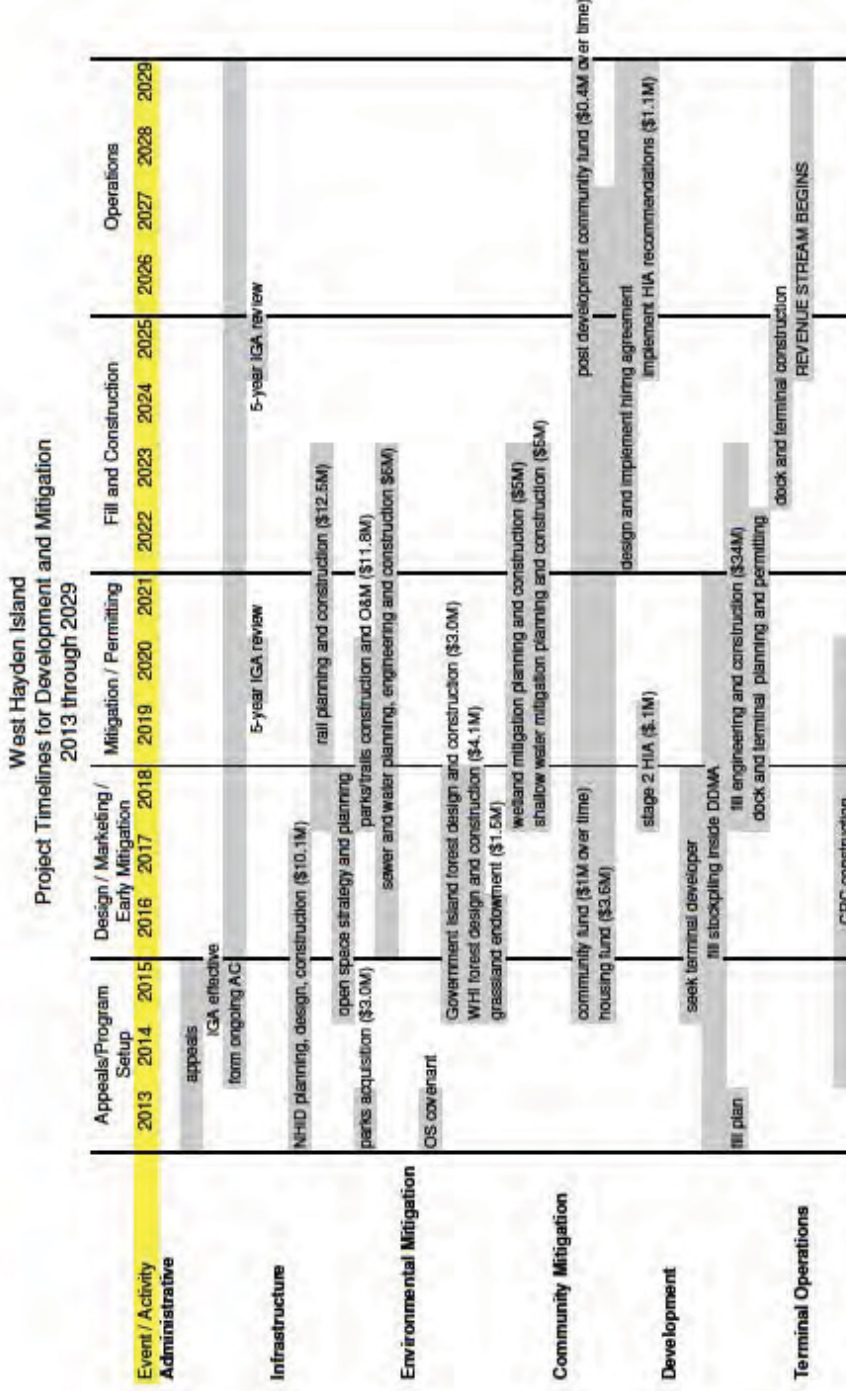
The Port does have a Port-wide Small Business Development Program. Its mission is to “increase local small business participation in Port of Portland projects and procurements through the integration of a portwide process to develop and grow mutually beneficial business relationships with local small businesses.” The focus is to:

- Increase access and participation of small businesses in Port business opportunities.
- Small business development through Port Mentor Protégé Program and partners.

The Port also has a Disadvantaged Business Enterprise (DBE) Program for businesses that are certified as socially or economically disadvantaged in accordance with US Department of Transportation regulations. Details on these programs can be found at http://www.portofportland.com/SROS_SB_Home.aspx.

These programs could be mentioned as part of the best practices for the future port development.

NOTE: Original Timeline – New timeline will follow in subsequent memo.



This document is a hypothetical sequence of events based on the November 21 draft of the City-Port WHI IGA. The purpose of this document is to enable further PSC discussion of potential timeline and cost sequencing concerns raised by stakeholders.

Developed Jan. 2013

Other IGA Legal and Enforceability Questions**Enforceability, Loopholes?**

86. Can the “numerous escape clauses” the Audubon Society (Bob) identified be pointed out?
87. There are various clauses that allow the Port or the City to kill the IGA. What impact do these clauses have on the enforceability? What is the purpose of these caveats?

Answer: *These two questions were combined into one answer:*

The purpose of an intergovernmental agreement (IGA) is to commit the parties to take specific actions for the purpose of achieving a mutually beneficial objective. Often implementation of an IGA may depend on each government entity’s ability to appropriate funds. Additionally, circumstances unforeseen at the time an IGA is entered into may require later changes to the agreement. Finally, the parties may determine that for unforeseen or unforeseeable reasons, the projects or objectives identified in an IGA are not possible to achieve (at least in the way originally envisioned) or are no longer desirable. As a result, an IGA commonly includes provisions that address these variables and allows the parties to adapt to changing circumstances when and if needed. These provisions offer protection for both parties.

The draft City-Port IGA for West Hayden Island (WHI) contains provisions intended to anticipate the situations described above. These are provisions the City often includes in IGAs, such as:

- (1) Nonappropriation language: Section 7.1.4 acknowledges that the parties’ funding obligations are dependent on appropriation of funds by the City Council and Port Commission to carry out the agreement. Without the appropriation of funds, neither party can fulfill their obligations under the agreement. If funds are not available, Section 7.1.6 commits the parties to negotiate in good faith to reprioritize their obligations and seek other funding for a 90-day period. If they are unable to reach agreement, they may elect to terminate the agreement.
- (2) Changes to the IGA: Several provisions of the IGA allow it to be changed in various ways as the parties determine appropriate. These include: (a) extending, modifying, or terminating the agreement when its 25-year term is near expiration (2.1); (b) suspending certain financial obligations if industrial development has not occurred or received permits by July 1, 2027 (7.1.8); (c) allowing the agreement to be amended by mutual written agreement of the parties; and (d) allowing the agreement to be terminated by mutual written agreement, with the exception that either party may terminate the IGA if the other party fails to fulfill certain funding obligations. The IGA also identifies Port obligations that will continue even if the IGA is terminated. These include responsibility for transportation, sewer, and water improvements, a commitment not to seek rezoning of the Open Space-zoned portion of WHI, and maintenance of planted vegetation.

88. What are the “voluntary measures” referenced in the purpose section of the IGA?

Answer: These are activities the Port is agreeing (contractually) to carry out and that go beyond the City’s minimum regulatory requirements.

Under Statewide Planning Goal 5, the City must decide whether to allow fully, limit, or prohibit a use that conflicts with an identified Goal 5 resource, such as a wetland or forest resource. The City weighs the effect of the conflicting use and the resource on each other in a document that analyzes the economic, social, environmental, and energy consequences of these options (referred to as an ESEE Analysis). Based on the ESEE Analysis, the City decides whether the conflicting use should be allowed fully, allowed with some limitations, or prohibited.

In the case of WHI, the City’s ESEE Analysis yielded a decision to allow fully the proposed Port industrial and marine terminal development, but to allow with limitations docks in the water shoreline setbacks. The “allow with limitations” decision is implemented in the proposed zoning code amendments. Although not required by the ESEE Analysis, the Port is agreeing to mitigate for forest losses in the manner described in the IGA. In that sense, the Port’s agreement to do so is a “voluntary measure.” Although the IGA is being entered into voluntarily, it still enforceable.

89. Waiver of Default. What does this mean? (page 121)

Answer: The IGA identifies what happens after one of the parties has breached the agreement (i.e., failed to do what the party has committed to do) and has not taken corrective action within 90 days after being notified of the breach by the non-breaching party. At this point, the breaching party is considered to be “in default”—in violation of the IGA (9.1.1) and the non-breaching party may pursue various remedies outlined in Sections 9.1.2 - 9.1.4. These include going to court to compel the breaching party to honor its commitment under the agreement or any other legally available remedy. An alternative course of action is for the non-breaching party to excuse the breaching party’s failure to honor its commitment under the IGA (9.1.4). This is called “waiver of default.”

90. If the Port fails to achieve actions outlined in section 4 and 5 [environmental and community mitigation] in the agreed to schedule, what is the penalty?

Answer: If the Port fails to perform its obligations under Sections 4 and 5 of the IGA, the City has a variety of remedies available to it. If the Port’s nonperformance is attributable to a lack of funding, the City and Port can agree to renegotiate and/or amend the IGA to identify alternative ways to implement these mitigation actions. This could involve reprioritizing the mitigation obligations, identifying different mitigation actions, or modifying the parties’ respective funding obligations. If the Port fails to perform for other reasons, the City can pursue any other remedies available to it under the agreement, including filing a lawsuit to compel the Port to perform. Even if the Port and City terminated the agreement, however, the Port’s obligations to maintain forest habitat under Sections 4.3.1-4.3.13 of the IGA and to implement the community impact mitigation under Section 5.3 survive termination of the IGA.

91. Can the IGA specify that SB 766 protections for development are waived?

Answer: SB 766 (codified as ORS 197.722 - 197.728) authorizes a state Economic Recovery Review Council to designate up to 15 regionally significant industrial areas (RSIAs) and provides for expedited state and local review of applications to develop or expand an industrial use within a RSIA. It also limits the type of comprehensive plan and zoning actions a local government may take to ensure land within a RSIA is available for the development of industrial uses.

It is legally possible to include language in the IGA that waives all protections for development under SB 766. Whether that is necessary or desirable and the potential positive and negative consequences of including this language are policy questions for the PSC and the City Council to resolve.

It is likely that a provision waiving SB 766 protections for development would be viewed as a symbolic statement with little real impact. BPS staff has not been able to identify a situation where the provisions of SB 766 would provide any advantage to the Port on WHI. Almost all anticipated work on WHI will require federal permits and SB 766 does not apply to projects where federal environmental permits must be obtained. Even if SB 766 applies to a minor non-federal aspect of the WHI development, it provides an advantage (expedited review) to the Port only if the City requires a land use review for that aspect of the proposed development. Under the proposed base zoning and West Hayden Island Plan District regulations, there is no land use review required that could be expedited. Even if the Port and City agreed there is some advantage to waiving SB 766 on WHI, a third party could still nominate WHI for SB 766 protections.

Finally, it is possible that state funding for future industrial infrastructure development will be tied specifically to areas designated as "Regionally Significant Industrial Lands," a term defined in SB 766. Agreeing to waive SB 766 protections could have the unintended consequence of reducing future funding opportunities.

92. What's to say that once annexation is approved there won't be a move to modify or eliminate mitigation requirements based on the [specious] argument that state planning Goal 9 "trumps" Goals 5, 6 and 7 and policy directions from the Portland Plan and Comprehensive Plan?

Answer: Any amendment to the IGA can be made only by mutual written agreement of the City and Port. As a result, any effort to modify or eliminate mitigation requirements stated in the IGA would require both parties to agree. If the City Council concludes modifying or eliminating these mitigation obligations is not in the City's interest, the Council can decline to amend the IGA as requested.

Future Funding Decisions

93. It's a huge leap of faith to assume foundations will fund the work anticipated in the IGA. Even if these potential sources of funding were realistic, what might the impact be on other local and regional funding priorities?

Answer: The source of funding is not assumed or expected to be finalized as part of the IGA.

The IGA recognizes the fact that investments in infrastructure, mitigation, parks development and operations & maintenance will be taking place over a 30 year period, and it is impossible to identify all the funding sources that may be available over such a long timeframe. However, the IGA includes triggers and process points that will help to ensure that items will be funded and constructed prior to other operations taking place. In addition, since many of the potential funding sources could come from federal or state programs, one cannot predict the total amount of that funding in the future, whether these funding sources would be used on other local or regional projects if not on WHI, or if they would fund something elsewhere in the country or the state. There is no assumption that private non-profit foundations would play a role - the term "grant" is a term commonly used to refer generically to many state and federal funding pools.

Other

94. Has this area been designated for industrial development for decades? If so, then why is everyone so surprised that it is being discussed for development? If not, then why are people saying it is?

Answer: West Hayden Island was brought into the urban growth boundary in 1983 (30 years ago) for the purpose of satisfying a regional need for future marine industrial facilities. Presumably many people involved in the current process were not aware of those plans, and that decision. Subsequent regional decisions have also designated the site as an important natural resource. Metro directed the City to develop a plan to accommodate both objectives, if possible.

95. Can we require that a City of Portland Business license be required to do work on WHI (construction or terminal operations)?

Answer: Technically, this is already required. See Chapter 7.02, Business License Law, under the City's Title 7, Business Licenses. Businesses are required to pay a business license tax if they are essentially doing business in the City of Portland (providing goods or services, owning or leasing property, advertising or otherwise professing to do business within the city). Taxes should be collected on the adjusted net operating income. Exemptions may apply in situations where the income may be exempt from taxation through other laws. It is up to the City to collect on these taxes.

Recreation Questions**Costs, Who Does What, Timing Need and Benefits****81. Can the recreation objectives be met without compromising ecological objectives? How do recreation opportunities on WHI impact habitat preservation?**

Answer: To limit the impact on habitat, recreation uses are limited to part of the site, and the types of recreation improvements would be restricted. Low impact recreation (trails) are planned on the eastern side of the open space, with beach access and a trailhead near the site entrance. Trails could provide access to the southern shore, and possibly along the beach or along the Power line corridor. The western side of the open space is reserved for natural resource mitigation and enhancement, with no formal recreation. A more specific trail plan and open space strategy is suggested in the IGA, to be developed after annexation, but before development. The proposed zoning code includes review standards and criteria that would be used to determine mitigation for recreational impacts at the time of recreational development.

The area where recreation impact is anticipated to be the greatest is near the site entrance. A trailhead, parking or other facilities, along with a trail accessing the beach, may be located here. For these reasons, the City's proposed on-site mitigation does not credit this portion of the site. In other words, no mitigation is planned in that area.

82. Have enough funds been allocated to open space planning and design on the 500 acres? (noted difference between the 500 acres and the 6 acres).

Answer: Portland Parks & Recreation estimates the planning cost will be \$150,000 for the open space planning that includes recreation improvements and habitat enhancements. If the Port is using the area for mitigation, then the cost for just planning recreational improvements is \$75,000. This is only planning work - conceptual design (10%). Additional money will be needed for construction documents and permitting.

Currently the IGA lays out planning and design for the 500 acres on WHI in the following sections:

- Open space strategy (Section 7.2.1): focuses on the recreational improvement planning on West Hayden Island and the establishment of a timeline for those improvements. In addition the plan is expected to facilitate the implementation of the conservation measures described in section 4 of the IGA and a means to coordinate recreation projects on both WHI and East Hayden Island. The agreement states that the Port agrees to pay for BES, PP&R and consultant time to support City participation in development of an open space strategy, up to \$200,000 (Section 7.2.1).
- Design/Engineering of recreational trail system on WHI (Section 3.2.2.2): the Port agrees to pay PP&R \$150,000 for design and engineering of the trail system (upon completion of the Open Space Strategy)

Outstanding Issue:

- PP&R prefers that the Port be responsible for the design, construction and permitting of the recreational amenities as part of their development. Currently the agreement states that permitting, design and construction of trail and parks improvements will be the City's responsibility. Under the current IGA the Port's obligation is limited to providing funding and access to the Port property. The current IGA language reflects BPS's recommendation that Parks is better equipped to manage that public design and construction process, since that kind of activity is more central to their mission than the Port's.

83. Why was the development of a written strategy for use of the Open Space area changed from one year to 5 years? Is \$200,000 sufficient compensation to the city for BES and Parks and Recreation work on the development of the strategy?

Answer: The IGA states that the Port will prepare the written strategy in consultation with PP&R and BES. The time frame for producing a written strategy was changed to 5 years due to limited staff time and resources at PP&R, in the near-term. PP&R will need to schedule this work in the future. The current amount of \$200,000 is to support staff participation in the process from each agency.

84. Please provide a clear understanding with Parks on what is being proposed, how it is funded, who owns the park and who maintains the park etc.

Answer: The IGA currently discusses recreation improvements for West and East Hayden Island.

West Hayden Island: Section 3.2.1 describes the recreational improvements on WHI in accordance with the concept planning work completed by project consultant Worley Parsons. The WorleyParson's report estimates that this system will cost \$1.8 million including engineering, design, construction and construction management cost. The improvements include: trails, parking lot, restrooms and an overlook. The Port agrees to provide Portland Parks and Recreation (PP&R) \$1.8 million for these recreational improvements. The Port will also pay PP&R for operation and maintenance costs for 10 years or at least \$1 million, whichever is larger. If mitigation is required for the construction of the recreational facilities, the Port will be responsible for providing the mitigation, including the O&M, and fulfilling the monitoring requirements.

Outstanding issues:

- As noted above in question # 82, the current IGA language reflects BPS's recommendation that PP&R is better equipped to manage that public design, engineering and construction process, since that kind of activity is more central to their mission than the Port's.
- If PP&R was to manage the entire process for the recreational trail development, they estimate \$615,000 for permitting, design, engineering and construction oversight. They also would calculate a 40% contingency on top of the \$1.8 million construction costs. This is higher than Worley Parsons concept planning estimates which did not factor in permitting expenses and also estimated a lower contingency fee than PP& R uses.

- The Port has not committed to the O&M support for WHI trail development

East Hayden Island: In Section 3.2.2.1 of the draft IGA, as currently written the Port would agree to purchase and convey at no cost to the City, at least 6 acres of park land within the Hayden Island Neighborhood, east of the BNSF Railroad. Any environmental clean up and roadway improvements would be the Port's responsibility. The Port would agree to pay the City \$7 million for parks design, engineering, and capital improvements. The City would agree to contribute \$1 million toward design and engineering and/or the capital improvements. The Port would agree to pay a lump sum of \$2 million or enough to cover 10 years of O&M, whichever is larger for the 6 acres of park land.

Outstanding issues:

- The Port supports recreational park land acquisition but has not committed to providing money for parks design, engineering and capital improvements or O & M.
- PP&R provided a cost estimate to the City for the design, engineering, capital improvements and O&M for 2.6 acres, not 6 acres. The estimate provided for 2.6 acres is \$8.4 million. PP&R is primarily interested in a 2.6 acre area directly abutting the shoreline, and is not interested in the larger 6 acre area.
- PP&R has indicated that if there is a larger park then it will need to be a public private partnership or owned and managed by another entity.

Recommendations

- The timing for the construction of the parks and trails should be pushed back to align with initial construction of the terminal on WHI so that terminal construction doesn't impact the recreation improvements.
- The IGA should be amended to further clarify the responsible parties for the recreation improvements on both WHI and EHI (since the bureaus disagree, PSC will need to provide direction on who that should be).

85. Describe the relationship between a potential boat ramp east of the tracks and proposed passive recreation west.

Boat ramp east

The boat ramp proposal, east of the railroad tracks, has been proposed by Inland Sea Maritime Group. The plan encompasses approximately 6 acres and creates a local park and a motorized and non-motorized boat ramp. Inland Sea Maritime Group has provided comments and drawings in response to this, and other recreation questions (Attachment H). The plan calls for a realignment of N. Hayden Island Drive (NHID) to expand the parking lot. The proposal suggests that this design could accommodate the necessary parking for West Hayden Island recreational trail development.

Outstanding Issues:

- PP&R is interested in park land development on the 2.6 acres property along the Columbia River as noted in response above, but is not interested in operating or maintaining the proposed motorized boat facility. The proposed boat ramps could add significant traffic to NHID, which has not been evaluated.

Passive Recreation west

The WHI concept plan laid out recreational objectives for West Hayden Island. These include:

- Recreational trailhead to northern beach on north shore with parking area and comfort station. A seasonal pedestrian trail to the northern beach that extends to the western tip of the island.
- Access to the eastern end of WHI via optional locations for non-motorized boat launches on the south side of the island
- A pedestrian trail that extends along the southern edge of the facility to the west side of the terminal and then north to a lookout point near Benson Pond.

Relationship between the two proposed recreational improvements: The development of the property east of the railroad tracks as a park could also include a comfort station and parking lot serving WHI. The Inland Sea Maritime Group proposal suggests that having these facilities east of the railroad tracks would relieve the Port property from additional development and could provide the trail head for the WHI trail development. The City feels that the discussion about the potential relationship between these two recreational proposals should take place as part of the Open Space Strategy discussion. It is premature to define this relationship beyond the conceptual plans and discussions that have been presented.



DATE: March 8, 2013
TO: Phil Nameny, Eric Engstrom
FROM: Tom Souhlas, Ed MacMullan
SUBJECT: Error! Reference source not found.

1 Introduction

Staff with the City of Portland (the City) provided ECONorthwest with cost information associated with four action items: (1) forest restoration and enhancement efforts on West Hayden Island (WHI) and Government Island (GI), (2) construction and operations and maintenance (O&M) of park-related efforts on East Hayden Island (EHI), (3) construction and O&M of trail-related efforts on WHI, and (4) land acquisition on EHI. The City asked ECONorthwest to distribute these costs, over time, using several different financing mechanism and payment assumptions. In the remainder of this memo we:

- Summarize the costs associated with each of the four action items identified above.
- Identify and describe these costs under six scenarios.
- Provide additional details regarding our assumptions in Appendix A.

2 Cost Assumptions

In this section, we summarize the cost data we used for our analysis.

2.1 Forest Restoration and Enhancement

The City provided per-acre costs (in constant 2012 dollars) for both forest enhancement and forest restoration, by year, as well as transportation costs related to efforts on GI (see Table 1). The City also provided the total acres of forest enhancement and forest restoration proposed for the two islands. For WHI, we assume a total of 124 acres of forest enhancement and 22 acres of forest restoration. For GI, we assume a total of 296 acres of enhancement and 174 acres of forest restoration, as well as transportation costs. See Appendix A for more details describing these costs. As per the City's assumption, costs associated with GI actions will begin accruing in 2015, and costs associated with WHI actions will begin accruing in 2020.

Table 1. Annual Enhancement, Restoration, and Transportation Costs, by Year (2012\$)

	Forest Enhancement (\$/acre)	Forest Restoration (\$/acre)	Transportation to Government Island
Year 1	\$1,628	\$1,227	\$35,000
Year 2	\$2,299	\$3,698	\$500
Year 3	\$662	\$797	\$500
Year 4	\$1,681	\$1,796	\$500
Year 5	\$386	\$797	\$500
Year 6	\$89	\$386	\$500
Year 7-26	\$238	\$857	\$500
Year 27-30	\$238	\$238	\$500

2.2 Parks on EHI

The City provided cost data and timing of expenditures associated with constructing, operating, and maintaining a 2.6-acre park on EHI. Construction is anticipated to begin in 2018 and will last three years. For our analysis, we assume that construction costs incurred during the first year total \$300,000 (2012\$), and that costs incurred during the second and third years total \$7.3–\$7.5 million (2012\$). We assume that annual O&M costs would begin in 2021 and would total \$200,000 (2012\$) per year.

2.3 Trails on WHI

The City provided cost data and timing of expenditures associated with constructing, operating, and maintaining trails on WHI. Construction is anticipated to begin in 2023 and will last three years. For our analysis, we assume that construction costs incurred during the first year total \$615,000 (2012\$), and that costs incurred during the second and third years total \$2.5 million (2012\$). We assume that annual O&M costs would begin in 2026 and would total \$33,500–\$100,000 (2012\$) per year.

2.4 Land Acquisition on EHI

As per the City’s assumption, land acquisition costs on EHI would total \$3.0 million (2012\$), and would occur in 2015.

3 Analysis

As described in the previous section, our analysis includes a number of different costs that occur at different times from 2015-2044. Appendix A shows the annual costs associated with each action item, by year, from 2015-2044, in constant 2012 dollars. We also

calculated costs in nominal dollars, taking anticipated inflation into account. In this section, we consider these costs under a number of different scenarios, reflecting different financing mechanisms.

3.1 Base Case

Before we describe the effects of different financing mechanisms on total payment amounts, it is helpful to consider the total costs of these action items, in real terms and in nominal terms. In Table 2, we sum the annual costs (in constant 2012 dollars as well as nominal dollars, adjusted for inflation) associated with each action item from 2015-2044. The City provided costs in constant 2012 dollars. As per the City's assumption, we also inflated future costs using the average annual change in the CPI-U¹ over the past 10 years (2.3%).

From an economic perspective, adding costs from different years produces an apples-and-oranges mix of dollars with different values. For this reason we strongly recommend that any policy decisions not be based on the costs summarized in Table 2. We conducted this calculation to help illustrate the effects of incorporating inflation calculations in the following scenarios. .

Table 2. Total Undiscounted Costs, 2015-2044 (in millions of dollars)

	WHI and GI Restoration and Enhancement	EHI Parks Construction and O&M	WHI Trails Construction and O&M	Total*	EHI Acquisition
2012 dollars	\$10.3	\$12.4-\$12.8	\$3.8-\$5.0	\$26.5-\$28.1	\$3.0
Nominal dollars	\$14.2	\$16.7-\$17.1	\$5.2-\$7.3	\$36.1-\$38.7	\$3.2

* Values may not sum due to rounding. Total does not include acquisition costs.

3.2 Lump-Sum Payment

Scenarios 1, 2, and 3 represent the same basic financing mechanism: a lump-sum payment in 2015 that would cover all costs from 2015-2044. The difference between these three scenarios is the interest rate at which that lump-sum payment grows over time. In Scenario 1, we assume an interest rate of 0%. In Scenario 2, we assume an interest rate of 0.5%. In Scenario 3, we assume an interest rate of 5.0%.

¹ The CPI-U, or Consumer Price Index for all urban consumers, uses monthly data on changes in the prices paid by urban consumers for a representative basket of goods and services to estimate inflation. For more details, see <http://www.bls.gov/cpi/>.

We summarize the payments associated with Scenarios 1, 2, and 3 in Table 3 and Figure 1. Assuming an interest rate of 0%, Scenario 1 would require a lump-sum payment of \$36.1-\$38.7 million in 2015 to cover costs for the following 30 years. Scenario 2 and 3 would require smaller lump-sum payments because those funds would earn interest. Scenario 3 requires the smallest lump-sum payment (\$22.1-\$23.2 million) because it has the highest interest rate. Acquisition costs are the same across all scenarios because acquisition is anticipated to occur in 2015, before any of the payments begin earning interest.

Since these three scenarios require full payment in 2015, their values in Table 3 are in 2015 dollars (inflated by 2.3% per year from 2012 dollars).

3.3 Incremental Payments

Scenarios 4, 5, and 6 represent a different financing mechanism: 6 incremental 5-year payments occurring in 2015, 2020, 2025, 2030, 2035, and 2040 that would cover costs over the 30-year period. In Scenario 4, we assume an interest rate of 0%. In Scenario 5, we assume an interest rate of 0.5%. In Scenario 6, we assume an interest rate of 5.0%.

We summarize the payments associated with Scenarios 4, 5, and 6 in Table 3 and Figure 1. Since Scenario 4 assumes a 0% interest rate on all payments, it is essentially the same as Scenario 1. The sum of all payments in Scenario 4 total \$36.1-\$38.7 million. The timing of these payments, however, is different than Scenario 1. In Scenario 4, a payment of \$8.4-\$8.6 million (2015\$) would be made in 2015, and would cover costs incurred from 2015-2019. In 2020, a payment of \$10.4-\$10.6 million (2020\$) would be made, which would cover costs incurred from 2020-2024. The rest of the 5-year payments are summarized in Table 3. Scenarios 5 and 6 are more complex because as each 5-year payment is spent on costs, it grows with interest. In Scenario 5, the interest rate is 0.5%, and in Scenario 6, the interest rate is 5.0%. Since Scenario 5 has such a low interest rate, its 5-year payments are similar to those under Scenario 4. Since Scenario 6 assumes a much higher interest rate, its 5-year payments are less than Scenarios 4 and 5.

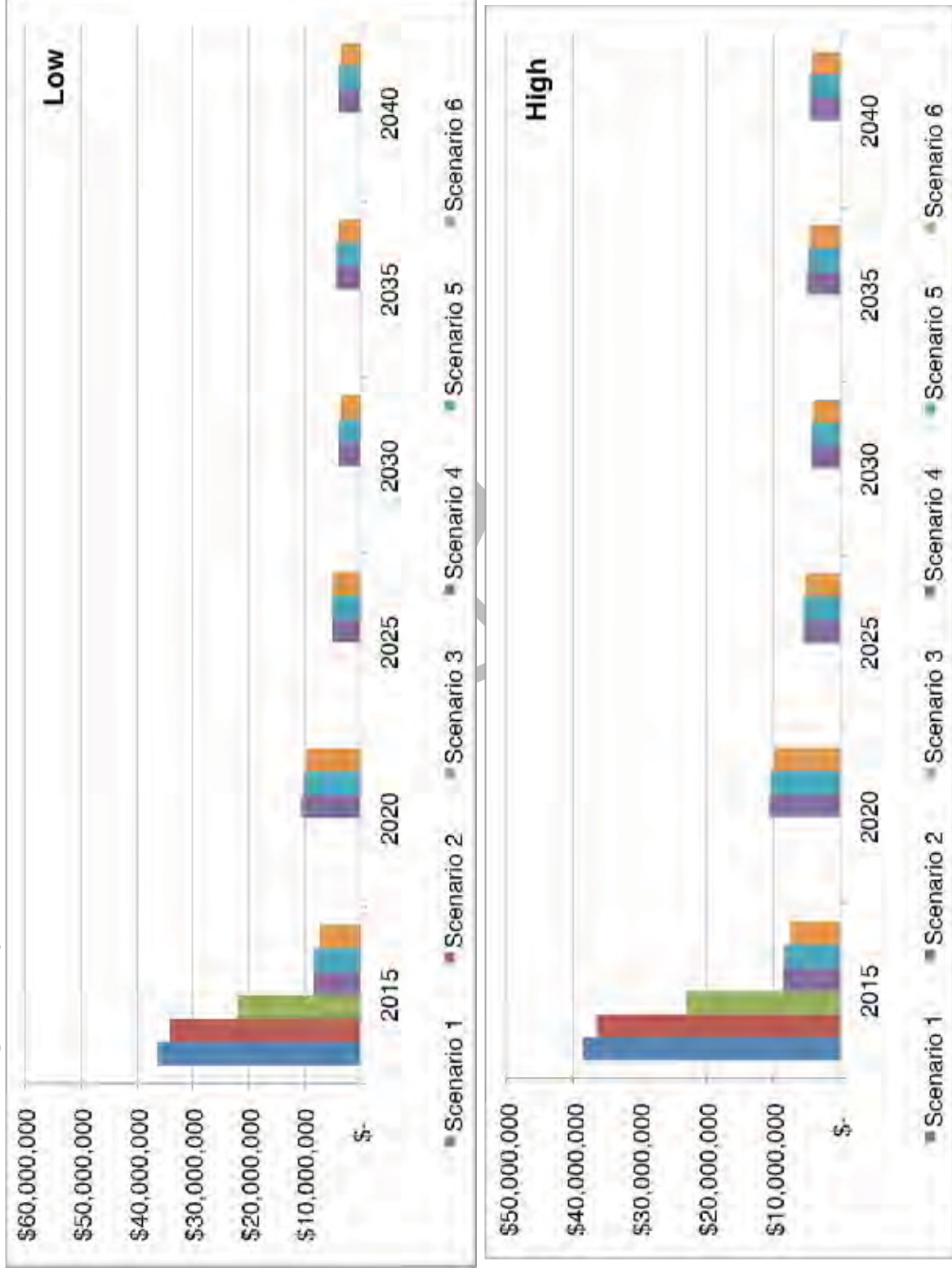
Since these scenarios require incremental payments over time, the values in Table 3 represent nominal values, adjusted for inflation, in the year of payment. From an economic perspective, adding the nominal values of payments over the 30-year period produces an apples-and-oranges mix of dollars with different values. Of interest in our analysis, however, is the nominal dollars that will be required in the future, not the net present value of those future expenditures in today's dollars. Hence, our sums of totals payments over 30 years is primarily useful in comparing the scenarios with each other, but does not represent the present value of future payments.

Table 3. Total Costs for Scenarios 1, 2, 3, 4, 5, and 6, 2015-2044 (in millions of nominal dollars)

	Payment Period	WHI and GI Restoration and Enhancement	EHI Parks Construction and O&M	WHI Trails Construction and O&M	Total*	EHI Acquisition
Scenario 1	2015-2044	\$14.2	\$16.7-\$17.1	\$5.2-\$7.3	\$36.1-\$38.7	\$3.2
	2015-2044	\$13.4	\$15.8-\$16.2	\$4.9-\$6.8	\$34.1-\$36.5	\$3.2
	2015-2044	\$8.5	\$10.5-\$10.9	\$3.0-\$3.8	\$22.1-\$23.2	\$3.2
Scenario 4	2015-2019	\$3.8	\$4.6-\$4.8	\$0.0-\$0.0	\$8.4-\$8.6	\$3.2
	2020-2024	\$2.5	\$5.5-\$5.7	\$2.4-\$2.4	\$10.4-\$10.6	--
	2025-2029	\$1.8	\$1.4-\$1.4	\$1.9-\$2.3	\$5.1-\$5.5	--
	2030-2034	\$2.1	\$1.6-\$1.6	\$0.3-\$0.8	\$3.9-\$4.4	--
	2035-2039	\$2.4	\$1.8-\$1.8	\$0.3-\$0.9	\$4.4-\$5.0	--
Scenario 5	2040-2044	\$1.7	\$2.0-\$2.0	\$0.3-\$1.0	\$3.9-\$4.6	--
	Total	\$14.2	\$16.7-\$17.1	\$5.2-\$7.3	\$36.1-\$38.7	\$3.2
	2015-2019	\$3.8	\$4.5-\$4.7	\$0.0-\$0.0	\$8.3-\$8.5	\$3.2
	2020-2024	\$2.5	\$5.5-\$5.7	\$2.4-\$2.4	\$10.3-\$10.5	--
	2025-2029	\$1.8	\$1.4-\$1.4	\$1.9-\$2.2	\$5.1-\$5.5	--
Scenario 6	2030-2034	\$2.1	\$1.6-\$1.6	\$0.3-\$0.8	\$3.9-\$4.4	--
	2035-2039	\$2.3	\$1.7-\$1.7	\$0.3-\$0.9	\$4.3-\$4.9	--
	2040-2044	\$1.7	\$1.9-\$1.9	\$0.3-\$1.0	\$3.9-\$4.6	--
	Total	\$14.1	\$16.5-\$17.0	\$5.1-\$7.2	\$35.8-\$38.3	\$3.2
	2015-2019	\$3.5	\$3.8-\$3.9	\$0.0-\$0.0	\$7.3-\$7.5	\$3.2
Scenario 6	2020-2024	\$2.3	\$5.4-\$5.6	\$2.0-\$2.0	\$9.7-\$9.9	--
	2025-2029	\$1.7	\$1.3-\$1.3	\$1.9-\$2.2	\$4.8-\$5.1	--
	2030-2034	\$1.9	\$1.4-\$1.4	\$0.2-\$0.7	\$3.6-\$4.0	--
	2035-2039	\$2.1	\$1.6-\$1.6	\$0.3-\$0.8	\$4.0-\$4.5	--
	2040-2044	\$1.5	\$1.8-\$1.8	\$0.3-\$0.9	\$3.6-\$4.2	--
Total	\$13.0	\$15.2-\$15.6	\$4.7-\$6.6	\$32.9-\$35.2	\$3.2	

* Values may not sum due to rounding. Total does not include acquisition costs.

Figure 1. Payments for Scenarios 1, 2, 3, 4, 5, and 6, 2015-2044 (in nominal dollars)*



* Values in the figures are based on the "Totals" column in Table 3.

Appendix A.

This appendix shows annual costs in 2012 dollars as well as nominal dollars, inflated for inflation (2.3% per year). The annual costs and schedule of costs are based on information provided by the City.

Annual Costs (2012\$)

Year	WHI and GI Restoration and Enhancement	EHI Parks Construction and O&M (Low)	EHI Parks Construction and O&M (High)	WHI Trails Construction and O&M (Low)	WHI Trails Construction and O&M (High)	EHI Acquisition
2015	\$730,284	--	--	--	--	\$3,000,000
2016	\$1,324,285	--	--	--	--	--
2017	\$335,360	--	--	--	--	--
2018	\$810,542	\$150,000	\$150,000	--	--	--
2019	\$253,499	\$3,743,662	\$3,925,000	--	--	--
2020	\$322,929	\$3,743,662	\$3,925,000	--	--	--
2021	\$586,342	\$200,000	\$200,000	--	--	--
2022	\$319,668	\$200,000	\$200,000	--	--	--
2023	\$467,919	\$200,000	\$200,000	\$615,000	\$615,000	--
2024	\$285,375	\$200,000	\$200,000	\$1,260,000	\$1,260,000	--
2025	\$239,547	\$200,000	\$200,000	\$1,260,000	\$1,260,000	--
2026	\$268,299	\$200,000	\$200,000	\$33,500	\$100,000	--
2027	\$268,299	\$200,000	\$200,000	\$33,500	\$100,000	--
2028	\$268,299	\$200,000	\$200,000	\$33,500	\$100,000	--
2029	\$268,299	\$200,000	\$200,000	\$33,500	\$100,000	--
2030	\$268,299	\$200,000	\$200,000	\$33,500	\$100,000	--
2031	\$268,299	\$200,000	\$200,000	\$33,500	\$100,000	--
2032	\$268,299	\$200,000	\$200,000	\$33,500	\$100,000	--
2033	\$268,299	\$200,000	\$200,000	\$33,500	\$100,000	--
2034	\$268,299	\$200,000	\$200,000	\$33,500	\$100,000	--
2035	\$268,299	\$200,000	\$200,000	\$33,500	\$100,000	--
2036	\$268,299	\$200,000	\$200,000	\$33,500	\$100,000	--

2037	\$268,299	\$200,000	\$200,000	\$33,500	\$100,000	--
2038	\$268,299	\$200,000	\$200,000	\$33,500	\$100,000	--
2039	\$268,299	\$200,000	\$200,000	\$33,500	\$100,000	--
2040	\$268,299	\$200,000	\$200,000	\$33,500	\$100,000	--
2041	\$146,892	\$200,000	\$200,000	\$33,500	\$100,000	--
2042	\$146,892	\$200,000	\$200,000	\$33,500	\$100,000	--
2043	\$146,892	\$200,000	\$200,000	\$33,500	\$100,000	--
2044	\$146,892	\$200,000	\$200,000	\$33,500	\$100,000	--

Annual Costs (nominal dollars)

Year	WHI and GI Restoration and Enhancement	EHI Parks Construction and O&M (Low)	EHI Parks Construction and O&M (High)	WHI Trails Construction and O&M (Low)	WHI Trails Construction and O&M (High)	EHI Acquisition
2015	\$780,868	--	--	--	--	\$3,207,799
2016	\$1,447,981	--	--	--	--	--
2017	\$374,963	--	--	--	--	--
2018	\$926,718	\$171,500	\$171,500	--	--	--
2019	\$296,376	\$4,376,872	\$4,588,882	--	--	--
2020	\$386,073	\$4,475,682	\$4,692,478	--	--	--
2021	\$716,818	\$244,505	\$244,505	--	--	--
2022	\$399,625	\$250,025	\$250,025	--	--	--
2023	\$598,162	\$255,669	\$255,669	\$786,183	\$786,183	--
2024	\$373,043	\$261,441	\$261,441	\$1,647,079	\$1,647,079	--
2025	\$320,206	\$267,343	\$267,343	\$1,684,262	\$1,684,262	--
2026	\$366,736	\$273,379	\$273,379	\$45,791	\$136,689	--
2027	\$375,015	\$279,550	\$279,550	\$46,825	\$139,775	--
2028	\$383,481	\$285,861	\$285,861	\$47,882	\$142,931	--
2029	\$392,138	\$292,315	\$292,315	\$48,963	\$146,157	--
2030	\$400,991	\$298,914	\$298,914	\$50,068	\$149,457	--
2031	\$410,043	\$305,662	\$305,662	\$51,198	\$152,831	--

2032	\$419,300	\$312,562	\$312,562	\$52,354	\$156,281	--
2033	\$428,766	\$319,618	\$319,618	\$53,536	\$159,809	--
2034	\$438,446	\$326,834	\$326,834	\$54,745	\$163,417	--
2035	\$448,344	\$334,212	\$334,212	\$55,981	\$167,106	--
2036	\$458,465	\$341,757	\$341,757	\$57,244	\$170,879	--
2037	\$468,815	\$349,472	\$349,472	\$58,537	\$174,736	--
2038	\$479,399	\$357,362	\$357,362	\$59,858	\$178,681	--
2039	\$490,221	\$365,430	\$365,430	\$61,209	\$182,715	--
2040	\$501,288	\$373,679	\$373,679	\$62,591	\$186,840	--
2041	\$280,649	\$382,115	\$382,115	\$64,004	\$191,058	--
2042	\$286,985	\$390,742	\$390,742	\$65,449	\$195,371	--
2043	\$293,464	\$399,563	\$399,563	\$66,927	\$199,781	--
2044	\$300,089	\$408,583	\$408,583	\$68,438	\$204,291	--

Comments Received by Technical Reviewers to Staff's Economic Questions and Answers.

Note that staff sent specific questions and answers to different technical reviewers depending on their experience. Reviewers included:

ECONW: Ed McMullan & Terry Moore
Bay Area Ec: Janet Smith-Heimer
Port: Keith Leavitt & Greg Theisen
Business Oregon: Mike Williams
City OMF: Jennifer Cooperman
PDC: Bruce Allen

Comments from Ed McMullan & Terry Moore (ECONW). Please also see their initial responses to our questions.

No suggested additions or changes to the ben-cost responses.

It was interesting to read about the issues addressed by the BAE study.

Thanks
Ed

Sorry, we should have responded to let you know that we are tracking.

- Nick and I think that the responses re our Portland Harbor analysis are close enough
- Ed will be sending you comments on the BCA part. I think he is working on that today.

Terry Moore
ECONorthwest

Comments from Mike Williams (Business Oregon)

Did a quick review. I have nothing to add or correct.

- Mike

Comments from Jennifer Cooperman (Office of Management & Finance)

The Port's presentation on its finances at last Tuesday's PSC meeting was illuminating. The BAE memo will need to be rewritten to reflect the Port's policy approach for cash-financing its property development projects such as WHI.

Regarding the draft responses you forwarded to me for review, please note that most of the questions extend beyond my comfort zone as I do not profess to have any expertise on the benefit of traded sector industries nor on the impact to the State's (!) general fund over 50 (!) years. By the way, has anyone in BPS tapped PDC's expertise on any of these matters, since economic development is their bailiwick?

All that notwithstanding, here are my two specific comments:

- Page 1, second paragraph states: Traded sector industrial jobs are often middle income jobs that provide opportunities for people without college degrees. MI thought the traded sector workers were better educated than the local sector (my read of this article <http://www.valueofjobs.com/pdfs/traded-sector-study-FINAL.pdf>).
- Correct the typo in the following sentence (“its” rather than “it’s”) – Portland is actually located west of LA/Long Beach and it’s more northerly location benefits ships that cross over the Northern Pacific.

I do think it would be useful to discuss the financial assumptions and approach directly with the Port at some point.

Comments from Bruce Allen (PDC) to our answers. Please refer to the initial response section for his 12/31 and 12/28 emails

Follow-up email from Bruce on 2/20 after discussion with BAE
Phil,

The issues with the “land values” is, on the one hand, simple, and, on another, complicated. We are in complete agreement that land values for “industrial land” is between \$5 and \$7 psf. In Portland, the current # is around \$5.25 - \$5.75. Rail service and other amenities add a little, maybe another \$1.00 psf. BAE’s numbers are closer to \$6 - \$7 adjusted for location. But, again, these are for land, not terminal facilities. One of the reasons that the POP may keep coming back to this number is perhaps because they have an extraordinary amount of land under lease or sale, probably one of the largest inventories in the west.

BAE is right that valuing a marine terminal is different, in part, because they are not bought and sold on the open market. And, their income comes from various combinations of rent, fees, commissions, incentives, etc, etc. Hence, in a productive environment, they can be and often are quite profitable and income may exceed what a static sale of vacant land, or a long term lease, would bring.

So, the Port knows what land sales bring. But, on the other hand, they have had less success with overall marine terminal operations, although their auto and bulk traffic has seen a steady cash flow. So, they are understandably, and justifiably, gun-shy about overestimating income for operations since they face challenges growing their marine business 100 miles upriver, not to mention labor and other issues.

The biggest factor in valuing real estate investments (or, any investments, for that matter) is the unknown, or, in another word, uncertainty. While Long Beach and LA and others also face uncertainty, it is probably not nearly the same as it is here in PDX. This in not to suggest that the risk is high, but rather, that it's safer to make somewhat more conservative assumptions about sales, costs and liabilities since these factors are so heavily influenced by the factors discussed above.

Email from 1/24
Phil,

As the questions from the PSC are pretty specialized in terms of 1) macro economics, and 2) Information that Port can best respond to, I really don’t have anything to add. If asked for some specific feedback/recommendations, I think I would touch on the points I made in my 12/28 and 12/31 e-mails to you and your team.

The following pages present comments in Track Changes form from the following:

- Janet Smith-Heimer (Bay Area Economics)
- Keith Leavitt & Greg Theisen (Port or Portland) - two sets of comments

West Hayden Island - Planning & Sustainability Commission's Questions**Economic / Finance Questions to BAE (Janet Smith-Heimer) for review.**

Note, these responses are drafted by City Staff. In some cases, preliminary input has been received from other parties such as the Port, Portland Business Alliance and ECONW consultants (who worked on the Harbor Lands and Cost-Benefit Analyses. Where applicable or needed, we incorporated information from their responses in our answers. In some cases, we may still be looking for additional information to help complete the answer. Your comments on these may also be helpful. In general, we are looking for input from you to verify the response based on your role in regards to the financing and revenue timing for WHI.

Taxes / Revenue Distribution

- Describe the overall benefits of traded sector industries (including trans-shipment ports) on regional and state economy. What benefit does a "pass-through" port have, if we assume it is not focused on shipping local goods? (Q52 from PSC list)

Answer: In general, traded sector industries are beneficial to local economies by bringing export income into a region. Traded sector industries export a portion of their goods and services beyond the metropolitan region which bring in outside income that can be used for further investment. Export activity can generate new jobs that wouldn't otherwise occur to serve the existing population. These export markets can also drive competition and productivity gains.

In the case of trans-shipment ports, the benefits may be distributed over a wider region, especially if the goods or services are produced elsewhere. However, international and domestic shipping is a traded sector on its own, as the ports and transportation network provide the logistics and service to move and transfer the goods, sometimes with value added to the goods. This activity feeds into the region's transportation and wholesale trade sector. Overall, traded sector activity accounted for an estimated 61% of the transportation sector and 43% of the wholesale trade sector in the Portland metropolitan regions (ECONW 2012). Traded sector industrial jobs are often middle income jobs that provide opportunities for people without college degrees. These types of jobs can help reduce the equity gaps between higher paying professional occupations and lower paying service positions. Freight gateways also create key transportation costs and conveniences that can help producers both in the metropolitan region and throughout the west, including metals manufacturers in Portland and Eastern Oregon farmers.

Lastly, providing local opportunities for the growth of transportation sector ports and hubs can justify continuing national-system investments in river channel, rail and road infrastructure, which benefit all traded sector industries in the region. Portland's Pacific Rim location and river-grade access through the Cascade Range provides important locational advantages for freight hub infrastructure and the regional distribution sectors. Pass-through cargo in dry bulks and containers are a strategic service priority for both the Union Pacific and Burlington Northern Santa Fe railroads in the Pacific Northwest, and investment in ports servicing these commodities would lead to further railroad investments that could help other freight and passenger rail. Although Portland is located upriver from the coast, its location, from an east/west

perspective is comparable to the Ports of Vancouver BC, Seattle, Tacoma and Oakland. Portland is actually located west of LA/Long Beach and it's more northerly location benefits ships that cross over the Northern Pacific. This location provides an advantage for trade with Asia.

Financing / Timing

- We need a realistic schedule of revenue and deadlines in the IGA. (Q60 from PSC list)

Answer: Based upon the Mayor's revisions to the Intergovernmental Agreement (IGA), BPS staff have developed an estimated timeline for the development, mitigation and other activities that are needed to establish a marine terminal and meet the community and mitigation requirements dictated by the IGA. *(A summary table of major events and timelines is attached to this document.)*

Assuming a city approval in 2013, and the potential for appeals, a draft effective date in 2015 is selected for the IGA. Once the IGA is put into effect, there are several capital and mitigation projects that need planning and financing up front. These include the acquisition of parks lands for Hayden Island, the extension and improvements to North Hayden Island Drive, and the startup of mitigation on Government Island. During this time period (2015-2017) the Port would be actively working to find potential clients to build and operate the marine terminals. Planning and permitting for the terminals would include review and initial planning for the docks and site (2017-2022), clearing, filling, grading and site preparation for the terminal (2022-2024) and terminal construction (2024-2025). Concurrently with the terminal planning, it is expected that the community and housing funds would also be put in place.

This estimated schedule indicates revenue from port terminal operations would not begin until approximately 10 years after the effective date of the IGA. Expenses would be occurring during that time both for mitigation and for permitting and preparation of the facility. To aid in bridging the gap between the upfront costs and later revenue generation, Bay Area Economics (BAE), as part of a brief economic analysis for the project, suggests that the City and Port consider a joint business planning process to help identify additional phasing approaches so that mitigation measures are required only after certain benchmarks are reached, and to better align costs with overall project viability.

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- Provide a cash flow analysis - Port expected revenue vs. expenditures for 50 years. (Q61 from PSC list)

Answer: The Port of Portland has developed a generalized cash flow analysis, with a version of its results, reviewed online by Bay Area Economics (BAE), but the model was not provide to BAE, constraining its full analysis. This review, resulted in a memo from them dated December 28. The Port's current cash flow model, using a 12% annual discount rate for future revenue and expenses, indicates that the project shows a negative value (i.e. cannot generate a yield sufficient enough to offset the discount rate). A secondary analysis using a discount rate of 6% also indicates a negative value when considering the upfront expenses and future revenue. A major hurdle (discussed below and in Question 60) is with the timing of expenses versus revenue. The method of applying a discount formula to the net difference between revenues and expenses

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over a long period of time, is very sensitive to the timing of each revenue and expense item.

There are several assumptions within the Port’s model that BAE states could impact the feasibility of the project as currently detailed in the Mayor’s IGA revision. These include:

Project Timing and Impact on Bottom Line Cash Flows: The Port’s model indicates a 20 year duration, of which the first 10 years have substantial costs. Considering the discount rates applied to both revenue and expenses, the 10 year hole is a tough hurdle to exceed. BAE felt that the structure of the IGA could potentially be altered so that the expenditures for the project better match with the timing of future revenues. Additional detail on the scheduling is provided in Question 60 above.

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Escalation Assumptions: The Port’s model assigns a higher inflation rate to costs than to revenues, which is typical in conservative cash flow models. However, similar to above, this assumption makes it more difficult to recover upfront costs in a “discount net present value” calculation.

Potentially Low Revenue Estimates: The Port bases their rent assumptions on the Toyota facility. However, BAE felt that there is potential to receive greater revenues, considering what other ports have received for auto marine terminals, especially if dealer-prep facilities are incorporated into the project.

Potentially High Development Costs: The Port provided an overall development cost estimate of approximately \$96M in today’s dollars. Some of this total is based on the estimates for mitigation and recreation costs. However, the largest single item is the clearing and fill of the site which, at \$34M, is based on an estimate from the Concept Plan consultant, Worley Parsons. Another cost factor is the contingency factor. It’s possible that additional research could tighten or bring down these costs.

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Lack of Leverage Using Debt: Often the types of projects that generate public and private benefits can assume a debt financing scheme, through bonds, etc. The Port typically does not have access to public financing mechanisms to fund the project, but BAE feels that exploring this funding mechanism to leverage the costs could increase the overall feasibility.

Discount Rate: Based upon the complexity, uncertainty and risk of this project, the Port feels that the use of a 12% discount rate is warranted in its model. BAE feels that it may be difficult for the Port to both promote the development and earn a financial return equivalent to this discount rate, and that the project’s economic benefit may warrant a lower or different method of evaluating its feasibility to the Port.

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It should be noted that there is not universal agreement regarding the opportunity to significantly revise these assumptions. As mentioned under Question 60, BAE recommends a joint business planning process between the City and the Port to address these issues.

- In the Port’s view, provide a decision tree of issues that give them a clear path to market ready development? (Q62 from PSC list)

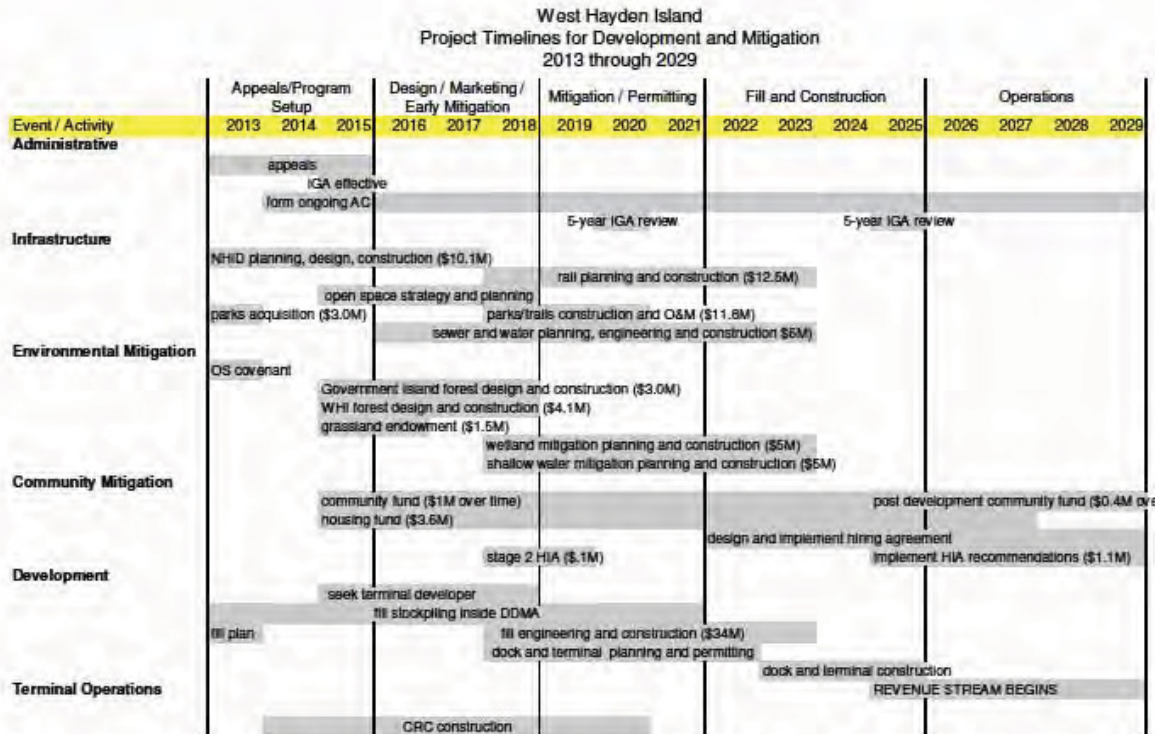
Answer: From the Port's view, it will be extremely difficult for a market ready development to be viable if there are a large number of expenses that need to take place before any revenue can be generated through the operation of the port. In their opinion, the expenses must be better triggered through performance standards that link the expenses and the revenue. The Port does expect a certain amount of expenses to be triggered prior to development, but feels that many impacts cannot be considered until there is more certainty on the type of terminal development that will take place. *(note that we anticipate the Port to provide additional information on this question.)*

- What is the business cycle duration for potential decision makers on a site? (Looking for number of months or years.) (Q63 from PSC list)

Answer: The development of a marine terminal is considered to be a long-term investment both from the perspective of the port authority and from the perspective of the port operator. Since permitting and construction can take upward of 10 years to complete, it is expected that operations of the terminal may be leased out for 15 to 25 years. It is assumed that the upfront costs would take many years to be recouped, with some studies reporting that the investments take at least a decade to amortize. *(note that we anticipate the Port to provide additional information on this question.)*

- Can mitigation funding be tied to selected benchmarks of economic success? For example, have extra mitigation triggered if revenue meets certain expectations, or if a second or third terminal is built on the site? (Q65 from PSC list)

Answer: It should be noted that the issue of timing of costs versus receipt of revenue is part of the ongoing discussion and study. Some of the initial results of this economic review are provided under questions 60 & 61. Part of the conclusion of this study is that there may need to be better coordination between the allocation of upfront expenses and future revenue. This could potentially be done through better phasing of conditions in the IGA. In addition, alternative financing mechanisms could also be explored that provide leveraging of the debt. *(note that we anticipate the Port to provide additional information on this question.)*



This document is a hypothetical sequence of events based on the November 21 draft of the City-Port WHI IGA. The purpose of this document is to enable further PSC discussion of potential timeline and cost sequencing concerns raised by stakeholders.

Developed Jan. 2013

West Hayden Island - Planning & Sustainability Commission's Questions**Economic / Finance Questions to Port of Portland for review.**

Note, these responses are drafted by City Staff. In some cases, preliminary input has been received from other parties such as the Port, Portland Business Alliance, Bay Area Economics (BAE - who worked on some finance assumptions) and ECONW consultants (who worked on the Harbor Lands and Cost-Benefit Analyses. Where applicable or needed, we incorporated information from their responses in our answers. In some cases, we may still be looking for additional information to help complete the answer. Your comments on these may also be helpful. In general, we are looking for input from you to verify the response based on your experience in regards to the financing and revenue opportunities for WHI.

Taxes / Revenue Distribution

- Describe the overall benefits of traded sector industries (including trans-shipment ports) on regional and state economy. What benefit does a "pass-through" port have, if we assume it is not focused on shipping local goods? (Q52 from PSC list)

Answer: In general, traded sector industries are beneficial to local economies by bringing export income into a region. Traded sector industries export a portion of their goods and services beyond the metropolitan region which bring in outside income that can be used for further investment. Export activity can generate new jobs that wouldn't otherwise occur to serve the existing population. These export markets can also drive competition and productivity gains.

In the case of trans-shipment ports, the benefits may be distributed over a wider region, especially if the goods or services are produced elsewhere. However, international and domestic shipping is a traded sector on its own, as the ports and transportation network provide the logistics and service to move and transfer the goods, sometimes with value added to the goods. This activity feeds into the region's transportation and wholesale trade sector. Overall, traded sector activity accounted for an estimated 61% of the transportation sector and 43% of the wholesale trade sector in the Portland metropolitan regions (ECONW 2012). Traded sector industrial jobs are often middle income jobs that provide opportunities for people without college degrees. These jobs tend to have a lower barrier to entry providing living wages to those who may otherwise struggle for access to the job market. For example, Gunderson's rail and barge building facility on the Willamette waterfront provides jobs for individuals with 22 different language/ethnic backgrounds. These types of jobs can help reduce the equity gaps between higher paying professional occupations and lower paying service positions. Freight gateways also create key transportation costs and conveniences that can help producers both in the metropolitan region and throughout the west, including metals manufacturers in Portland and Eastern Oregon farmers.

Lastly, providing local opportunities for the growth of transportation sector ports and hubs can justify continuing national-system investments in river channel, rail and road infrastructure, which benefit all traded sector industries in the region. Portland's Pacific Rim location and river-grade access through the Cascade Range provides important locational advantages for freight hub infrastructure and the regional distribution sectors. Pass-through cargo in dry bulks and containers are a strategic service priority for both the Union Pacific and Burlington Northern Santa Fe railroads

Comment [GT1]: Phil, can you attach the traded sector report to this transmittal?

in the Pacific Northwest, and investment in ports servicing these commodities would lead to further railroad investments that could help other freight and passenger rail.

At the national level the Columbia River navigation system competes with every other port in the country for what is increasingly limited infrastructure dollars. The greater the amount of goods flowing through the Columbia system the more likely maintenance dollars will flow to the Army Corps and other agencies that work on the Columbia levees, navigation aids, jetties and shipping channel. The Corps prioritizes projects by the national benefit they bring; a port that serves mostly a local region will not fare well against a port that handles pass-through cargo. Further it builds support from elected officials and businesses in other states to make the Columbia River system a high priority for funding since they depend on it for their exports. Overall this benefits local companies by increasing the flow of federal dollars for all users of the river, like Advanced American, Columbia Grain, Vigor, Canpotex and Zidell.

Although Portland is located upriver from the coast, its location, from an east/west perspective is comparable to the Ports of Vancouver BC, Seattle, Tacoma and Oakland. Portland is actually located west of LA/Long Beach and it's more northerly location benefits ships that cross over the Northern Pacific. This location provides an advantage for trade with Asia.

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- Describe for each terminal the following: number of new jobs on site; global and USA value. (Q53 from PSC list)

Answer: ECONW's analysis was done to estimate the range of jobs generated by the utilization of WHI for marine terminal use. It consisted of a conservative estimate of the number of jobs generated on 300 acres of land, using a comparison of the number of jobs per acre within marine terminals at the Portland Harbor. The estimate was not calculated on a facility by facility basis, nor was it considered specific to any one terminal. The base figures were taken from a Martin Study on the Economic Impacts of the Portland Harbor from 2011. The figures included job and income figure from both the public and private terminals. The public terminals were used as the base since their total acreage could be provided by the Port. Since the public terminals include both larger job generators such as the container facility and smaller generators such as the potash facility, ECONW used a more conservative number of jobs per acre in developing the table that was ultimately placed in the Cost-Benefit Analysis (provided below). However, due to the uncertainty of the types of facilities that ultimately may be constructed on WHI, developing a per/facility set of numbers might not provide a relevant set of numbers for the project.

Comment [h2]: It might be easier to say that these numbers are estimates and may change depending on the type and number of facilities built on WHI.

The Martin Study included a number of current direct jobs per 1000 tons for each commodity handled in the Portland Harbor. Estimates from these existing facilities could inform the number of direct jobs per type of facility. As an example, the current potash facility handles approximately 3,500,000 tons. This would translate to 105 direct employees. The grain terminal at T-5 has an estimated capacity of 4,100,000 tons which could result in a maximum of 369 employees. Although not broken out by facility, the Martin study job numbers would correlate to a total of 812 employees at the three auto facilities. According to the Martin study, facilities that transport autos,

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break bulk cargo and steel slab generate the largest number of employees per 1,000 tons.

The Port also has job numbers based on the various operations at their terminals which may provide insight into the overall number of jobs. These numbers are positions that actually are at the terminal, and don't include spinoff jobs that occur off the site (regionally or globally). While we do not have job numbers by terminal, what we do know is that these traded sector jobs generate about 2.3-3 indirect and induced jobs for every one direct job. (Port may provide some additional information.)

Comment [h3]: We do not have jobs numbers as described here. We do have an indicator for the number of DIRECT jobs that are generated per 1,000 tons of X cargo. I can transmit this to you if you think it will be useful.

Below is the table from ECONW:

Table 1. Summary of Results from Recent Economic Impact Analyses

	Total Portland Harbor	West Hayden Island Estimate #1	West Hayden Island Estimate #2
Jobs (Employment Years)			
Direct	7,011	1,175	937
Induced	6,668	1,591	891
Indirect	3,833	847	512
Total	17,512	3,613	2,340
Personal Income (\$1,000s)			
Direct	\$355,907	\$64,003	\$47,566
Induced	\$871,367	\$192,764	\$116,456
Indirect	\$193,015	\$39,441	\$25,796
Total	\$1,420,288	\$296,208	\$189,818
Business Revenue (\$1,000s)	\$1,481,570	\$240,324	\$198,008
State and Local Taxes (\$1,000s)			
Oregon	\$80,998	\$19,977	\$10,825
Washington	\$55,221	\$10,292	\$7,075
Total	\$136,219	\$30,269	\$17,900
<small>Source: ECONorthwest staff estimates with data from Martin and Associates (2010).</small>			

- What is the impact to the state general fund over 50 years? Clarify the amount of tax revenue and graph with 2 terminals, and then up to 4. (Q54 from PSC list)

Answer: The cost-benefit analysis and the previous economic impact studies do not provide the level of detail needed to break out tax benefits by individual facility, or by state versus local tax revenue. The ECONW estimates were based upon work done by Martin and Associates for the Port of Portland. This study did separate out the public and private terminal benefits. It also separately identified personal income, business revenue and taxes (state and local) The cost-benefit analysis estimated the annual range of state and local tax revenue to be \$18-30M. Oregon's share of this revenue was between \$11-20M. Tax impacts would include personal and corporate income tax, insurance tax, gift tax, state fuel tax, school taxes and the Tri-Met taxes. This was estimated based on 300 acres of marine terminal usage, which included three facilities. Reducing or increasing the number of facilities by one could result in an increase or decrease in the tax revenue, although the change in tax revenue would be largely dependent on the types of materials being shipped. However, using a rough

numbers calculation, an increase or decrease in the number of facilities by 33% could result in a similar corresponding increase or decrease in tax revenue, which would translate to an increase or decrease of \$3.5-6.5M in tax revenue.

While the Port, as a public agency does not pay property tax for its land, terminal operators who lease the property from the Port will pay property taxes or in-lieu fees. These taxes are split out to various regional and local agencies, with the top three receivers being the City of Portland (34%), Portland School District (31.5%) and Multnomah County (26.0%). The dollar amount would need to be calculated based on the assessed value of improvements, and these values have not been estimated for the range of terminals proposed. *(Note: It is not clear if the Martin #s above factor in property taxes, so this may be in addition)*

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The ECONW cost-benefit analysis and the base Martin study predict annual income rather than over a longer time period. If one were to assume a consistent flow of revenue and rates to the state and local taxing agencies over the 50 year period, Oregon could anticipate a total impact of between \$550M - \$1B in revenue for state and local agencies. This does not factor in any inflation, changes in growth or business revenue or changes in taxing rates. It also does not factor any expenses that the state may incur for the provision of transportation improvements.

Comment [h4]: If you are interested we can try and provide an example of what Columbia Grain or another terminal lessee pays.

Comment [KL5]: It probably should be noted that state statute provides for reduced tax treatment for cargo operations

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Financing / Timing

- We need a realistic schedule of revenue and deadlines in the IGA. (Q60 from PSC list)

Answer: Based upon former mayor Adam's revisions to the Intergovernmental Agreement (IGA), BPS staff have developed an estimated timeline for the development, mitigation and other activities that are needed to establish a marine terminal and meet the community and mitigation requirements dictated by the IGA. *(A summary table of major events and timelines is attached to this document.)*

Comment [h6]: Phil, you may want to mention that the Port has not agreed to the expenditures or timelines in this proposal.

Assuming a city approval in 2013, and the potential for appeals, a draft effective date in 2015 is selected for the IGA. Once the IGA is put into effect, there are several capital and mitigation projects that need planning and financing up front. These include the acquisition of parks lands for Hayden Island, the extension and improvements to North Hayden Island Drive, and the startup of mitigation on Government Island. During this time period (2015-2017) the Port would be actively working to find potential clients to build and operate the marine terminals. Planning and permitting for the terminals would include review and initial planning for the docks and site (2017-2022), clearing, filling, grading and site preparation for the terminal (2022-2024) and terminal construction (2024-2025). Concurrently with the terminal planning, it is expected that the community and housing funds would also be put in place.

This estimated schedule indicates that under a best case scenario, revenue from port terminal operations would not begin until approximately 10 years after the effective date of the IGA. Expenses would be occurring during that time both for mitigation and for permitting and preparation of the facility. To aid in bridging the gap between the upfront costs and later revenue generation, Bay Area Economics (BAE), as part of a brief economic analysis for the project, suggests that the City and Port consider a joint business planning process to help identify additional phasing approaches so that

mitigation measures are required only after certain benchmarks are reached, or to better align costs with overall project viability.

- Provide a cash flow analysis - Port expected revenue vs. expenditures for 50 years. (Q61 from PSC list)

Answer: The Port of Portland has developed a generalized cash flow analysis that was reviewed online by Bay Area Economics (BAE), which has resulted in a memo from them dated December 28. The Port's current cash flow model, using a 12% discount rate for future revenue and expenses, indicates that the project shows a negative value (i.e. cannot generate a yield sufficient enough to offset the discount rate). A secondary analysis using a discount rate of 6% also indicates a negative value when considering the upfront expenses and future revenue. A major hurdle (discussed below and in Question 60) is with the timing of expenses versus revenue.

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There are several assumptions within the Port's model that BAE states could affect the feasibility of the project as currently detailed in the Mayor's IGA revision. These include:

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Project Timing and Impact on Bottom Line Cash Flows: The Port's model indicates a 20 year duration, of which the first 10 years have substantial cash outlays. Considering the discount rates applied to both revenue and expenses, the 10 year hole is a tough hurdle to exceed. BAE felt that the structure of the IGA could be altered so that the cash outlays make more business sense with the future revenues. These cash outlays should also be tied to measurable impacts from development. The cash flow analysis is further affected by other demands on the Port's general fund. As described at the PSC 1/22/12 work session these demands include superfund obligations, natural resource damages and other property and infrastructure investments that are required for the Port to meet its stated mission and obligations. Additional detail on the scheduling is provided in Question 60 above.

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Escalation Assumptions: The Port's model assigns a higher inflation rate to costs than to revenues, which is typical in conservative cash flow models. However, similar to above, this assumption makes it more difficult to recover upfront costs. Given how far out the investment is and how undefined a conservative cash flow model is best suited to the current assessment.

Potentially Low Revenue Estimates: The Port bases their rent assumptions on the Toyota facility and other marine terminal tenants. However, BAE felt that there is potential to receive greater revenues, considering what other ports have received for auto marine terminals. Unfortunately the other ports examined by BAE are not in the Port of Portland's competitive market area. Additional analysis of revenue estimates for lower Columbia or Gray's Harbor ports would provide additional and perhaps appropriate more appropriate revenue estimate comparisons.

Potentially High Development Costs: The Worley Parsons Final Concept Plan, completed for the City of Portland, identifies an overall development cost of approximately \$96M in today's dollars. In addition, city required mitigation, enhancement and recreation costs add another \$20+ (???) million dollars to overall development costs .. However, the largest single item is the clearing and fill of the

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site which, at \$34M, is based on an estimate from the Concept Plan consultant, Worley Parsons. The second most expensive item based on city discretionary mitigation decisions is forest mitigation at \$19 million. Another cost factor is the contingency factor. It's possible that additional research could tighten or bring down these costs as is typical: as development specificity grows contingencies lessen.

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Lack of Leverage Using Debt: Often the types of projects that generate public and private benefits can assume a debt financing scheme, through bonds, etc. The Port does not have access to public revenue streams to back such financing, because of lease limitations, but BAE feels that exploring this funding mechanism to leverage the costs could increase the overall feasibility.

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Discount Rate: Based upon the complexity, uncertainty and risk of this project, the Port feels that the use of a 12% discount rate is warranted in its model. BAE feels that it may be difficult for the Port to both promote the development and earn a financial return that is in excess of this discount rate, and that its economic benefit may warrant a less-than-market-rate pricing of financial return.

It should be noted that there is not universal agreement regarding the opportunity to significantly revise these assumptions. As mentioned under Question 60, BAE recommends a joint business planning process between the City and the Port to address these issues.

- In the Port's view, provide a decision tree of issues that give them a clear path to market ready development? (Q62 from PSC list)

Answer: From the Port's view, it will be extremely difficult for a market ready development to be viable if there are a large number of expenses that need to take place before any revenue can be generated through the operation of the port. In their opinion, the expenses must be better triggered through performance standards that link the expenses to measureable impacts and the revenue. The Port does expect a certain minimal amount of expenses to be triggered prior to development, but feels that many impacts cannot be considered until there is more certainty on the type of terminal development that will take place. *(note that we anticipate the Port to provide additional information on this question.)*

Comment [GT7]: Some of this information was provided in the 1/22 presentation by Mr. Leavitt. We will be providing additional information on this matter.

- What is the business cycle duration for potential decision makers on a site? (Looking for number of months or years.) (Q63 from PSC list)

Answer: The development of a marine terminal is considered to be a long-term investment both from the perspective of the port authority and from the perspective of the port operator. Since permitting and construction can take upward of 10 years to complete, it is expected that operations of the terminal may be leased out for 25 to 40 years. It is assumed that the upfront costs would take many years to be recouped, with some studies reporting that the investments take at least a decade to amortize. *(note that we anticipate the Port to provide additional information on this question.)*

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Comment [GT8]: See above note.

- Can mitigation funding be tied to selected benchmarks of economic success? For example, have extra mitigation triggered if revenue meets certain expectations, or if a second or third terminal is built on the site? (Q65 from PSC list)

Answer: It should be noted that the issue of timing of costs versus receipt of revenue is part of the ongoing discussion and study. Some of the initial results of this economic review are provided under questions 60 & 61. Part of the conclusion of this study is that there may need to be better coordination between the allocation of upfront expenses linked to direct impacts and future revenue. This could potentially be done through better phasing of conditions in the IGA. In addition, alternative financing mechanisms could also be explored when a third party developer or tenant is willing to undertake a long term lease commitment. *(note that we anticipate the Port to provide additional information on this question.)*

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Community / Business Outreach

- As part of the IGA is (or can) the port be required to provide outreach/recruitment to the community to generate additional local benefits through port investments that attract and induce other investments in the local economy? What else can we do to maximize local benefit to Portland firms?

Answer: The IGA currently contains a clause that requires a ‘first source agreement’ to give North Portland residents priority for jobs on WHI created by the development. The community benefit grant will also provide funding to projects that benefit the surrounding community. Since the Port is an agency based in Portland, it is assumed that they will be using local vendors, contractors and service providers for work that they perform on WHI. However, the IGA does not currently contain a provision that requires the Port to work with companies that may have a more direct benefit with island residents either through their office location and/or hiring preferences. Any kind of specific agreement related to recruitment or outreach for hiring of firms for investment would also need to be consistent with the Ports policies for hiring of firms.

The Port does have a Portwide Small Business Development Program. Its mission is to “increase local small business participation in Port of Portland projects and procurements through the intergration of a Portwide process to develop and grow mutually beneficial business relationships with local small businesses.” The focus is to

- Increase access and participation of small businesses in Port business opportunities.
- Small business development through Port Mentor Protégé Program and partners.

The Port also has a Disadvantaged Business Enterprise (DBE) Program for businesses that are certified as socially or economically disadvantaged in accordance with US Department of Transportation regulations. Details on these programs can be found at http://www.portofportland.com/SROS_SB_Home.aspx

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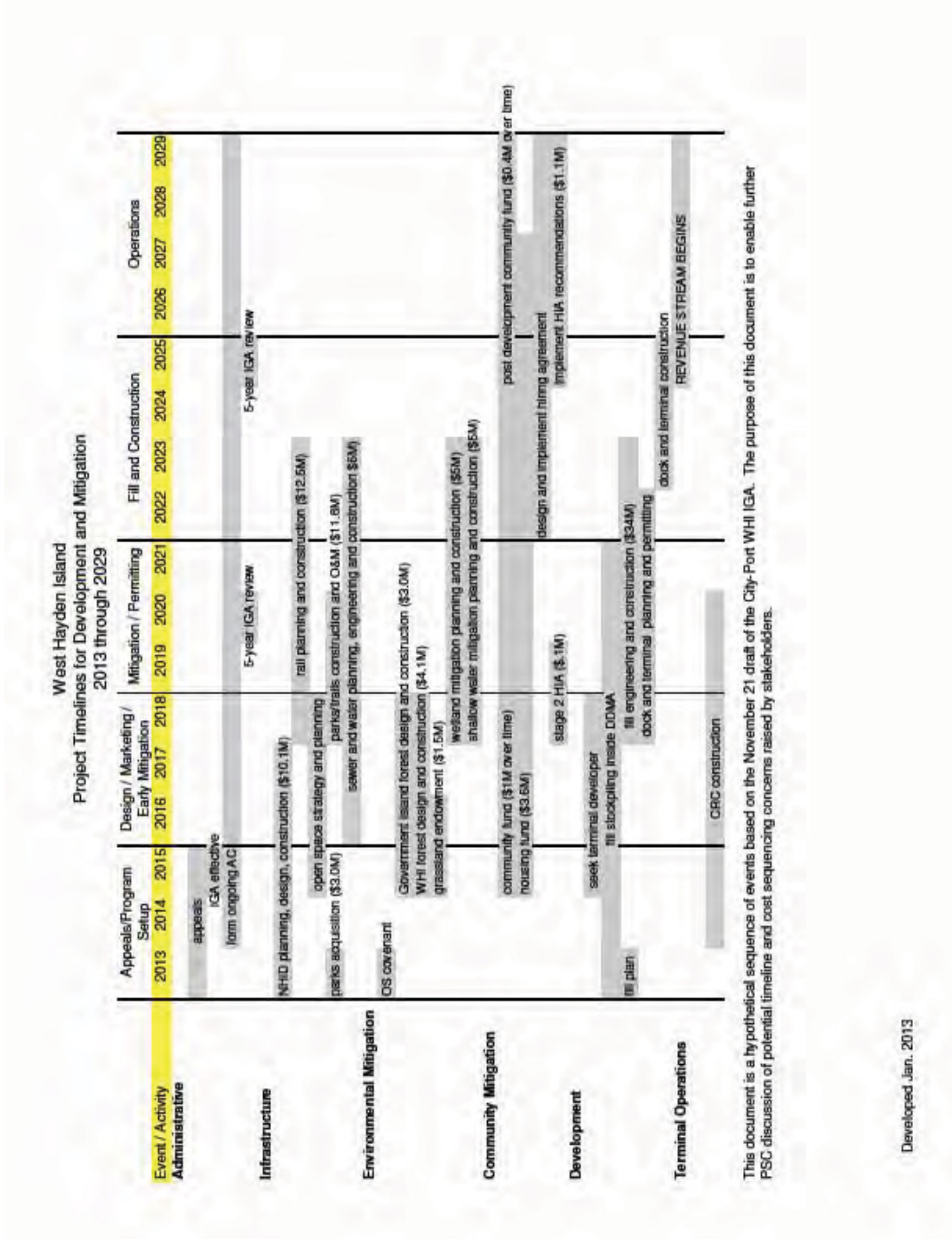
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It is not clear from the question what may be intended through port investments that induce other investments in the local economy. *(note that we anticipate the Port to provide additional information on this question.)*

Comment [GT9]: The Port



This document is a hypothetical sequence of events based on the November 21 draft of the City-Port WHI IGA. The purpose of this document is to enable further PSC discussion of potential timeline and cost sequencing concerns raised by stakeholders.

January 14, 2013

TO: Susie Lahsene
FROM: Dana L. Krawczuk
RE: **Responses to WHI PSC Goal 9 Questions**

Below are responses to the questions that the Portland Planning and Sustainability raised about the implications of Goal 9 on the WHI planning process.

55. Does the City of Portland need to meet industrial land needs (Goal 9) within its own boundaries? What is our Goal 9 flexibility? Is it factually correct that the city must annex WHI to meet state wide planning Goal 9?

Yes, state law requires the City of Portland to meet the industrial land needs that the City has identified within the City's boundaries. OAR 660-009-0020 and -0025(2). On October 3, 2012, the City adopted its Economic Opportunities Analysis ("EOA") which identified that the City has a deficit of 635 acres in the Columbia Harbor, of which there is a need for 356 acres of Harbor Access Lands. Of the Harbor Access Lands, 350 acres are needed for marine terminals. EOA, Section 2/3, Supply and Demand, Figure 3, attached and <http://www.portlandonline.com/portlandplan/?a=392785&>. The City's EOA specifically identifies WHI annexation as "the only significant opportunity" to achieve legal requirements. EOA, Section 4, Alternative Choices, pg. 17.

The flexibility in Goal 9 is the City has discretion in determining which tool(s) the City will rely upon to meet the land need adopted in the EOA. Annexing and zoning WHI for a marine terminal is one option for addressing the employment land deficit. Other tools for meeting the land shortfall include assembling parcels and facilitating brownfield development. The various options are currently under consideration as part of periodic review.

Given the need for land identified in the City's EOA, and the site characteristics of land needed, annexation of WHI is both factually and legally the most likely, if not the only, way the City can meet its unavoidable Goal 9 obligations.

Goal 9 recognizes that not all employment land is fungible, and requires that the City "designate an adequate number of sites of suitable sizes, types and locations" and to "designate serviceable land suitable to meet the site needs identified" in the EOA. OAR 660-009-0020(1)(c) and OAR 660-009-0025(1). Therefore, while technically the City has the discretion to choose how to accommodate the needed Harbor Access Lands and marine terminal land, given the particular site characteristics that the EOA identified as being necessary for the needed lands,¹ the only

¹ The adopted EOA notes that "Based upon the development trends of new terminals being constructed on the west coast, most of the land need for marine cargo is expected to be for parcels larger than 100 acres to accommodate rail

solution identified to date is annexing WHI and zoning it so that it can accommodate an approximately 300 acre marine terminal development. For example, the adopted EOA explains:

West Hayden Island represents the only significant opportunity to bring new capacity into Portland's industrial land supply, especially for marine terminal use. The master planning and annexation process for West Hayden Island is underway and can add an estimated 300 acres of industrial land capacity, specifically to meet the need for marine terminals. Portland Harbor has insufficient land to accommodate the demand for marine terminals. Land assembly and assistance efforts could potentially be effective to expand and develop the 43-acre Time Oil site and 59-acre Atofina site for marine terminals, but the feasibility of doing so is challenged and falls far short of demand.

EOA, Section 4, Alternative Choices, pg. 17. Also see the attached preliminary evaluation of potential alternatives to overcome industrial land capacity shortfalls.

<http://www.portlandoregon.gov/bps/article/411009> and
<http://www.portlandoregon.gov/bps/article/410137>

In summary, while the City has some limited discretion in how it complies with Goal 9, as a practical matter that discretion is severely limited by law and the City's own adopted actions. If the City were to decide not to annex WHI, it would need to have a clear explanation as to how it intends to comply with Goal 9 and other state and regional requirements without the industrial lands the annexation would bring into the inventory. See Question 56 for a more detailed analysis.

56. What would happen if we do not annex WHI? How would this impact City's Goal 9 tasks? What process steps would occur next, in that scenario?

If WHI is not annexed and zoned for marine terminal purposes, and no other solutions are identified that would accommodate the adopted Harbor Access Lands and marine terminal land needs, then the City would fail to comply with Goal 9. Potential consequences of the City's failure to comply with Goal 9 as part of periodic review include objections/appeals to LCDC, modification of the approved work program, sanctions imposed by LCDC for failure to meet periodic review deadlines, and DLCD completing the work program on behalf of the City.

Question 56 appears to be directed at eliciting information about how the City may avoid annexing and zoning WHI, while still complying with Goal 9. To be clear, the consequence of such a reversal of an adopted City policy would be that despite the demonstrated need for a marine terminal, the City would elect to forgo the incorporation of required industrial land, 2,300 to 4,000 jobs (direct, indirect and induced), \$200-\$300M in annual personal income, and \$18-

access and ensure competitiveness. The most modern rail-served facilities are 270 acres or more." EOA, Sections 2/3, pg. 20.

\$30M in annual state and local tax revenue expected to be generated by WHI development. If the City desires to change course and pursue such an economic policy, then the next step would be to seek a modification to Portland's approved periodic review work program so that the land deficits adopted in the EOA could be reconsidered.

In an EOA reconsideration process, Portland could not simply decide in isolation that notwithstanding the demonstrated need, the City prefers not to accommodate jobs that rely upon Harbor Access Lands and/or marine terminals. Instead, the City would need to demonstrate that the policy choice remained in compliance with adopted local, regional, state and national plans and policies such as Metro's 2040 Growth Concept, the Portland Plan, City Export Initiative, Working Harbor Reinvestment Strategy, Guild's Lake Industrial Sanctuary Plan, River Renaissance, the City's Economic Development Strategy, Greater Portland Export Plan, and the National Export Initiative. We are skeptical if such a drastic change in policy could be compliant with those plans.

Additionally, legally Portland cannot ignore its role in the regional and state economic fabric, and the related state and regional regulations. WHI was included in the regional urban growth boundary (UGB) in 1983 to meet an industrial land need. The UGB assumes that 422 acres of the region's industrial land requirement will ultimately be accommodated on WHI. Goal 14's rules mandate that land included in the UGB for a specific purpose must be zoned consistent with that purpose. OAR 660-024-0050(5). Metro's Title 11 includes a similar requirement. MC 3.07.1120. If the City adopts a policy that WHI will not be developed as a marine terminal, or otherwise fails to adopt zoning that allows a viable marine terminal, it would violate Goal 14 and Title 11. To resolve the Goal 14 violation, the region would be required to accommodate the need elsewhere, likely through a UGB expansion of land suitable for a marine terminal, which would presumably also have natural resource value because by definition marine terminals are located adjacent to water.

WHI is designated as a Regionally Significant Industrial Area ("RSIA") under Metro Title 4, because it is an "[i]ndustrial area with site characteristics that are relatively rare in the region that render them especially suitable for industrial use." MC 3.07.130. Title 4 is also an obstacle to a policy change that WHI will not be developed as a marine terminal, or if the City otherwise fails to adopt zoning that allows a viable marine terminal because a RSIA designation can be removed or modified only if strict criteria are met. MC 3.07.450. Given WHI's unique characteristics, such as its size, access to existing transportation infrastructure and a deep-water channel near the confluence of two rivers and an international gateway, we are skeptical if proposing to remove the RSIA designation from WHI would comply with Title 4.

cc: Ian Whitlock, Greg Theisen

adjusted for market factors in some areas to reflect zoned capacity that is more than is currently being developed or expected to be developed in the foreseeable future.

The city-wide employment development capacity is about 101 million square feet, which is distributed across the different employment geographies. The employment land supply is presented in three stages – the base supply (vacant and underutilized parcels), the constrained supply, and the (final) adjusted market supply (Figure 2).

Figure 2. Summary of 2035 Employment Development Capacity

Aggregate Geography	Bldg Sq.Ft.	
Central City	37,443,000	37%
Industrial	21,612,000	20%
Commercial	33,000,000	33%
Institutions	10,676,000	11%
Total	102,731,000	

Source: BPS

LAND NEEDS RECONCILIATION

By subtracting effective land supply from demand, it is possible to determine whether and to what extent Portland's employment land base will be adequate to serve forecast needs over the 2035 planning horizon. In cases where there is adequate inventory, a land surplus is indicated; where the inventory is not adequate, a resulting deficit is calculated.

Figure 3. 2035 Employment Land Needs

Employment Geography	Demand	Land Supply	Surplus/Deficit	% Capacity
Central City Commercial	60	149	89	248%
Central City Incubator	100	40	(60)	40%
Columbia Harbor	1,490	855	(635)	57%
<i>Harbor Access Lands</i>	450	94	(356)	21%
Columbia East of 82nd	360	394	34	109%
Dispersed Industrial	140	112	(28)	80%
Gateway Regional Center	50	135	85	270%
Town Centers	140	90	(50)	64%
Neighborhood Commercial	530	1,118	588	211%
Institutions	380	306	(74)	81%
Total	3,250	3,198		
Aggregate Geography				
Central City	160	189	29	118%
Industrial	1,990	1,361	(629)	68%
Commercial	720	1,342	622	186%
Institutions	380	306	(74)	81%
Total	3,250	3,198		

Note: Columbia Harbor includes 580ac for traded sector facilities.

Harbor Access Lands include 350ac for marine terminals

**What choices make sense to meet Portland's 720-acre industrial land shortfall to 2035?
Summary of the discussion so far...**

Alternatives discussed	Potential Acres	Illustrative Scenarios		Potential Impact	Cost	Likelihood of success	Controversy	Issues
		A	B					
Industrial land retention	40	0	0	Medium	Low	Medium	Medium	
1. Limit conversion of industrial land	-30	-30	-30	Medium	Low	Medium	Medium	Loss of flexibility
2. Greater limits on non-industrial uses in industrial areas	70	30	30	Low	Low	Medium	Medium	Loss of flexibility
Industrial land intensification	530	270	390	High	High	Low	Medium	
3. Increase brownfield redevelopment	220	110	200	High	High	Low (cost, trends)	Low	Complexity, cost/funding
4. Improve infrastructure	230	110	140	High	High	Low (cost)	Medium	Cost/funding
5. Expand industrial-office development incentives	80	50	50	Medium	Medium	Medium	Medium	Funding
Industrial area expansion	750	550	430	High	High	Low	Medium	
6. Rezone part of West Hayden Island	300	300	0*	High	High	Medium	High	Matching mitigation & development feasibility. Cost.
7. Rezone part of private golf courses	370	190	370	High	Medium	Medium	Medium	Less ability to meet habitat & park need
8. Expand industrial-office overlay in Central City	20	20	20	Low	Low	Medium	Medium	Parking
9. Expand light industry in commercial corridors	60	40	40	Low	Medium	Medium	Medium	Neighborhood impacts
Watershed health improvement	-30	-100	-100	Medium	Medium	Medium	Medium	
10. Expand protection of Natural Resources Inventory	-30	-100	-100	Medium	Medium	Medium	Medium	Resource protection losses
	1290	720	720					

* This option does not meet the State Planning Goal 9 requirement to designate land that meets total projected land needs for each use category.

Why is industrial land in Portland so important?

1. Traded sector growth drives regional prosperity. This region's traded sector specializations and growth have been largely industrial and rely on industrial land supply.
2. Economic inequality is increasing as middle-income jobs erode, disparities persist, and rising costs of living outpace low-income wages. Industrial retention and growth stems that trend by adding family-wage jobs accessible to workers without four-year college degrees.

Why is meeting industrial land needs so difficult?

1. Portland's prime industrial land is concentrated in a unique riparian area at the confluence of Oregon's two largest rivers. Endangered species and Superfund listings have raised the priority of watershed health in this area.
2. Portland is substantially land-locked. The tightening supply of undeveloped land reduces options to expand natural resource protection and expand industrial land.
3. The edge of the region has limited ability to replace or expand the multimodal freight-hub infrastructure and related heavy industrial activity that characterize the city's industrial land.
4. Using existing industrial land more intensively is desired, but options are limited by public budgets, complexity of overcoming site constraints, and predominantly low-density demand.

What are the next steps?

1. Seek creative solutions to improve the likelihood and consensus of high-impact options.
2. Engage industrial, environmental and broader communities in identifying preferred options.

Preliminary Draft Summary Evaluation of Potential Alternatives to Overcome Industrial Land Capacity Shortfalls to 2035, August 24, 2012

Effect of alternatives to meet capacity shortfalls	Preliminary estimate of gain/reduction (acres)				Job impacts		Prosperous	Educated	Healthy	Equitable	Other priorities
	Columbia Harbor	Harbor Access	Central Incubator	City Dispersed Industrial	Direct (on-site)	Supported (regional)					
Potential alternatives to meet industrial land capacity shortfalls											
Estimated shortfalls											
Available surplus capacity from Columbia East district	34	-356	-60	-28	400	900					
Policy concept: Industrial sanctuaries and retention											
1. Limit industrial sanctuary conversion	0	0	-11	-18	-1,700	-3,500	Unique freight-hub location		Freight hub energy efficiency	Family-wage job retention	
(a) Allow no net loss in "prime" industrial areas and up to 3% loss in other areas by 2035.											
(b) Allow up to 1% loss in "prime" industrial areas and 5% loss in other areas by 2035.	-114	-65	-18	-30	-4,300	-8,900	May reduce headquarters growth		Support 20-minute neighborhoods		
2. Restrict new non-industrial uses in industrial areas (e.g., refinement plan)	65	7			800	1,700					
(a) Identify and substantially reduce allowances for land-intensive non-industrial uses;											
(b) Limit industrial conversion per alternative 1 above.	31	7			400	800					
Policy concept: Industrial land intensification											
3. Increase brownfield redevelopment (e.g. cost-gap incentives)	209	62	0	10	3,000	6,300	Traded sector growth	Expand tax base; fiscal opportunity cost	Reduce contamination risks	Family-wage jobs; upward mobility	
(a) Make a large public investment to incentivize brownfield cleanup and reuse											
(b) Make a moderate public investment to increase brownfield cleanup and reuse	104	31	0	5	1,500	3,200					
4. Encourage site intensification (e.g., freight infrastructure, business climate)	218	16	14	0	4,100	8,400	Traded sector growth	Expand tax base; fiscal opportunity cost		Family-wage jobs; upward mobility	
(a) Greatly increase public investment and improve regulatory/free environment											
(b) Maintain current public investment and regulatory/fee levels (assume 20% "refill").	127	6	4	0	2,000	4,300	Innovation, small business vitality	Expand tax base; fiscal opportunity cost		Family-wage jobs; upward mobility	
5. Expand incentives for low-cost "industrial office" development in											
(a) Create incentives to greatly increase industrial office development (assume 15% of											
(b) Maintain current industrial office development incentives (assume 5% of area).	300	300	57	21	6,900	13,700	Unique harbor growth capacity		Habitat loss and mitigation	Family-wage jobs; upward mobility	
Policy concept: Industrial area expansion											
6. Annex and rezone West Hayden Island											
(a) Designate 300 acres of marine terminal area and 500 acres of natural area;	376				4,800	10,000	Traded sector growth	Expand tax base	Park/trail deficiency reduction	Family-wage jobs; upward mobility	
(b) No additional industrial acres.	188				2,400	5,000	Innovation, small business vitality			Family-wage jobs; upward mobility	
7. Update the location of open space zoning in industrial areas without reducing net											
(a) Designate airport area golf courses for 2/3 industrial & 1/3 open space if converted;											
(b) Designate airport area golf courses for 1/3 industrial & 2/3 open space if converted;											
8. Expand Central City's industrial-office overlay zoning											
(a) Apply EOS overlay zone to all Central City industrial areas;			16		1,800	3,400					
(b) Substantially expand (assume 60 acres) small-scale industrial/office areas;			8		900	1,700					
(c) Modestly expand (assume 30 acres) small-scale industrial/office area.					1,900	4,100	Small business vitality		Compatibility limitations	Good jobs in distressed neighborhoods	
Policy concept: Relation to watershed health											
10. Allow for limited additional Natural Resource Inventory protection											
(a) In prime industrial area, limit new protected area to "high" ranked resources	-29	-2			-400	-800	Limit traded sector growth		Limit watershed enhancement	Limit family-wage jobs, upward mobility	
(b) In prime industrial area, limit new protected area to "high/medium" ranked	-95	-4			-1,200	-2,500					
(c) In prime industrial area, limit new protected area to "high/medium" ranked	-200	-4			2,500	-5,300					
All capacity options combined											
All "a" high-capacity-gain options combined (assume 10% overlap)	1,025	345	69	65	22,500	46,300					
Resulting capacity surplus/shortfall	424	-11	9	37	7,400	15,500					
All "b" low-capacity-gain options combined (assume 10% overlap)	217	-23	12	10	4,400	9,200					
Resulting capacity surplus/shortfall	-384	-379	-48	-18	-10,600	21,700					
Example of mixed "a" options to meet shortfalls and priorities (assume 10% overlap)											
Resulting capacity surplus/shortfall	884	343	60	38	16,500	33,800					
Resulting capacity surplus/shortfall	83	-13	0	10	1,400	3,000					

Notes: This preliminary evaluation of capacity alternatives is intended to facilitate discussion. Each alternative includes a high option "a" and low option "b" to indicate a range of possible choices. Capacity and employment effects are estimated from draft Economic Opportunities Analysis results. Supported jobs include direct, indirect, and induced regional jobs. Effects of alternatives among public priorities considers overlapping objectives and tradeoffs.

Initial Comments to Questions Received from Technical Reviewers prior to the City's release of answers

Economic / Finance Questions to ECONW for review.

Note, in all cases, staff will be formulating a response to these questions and looking to ECONW to verify the response based on your role in the Cost-Benefit and Harbor Lands reports. In the cases of the section on Taxes and Revenue, we may be providing some partial information, while looking for any additional information to help provide an answer.

Economic Need / Vancouver Role

- Are the predictions about local jobs being created true and if so, all I need is a simple chart about what the local, regional and state benefits will be from having a new marine terminal on WHI?

ECONW: The estimated job impacts are based on reports by Martin and Associates. This group focuses on describing economic impacts of port activities. We took these reports as given. The extent to which these jobs happens depends on the types and amounts of future port activities. We address the uncertainties associated with these activities in our comments on the next question.

- Why so many caveats in EcoNorthwest report? A sign that this is really not worth it? , Could we get another independent economist(s) provide another opinion on the cost-benefit of the proposed development?

ECONW: The large majority of the caveats apply to the uncertainty around what types of development would happen on the port acres, and when this development would happen. Given that the proposed development would not happen for a number of years, given that the Ports of Vancouver and Portland compete for trade, and given that the analysis looks out 100 years, there is no way of avoiding these uncertainties. Our report acknowledges these uncertainties, and hence the caveats.

Another economist may give a different answer, and their answer may or may not include “many” caveats. However, lacking a crystal ball that sees into the future, they could not avoid the impacts of the uncertainties described above on their analysis. The question is the extent to which they would acknowledge the uncertainties in their work.

- Are both Vancouver and Portland marine terminal sites needed for future growth? Or is it just a competition? What is the reality of using the Port of Vancouver instead of WHI? Is that realistic or fantasy?

ECONW: As we describe in our land-use report, the answer is: it depends. It depends on the size of future terminals, and the growth in demand for cargo. If you think we'll have slower growth in demand for cargo, and if you think we can have highly efficient terminals with small footprints, then yes, Vancouver could realistically accommodate all of the regional growth for the next several decades. If you think we'll have more rapid growth, and we'll need bigger terminals, then no, Vancouver cannot accommodate the regional demand for the next several decades. Anyway you look at

it, Vancouver has a fixed supply of demand, someday it will run out, and when that happens, you'll either have to develop more terminals in Portland, or else the region will miss out on growth (or some amazing technological advancements or other revolutionary developments will completely change the way we think about this question).

- Why can't the Port maximize capacity of existing terminals and Vancouver site before constructing WHI? - Is it possible for a facility similar to the one proposed to be built on the Vancouver side and to come to an agreement between the Port of Vancouver and the Port of Portland to provide economic benefits to Oregon while preserving WHI?

ECONW: If: all of Vancouver's land is shovel ready, and officials from the Port of Portland and Port of Vancouver collaborate to funnel all inquiries for development to the Vancouver side of the river, that could delay the need to develop on West Hayden Island (who knows how long this would delay the decision, 5 years? 50 years? Only time will tell). Not sure how you could come to an agreement to provide economic benefits in Oregon. Require that tenants at the Port of Vancouver hire X% of employees from Oregon? Spend X% of their dollars in Oregon? Doesn't seem realistic.

- Is there any analysis as to what benefits are gained in WA by this proposal vs. OR?

ECONW: No current analysis that we are aware of. Answering this complicated question would require an analysis of much finer detail (and expanded budget) than we were asked to conduct. Conducting such an analysis, however, would include the uncertainties described above, as well as uncertainties about where and how benefits and costs would be distributed between the two states.

Taxes / Revenue Distribution

- Describe the overall benefits of traded sector industries (including trans-shipment ports) on regional and state economy. What benefit does a "pass-through" port have, if we assume it is not focused on shipping local goods?

ECONW: The large majority of ports world wide are now "pass-through" ports. That is, most ports are transshipment points located some distance away from raw materials, production facilities, or final customers. The benefits of such ports are typically limited to the workers at the port that facilitate the transshipment of goods and materials. The Martin and Associated reports describe the employment benefits of port activities, such as that proposed for West Hayden Island.

- Describe for each terminal the following: number of new jobs on site; global and USA value.

ECONW: We were asked to focus on local impacts of the proposed port. To that end, we described the employment impacts on the Portland regional economy. The Martin and Associated reports describe employment impacts across a broader geographic area. They do not, however, address "global" jobs or even USA jobs. This would require additional analysis and come with significant caveats for the reasons described above.

Regarding the term “value”: need to clarify the meaning of this term in the questioners’ mind. Economists interpret the term to mean economic benefits (or costs). It’s not clear that a proposed port on WHI would influence USA or global value. To the extent that WHI doesn’t happen, the goods that would have been shipped through WHI presumably would go through other ports. That is, WHI would not affect the demand or supply of goods that come into the US or are produced globally.

- What is the impact to the state general fund over 50 years? Clarify the amount of tax revenue and graph with 2 terminals, and then up to 4.

ECONW: Does the question focus primarily on income taxes? If so, an analysis would need to determine estimates of how many employees at each terminal, and the average income, and the tax for the State. Then we’d have to look at the secondary impacts, and the jobs and income generated from the secondary impacts.

Net Present Value (NPV)

- Clear explanation to PSC on the soundness of city estimates of cost of restoration. Are the NPV estimates accurate? Has an independent economist weighed in on these calculations?

ECONW: As we understand, the costs of restoration come from calculations done by City of Portland, or Port of Portland staff. We took that information and conducted standard net present value calculations. We described our data sources and assumptions, and conducted sensitivity analyses of our results.

We are also working with City staff on the economic aspects of financing the costs of restoration. This is a separate calculation.

Financing / Timing

Note that there are also several questions related to some of the cash flow, business planning and timing of development, mitigation, that we mentioned may be worth having ECONW review. However, this partially depends on what we receive from Bay Area Economics (BAE), and also may over-extend the amount of review that you’ll be able to do under the Task Order.

We have experience conducting the types of analyses and calculations listed in the paragraph above and could help with such work.

West Hayden Island - Planning & Sustainability Commission's Questions

Economic / Finance Questions to BAE (Janet Smith-Heimer) for review.

Note, in all cases, staff will be formulating a response to these questions and looking for help from you to verify the response based on your role in regards to the financing and revenue timing for WHI. Also, if you have any source documents that you feel could help with these questions, please let us know about them.

Taxes / Revenue Distribution

- Describe the overall benefits of traded sector industries (including trans-shipment ports) on regional and state economy. What benefit does a “pass-through” port have, if we assume it is not focused on shipping local goods?
(note, we acknowledge that you haven't had involvement regarding this question, but thought you may have some background information through your consulting work.)

I mentioned this issue in my Draft Memo #2 to Tyler and Eric. I am aware of EcoNorthwest's earlier economic impact study, and reviewed it quickly in Oct 2012. I would need to review it again in light of the above question...but yes, my gut tells me that this low-labor use, with known pass-through trade, and will not likely be a substantial economic benefit to the region.

Financing / Timing (note that we may have a clearer idea how to answer these once we receive your memo, and potential Port information)

- We need a realistic schedule of revenue and deadlines in the IGA.

Yes, this is a key recommendation by me, as well. See memo.

- Provide a cash flow analysis - Port expected revenue vs. expenditures for 50 years.

Again, agreed. I was able to see the Port's, and it's just so generic and not reflecting this project, that it needs to be redone.

- In the Port's view, provide a decision tree of issues that give them a clear path to market ready development?
- What is the business cycle duration for potential decision makers on a site? (Looking for number of months or years.)

This is a good question, but I'm not sure that it is answerable in a generic way. Since the studies say the facility itself will take 3 years to build, if other approvals are in place, and depending on the lead time to reforest elsewhere, one could assume the development cycle is 5 years. So to me, the question is, would the private sector commit to developing a terminal any sooner than five years before it opens? Are there other options to engaging a partner earlier? Probably, if there are sufficient interim uses that generate some revenue and/or limit private party's costs (see BAE memo #1 describing lay down space, other revenue ideas). A partner will respond if there is sufficient market demand and the economics (ground lease, other costs) align with a clear financial return. But few or none will respond to uncertain demand, high investment costs, etc.

- Can mitigation funding be tied to selected benchmarks of economic success? For example, have extra mitigation triggered if revenue meets certain expectations, or if a second or third terminal is built on the site?

Yes they can be tied to phases of development...not sure this should be framed as economic success (since the mitigations are needed even if the project is not breaking even)...but the project should be phased, with mitigations tied to each phase, and the phases could be tied to triggers such as economic success.

Email Correspondence from Bruce Allen (PDC) in regards to Bay Area Economics (BAE) memo. Comments were considered relevant to BPS questions as well.

Phil,

As the questions from the PSC are pretty specialized in terms of 1) macro economics, and 2) Information that Port can best respond to, I really don't have anything to add. If asked for some specific feedback/recommendations, I think I would touch on the points I made in my 12/28 and 12/31 e-mails to you and your team.

Bruce Allen (PDC) 12/31 email

Thanks,

After reviewing these two memos, I can offer a few observations:

- 1) There is no question that many of the Port's financial assumptions are on the conservative end. They show the project costs inflating at 3% and revenues at 1.5%; No revenues until Year 11 while costs are piling up; an assumed rate of return of up to 12%; etc. etc. I agree that they are all on the conservative side, perhaps, very conservative. With so many long-term uncertainties and things that can go south on them, it makes sense to err on the side of conservatism. This is really not much different than the conservative financial proforma modeling that a developer would do for a project that was untested, such as a high density, mixed-use development in a bad part of town. Here we would see costs that exceed revenues; huge carrying costs; substantial contingency funds, etc., etc. In our world, that's where PDC typically comes in with the financial backing necessary to make the project pencil thereby allowing the private equity and debt financiers to commit. While the Port is not, of course, a developer, it does need to run its operations as a business.
- 2) Related to the above, BAE notes that the Port is using a 30% contingency. They are correct that, as problems are solved and as plans become better defined and more concrete, that contingency should decrease. But, my experience, and that of all of the engineers I have worked with, is that the reduction of the contingency is usually combined with a rise in the base cost of the project. The City's Transportation Bureau, for example, has historically started the planning work on a new project with a 50% contingency. As questions are answered, new features are added to the design to mitigate potential issues. At the end of the day, the total project cost is usually close to the initial estimate with a 50% contingency, but with a higher base cost and a 10 % contingency.
- 3) BAE correctly suggests that it would be great if there was a way to do a regular check on the actual costs and revenues and make a course correction at various stages along the way. The upside to this should be reduced overall costs; the downside is that the money might not be there down the road if needed, and this lack of certainty scares investors, bond-buyers, etc. However, there is one potential idea along these lines. I understand that the Port's numbers assume that they will need to purchase fill to lay the foundations for the new facilities, and that the labor and material costs to do so make up one of the largest line items in the overall estimate. However, if the Port were able to get the necessary state and federal approvals to do so, that, by using dredge materials in whole or in part, they could realize significant cost savings. Perhaps, the IGA could provide for this potential and specify how the cost savings would be shared.

- 4) Finally, in looking at BAE's memo regarding the Port's assumptions on achievable rents, they took some exception to the Port's assumed fair market land price of between \$5 and \$7 per square foot, and compared that to facilities in Long Beach at more than \$19 psf. And, at the end of their report, they compared Long Beach lease rates with port facilities in San Diego, Oxnard and Olympia, Wa. Now, I know nothing about international freighters and other sea-faring operations, but, I do know that land values in Long Beach and San Diego rise well above Portland's, and, also, that it takes an extra day, or longer, for ships to lug their goods up-river to Portland, and then back out to the ocean, verses docking at an ocean port. Clearly, those ocean ports are more valuable and they can command much higher rents than an inland port such as ours. In looking at the four examples, the Olympia port is somewhat comparable to Portland in that ships need to maneuver through Puget Sound to get to the Port of Olympia. And, there, the rents that BAE documented are actually very close to the assumptions that the Port of Portland is using.

In summary, I think BAE did a good job raising questions that we should all look at. Maybe, the best suggestion they had is to build into the agreement with the Port a way to tie potential cost savings to additional community benefits. By allowing the Port to enjoy some of those savings, and, at the same time, potentially increasing funding for additional enhancements, could be a good incentive for everyone.

Bruce Allen (PDC) 12/28 email

I found this analysis to be quite fascinating, well written and with some good ideas. I would probably take *some* exception to some of their assumptions, but first, I need to review the "first memorandum" BAE produced. Can you send that to me (today, if possible, so I can read it over the weekend.)

I also think that, entering into a Joint Business Planning Process with the Port and the City is an intriguing idea. I would love to be able to do that because I know that when smart people have the opportunity to do so, they can usually reach consensus on seemingly unsolvable differences. But, I just don't see it working here in Portland on THIS issue, especially with Portland's history of openness and public process and especially with issues that are so terribly contentious. To be effective, the parties would need to be allowed to do their work without outside influence and with a high level confidentiality, and, I just don't see that happening. Key information would be leaked, and the battle would be once again on.



Memorandum

Date: January 7, 2013

To: Planning and Sustainability Commission

From: Portland Business Alliance

Re: Portland Business Alliance comments regarding Planning and Sustainability Commission's questions about West Hayden Island, dated December 6, 2012

The Alliance has participated in the West Hayden Island (WHI) planning process for years and offers the following information for the city and the Planning and Sustainability Commission's (PSC) consideration.

33. PSC Question: *Do we have any policy levers available to ensure that Columbia Gateway is developed first and that WHI is not developed if the economic reality does not reach the forecast levels at which a second terminal is required?*

Alliance Comments: Suggesting there might be "policy levers" available to ensure that Columbia Gateway is developed before WHI is problematic on multiple levels.

First, Both the City of Portland and Metro have adopted decisions that demonstrate the need for a marine terminal in Portland. The need was first established when Metro included WHI the Urban Growth Boundary in 1983 to "satisfy a long term regional need for water-dependent, deep-water marine terminal and industrial facilities." It was designated as a Regionally Significant Industrial Area in 1994. Metro continues to rely on WHI to satisfy the region's projected need for industrial job lands to reduce the expansions of the urban growth boundary, and assumed in the 2010 Urban Growth Report that WHI would accommodate 422 acres of industrial development. Compounding this is the city's Economic Opportunities Analysis, which documents an industrial land shortfall of over 700 acres, and specifically calls on WHI to help address the shortfall:

"West Hayden Island represents the only significant opportunity to bring new capacity into Portland's industrial land supply, especially for marine terminal use. The master planning and annexation process for West Hayden Island is underway and can add an estimated 300 acres of industrial land capacity, specifically to meet the need for marine terminals. Portland Harbor has insufficient land to accommodate the demand for marine terminals. Land assembly and assistance efforts could potentially be effective to expand and

develop the 43-acre Time Oil site and 59-acre Atofina site for marine terminals, but the feasibility of doing so is challenged and falls far short of demand.”¹

To rely on another state to overcome the city’s documented industrial land shortfall, we believe violates the intent of Senate Bill 100, Oregon Land Use law and the entire premise of the urban growth boundary. Oregon’s much admired land use planning and regulatory framework was not designed or intended to push jobs out of the state but to better plan for and accommodate economic growth within Oregon. Further, when Oregon in general and Portland in particular have suffered from higher than average unemployment rates relative to the national and metro average for years, it is simply bad public policy to forgo jobs, income tax revenue and other economic benefits for Portland and Oregonians and defer them to another state. This is particularly true at a time where general fund budgets are not adequate to address necessary service levels for public goods.

Second, the Port of Portland – which provides critical infrastructure to the region’s employment base – must continue to invest in building adequate capacity in their port facilities to stay economically viable. WHI is a key parcel in this investment plan, due to its unique attributes which include: access to existing transportation infrastructure, a deep-water channel at the confluence of two rivers and an international gateway, and planning processes that have long-paved the way for this island to be developed into a marine terminal. The port participates in this process now because terminal development takes a long-range planning effort; they must be able to market the site to potential developers now, with the certainty that the parcel will be available for development planning for future development timed with market demand.

To prevent the port from investing to remain economically viable by deferring to another state to take advantage of market demand first, does economic harm to Portland and Oregon. The city would be limiting the port’s capacity to provide Portland with access to national and international markets. This impacts Portland’s traded-sector and export economy, which, according to the Brookings Institution, generate one-fifth of Portland-metro’s jobs.² Delaying action on WHI also runs counter to the city’s adopted Economic Development Strategy³ and the Greater Portland Export Strategy⁴ which both depends in large part on the continued growth and investment of the port in facilities such as those projected for WHI.

¹ City of Portland; Economic Opportunities Analysis, Section 4, Alternative Choices 2012

² Brookings; Greater Portland Export Plan, Metro Export Initiative 2012

³ Portland Economic Development Strategy, 2009

We strongly urge the city to not consider deferring development to the Port of Vancouver as a strategy to preserve WHI, as it causes real economic harm and is not a legally sound land use alternative.

49. PSC Question: *Are the predictions about local jobs being created true? And if so, all I need is a simple chart about what local, regional and state benefits will be from having a new marine terminal on WHI.*

Alliance Comments: There are direct and indirect economic and employment benefits created by a new marine terminal on WHI. According to economic impact studies by the Port of Portland, there are 2,300 - 4,000 jobs (direct, indirect and induced), \$200 - \$300M in annual personal income and \$ 18 - 30M in annual state and local tax revenue.⁵

Some examples of direct and indirect jobs include those related to terminal operations and cargo handling, marine vessel handling and support (including towing, ship-related jobs and ship repair), as well as professional services related to the export economy (freight forwarders, insurance agents, attorneys, bankers).

In the Value of Jobs' study titled "Portland-metro's Traded Sector". The study shows that traded-sector jobs are important because they bring new money into the community, they support small and local businesses, and they pay higher wages than non-traded sector jobs – on average, 42 percent more. Portland-metro has more traded-sector goods firms than the national metro average. Traded-sector firms are supported by their ability to export their goods; therefore, viable port facilities are essential to their success. WHI is a key component of maintaining a viable port; not only does this development support direct and indirect jobs related to the port activities itself, it also supports the entire Portland-metro traded-sector economy and its spillover effects to small and local businesses.⁶

50. PSC Question: *Why Now?*

Alliance Comments: The recently completed regional industrial lands inventory, Land Availability; Limited Options⁷, found the metro region in general and the city of Portland in particular have very few large industrial sites currently available for traded-sector industrial development. The report found that the region has only one site of 100 acres or more currently available and zero sites of 100 acres or more expected to be available in the 6 month to 2 year time frame. The report also points out that requests for large lot sites represent a significant proportion of all the requests for new traded-sector business location received by Business Oregon and without a development ready supply the region risk losing new business recruitments to regions with a ready supply of developable land. Finally, the report details the

⁵ Port of Portland, 2012

⁶ Value of Jobs; Portland Metro's Traded Sector: A Source of Good Jobs, Higher Wages and Small Business Growth, 2012

⁷ Land Availability; Limited Options, 2012, Volumes I and II

length of time, risk and expense of bringing large industrial sites to development ready status. This work must be started years before the specific end user is identified if the region is to have an opportunity to recruit new firms and jobs to the local economy.

Large-scale industrial development projects take a long-range planning and development timeline. As documented in the Regional Industrial Site Readiness Project⁸ sites that are classified as tiers 2 and 3, meaning they have infrastructure, regulatory and other barriers, can take years to get to development-ready status. In order for the port to meet market demand for marine terminals in the next ten years, the city needs to take the necessary steps now to begin the process to get WHI to development-ready status. Annexation with a feasible concept plan is a necessary first action item before the port can begin marketing and preparing the site for development.

52. PSC Question: *Describe the overall benefits of traded sector industries (including transshipment ports) on regional and state economy. What benefit does a “pass-through” port have, if we assume it is not focused on shipping local goods?*

Alliance Comments: The Alliance objects to the premise of this question – that some jobs are “desirable” and some are “undesirable” and the implication that the PSC has the responsibility or authority to make its decisions based on its judgment of whether it deems the jobs that WHI will generate desirable or undesirable. While economic analysis shows that traded-sector jobs generate better wages and multiplier effects than non-traded sector jobs, that fact should only inform the economic sectors in which the city chooses to make pro-active efforts to recruit and promote new business. It should not use those definitions in a discriminatory or negative way – to exclude from consideration accommodating jobs that do not create as much leverage as traded sector jobs. The jobs contemplated for WHI are valuable in their own right, will pay good wages and benefits, and boost the regional economy. It sets a very dangerous precedent for the PSC to begin to discriminate among different kinds of industries or jobs, particularly when city council has adopted no policy that would guide the commission in making such decisions.

Given that broad policy objection to the question, the Alliance would note that, as referenced in #49, traded-sector industries provide many benefits to the local, state and regional economy, and investing in the export infrastructure that supports traded-sector firms is essential to sustaining and growing these jobs. This means that all operations of the port are important to generate enough capacity to support diversified export activities, including those related to exporting local goods to other markets:

1. Traded-sector workers in Portland-metro earn on average 42 percent more per year than a local-sector worker. Higher wages mean more affordability to individuals and families, and more demand for local goods and services (i.e.

⁸ Regional Industrial Site Readiness Project, Volume 2, August 2012

- more people and more money mean more customers for local grocery stores, restaurants, carpenters, hairdressers, etc).
2. Traded-sector jobs pay higher wages and this means more tax revenues into public service budgets. For example, to generate the state taxes to pay for one teacher you need to create about 150 new local-sector jobs, but only 90 new traded-sector jobs.
 3. Traded-sector jobs create 2.5 local-sector jobs on average, due to the increased capacity to afford and consume local goods and services.
 4. Traded-sector jobs lead to the formation and growth of small, local businesses. As traded sector firms reach such scale that they become anchor firms, they form a nucleus of an industry cluster with small start-ups, relocations and spin-offs for innovation.
 5. Traded-sector goods (i.e. manufacturing) firms provide jobs that pay higher wages and benefits, particularly as entry-points for workers from a variety of backgrounds and education levels to higher-wage jobs. Non-white workers earn nearly 50 percent more in manufacturing careers than in non-manufacturing jobs. Manufacturing jobs are an important component for meeting Portland's equity goals; with over half of the population without a post-secondary degree, these jobs are essential to providing family-wage jobs and benefits for Portland residents.⁹

The traded-sector is an essential part of sustaining and growing the local economy and providing real economic benefit to the city, region and state. Investing in human, natural and physical capital is a necessary strategy for maintaining a strong traded-sector; modernized and adequate port facilities are one of these necessary investments.

55. PSC Question: *Does the city of Portland need to meet industrial land needs (Goal 9) within its own boundaries? What is our Goal 9 flexibility? Is it factually correct that the city must annex WHI to meet state wide planning Goal 9?*

Alliance Comments: The city of Portland is required by Goal 9 to undertake a land supply inventory, and make policy decisions to accommodate economic demand. Policy decisions include planning alternatives to intensify land use, expand new land into the city, rezone existing land, or protect existing zoning. Usually a mix of alternatives is employed; the city states that annexing WHI is an alternative to help address 300 acres of the current 700-plus acre industrial land shortfall in its adopted Economic Opportunities Analysis.

If the city is unable to reasonably accommodate the shortfall of land relative to economic demand through other strategies, an expansion of the urban growth boundary merited. Given that the city's alternatives to overcome the existing shortfall

⁹ Value of Jobs; Portland-Metro's Manufacturing Sector: Paying Dividends for Portland-Metro Families, 2012

of industrial land include strategies that are dependent on unidentified and unsecured financial resources, i.e. brownfield remediation, site intensification and assembly, it would be reasonable to expect the city to choose alternatives that are more cost-feasible in the near term, such as annexing WHI for 300 acres of industrial land.

To not move forward with annexing WHI as part of overcoming the documented industrial land shortfall would violate Goal 9, in our opinion. First, legislatively, a significant portion of WHI is intended for employment land use: WHI was brought into the UGB, it was designated by Metro as Regionally Significant Industrial Land, and Portland City Council agreed to annex 300 acres for marine terminal development. Second, to not develop WHI would forgo direct and indirect jobs related to the terminal, and it would hamper the economic viability of the port. This decision would cause material economic harm and violate the letter and spirit of Goal 9.

56. PSC Question: *What would happen if we do not annex WHI? How would this impact the city's Goal 9 tasks? What process steps would occur next, in that scenario?*

Alliance Comments: As referenced in #55, it is our opinion that if the city chooses not to annex WHI, then the city would be in violation of Goal 9, and documentation that supports this claim would serve as the basis for an appeal. The city could adopt one or two alternative options. It could adopt policies that purport to rely on other strategies to meet the industrial land shortfall, such as significantly expedited brownfield remediation, site intensification achieved through substantially increased investments in infrastructure, reduced regulation of existing industrial sites to allow more intensive use, conversion of golf courses to industrial use, and similar strategies. Even with the annexation of WHI, the Alliance does not believe these strategies will be sufficient to meet the shortfall identified in the Economic Opportunities Analysis, a position which is supported by the city's own analysis of potential strategies to address the shortfall.¹⁰ As noted previously, many of these strategies are unfunded and will not produce any significant benefit without millions in as yet unidentified resources. The Alliance believes adopting a policy that does not demonstrate with any assurance that the city can address the shortfall identified in the Economic Opportunities Analysis -violates Goal 9.

A second strategy the city could adopt is to simply make a policy statement that it no longer intends to accommodate industrial development that requires additional land and that it will instead prioritize the creation and expansion of other jobs that do not require significant land. Such a declaration by the city would be unprecedented. The Alliance believes adopting such a policy would not only put the city at significant risk of being overturned by the state, but would be discriminatory to a whole class of Portland citizens who stand to benefit from the types of jobs that such a policy would

¹⁰ Industrial land capacity alternatives handout, City of Portland, September 12, 2012

preclude and would violate the equity component of the Portland Plan¹¹, among other negative impacts.

57. PSC Question: *Are both Vancouver and Portland marine terminal sites needed for future growth? Or is it just a competition? What is the reality of using the Port of Vancouver instead of WHI? Is that realistic or fantasy?*

Alliance Comments: As referenced in # 33 and #56, we do not believe it is within the legal bounds of Senate Bill 100 and Goal 9 to intentionally transfer the city's land supply shortfalls – and resulting economic benefit– to another state. Further, as documented in the study titled “Land Availability, Limited Options”, Clark County suffers from a shortage of available industrial land similar to Portland-metro.¹² Both the Port of Vancouver and Portland face land supply and environmental constraints as they expand and invest in their infrastructure and capacity to remain viable in a global market. Ultimately, parcels from both ports will need to be developed. To use land in the Port of Vancouver instead of WHI is functionally problematic for other reasons, as documented in Port of Portland testimony to the PSC on November 27, 2012:

- Marine terminals must be located on a river, which means marine terminals are located within the floodplain. FEMA Flood Insurance Rate Maps denotes the entire Columbia Gateway development area is subject to inundation in the event of a 100 year flood, and the entire site was under water in the 1996 flood. Any arguments about potential flood hazards that are exacerbated by terminal development on WHI would be no different if the marine terminal were developed at Columbia Gateway.
- There are approximately 110 acres of wetlands on the Columbia Gateway site that would be impacted by marine terminal development, compared to the 10.2 acres projected at WHI.
- Another segment of the development site at Columbia Gateway is fallow, sparsely vegetated fields, similar to WHI dredge material management site. Any arguments about potential negative impact to species that rely on grassland habitat that are exacerbated by terminal development WHI would be no different if the marine terminal were developed at Columbia Gateway.
- Shoaling along the shoreline at Columbia Gateway is extensive, so dock access ramps of 800-1000 ft. over shallow water would be required, impacting considerable shallow water habitat.

¹¹ The Portland Plan, April 2012

¹² Value of Jobs; Land Availability, Limited Options, 2012

- Additional impact to aquatic habitat would result from the substantial dredging that is necessary for berth access from the Columbia channel to Columbia Gateway

As the port states, “We cannot assume that Columbia Gateway is an easily and readily developable substitute for WHI when the natural resource constraints at Columbia Gateway are comparable and in some cases greater than those at WHI. The evidence demonstrates that because of their locational attributes and partially due to their constraints, both properties are necessary to meet the demand for additional marine terminals in the Portland/Vancouver harbor.”¹³

58. PSC Question: *Why can't the port maximize capacity of existing terminals and Vancouver site before constructing WHI? Is it possible for a facility similar to the one proposed to be built on the Vancouver side and to come to an agreement between the Port of Vancouver and the Port of Portland to provide economic benefits to Oregon while preserving WHI?*

Alliance Comments: The Port of Vancouver has similar land supply constraints to the Port of Portland. While we appreciate the PSC's interest in addressing land supply issues regionally, pushing Portland's deficits off to another state to handle before the city takes any action is not allowed by Oregon land use law, and it is bad public policy. In a time where local and state governments are in need of revenue and citizens are in need of employment, passing Oregon's economic benefits to another state and deferring land use decisions until another state has exhausted their supply is irresponsible and does harm to the city and state's tax base. It is our opinion that this violates Goal 9.

¹³ Port of Portland; Port of Portland's Preliminary Response to Issues Raised at the November 15th Planning & Sustainability Commission Hearing Regarding West Hayden Island (“WHI”), 2012



2012

PORTLAND-METRO'S TRADED SECTOR

A source of good jobs, higher wages and small business growth

A look into Portland-metro's traded sector

In December 2010, the Value of Jobs Coalition began an effort to gain a better understanding of the Portland-metro region's economy. The goal of this work was to inform policy-makers and the general public about the region's economic challenges and opportunities and illustrate how private-sector jobs support our region's quality of life and public services.

The following study, focusing on Portland-metro's traded sector, is a continuation of this effort, and it sheds some new light on why the traded sector is a critical part of the region's economy. Before the coalition commissioned this study, we knew it was important as state, regional and local economic development strategies were centered on growing traded-sector jobs. For example, Portland recently issued one of the nation's first metro international export strategies. The following pages, however, reveal even more reasons why Portland-metro should support a strong and healthy traded sector.

Highlights include:

- ▶ Expanding the Portland-region's traded-sector firms can help small business and inspire business creation. At the same time, the report shows an unsettling decline in the region's new business creation rate.

This report examines Portland-metro's traded sector - the industries and employers that are located here but sell the majority of their goods and services outside Portland-metro. The report looks at how Portland-metro's traded sector is faring and its impact on the region's employment, wages and overall economic health. The research was conducted by ECONorthwest at the request of the Value of Jobs Coalition, which consists of Portland Business Alliance, Port of Portland, Associated Oregon Industries, Oregon Business Council and Oregon Business Association.

Portland-metro in this report refers to the Metropolitan Statistical Area of Portland-Vancouver-Hillsboro, OR-WA MSA. Other metro regions in this study are based on the Metropolitan Statistical Areas used by the U.S. Census Bureau.

BY THE NUMBERS

42%.

Average percent more a Portland-metro, traded-sector worker earns per year compared to a local-sector worker.

2.5.

Number of local-sector jobs created by one high-skilled traded-sector job on average.

32.

Number of new businesses created in Oregon per 10,000 adults in 2011, comparable to the U.S. average, but below 1999-2001 level in Oregon.

\$56,000.

Average wage of a Portland-metro, traded-goods sector worker.

\$47,200.

Average wage of a Portland-metro, traded-services sector worker.

\$63,700.

Average wage of a Denver-metro, traded-goods sector worker.

\$61,400.

Average wage of a Seattle-metro, traded-services sector worker.

60%.

Percentage increase of inflation-adjusted wages in Portland-metro's traded-goods sector since 1970 (faster than the U.S. metro average).²

- ▶ Generating more traded-sector jobs may increase family incomes because, on average, traded-sector workers earn about \$15,300 more per year.
- ▶ The traded sector is competitive and changes over time. To be successful in growing, retaining and attracting future traded-sector jobs, the region must invest in its human, natural and physical capital.

The higher wages from traded-sector jobs have another important benefit: in our income-tax-dependent state, traded-sector jobs will, on average, generate more revenue for critical services like schools, health care and social services than local-sector jobs. For example, to generate the state taxes to pay for one teacher you need to create about 150 new average wage local-sector jobs, but only 90 new average wage traded-sector jobs.

Through this study, we hope to engage policymakers in constructive dialogue about how the region can focus on the factors that attract and retain these firms. By doing so, we can continue to build a stronger and more diverse economy for the Portland-metro region and a sustainable base from which important public services, and a good quality of life, can be funded.

Why the traded sector matters

The traded sector includes industries and employers which produce goods and services that are consumed outside the region where they are made.¹ The local sector, on the other hand, consists of industries and firms that produce goods and services that are consumed locally in the region where they were made.

Both sectors – traded and local – are essential to economic health. Traded-sector employers export products or services, bring in new money into a region. In part, this money gets spent in the local economy, supporting jobs and incomes in the local sector. Local-sector employers provide necessary goods and services that both improve quality of life and contribute to the productivity and competitiveness of the traded sector.

Most forms of manufacturing, specialized design services, advertising and management, and technical consulting are classified as traded in this analysis. Retail trade, construction, healthcare, education, real estate and food services are found in all metropolitan areas and mostly fall into the local sector.

Figure 1 presents the share of major industry categories classified as traded in the U.S. overall and in the Portland-metro area.

Figure 1: Share of major industry categories classified as traded, 2010

INDUSTRY	PORTLAND	U.S.
Agriculture, Forestry, Fishing & Hunting	100%	100%
Management of Companies & Enterprises	100%	100%
Manufacturing	86-100%	85-100%
Professional, Scientific & Technical Services	87%	86%
Finance & Insurance	67%	66%
Transportation & Warehousing	61%	59%
Wholesale Trade	43%	43%
Arts, Entertainment & Recreation	53%	36%
Public Administration	16%	29%
Utilities	18%	20%
Accommodation & Food Services	12%	13%
Retail Trade, Health Care, Education & Construction	0-8%	0-7%

Source: ECONorthwest analysis of U.S. Census and American Community Survey data.

¹ In this report, traded- or local-sector industries are classified following the approach developed by economists J. Bradford Jensen and Lori Kletzer of Jensen and Kletzer (2006). For more details on the methodology, see the full report at www.valueofjobs.com.

Differences between traded sector & local sector

On average, while both local and traded sectors include large and small, young and old, and high- and low-wage firms, historically, the traded sector differs from the local sector in several important ways:

- The amount of output (or value-added of the product or service being produced) per job is higher in traded-sector industries. This higher value is often referred to as value-added.
- The growth in traded-sector value-added per job accelerated during the past decade and outpaced the growth in value-added in the local sector.²
- Workers in the traded sector tend to be better educated, work more hours and earn higher average wages.
- Traded-sector workers in low value-added jobs are more exposed to being replaced by lower-cost workers or automation.

² Spence and Hlatschwayo (2011) estimate that between 1990 and 2008, value-added per job increased by 44 percent, but the economy overall only experienced a 21 percent increase in value-added per job.

Figure 2: Characteristics of traded vs. local sectors, 2010

	PORTLAND		U.S.	
	TRADED	LOCAL	TRADED	LOCAL
Median Annual Income	\$39,300	\$27,000	\$36,000	\$25,000
Share Full-Time	70%	56%	72%	59%
Median Hourly Wage	\$20.59	\$16.56	\$19.31	\$14.71
Share with college degree	40%	31%	33%	26%

Source: IPUMS USA; ECONorthwest analysis of U.S. Census and American Community Survey data.

All of these factors result in traded-sector workers in the Portland region earning wages that are significantly higher than their counterparts in the local sector, on average about \$15,300 or 42 percent more per year.³ Some of the annual wage difference is due

to longer hours worked by traded-sector employees, but even on an hourly basis, traded-sector employees earn about 18 percent, or about \$4.23, more per hour than local-sector workers.

³ These results are in part “on average.” Traded-sector firms still have lower paying jobs in administration and maintenance, but they have a greater proportion of jobs in higher-paying occupations like management, finance and engineering. But it is also the case that successful traded-sector businesses tend to pay higher wages for similar positions filled by more skilled employees.

A traded-sector story

Portland's traded-sector clusters

The Portland-metro region has identified groupings of traded-sector firms – companies that specialize in particular manufactured products or services that tend to cluster together because they draw competitive advantage from their proximity to competitors, a skilled workforce, specialized suppliers and a shared base of sophisticated knowledge about their industry.

Local and regional economic development strategies have identified a number of key traded-sector industry clusters as a focus for job and wage expansion strategies. This list shows the clusters identified in Portland-metro's economic development strategies and a sampling of the companies in each cluster.

Activewear & Outdoor Equipment

- adidas
- Benchmade Knife Company
- Columbia Sportswear
- Icebreaker
- KEEN Footwear
- Nike
- Pendleton

Clean Tech & Sustainable Industries

- CH2M Hill
- Gerding Edlen
- Glumac
- SERA Architects
- ZGF Architects

Renewable Energy & Energy Efficiency

- Iberdrola Renewables
- PECO
- Solaix
- SolarWorld
- Soloplo
- Vestas

Software & Electronics

- Coaxis, Inc.
- Hewlett-Packard
- IBM
- Intel Corp.
- Jama Software
- McAfee
- Tripwire
- TriQuint Semiconductor
- Wacom Technology

Traditional & Advanced Manufacturing

- Boeing
- Blount
- ESCO Corp.
- Evraz, Inc.
- Gunderson LLC/Greenbrier
- Madden Fabrication
- NACCO Materials Handling Group
- Oregon Iron Works
- PCC Structurals
- Schnitzer Steel
- Vigor Industrial

Nike & Hydro Graphics, Inc.

When the University of Oregon football team took the field at the 2012 Rose Bowl, television viewers across the nation were awed by the new Nike Pro Combat uniforms. Particularly notable were the one-of-a-kind Liquid Metal helmets.

Nike partnered with Newberg-based Hydro Graphics, Inc. (HGI) to develop the eye-catching finish for the helmet. HGI developed a mirrored appearance using a proprietary HydroSkin water transfer printing technology to create the highly reflective surface, fittingly named HydroChrome.

"Working with Nike to develop these iconic helmets that were seen by millions of viewers around the country was huge for us. Without that partnership, we never would have had that opportunity," says Chris Thom, HGI President.

HGI was founded in 2006 as an extension of their previously established painting facility, Finish Line Industries, which began operations in 2001. HGI currently has 37 valued employees.

"Working with a small firm like HGI gives us the flexibility to do something really unique and special," says Nike's Global Creative Director for Football Todd Van Horne. "We can tap into special talents and processes by partnering with small firms such as HGI."

How Portland-metro measures up

Traded goods

In past economic studies, the coalition has compared Portland-metro to a number of other metro regions that either have similar characteristics or that the region traditionally benchmarks its economic performance against. For the purpose of this study, Portland-metro is compared to Seattle, Minneapolis, Denver, Cincinnati, St. Louis and Sacramento metros. Seattle, Minneapolis and Denver are seen as ‘aspirational’ metros since Portland-metro’s economy once kept pace with those three metros, but, since 1990, has fallen behind them significantly.

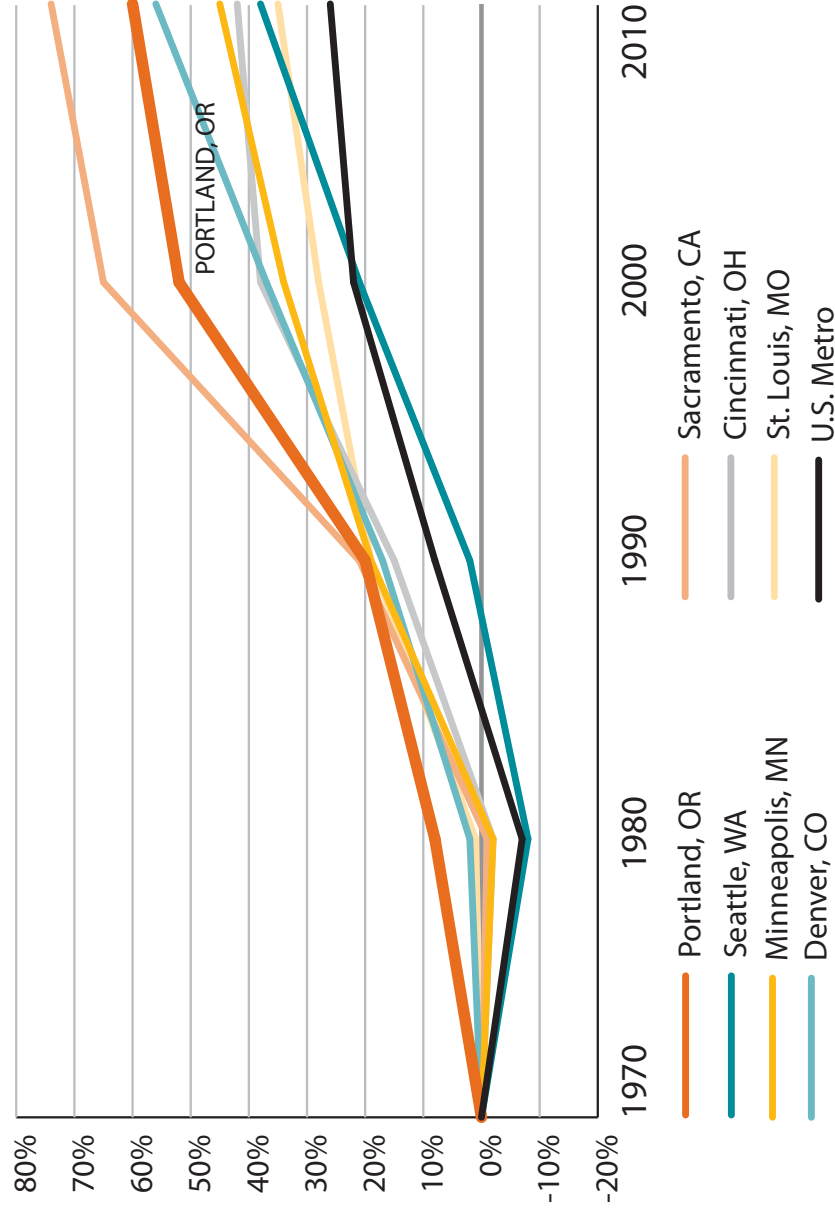
Across metro regions, the traded sector typically makes up 35 to 40 percent of total employment; however, the industries that comprise each region’s traded sector differ. As a result, differences in traded-sector industries across regions explain much of the variation in economic performance across cities.

Over the past 40 years, Portland’s traded-goods sector – such as manufacturing – has performed relatively well, increasing employment and wages at a rate faster than the U.S. metro average. Inflation-adjusted wages in Portland-metro’s traded-goods sector grew by 60 percent over that period, faster than the U.S. metro average and all of the comparison regions except Sacramento. Portland-metro lost ground, however, on both employment and wages to Seattle, Minneapolis and Denver over the past decade.

Today, the average wage in Portland-metro’s traded-goods sector is approximately \$56,000 per year. This amount exceeds the U.S. metro average of approximately \$52,000, but falls below the average in some of the other comparison metros such as Seattle (\$67,600), Denver (\$63,700), Minneapolis (\$60,600) and Cincinnati (\$59,100).

In previous studies, the Value of Jobs Coalition explored the potential reasons for the wage differential between Portland-metro and other metros. These factors impact wages in both the traded-goods and traded-services sectors.

Figure 3: Percent change in inflation-adjusted wages for traded goods since 1970



Source: IPUMS USA; ECONorthwest analysis of U.S. Census and American Community Survey data.

While multiple factors contribute to the differences, the coalition identified three main factors:

- 1) **SIZE:** The aspirational metros are larger than Portland-metro, and there is a strong relationship between larger size and higher wages (although the coalition's 2011 economic study indicated that Portland underperforms even when accounting for size).
- 2) **EDUCATION:** The aspirational metros have a higher share of their population with college degrees and there is a strong relationship between education levels and wages.
- 3) **COMPOSITION OF INDUSTRIES:** The aspirational metros have a higher share of their employment in higher-paying specialties such as aerospace and advanced electronics in the case of manufacturing, and finance and management in the case of services.

A traded-sector story

The Standard & Alyssa Gasca

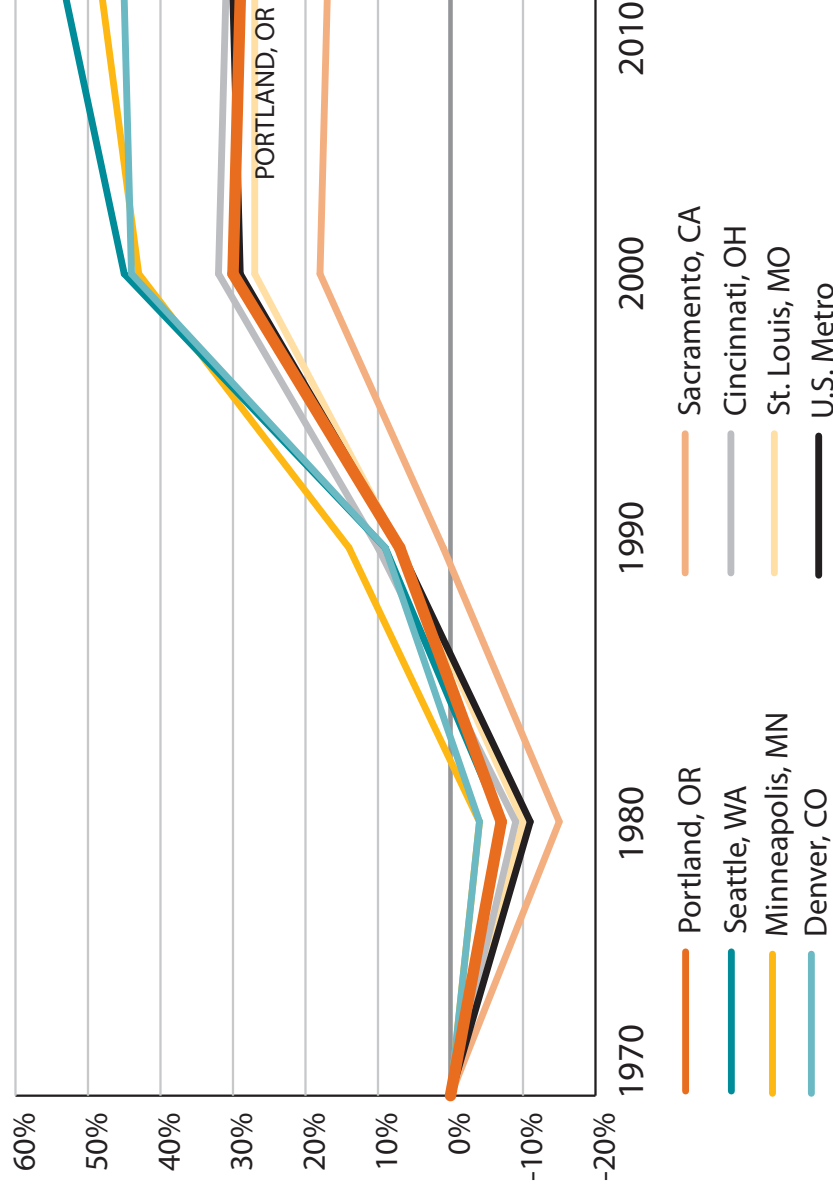
Founded in Portland in 1906 by German immigrant Leo Samuel, The Standard provides life, disability, dental and vision insurance and financial management services nationwide. Because most of its 7 million customers are located outside the Portland-metro area, The Standard is considered one of the largest traded-sector service companies in the region.

The Standard generates more than \$660 million in annual economic activity in Oregon, including \$347 million in personal income. The company employs 2,400 at its headquarters in Portland, and generates 3,000 other jobs through contracting and purchasing of goods and services – often with small, local companies.

One example is Alyssa Gasca's organizational consulting business. The Standard regularly uses Ms. Gasca's firm to help with strategic planning and professional development. The relationship has allowed Ms. Gasca to grow her company with local hiring to meet The Standard's needs.

"This is a virtuous cycle," said Ms. Gasca, "The Standard's national presence translates into more jobs and the resources to hire a firm like mine here in Portland. In turn, my firm helps The Standard to be even more successful as they compete on that bigger national stage, meaning they provide even more economic activity here at home."

Figure 4: Percent change in inflation-adjusted wages for traded services since 1970



Source: IPUMS USA; ECONorthwest analysis of U.S. Census and American Community Survey data.

Traded services

From 1970 to 2010, Portland-metro's traded-services sector – such as insurance, architecture and investment consulting – has grown rapidly. In this sector, Portland-metro's performance is relatively typical for U.S. metro areas, but falls below several standout regions. Relative to all U.S. metro areas, Portland-metro's traded-service sector saw greater employment growth, but slightly slower wage growth. Portland-metro's wage growth, however, significantly trails behind the metro areas of Seattle, Minneapolis and Denver, particularly since 1990.

In previous economic studies, the Value of Jobs Coalition pointed to concerns about Portland-metro's wage and income levels falling below the national average and lagging behind Seattle, Minneapolis and Denver. This traded-sector study reveals that a significant portion of the Portland region's declining income relative to some metro areas is the result of lagging wage growth in the traded-services sector.

In 2010, wages in Portland-metro's traded-services sector fell below the U.S. metro average (\$47,200 vs. \$52,300) and all of the comparison areas. While Portland's wages were close to Sacramento, St. Louis and Cincinnati (all in the \$47,000 to \$49,000 range), Portland's traded-service wages are significantly below Seattle (\$61,400), Minneapolis (\$56,700) and Denver (\$56,200).

Benefits of traded sector activity

Impact on local jobs

The traded sector affects the size and health of the local sector. Growth in the traded sector generates growth in the local sector.⁴

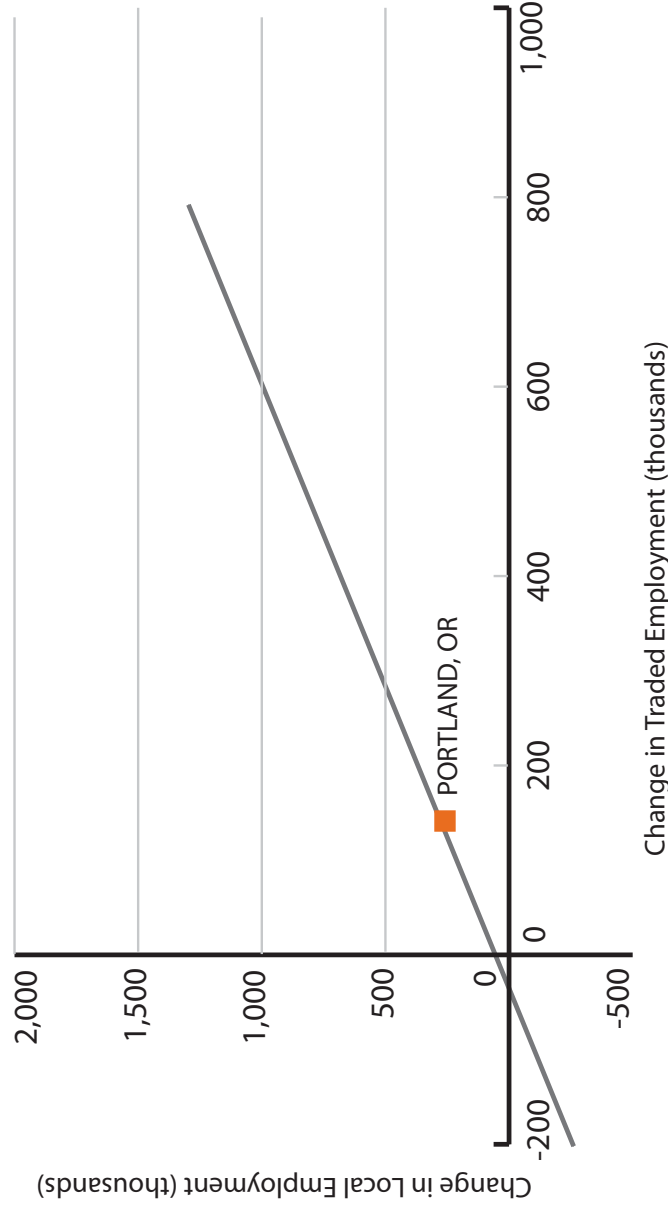
As employment and income in the region increases, demand for local goods increases. More people and more money mean more

⁴ There are both positive and potentially negative aspects of traded-sector growth. Job and wage growth are positive but may impact housing costs if housing supply is constrained relative to demand.

customers for local grocery stores, restaurants, hairdressers, carpenters, etc. Figure 5 helps to illustrate this relationship. The line in the figure represents the average relationship between the growth in employment over the past 30 years.

One recent estimate developed by economist Enrico Moretti suggests that, on average, one additional high-skill traded-sector job creates 2.5 local-sector jobs, and one additional low-skill traded-sector jobs is associated with one additional local-sector job.

Figure 5: Change in local and traded sector employment



Change in Traded Employment (thousands)

Impact on local income

A clear correlation exists between changes to traded-sector income and changes to local-sector income for U.S. metro areas.

Much of the difference in income (and prices) across various metro areas comes from differences in the productivity of the region's traded sector.⁵ Because traded-sector employers compete in large markets, the price of traded products is tied to the prices charged by companies from other regions. For Portland-metro workers to earn more than metro workers, who are producing the same good for a similar price, Portland-metro works must produce more value-added products or services.

Higher value-added products or services lead to higher traded-sector wages that can help grow the wages of a region's local sector. Because a region's local- and traded-sector employers compete for the same workers, the local-sector employer must pay higher wages to attract employees.⁶ As a result, higher regional income levels stem from higher productivity in the traded sector. This higher income level can, however, also impact costs for housing in a highly productive region.

Boosts to small business growth and development

A healthy traded sector can lead to the formation and growth of small, local businesses. As the traded sector increases employment and wages, it also encourages entrepreneurs to start new businesses. Furthermore, if traded-sector firms

attract skilled workers or encourage the creation of ample, independent suppliers, then starting a new business in the area may become more attractive and less costly.

Some traded-sector businesses reach such scale that they become anchor firms, forming the nucleus of an industry cluster with small start ups, relocations and spin-off companies seeking the talent, ideas and innovation surrounding the anchor employer. One example in the Portland-metro region is the activewear and outdoor equipment cluster that has grown around Nike and Columbia Sportswear.

Traded-sector industries frequently invest in research and development that attract smart, innovative people. The hiring of these individuals makes it more likely that a local entrepreneur will have a new, breakthrough idea that supports the creation of new firms and the growth of new or existing industries.

The health and characteristics of a region's traded sector may affect the level of entrepreneurial activity in a location. Historically, Portland-metro (including its traded sector) provided a favorable climate for small and new businesses.

The rate of new business creation in Oregon used to be well above average. In 1996, each month 49 out of every 10,000 adult Oregonians started a new business at which they worked at least 15 hours per week.⁷ In contrast, across the U.S., only 31 out of every 10,000 adults started a new business each month in 1996.

A traded-sector story

Boeing & PECO Manufacturing

Boeing is the world's leading manufacturer of commercial jetliners and defense, space and security systems. Boeing's Gresham operation employs about 1,700 people and serves as the company's center of excellence for complex machining, gear systems and pilot controls for all Boeing Commercial Airplane programs. It ranks as one of the largest profile milling facilities in the world and produces some of the most critical machined parts and structures for Boeing's jets.

Founded in 1938 as an aluminum and zinc die cast job shop, Portland's PECO Manufacturing has been building components used in Boeing's commercial and military aircraft for more than 50 years. Boeing is PECO's largest and also one of its longest-standing customers.

"PECO builds components that are used in a range of Boeing products," said Boeing's Portland General Manager, Perry Moore. "Their products go into airplanes that are sold and operated around the world."

Because of its strong ties to Boeing, PECO has been able to expand its product line and markets. Today PECO employs about 250 people at its Southeast Portland plant.

"We make very specialized products that require highly skilled workers," said Steve Scheidler, PECO President. "Our product isn't something that you buy at the corner store. Without Boeing's global market reach, our employee count would be far less."

5 Avent (2011)

6 Economists refer to this result as the Balassa-Samuelson effect (after the economist who first advanced this theory).

7 Fairlie, R. (2012) *Kauffman Index of Entrepreneurial Activity, 1992-2011*. www.kauffman.org/kiea

However, in recent years, Oregon's rate of new business formation has declined. Between 2009 and 2011, Oregon's rate of new business creation fell to 32 new businesses for every 10,000 adults, approximately equal to the U.S. average of 33 businesses per 10,000 adults. The decline in entrepreneurship is troubling and may be indicative of or related to weaknesses in the traded sector, since many new businesses are launched to support traded-sector partners. This concerning trend is evident in Figure 6, which shows how Oregon has historically trended above the U.S. average but has fallen below in recent years.

Growing the traded sector

A region derives its economic capacity from innovation and the four forms of capital: natural capital (climate, natural resources), physical capital (machines, roads, buildings), human capital (people and their skills) and social capital (institutions and social norms).

Some traded-sector industries require natural resources, so they locate in regions that offer particular natural advantages such as good soil or low-cost energy sources. Other traded-sector industries need access to markets, so they

locate near transportation hubs such as ports, rail and road facilities. Still other traded-sector industries require access to well-educated or innovative people or ideas, so the sector grows up around particular individuals or groups, often linked to universities or an innovator's hometown, which was the case with Phil Knight and Nike or Bill Gates and Microsoft.

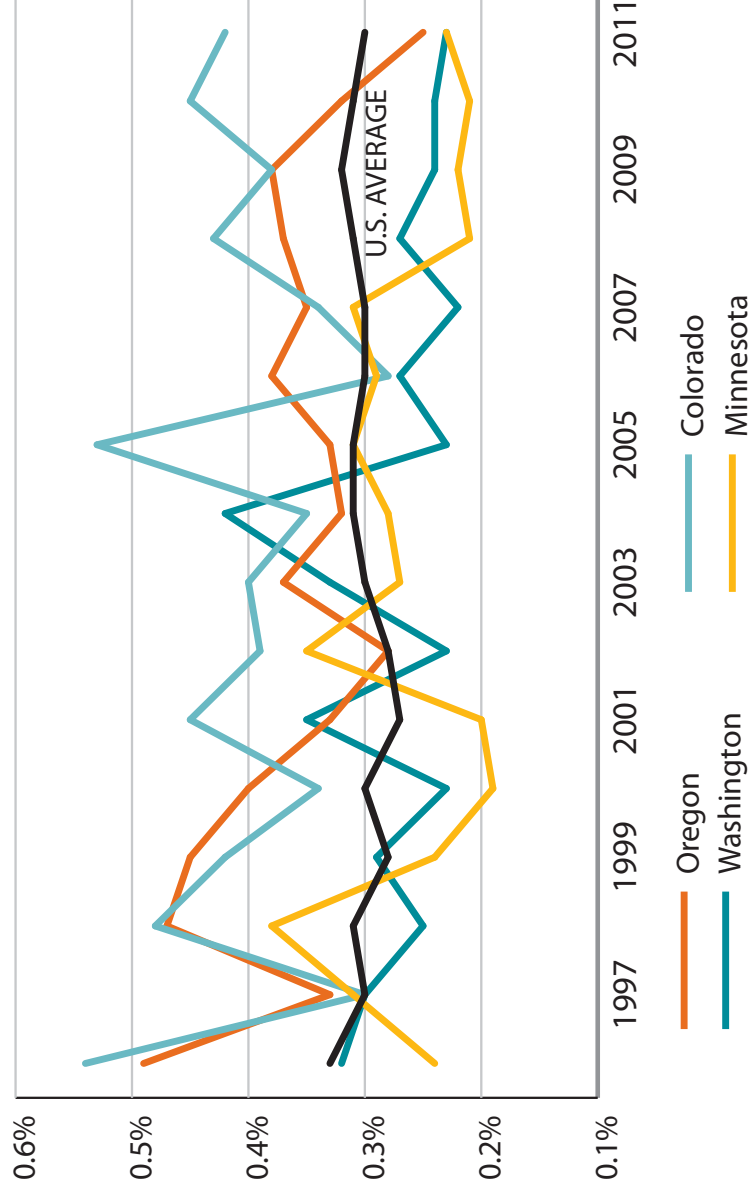
Some factors that influence the location decisions of traded-sector employers, like natural resources and global economic conditions, are largely outside a region's ability to influence.

Other factors, such as support for entrepreneurial activity and governance, can be influenced by public policy. For instance, if the local construction industry or local government land use and building regulations are inefficient, the cost of building new houses, factories, or office buildings will increase, decreasing regional traded-sector competitiveness.

If local school systems or health care systems provide low-quality services at a high cost, the quality of the local workforce will suffer and costs will increase, which tends to reduce regional traded-sector competitiveness. Or if tax policy inhibits business launches or wealth creation, the result may be more reluctance on the part of entrepreneurs to invest time, energy and capital in a particular area.

In other words, a region's infrastructure – both human and physical – can impact a region's traded-sector productivity and wages.

Figure 6: Kauffman Entrepreneurial Index (1996-2011)



Source: Kauffman Index of Entrepreneurial Activity by State (1996-2011)

Conclusions

Over the past several decades, the U.S. traded sector has shifted from predominantly goods producing to predominantly services producing. This transition can be linked to growth in global trade and technological changes.

Traded-sector evolutions are even more pronounced at the regional level. The perpetual birth, death or movement of industries (and employers) means that each region's traded sector is constantly in flux.

A region's traded sector can change when a new industry finds a home there or when an old industry declines.⁸ Change can also occur in response to the movement of industries across places.⁹ How regions cope with change is at the crux of regional economic development debate.

As this analysis has shown, Portland-metro benefits from a strong base of traded-sector jobs, and there are numerous reasons to grow and strengthen Portland-metro's traded sector: new money introduced in the economy; potentially higher wages for local- and traded-sector workers; and potentially higher entrepreneurialism and small business growth. These advantages and connections were further illustrated by stories about traded-sector companies that purchase goods or services from other smaller, local- or traded-sector businesses.

As a region, we need a better understanding of the role of the traded sector in our communities' local sectors. The Value of Jobs Coalition hopes this report is a good first step.

⁸ Klepper (2010)

⁹ Duranton (2007)

A traded-sector story

PCC Structural & BOWCO

Headquartered in Southeast Portland, PCC Structural manufactures large and small castings in nickel, titanium and stainless steel for aerospace, medical and other industries.

A division of Precision Castparts Corp., PCC Structural was founded in the early 1950s, growing from a business that originally made chainsaw parts. By 2011, the company had diversified to highly engineered castings for the aircraft-propulsion, aerospace and other industries. Today the company has sales of \$7.2 billion, more than 21,000 employees and 120 manufacturing facilities worldwide.

Casting metal requires accurate wax molds and when PCC Structural needs one they often turn to BOWCO Industries, a provider of precision engineered molding services.

Founded in 1990, Canby, Oregon-based BOWCO has 20 employees.

"Parts we make using BOWCO molds end up in aircraft engines and other highly engineered products sold literally across the globe," said Steve Duea, Vice President of Human Resources for PCC Structural.

"The parts PCC Structural makes with our molds end up in products made by GE Aviation, Pratt & Whitney and Rolls-Royce," said BOWCO President Doug Bowen. "We're able to pay better wages and create more jobs through the connection with PCC Structural than we could if we were only supplying to the local market."

For state and regional policy-makers, the challenge is to determine what factors help or hinder both our traded-goods and traded-services sectors and develop a strategy for nurturing those factors that encourage the location, formation and growth of traded-sector firms.

While the Portland-metro region has certain "fixed" natural and physical advantages for some traded-sector firms, employers rely on "un-fixed" resources such as: an educated and trained workforce, modernized infrastructure, available land supply and a favorable business climate. Public- and private-sector leaders must work together to ensure that the Portland-metro region's natural, physical, human and social capital is up to par for traded-sector firm needs. This means:

- ▶ Investments in education as well as trade programs and research institutions;
- ▶ Modernized, affordable infrastructure that provides access to market;
- ▶ Sufficient supply of market-ready, developable land; and
- ▶ Tax structures that encourage investment and economic growth.

How can we work together to ensure the Portland-metro region continues to evolve its economy and create more capacity for prosperous growth and increased revenue for public services? We hope the Value of Jobs Campaign through this study and others continues to inform this discussion.



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Associated Oregon Industries



About the Value of Jobs Coalition

The Value of Jobs Coalition is based on the premise that in order to have a prosperous, healthy Portland region with a good quality of life, we need more private-sector jobs. The coalition began with an economic study in the fall of 2010, which uncovered troubling economic data about the Portland-metro region. A number of other studies have followed that highlight the region's economic opportunities and challenges. Find out more at: www.valueofjobs.com.

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bae urban economics

MEMORANDUM #3

To: Eric Engstrom, City of Portland, Bureau of Planning and Sustainability (BPS)
From: Janet Smith-Heimer, MBA, Managing Principal
Re: West Hayden Island Annexation – Economic Review
Date: March 12, 2013

Purpose

This memorandum is the third in a series of memorandums prepared by BAE Urban Economics to support the Bureau of Planning and Sustainability (BPS) during its review of the potential annexation of West Hayden Island (WHI) into the City of Portland for purposes of future development.

BAE Review Process

BAE was retained in late September, 2012 to review background documents, attend a meeting of the Advisory Committee on September 22, 2012 to discuss Finance, and provide subsequent analysis of financial and feasibility issues to the extent possible, for the West Hayden process. The key issue at the time of our engagement, was the difference of opinion between the Port of Portland and other stakeholders about whether the project could financially support the roughly \$30 to \$40 M of mitigation measures under consideration.

BAE prepared its Memo #1, describing development feasibility issues, and identifying the need for more refined business planning to answer this question. Memo #1 was issued on October 16, 2012.

In December 2012, as a result of a Port of Portland offer to discuss the issues raised by BAE in its Memo #1, two conference calls were held between Port staff and Janet Smith-Heimer, Managing Principal of BAE. The first of these calls covered general feasibility issues, but without Port provision of specific numbers or analysis. The second call involved BAE's visual review online (via GoToMeeting) of the Excel-based cash flow model under development by the Port, to test the feasibility of the West Hayden Island project, including all expected development costs, mitigation cost, ground lease revenues, and other financial assumptions. BAE was not provided with a hard copy or electronic copy of the model for further reference, due to both the sensitive nature of internal Port real estate analysis, as well as the preliminary nature of the project. BAE was only able to take notes on the meeting, as we viewed and walked through the online version of the model with Port staff for approximately 30 minutes.

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This work resulted in BAE's Memo #2, issued on December 28, 2012. Memo #2 discussed how the Port of Portland has been evaluating its business proposition for WHI, and how this process could be improved and refined to devise a feasible project, including feasible mitigation costs, through more detailed business planning.

This 3rd memorandum combines the prior two memorandums into a final work product, blending the discussion into a summary of the project and how these general financial issues will impact it, along with recommendations for future resolution of these issues. As the prior two memos were circulated and several comments were received by BPS, this memo also seeks to clarify and/or incorporate comments.

West Hayden Island Marine Terminal Project

Overview of Port of Portland

The Port of Portland is a public agency created by the State of Oregon to promote economic development through construction and operation of aviation and marine facilities. With respect to its marine facilities, "the Port's goal is to maximize its marine facility footprint with the highest and best use in support of the Port's cargo mission. In doing so, the Port seeks to establish long-term customer relationships with business partners that are committed to environmental stewardship and focused on the protection and viability of the surrounding waterways."¹

In addition to aviation and marine facilities, the Port is the largest industrial park developer in the Portland Metro², with more than 10,000 acres of property holdings in six business and industrial parks including Rivergate Industrial District, Portland International Center, Swan Island Industrial Park (which includes Mocks Landing and Port Center), Troutdale Reynolds Industrial Park, and Brookwood Corporate Park. The most recent property acquisition was the 221 acre LSI Inc. site in Gresham, OR, which closed in late 2011 and will be developed as the Gresham Vista Business Park.

Marine Terminal Facilities

According to the Port of Portland's *2012-2013 Adopted Budget*, the Port's marine facilities include ownership of four marine terminal complexes handling a diverse mix of cargo, including grain, mineral bulk, liquid bulk, automobiles, project cargo, break-bulk cargo, and containers. At present, all major marine customers of the Port are under long-term lease agreements, including the most recent transaction, a 25-year lease with International Container Terminal Services, Inc. (ICTSI Oregon, Inc.) for the operation of the 200-acre

¹ *2012-13 Adopted Budget for the Port of Portland*, pg. 30.

² *Ibid.*

container facility at Terminal 6, signed in May, 2010. The lease includes the intermodal yard and the slab-steel bulk operation.

In FY 2011, the Port experienced throughput volumes of 193,335 TEU's (Twenty-Foot Equivalent Units) of containers, 242,753 automobiles, 688,690 short tons of break-bulk, 4.7 million short tons of grain bulk, and 5.7 million short tons of minerals. According to the Adopted Budget, with exception of containers, all of these volumes are expected to decline slightly in FY 2012-2013, with continued declines forecasted for FY 2013 compared to actual FY 2011 volumes³.

The West Hayden Island Project

West Hayden Island (WHI) is an approximately 800-acre undeveloped island adjacent to the Port of Portland's other marine facilities. Portions of the Island were acquired by the Port in 1994, while other portions are owned by the State Division of State Lands, but intended for acquisition by the Port prior to development.

WHI has been the subject of a lengthy ongoing planning and environmental assessment process between the Port of Portland, Metro, and the City of Portland. In 1983, WHI was included in the Urban Growth Boundary for purposes of satisfying a regional need for marine terminal facilities. Since that time, a series of resolutions and other actions have led to a July 29, 2010 City Council resolution directing the City of Portland's Bureau of Planning and Sustainability to develop a legislative proposal for annexation of WHI to the City with the intent of retaining at least 500 acres as open space, and to identify no more than 300 acres for future deep-water marine terminal development.⁴

The proposed development of WHI, described in the *West Hayden Island Final Report* (WorleyParsons, April 26, 2012), envisions three marine terminal facilities on approximately 300 acres, with one devoted to automobile off-loading and dealer processing, and two terminals handling minerals and/or agricultural products. None of the proposed WHI terminals are envisioned as container or break-bulk facilities.

³ Ibid.

⁴ *Draft Intergovernmental Agency Agreement between the Port and the City*, August 14, 2012

Development Feasibility of WHI

The following discusses three related issues that will affect the feasibility of WHI from a financial perspective: market demand (which affects the timing and amount of revenues from the project to the Port), the financial burden of proposed mitigation measures, and the overall financial prospects of the project from the Port's perspective.

Market Demand for Additional Marine Terminals

According to the *West Hayden Island Public Cost/Benefit Analysis* (EcoNorthwest, June 2012), the new WHI facility would not commence operations until 2026, following a three-year construction period.

BAE did not review any forecasts or evaluations of the market demand for future additional marine terminals on Port of Portland property. We are aware that this is a complex issue, and must take into account both overall forecasts of global trade and port competitive advantages, as well as the circumstances posed by the adjacent state of Washington with respect to shipping automobiles, minerals, and agricultural and other products to and from the US.

It should be noted, however, that the proposed WHI project will represent a major expansion of Port of Portland operations. Planning for marine terminal operations on environmentally-sensitive lands is a long term proposition, which poses the challenge of ascertaining likely market demand for facilities to be constructed more than 10 years in the future. This challenge is often present in large publicly-owned infrastructure projects, which may need to be planned for and built ahead of potential demand or need, in order to be ready when the future arrives. This challenge is faced in similar ways, by many other publicly-owned infrastructure and facilities, such as airport facilities, some types of rail service, etc. These large public projects often hinge on key early public policy decision points. Some communities invest in these facilities ahead of known demand, while others may opt to seek alternate methods of meeting future infrastructure needs, or chose to not meet these needs at all.

Land Value and Ability to Support Mitigation Costs

One of the major points of discussion during WHI project planning has been the ability of the project to support the costs of environmental and socio-economic mitigation measures. In general, the discussion focused on a financial measure set forth by Port staff and its advisors: that the planned mitigations and community benefits, along with all other development costs, should total less per square foot of developed land than the value of that land, in order to enable the Port to earn a return on its investment. Moreover, the Port estimates that "shovel ready" industrial parcels it owns in industrial parks in the Portland region, are generally worth \$5.00 to \$7.00 per square foot today. Using this value as a rough indicator, the Port is seeking total WHI costs to be less than this value (creating a potential financial return to the Port). Thus, the Port's view of the list of mitigation measures and community benefit costs has

been that this project cannot afford all of these added costs because these costs plus development costs might exceed ultimate land value to a significant degree, undermining any ability by the Port to achieve a financial return on WHI land. It should be noted that Port of Portland has emphasized its need to earn a return on its investment in projects such as WHI, due to the structure of Port operations, which seek to maintain self-sufficiency by generating more revenues than costs, within its Marine Division⁵.

BAE did not research current industrial land values in industrial parks in the Portland metro, because BAE believes that shovel ready industrial park land is not a directly comparable economic situation to the operation of a marine terminal at WHI. Specifically, research indicated that most public port authorities charge marine terminal developers/operators a ground rent plus other fees and charges, typically tied to the volume and type of terminal activity unique to the particular port's location and facilities. This revenue stream (ground lease plus other fees) is not directly comparable to landside industrial park land, where location and infrastructure facilities are much less unique or specific to the economic operations of the tenant.

To illustrate this concept, BAE profiled several recent port marine terminal lease deals on the West Coast. For example, as detailed in Appendix A, the Port of Long Beach owns a marine terminal facility leased to Toyota. The lease and operating agreement, signed in late 2011, generates a minimum guaranteed annual payment (GAM) of approximately \$84,650 per acre per year, for the 145-acre facility. If wharfage fees exceed this guaranteed minimum, the Port receives the higher amount. Toyota funded and owns its improvements under this 20-year lease arrangement (e.g., buildings). The Port provides docks and its equipment. The vehicle processing function of the terminal facility reportedly is the primary reason this project yields strong revenue payments, because dealers will pay fees for the convenience to off-load and immediately prepare vehicles for delivery and sale.

On a very conservative basis, if this guaranteed minimum payment is capitalized at 10 percent, the resulting land value would be \$846,500 per acre, or almost \$19.50 per square foot for the 145-acre facility at the Port of Long Beach. Typical ground rent charges for this land value would be \$1.95 per square foot per year (10 percent of value per year).

⁵ BAE reviewed the Port's *2012-2013 Adopted Budget*, which indicated that the agency blends some of its Marine and Industrial Development Division operating revenues and expenses with other functions as part of its General Fund, making it difficult to isolate the economic structure of just the marine port facilities in order to determine its achievement of stated financial return objectives. It appears that the Marine and Industrial Development Division earns more total revenue than costs, even excluding land purchase / sale events occurring within its industrial parks. Thus, it may be more accurate to conclude that the Port desires to earn a return on its marine terminal investments in order to support other Port economic activities related to industrial parks, general aviation, PDX, or agency-wide functions. A more detailed analysis would be needed to isolate and prepare an accurate analysis of this Division and its return on current investments, and/or other financial needs with respect to overall Port operations.

In contrast, if business/industrial park land in the Portland Metro is selling at \$218,000 per acre (i.e., the \$5.00 per square foot value cited by the Port) in the Portland metro, the ground rent on this site that would be typically charged by a public agency owner would be up to \$21,800 per acre per year, or \$0.50 per square foot per year (e.g., 10 percent of value per year).

This comparison shows that the Port of Long Beach marine vehicle facility yields an almost quadruple value through its guaranteed minimum payment, compared to the generic landside “shovel ready” industrial land value cited by the Port of Portland. While some comments received about this subject (per Memo #1) stated that this higher value at the Port of Long Beach must be due to generally higher industrial land values in Los Angeles than in Portland, the terms of the operating agreement in Long Beach are clear- this deal is about the operating benefits of locating at that Port, with its facilities, serving that market with prepped automobiles. This is demonstrated best by the wharfage fees tied to volume, which are not related to real estate values elsewhere in that region, but instead are affected by the economics of the auto shipping and prep business function and its economic benefit to auto dealers in the region (with economic cost structures that are very likely similar to Portland’s car dealers).

The Long Beach story was highlighted in Memo #1, not to estimate the land value of WHI, but to illustrate the operating fees unique to port marine terminals with the auto prep feature.

Other recent port agreements also described in Appendix A include:

- Port of San Diego: \$72,000/ac/yr for vehicle storage, pass-through, and processing facilities (with Port-owned buildings)
- Port of Olympia: \$33,500/ac/yr for lumber storage and pass-through
- Port of Hueneme: \$14,400/ac/yr for vehicle storage and pass-through

While BAE has not been engaged to value the land residual value and resulting revenue stream that may arise from WHI, BAE does believe that it will ultimately be driven by the economic value provided by WHI to terminal operators, not by land values at industrial parks elsewhere in the Portland region.

In summary, for publicly-owned marine terminal situations, the investment in docks, equipment, and overall location, plus the competitive advantage of limited port facilities granted to public agencies, means that this land and associated facilities are not comparable to landside industrial parks. Marine terminal facilities’ value is derived from a mix of ground rent and other charges applied by public agencies that captures this very different economic function.

Port’s Financial Cash Flow Model for WHI

To further amplify the Port of Portland’s concerns regarding WHI’s ability to support the mitigation measures requested by the City in its draft Intergovernmental Agreement (IGA), BAE

was invited by the Port of Portland staff to walk through its economic analysis of WHI project feasibility, in the form of a cash flow model, in December 2012. However, the Port did not provide BAE with the cash flow model or its output, due to the preliminary nature of the project and its financial planning at this time. Thus, the discussion in this memorandum is based on BAE notes taken during an online meeting with the cash flow model shown for review for approximately 30 minutes. BAE was able to understand the cash flow model's structure and assumptions, but does not have a full record of the assumptions or outputs of the model.

The Port described some of its financial background to BAE, prior to the cash flow walk-through. Port staff expressed that WHI needs to be at least self-sufficient from a financial point of view, and not create financial burdens on the rest of Port marine and other operations. Moreover, the Port described its long-term financial picture as "challenged" by other factors, including a future financial obligation to fund Superfund site cleanup at its sites in the Portland Harbor. While the timing and amount of cleanup costs are not yet known (under study), the Port is concerned that this one-time cost will impact its financial picture, causing the Port to seek positive revenue-generating opportunities to offset these expected extraordinary one-time costs. It is important to note that the cleanup costs for Superfund site mitigation that could potentially occur on WHI are not part of the WHI marine terminal project or annexation negotiations; cleanup costs and actions are not integrated or related to the WHI terminal project.

The Port's cash flow model for WHI contains a fairly typical type of real estate cash flow analysis, with upfront development costs and then eventual revenues earned from, in this case, ground leases (other Port cases would include land sales). The cash flow model compares the ground lease revenues with development costs, on an annual basis. The "bottom line" cash flow is then discounted by a rate of 12 percent, to determine the present value of the net cash flow, which in theory is the same as land value today if the project occurred as assumed. In financial terms, this 12 percent discount rate is the same as a minimum rate of return; its use in this way presumes that the project, if it had a positive cash flow during its life, would need to yield an overall rate of at least 12 percent, ending up at a zero value today. Any number less than zero (e.g., a negative number) resulting from this discount rate applied to each year's cash flow, would indicate that the project is not yielding sufficient return per this 12 percent assumption.

The bottom line of the Port's cash flow for the WHI project shows a negative value, under the 12 percent discount rate (meaning it is earning less than 12 percent per year for the years shown). The same model also calculated the net present value at a 6 percent discount rate, which again yielded a negative number in the cash flow's current form. Translated into laymen's terms, this means that if one agreed with all of the assumptions and timing as shown in the cash flow model, and one had a minimum return to meet, whether 12 percent or 6 percent, the project as modeled would be considered as infeasible.

BAE does not know the result of the model if the cash flow were set to a zero discount rate (meaning no financial return on the project), due to our inability to see this answer or manipulate the model ourselves.

Key Assumptions in Port Cash Flow Model

There are numerous key assumptions in the Port's current cash flow model of WHI that may not accurately portray the WHI project; in combination, these may affect the conclusion of infeasibility and should be further explored in a detailed business planning effort. These key assumptions include:

- **Project Timing and Impact on Bottom Line Cash Flows.** The Port's model starts with the current FY 2012/13 and shows a 20-year duration. The model includes substantial outlays of cash for 10 years, to pay for both mitigation measures and other pre-development costs, not offset by any project revenues until FY 2023/24 (Year 11). This means that 10 years of outlays for development costs are all negative bottom line cash flows, and all discounted by the 12 percent rate, creating a high hurdle to meet for any development project. Although BAE cannot comment further on this assumed timing, since the extent and nature of pre-development and site preparation is not yet fully planned, it is likely that a 10-year cash outlay to ready this site for its first year of revenues does not accurately reflect the timing that the Port would experience. Moreover, this structure could be refined to make more business sense. For example, if the IGA's mitigation measures could be refined so that at least some of the costs were pushed further out to match the timing of revenues, and also if a private partner were found to bear some of the costs (eliminating them from the cash flow in exchange for reduced rent revenues), this combination of changes would substantially alter the bottom line.
- **Escalation Assumptions.** The Port's model also assumes a typical relationship for conservative cash flow models: an inflation rate applied to revenues each year, that is lower than the inflation rate applied to costs. In the WHI project case, the cash flow model assumes that revenues increase by 1.5 percent per year, while costs increase 3.0 percent per year, meaning that for the 10 years of cost outlays described above, costs continue to escalate. By the 11th year, when revenues are shown as first occurring, these are inflated by half the rate of costs, creating a greater gap than if other assumptions were used. When overlaid with the 12 percent discount rate, the situation is very difficult to make feasible, even if today's un-inflated revenues and costs were better aligned.
- **Potentially Low Revenue Estimates.** The revenues for the WHI project assumed the first of the three terminals would come on line in Year 11, and generate \$2.6 M in ground lease payments, which works out to \$26,000 per acre or \$0.60 per square foot of land in that year. According to the Port, this rent assumption is based on another

Port ground lease for Terminal 4, which houses a Toyota marine facility including dealer prep and storage. As noted in Memo #1 as well as above, other ports have realized substantially higher revenues from auto marine terminals, especially when combined with the more active, job-intensive uses which involve auto prep for customer delivery within the same facility (as occurs at Terminal 4). While these payments will vary based on the business model and the strength of market demand for this type of facility, this difference signals that the Port of Portland's Terminal 4 experience may not maximize this type of revenue, and/or may otherwise be assuming too low of a revenue stream from this first terminal component⁶.

- **Potentially High Development Costs.** The Port of Portland assumes that the total development cost for WHI will be just under \$96M in today's dollars. It assumes it will lay out all of these costs across a 10 year period, accumulating to a peak of \$114M in Year 10 (includes the cost escalation described above). Of this total, the Port assumes that it will need to pay approximately \$13.7M of local mitigation costs, \$1M for recreation improvements, and \$9.3M for state/federal mitigation costs, or a total of \$24M in mitigation-related costs. However, it should be noted that the largest single cost item on the Port's list is for fill on the Island, which it assumes will cost approximately \$34M. Assuming this fill is for the 300 developable acres, it translates into a cost of over \$113,300 per acre, or \$2.60 per square foot of land being filled. While the Port says this cost is based on its experience with other projects, and BAE is not qualified to judge this cost, it is notable that this cost appears high. BAE is familiar with other large-scale projects which have coordinated with simultaneous excavations at other locations, with one project's dirt removal working to become the other project's fill. In some port projects, this fill may even be supplied by dredging the navigable waterways, which is necessary in any case, and can generate substantial amounts of usable fill dirt.

A second notable cost factor is an assumption made by the Port, in keeping with the Worley Parson's work, of a 30 percent contingency factor. While this is not unreasonable in general, it adds to the total project's cost by nearly one-third, and should be understood as a potentially variable factor that may be reduced as planning is refined.

- **Lack of Leverage Using Debt.** In most projects like WHI, with long-term potential public benefits, or with the potential to attract a private partner with access to debt financing, the cash flow model would assume a debt financing scheme, with different results

⁶ Port of Portland staff describe the Terminal 4 deal as one which was discounted due to the operator constructing their own building. However, at other ports, this cost is also often borne by the operator, but revenues to port agencies are nonetheless substantially higher than those achieved to date by the Port of Portland.

even if all other assumptions were held constant as described above. According to the Port of Portland, their own organization does not have access to any specialized public financing mechanisms to fund this project; however, many large projects that create industrial development can utilize the Oregon Industrial Development Bonds (IDBs). These bonds, available in every state, are often used to finance infrastructure, land, and buildings at low rates using the state's tax exempt status as financier of industrial development. Use of these bonds may require a third-party borrower (needs further research). The benefit of using a financing mechanism to fund upfront costs is that it reduces the financial impact of the full "pay-as-you-go" process now assumed by the Port. This leverage, with bond proceeds funding parts of the development costs, would alter the equation of the infeasible bottom line of the project by spreading out the debt service payments to better match the timing of revenues (e.g., bond issued, capital received to fund upfront costs, then bond paid via debt service over long period of time, reducing annual costs for those development components to the debt service amount)..

- **Discount Rate.** Finally, as described above, the Port is currently applying the relatively high discount rate of 12 percent to its cash flow. The Port has expressed that is using this rate, higher than its typical goal of 10 percent return, to reflect substantial perceived risk in the project at this point in time. The Port cited the lengthy and potentially very expensive Environmental Impact Statement (EIS) process that will be conducted for the project, to comply with the National Environmental Protection Act (NEPA). The cost of preparing and processing the EIS, estimated by the Port as high as \$5 M, has not been included yet in its cash flow model. Due to the perceived risk and expense of this process, the Port feels that a 12 percent discount rate is warranted for use in its model at this time.

BAE's view of this issue is that the Port's missions: to promote economic development and to also earn a financial return on its investments, may not both be achievable in the case of WHI. This is due to a host of factors, including siting a large marine terminal project on lands with sensitive environmental conditions, which also require fill and other expensive infrastructure investments in order to utilize for this purpose. As asked recently by Portland's Planning and Sustainability Commission, the specific tax (fiscal) and economic benefits of this type of economic activity for the City of Portland are not yet well-documented, especially since the activity may involve "pass through" economic actions, without substantial benefits to the City or its residents. On the other hand, this set of marine terminals may well be critical to the region's economic health, and may serve to attract additional businesses who benefit from convenient access to expanded marine terminal facilities. BAE has not attempted to evaluate these issues. If the project were evaluated on these criteria, it may well be concluded that there is substantial economic benefit, warranting a less-than-market-

rate pricing of financial return to the Port, or other mechanisms which help support the Port's mission to develop WHI.

BAE has worked extensively with other public agencies with missions similar to the Port of Portland's with respect to public sector support for vital economic development. In these other cases, the typical criteria used is more aligned with, at most, the goal of capturing the market rate value of the land in its current or improved state (if public dollars are invested to improve it), without anticipating additional financial return or pricing of risk (since the public agency is in the position to absorb the risk of the project). Thus, in those cases, the discount rate used (if the structure of the Port's model were followed), would be more in line with a low cost of public funds rate. In some cases, other criteria would be used to measure project viability, including assuming a ground rent charged to the private partner, with rent credits applied for private partner investments to offset this potential rent revenue stream. This arrangement can result in zero dollars paid by or received by the public agency for many years, in exchange for achieving other objectives such as job generation or revitalization. Related to this process, it should be noted, publicly-owned land is the asset that can be most easily contributed to a public-private partnership, and if the project achieves other public policy goals (and the public agency's mission allows it), this land can be written down (or leased) below market value, to support an otherwise infeasible project. These are all different ways of structuring a public-private partnership which is initiated by the public sector to achieve policy goals.

BAE Recommendation: A Joint Business Planning Process

The West Hayden Island project has been studied and discussed over a long period of time, and is considered an important economic development initiative by the Port, the State of Oregon, and the City of Portland, to ensure long-term expansion potential of marine terminal facilities. Given this starting point, and also given the items described above, BAE recommends that a full business planning process be undertaken jointly, by the Port and the City of Portland, to refine the expected project development timeline, methods of financing, and revenue streams.

BAE recommends this approach, to resolve and refine numerous items that are not yet resolved in the draft Intergovernmental Agreement. Specifically, while the focus has been on which mitigation measures to require, only limited attention has been paid to when these would be triggered (in terms of project finances) and how they would be paid. Questions of general affordability of mitigation measures have seemingly obscured how to make this project work. Moreover, the mitigation measures themselves, while estimated to be relatively expensive when considered in total, are less critical from a financial perspective than the underlying economics of the project, particularly when considering factors such as expensive fill costs, lack of clear financing mechanisms, the potential contributions by a private

partner(s), and the overall policy issue of needing to earn a level of return on investment by the Port (whatever the investment ends up totaling).

BAE recommends a joint process, to reduce the gap between Port internal planning and the City's public approvals process. This joint process will likely work to reduce risk to potential private parties, enable a more concrete set of agreement terms between the Port and the City, and better align objectives. In addition, this business planning process may serve to identify phasing approaches which reduce costs or time, identify interim lease revenue opportunities (as described in the prior BAE memo), serve to phase mitigations or better match them to the occurrence of the impact tied to the mitigation, etc. This process may result in further shifting of the timing (but not the totality of the action) of mitigation, to better align those costs with overall project viability.

Operationalizing this process to align with the current consideration of annexation approval and the accompanying IGA may require a several-stage approach. Well-written, potentially simplified IGA terms could be devised to lay out the process so that, for example, certain mitigations are required only after an initial step is achieved. For example, if the community benefit fund approach is retained, this community benefit fund should be structured so that it is funded just prior to, or at the same time, as funds are needed to mitigate the particular impact. Conversely, the City could require that the Port identify a private partner or other financing strategy, prior to next-step project approvals. Likely critical to this overall approach will also be a joint re-evaluation of the business plan and financing strategy, once the project is further along.

Perhaps most importantly, BAE recommends that further attention be paid to the revenue side of the equation. If this project can only generate financially negative cash flows, before mitigation measures are factored in, then this needs to be fully understood and discussed, in terms of whether a publicly-subsidized project like WHI makes sense to achieve other policy objectives. Further, since the Port's other operations are so critical to the economic health of the Portland metro region, this project's impact on overall Port operations must also be considered, and evaluated by the City in terms of its interests in continued Port viability.

The Business Plan and Financing Strategy should consider the following items:

- **Port Revenues** – As outlined above total Port of Portland revenues from leasing agreements to developers/operators have not been analyzed. If structured similarly to other ports' economic activities, WHI may be able to generate revenue based in part on fees for use of Port facilities.
- **Potential Recreation and Open Space Revenues** – While not likely to be a substantial revenue source, this set of revenues could include lodging ground leases, concessionaire payments (bike and boat) and other revenues from creating a new recreational facility on West Hayden Island

- **Rail Spur Costs** - Construction of rail spurs, as envisioned by the WHI project, can be borne by private rail companies, with fees set accordingly to pay back this investment in a rapid manner (see Appendix A for more information).
- **Potential Federal and State Grant Funds** – Some of the improvements envisioned for WHI may be fundable by grant funds from federal and state agencies, offsetting these costs and reducing the investment needed by Port of Portland and City of Portland
- **Infrastructure Assessment Districts** – BAE did not research the legal requirements of creating infrastructure assessment districts at this facility. In other states, this mechanism or a variation thereof, is often used to fund backbone infrastructure through the collection of property-based assessments for properties that benefit from the upfront investment by public agencies. The public agency floats a bond to pay for the infrastructure, and each property owner is then assessed an amount equivalent to the bond debt service over 20 or 30 years, apportioned by the benefit received.
- **Other Cost-Sharing Mechanisms** – In some states, the scale of WHI would be structured as a joint powers authority, utilizing the combined revenue-generating powers of different governmental jurisdictions and agencies. In this case, these agencies could include the Port of Portland, the City of Portland, counties which benefit from enhanced agricultural exports, and other public partners to be identified.
- **Interim Leases** – Some large public projects around the US are creating interim leases which generate substantial revenue while permanent capital improvements are phased-in. For example, some public land-owners, particularly of former military bases, have leased “lay down” space to steel and transit vehicle manufacturers to generate ground lease revenues for short periods (e.g., five years). Other examples include medium-term solar farm ground leases.
- **Monetizing Mitigation Measures through Carbon Offsets**– More research is needed, but it may be possible to monetize mitigation programs such as selling carbon offsets per the new forestation project envisioned to mitigate deforestation for the marine terminal portion of the WHI project.

APPENDIX A: EXAMPLES OF MARINE TERMINAL REVENUE STRUCTURES TO PUBLIC PORT AGENCIES

Port of Long Beach (auto on/off and vehicle processing)

The Port of Long Beach is a large seaport with 10 terminals, and is the second busiest port in the United States. The Port Authority is the Long Beach Board of Harbor Commissioners, an agency of the City of Long Beach, CA. The Port's Pier B hosts the RO-RO and vehicle processing operations of Toyota Logistics Services, Inc.

The Port and Toyota entered a 20-year lease in November of 2011 that governs both Toyota's presence at the Port and the terms of operations for its vehicle processing business. This lease was retroactively effective upon January 1, 2009. The lease grants 145 acres of terminal space to Toyota and non-preferential assignment to Berths 82 and 83. The space also includes 150,000 square feet of transit shed and office space. These buildings accommodate repair, vehicle processing, bodywork, and car wash operations on premises.

Toyota pays a monthly rent, dockage fees, and other charges as per the Port's Tariff No 4. The Guaranteed Annual Minimum Rent (GAM) is as follows:

- \$10,147,595 in 2009 and 2010
- \$11,121,797 in 2011
- \$12,274,000 in 2012 and 2013

Therefore, in 2012 and 2013, the Port will collect a minimum of \$84, 648 per acre for this vehicle processing terminal and associated facilities.

The GAM is renegotiated every 5 years. Toyota is also subject to wharfage fees and dockage fees in the event these exceed the GAM. Wharfage fees for standard vehicles are set at a rate of \$29.10 per 1,000 kg of vehicle weight. Dockage fees are established in Tariff No 4 and vary based on the size of vessel.

Toyota owns and is responsible for any improvements it constructs on the terminal during the lease and must remove them upon the termination of the lease. The Port owns and is responsible for the wharf, bulkheads, and fixed equipment.

Port of San Diego (auto on/off, vehicle processing, and other cargo loading/unloading)

The Port of San Diego is a large seaport with two maritime cargo terminals. The Port Authority is the San Diego Unified Port District, a public benefit corporation established by the State of California. The Port's National City Marine Terminal is, according to the Port, "the most advanced vehicle import/export facility on the West Coast," serving as primary port of entry for one in eight automobiles imported into the United States each year and equipped to handle 500,000 vehicles per year. The Terminal is also equipped to handle lumber and other large breakbulk cargo.

The Port entered into a new 10-year Terminal Operating Agreement for the National City Terminal with Pasha Automotive Services in January 2011 with four 5-year options to extend, for a total of 30 years. The Agreement was intended both to finance infrastructure improvements at the Terminal and to allow Pasha to continue operating the Port's vehicle processing operations while diversifying into other types of cargo. The Agreement entitles Pasha to the use of 116 acres of the Terminal, including over 350,000 square feet of warehouse and transit shop space, as well as preferential assignments to berths 24-2, 24-5, and 24-10. All improvements and land are owned by the Port, though Pasha is required to assume maintenance responsibility for all non-structural elements of the Terminal, including pavement maintenance valued at roughly \$225,000 per year.

Pasha will pay an annual rent of \$100,000 for the Port-owned buildings, to be adjusted annually for inflation. In addition, Pasha is bound to a Minimum Annual Guarantee amount for all wharfage, dockage, storage, and demurrage fees of \$5,200,000 per year to increase by \$1,500 per year. However, the average annual total fee revenue generated by Pasha over the six years prior to 2011 was \$8,600,000 and the Port expects this amount to increase over the term of the Agreement as a result of specified infrastructure improvements and the diversification of Pasha's cargo portfolio. After accounting for Pasha's right under the Agreement to retain 25 percent and 9.5 percent of all fee payments for vehicle and non-vehicle cargo, respectively, annual fee revenue to the Port can be expected to start at \$6,500,000, increasing over time. Finally, the Agreement requires Pasha to invest \$4,000,000 in physical improvements to the Terminal during the first five years of the Agreement term and \$2,000,000 during each 5-year extension.

In summary, the bottom-line annual revenue to the Port including rent, fee revenues, and required investment will be at least \$8,100,000 per year, or \$70,000 per acre in 2015. These revenues are expected by the Port to increase over the remaining term of the Agreement. If the assumption of maintenance responsibility by Pasha for Port-owned non-structural elements is also considered, the total consideration for the Operating Agreement can be valued at \$72,000 per acre in 2015.

Port of Olympia (lumber on/off loading, lumber storage)

The Port of Olympia is a medium-sized port with a single terminal governed by the Port of Olympia Commission, a municipal corporation of the City of Olympia, WA. The Port's primary trade in 2005 was in industrial and bulk commodities including iron and steel, vehicle parts, meat, plastic products, and lumber.

In September 2010, the Port entered into a 3-year lease with the option to extend for up to 9 years with Pacific Lumber & Shipping LLC in September, 2010. The lease governs both the PLS presence at the Port and the terms of operations for its lumber trade.

The lease grants a total of 8 acres of terminal surface space to PLS, of which 1 acre may be sub-leased to a terminal operator of PLS's choosing, and non-preferential assignment to the adjacent berth. The remaining 7 acres are to be used for lumber storage before and after on/off loading.

PLS pays a base rent, service fee, shortage fee, and other fees allocated directly to the Port's labor and other costs associated with PLS operations. LPS is also entitled to an annual credit of \$42,000. The base rent and fees are as follows:

- Ground rent
 - \$500 per acre per month plus state taxes for 7 acres (\$3,950 per year)
 - \$1,600 per acre per month plus state taxes for 1 sub-leased acre (\$5,755 per year)
 - Total: \$9,705 per year, or \$9,050 excluding taxes
- Service fee (single fee in lieu of wharfage, service & facility, and staging fees otherwise applicable)
 - \$25,000 per month for the first 14 million board feet of lumber and no fee for any additional board feet, adjusted by CPI annually
 - Total: \$300,000 per year
- Shortage fee - \$3.50 per board foot below the minimum annual export volume of 14 million board feet, adjusted by CPI annually
- Dockage fee - Set to 50% below the amount in Tariff No 10; varies by vessel size

Barring any shortage fee payments, these terms equate to a total annual payment by LPS of \$309,050 less state taxes and before dockage fees are applied. This total is \$267,050 after application of the annual credit. PLS is bound to collect other pass-through fees, including log vessel clean up and vessel loading fees that do not apply to Port's profit. Finally, PLS is entitled

to use an additional adjacent area of “flex area” at an additional rental rate of \$1,600 per acre per month on a temporary basis.

PLS or its sub-lessee operator is responsible for any improvements it constructs on the terminal during the lease and must remove them upon the termination of the lease. The Port owns and is responsible for the wharf, bulkheads, and fixed equipment.

Port of Hueneme, CA (auto on/off only)

The Port of Hueneme is a medium sized port with two terminals located in Oxnard, CA. The Port Authority is the Oxnard Harbor Commission, an independent special district of the State of California. The Port’s North Terminal supports RO-RO (roll-on roll-off) and vehicle processing operations via two agreements with AMPORTS (APS West Coast, Inc.), a major North American vehicle processing company with a presence at nine ports in the United State and Mexico (including at the Port of Benicia).

The first agreement is a May, 2011 Space Assignment Agreement between the Port and AMPORTS that entitles AMPORTS to a roughly one acre non-preferential space assignment on the Port’s North Terminal allowing for storage of a maximum of 200 vehicles at any time. The agreement requires that no vehicle remain on the terminal for more than 10 days, and stipulates a \$1.00 per vehicle per day fee for each day that any vehicle remains on the premises beyond the 10 day limit. Beyond this fee, the Space Assignment Agreement includes no other consideration. Contacts at the Port indicated that that an average of 800 vehicles per month pass through the Port on this basis.

The second agreement is 3-year On/Offloading Permit dated May 2011, between the Ventura County Railway Company (VCRC), a subsidiary of the Port, which establishes the terms of AMPORTS use of the VCRC rail spur that services the North Terminal. This agreement stipulates a charge of \$1.50 per vehicle on or off loaded from VCRC by AMPORTS. Contacts at the Port confirm that the rail spur was constructed by VCRC and that this charge is anticipated to be sufficient to pay back those infrastructure costs by 2014, the expiration date of the Permit.

Beyond the Space Assignment Agreement and Permit, AMPORTS and the Port do not have other agreements or rents/fee charges payable to the Port. AMPORTS removes its vehicles from the Port terminal to a vehicle processing facility wholly-owned by BMW that is adjacent to the Port terminal but outside of the Commission’s jurisdiction.

Summary

A comparison of fees and rents from these examples indicates the following amount per acre per year collected by port agencies from private operators:

- Port of Long Beach: \$84,650/ac/yr for vehicle storage, pass-through, and processing facilities (with privately-owned buildings)
- Port of San Diego: \$72,000/ac/yr for vehicle storage, pass-through, and processing facilities (with Port-owned buildings)
- Port of Olympia: \$33,500/ac/yr for lumber storage and pass-through
- Port of Hueneme: \$14,400/ac/yr for vehicle storage and pass-through



JOHN C. PINKSTAFF
503.778.2186
pinkstaffj@lanepowell.com

January 7, 2013

VIA ELECTRONIC MAIL
psc@portlandoregon.gov

Portland Planning and Sustainability Commission
1900 SW 4th Avenue, Suite 7100
Portland, OR 97201

Re: *West Hayden Island (WHI) Annexation*

Dear Planning Commission Members:

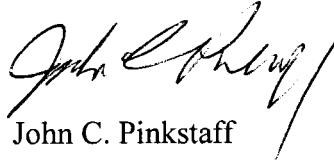
This firm represents Inland Sea Marine Group, LLC (hereinafter "ISMG") in the above matter. Enclosed is a Memorandum from Ms. Laurie A. Wall which responds to some of Staff's questions from their Work Session of December 11, 2012.

These materials follow up on our letter to the Planning and Sustainability Commission dated November 6, 2012, and numerous communications from Laurie Wall which are already in the City's records on West Hayden Island. Please place this Memorandum in the record of these proceedings.

Thank you for your consideration.

Sincerely,

LANE POWELL PC



John C. Pinkstaff

Enclosure

cc: Ms. Rachel Hoy

MEMORANDUM

January 7, 2013

TO: The Portland Planning and Sustainability Commission

FROM: Laurie A. Wall, A.I.C.P.
Certified Land Use Planner
Telephone: 503.200.0011
E-mail: laurieawall@yahoo.com

RE: Response to P&SC's Questions - West Hayden Island Proposed Plan

The Planning and Sustainability Commission has 90 questions for staff from their 12/11/12 Work Session on West Hayden Island. Five of the 90 questions are directly relevant to issues of concern to my client, Inland Sea Maritime Group, LLC ("ISMG"), and address the proposal for a 6-acre public park east of the railroad tracks. Below we address those 5 questions.

Question 73 - How will recreation opportunities be accessed?Response:

The proposed approximately 6-acre public park, and public motorized and non-motorized boat ramp, that is adjacent to and east of the Port's property would be accessed by a realigned N. Hayden Island Dr. as shown in the attached plan (Attachment 1, "Draft Conceptual Public Boat Launch, Open Space, and Public Trailhead," dated April 19, 2012). The realigned street would allow for adequate parking for the public park, with public boat ramp facility, on the Columbia River side of the street. This area would provide all of the necessary parking to be on one side of N. Hayden Island Dr., a criterion identified by the Oregon State Marine Board as required, because the State Marine Board (a likely potential partial funding source for the boat ramp) does not support folks parking on one side of the street and crossing to the other side to access the facility for safety reasons.

Question 81 - Can the recreation objectives be met without compromising ecological objectives? How do recreation opportunities on WHI impact preservation?Response:

Most of the property adjacent to, and east of, the railroad tracks has a base zone of Heavy Industrial. The property involves three parcels, in three ownerships, that are undeveloped, and have been used until recently for overload parking of Auto Auction's (Manheim's) cars. Most of the site has been graded and covered with compacted gravel. ISMG's property would be used for the boat ramp to Canoe Bay and a portion of the parking area.

The Portland Planning and Sustainability Commission
January 7, 2013
Page 2

All three of the property owners are willing to sell their property to allow for this public park and boat ramp. Costs would include land purchase from ISMG and the two other property owners (Gray and Liston). ISMG seeks \$400,000 for the portion of their property (TL 1500) that would be required for the park/boat ramp, or all of TL 1500 is available for \$1,500,000.

The river bank would remain open space for riparian habitat. The ramp would be for motorized and non-motorized boat access into the Bay.

ISMG has done all of the planning, which has been a significant amount of work, for this concept thus far.

Allowing for development of the site as a public park provides a solution to the fact that Hayden Island is park deficient. And providing a park at this location helps to relieve pressure to develop a park on more ecologically sensitive lands elsewhere on the Island. The city's adopted Hayden Island Plan indicates that a park should be developed at exactly this location.

There are many areas on Hayden Island, both west and east of the railroad tracks, that should be preserved for environmental reasons. This is not one of them.

Question 83 - Why was the development of a written strategy for use of the Open Space area changed from one year to 5 years? Is \$200,000 sufficient compensation to the city for BES and Parks and Recreation work on the development strategy?

Response:

We strongly encourage there to be a written strategy and work program to implement the approximately 6 acre park east of the railroad tracks within one year. By doing so, we are helping the residents of the Island achieve one of their goals of obtaining a public park at the location shown in their city-adopted neighborhood plan. The park is one of the elements of a mitigation package for any Port terminal development on WHI. There is no reason to not provide such mitigation for this under served and negatively impacted area of the city. Hayden Island residents have endured the Jantzen Beach Lottery Row, the CRC planning impacts, a park deficient neighborhood, and problems with people trespassing and camping on private land east and west of the railroad tracks. Neither the city, or the Port, have been able to adequately address these impacts. WHI, and the river-front property directly adjacent to and east of the railroad tracks, are notorious for use by the homeless, some of whom litter, rob, and vandalize this property and nearby properties. Developing a new public park in the near future would help ameliorate some of these negative impacts.

Additionally, ISMG has funded much of the planning and analysis needed to prepare for the proposed public park with boat ramp facility. This funding includes but is not limited to,

The Portland Planning and Sustainability Commission
January 7, 2013
Page 3

preparation of the attached site plan (Attachment 1), meetings and communications with the Oregon State Marine Board, Portland Parks and Recreation, Metro, the Port of Portland and BP&S staff.

Question 84 - Please provide a clear understanding with Parks on what is being proposed, how it is funded, who owns the park and who maintains the park, etc.

Response:

The proposed approximately 6-acre park is described in the letter from attorney John Pinkstaff to the P&SC dated Nov. 6, 2012. Funding is available through a variety of sources. The Port could provide funds to acquire or lease the site. In order for the Oregon State Marine Board to assist in funding of construction of a boat ramp and support facilities (parking, restroom, interpretive center, etc.) the boat ramp must be operated by a public entity. There are a number of possible public entities that could operate the facility including Portland Parks and Recreation, State Parks, Portland Bureau of Environmental Services, Metro, and the Port of Portland. It is most likely that whoever operates the park/boat ramp would also maintain the site.

Question 85 - Describe the relationship between a potential boat ramp east of the tracks and proposed passive recreation west.

Response:

The proposed boat ramp east of the tracks and the proposed passive recreation area west of the tracks would benefit each other.

The boat ramp site would include a public restroom facility, there by relieving the Port from using their property for public restrooms. And a viewpoint, interpretive center and or sign(s), grassy park area, bench(es) and public beachfront east of the tracks could be a gateway to the Port's property and their public passive recreation facilities.

The park/boat ramp site would allow for parking for police and emergency services that could easily access the users of the passive recreation areas west of the tracks. The boat ramp would allow for police boat access to WHI.

Users of the proposed park could help monitor the general area for illicit activities, which are currently a problem for nearby residents and businesses.

Finally, the boat ramp would allow for boat access to parts of WHI otherwise not accessible.

Attachment

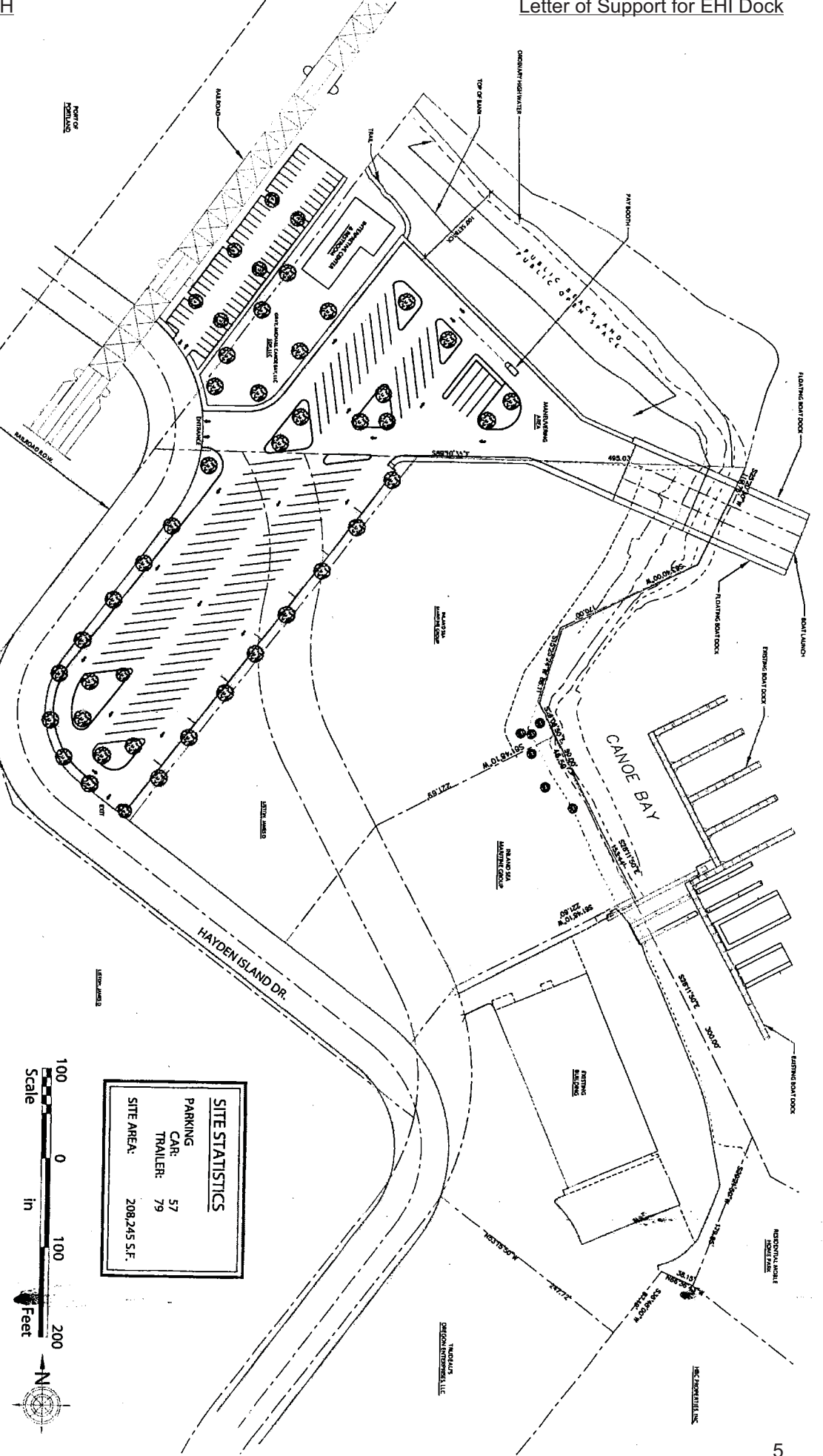
cc: Rachael Hoy

APRIL 19, 2012
 DRAFT CONCEPTUAL PUBLIC BOAT LAUNCH, OPEN SPACE AND PUBLIC TRAILHEAD

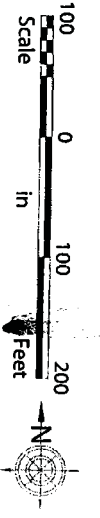
ARCHITECTURAL D.S. ON INTERIOR D.S. IN MASTER PLANNING LAYOUT



ATTACHMENT I



SITE STATISTICS	
PARKING	
CAR:	57
TRAILER:	79
SITE AREA:	208,245 S.F.



Hayden Island Business Park Association
3015 N. Hayden Island Drive
Portland, OR 97217

February 12, 2013

Portland Planning and Sustainability Commission
1900 SW 4th Avenue, Suite 7100
Portland, OR 97201

RECEIVED
PLANNING DEPARTMENT
FEB 19 A 10:29

Re: West Hayden Island Annexation
Park and Boat Ramp Proposal

To Portland Planning and Sustainability Commission:

On behalf of Hayden Island Business Park Association (HIBPA), I would like to express our enthusiastic support for Inland Sea Marine Group LLC Park and Boat Ramp Proposal.

HIBPA property owners hope that this project will have a positive impact on the area by inviting families and boat owners to the area. The project will create a local park for island residents and offer a convenient boat ramp for many of the boat related businesses on the island. There is currently a lack of community space on the island. This project will offer a convenient place for island residents and business alike.

We appreciate your consideration in this matter.

Sincerely,



Mike Trudeau
President, Hayden Island Business Park Association